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REPORT

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Academic Literature Review of Resilient Communities 2019

Research prepared for Resilient Melbourne

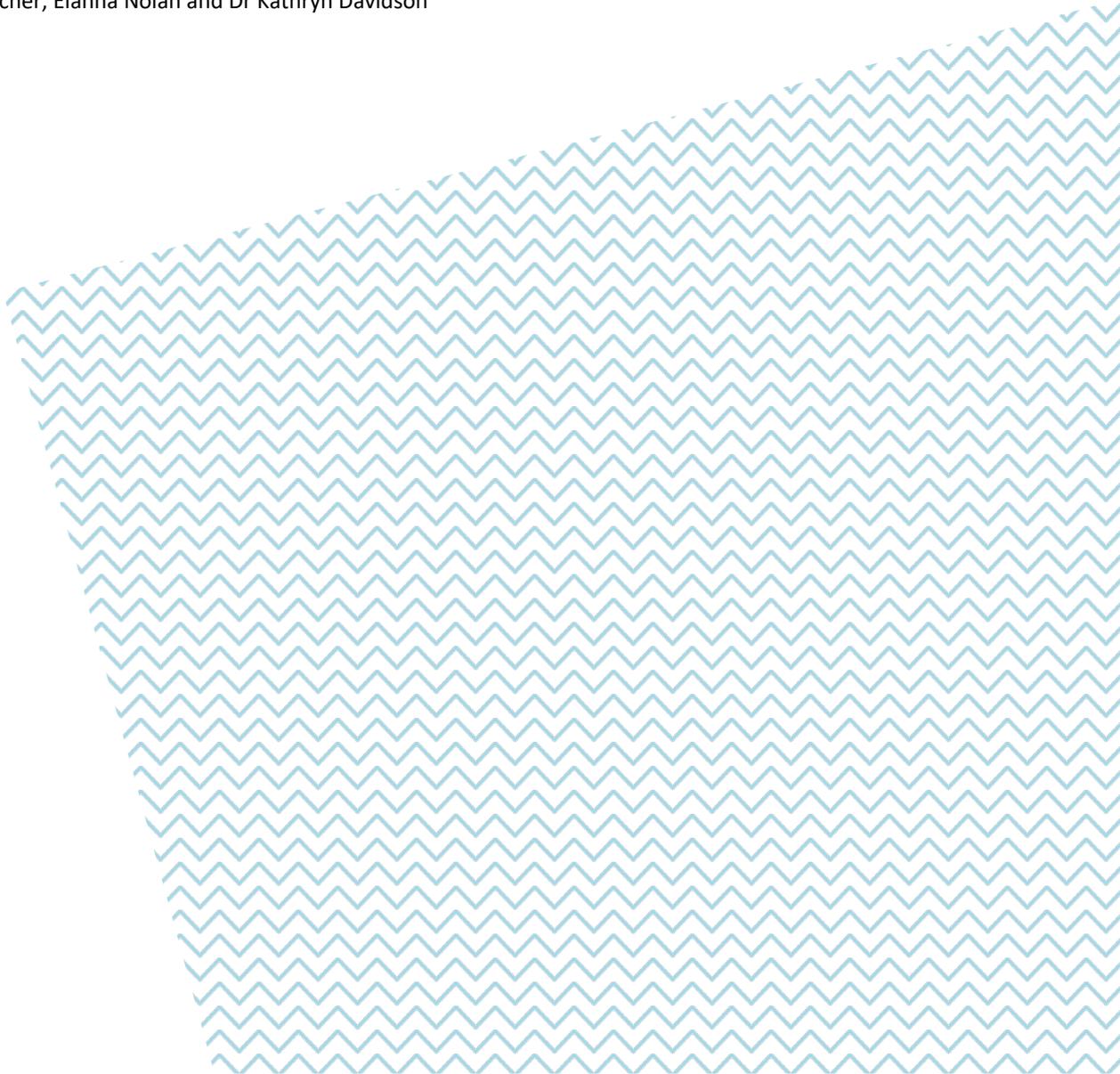Dr Stephanie Butcher, Elanna Nolan and Dr Kathryn Davidson

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Executive Summary

This report is produced for Resilient Melbourne, to support the progression of activities for their *Resilient Communities Action*. Specifically, this report responds to Resilient Melbourne's problem statement: *How do we create and sustain buildings, infrastructure and neighbourhoods that build resilience by genuinely reflecting the needs, values and aspirations of the communities using or occupying these spaces?* The intention of this report is therefore, to consolidate the evidence base for participatory planning and community resilience, and to propose a framework for clarifying the relationship between these concepts.

The literature review presents the case for involving residents in the process of planning their neighbourhoods and communities, gives an overview of key debates and indicators in relation to community resilience, and finally proposes a framework for the relationship between the two concepts.

It firstly reviews global case studies which have demonstrated the clear social and physical benefits of participation—including improving built environments that are responsive to community needs, strengthening community ties through inclusive processes, and building trust in institutions and local authorities through meaningful engagement processes. In this regard, there is clear evidence for Resilient Melbourne to position participation as making a valuable contribution to the aims of community resilience, which likewise emphasises facets such as engagement in official decision making, community infrastructure and organisation, a sense of community connectedness or social capital.

However, in addition to describing the wide set of benefits of participation, it also outlines some of the fundamental warnings around participation, and the ways in which it may be appropriated, disempower, or exacerbate localised inequalities, ultimately undermining the building of socially cohesive, resilient cities. In this regard, this report emphasises the need to ensure *meaningful* participation. In other words: participation which grants only limited decision-making authority, is not inclusive especially of the most marginalised individuals or groups, or which relies upon local communities to shoulder the burdens of wider stressors, can be profoundly disempowering, socially isolating, or erode trust between local communities, developers, and municipal authorities. In order to move closer to a grounded definition of meaningful participation, this report highlights three overarching questions: how participation is conceived, who is participating, and the scale at which participation is occurring. These questions can be asked in collaboration with developer partners, in order to obtain a better understanding of the specific ways in which 'participation' is conceived in each of its five sites. Critically, in recognition of the diversity of models represented by the five sites, as well as the constraints of the developers, this report recommends that rather than evaluating the five projects for how 'truly' participatory they may be, it is important to rather clarify and make explicit the models of participation on offer, and how this opens up or constrains different valued resilience outcomes.

Secondly, this report gives an overview of the key debates linked with community resilience and social cohesion. In particular, it draws out three key messages: its collective dimensions, the importance of remaining attuned to the 'social ecology' of communities, and the unequal experience of risk and exposure to ongoing stressors and acute shocks faced across different identity groups. This holds several critical practical implications. First, this suggests focusing on capacity building and developing community assets (though, for example increased social supports and access to resources) to decrease risks, trauma, and miscommunication. Second, this requires a close reading of the context-specific dimensions of resilience (whether conceived at the city or neighbourhood scale), and how this shapes the access to vital social, economic, political, cultural and environmental resources. And third is a reminder to engage with the rich diversity of communities, and how factors such as gender and class shapes resilience. Following these theoretical debates, the report presents a series of indices which have sought to make more explicit the different dimensions of resilience. These indicators can guide and shape the discussion around the resilience outcomes Resilient Melbourne would like to see as a legacy of the *Action*.

Finally, the report concludes with a detailed 'Community Resilience Action Framework' which provides one visualization of how participation and resilience can be linked through an examination of diverse 'community assets'. This is presented as a tool which can be used operationally to guide the five longitudinal studies, or simply as a visual representation which makes more explicit the theory of change which informs the *Action.*

Introduction

The case for cities, local authorities, and developers to engage in processes of participatory planning is gaining increasing traction internationally. Such attempts have sought to revise 'top down' approaches to planning—recognising, learning from, and adapting planning approaches to reflect the knowledge and experiences of local communities. Indeed, the benefits of involving citizens in participatory planning processes have been variously outlined as: leading to development outcomes which more closely reflect the needs and aspirations of communities, generating greater accountability and transparency in the allocation of goods and services, empowering residents to participate in decision-making that impacts their lives, and building a sense of social solidarity and community (Cornwall, 2011). What is clear is that citizen or community participation is understood to be valuable both as a *process and product*—leading to better planning or built-environment outcomes, as well as generating more intangible impacts linked with individual and community well-being, social solidarity, or civic activism (Hernandez-Medina, 2010; Aernouts and Ryckewaert, 2018; Engelsman, Rowe, Southern, 2018; Duncan and Thomas, 2000, Craig, 2007). Accordingly, there is a clear case to explore the potential of participatory processes to enhance social bonds and produce robust community infrastructure, which can ultimately help foster community resilience.

It is in this regard that the aims of participatory planning offer a clear entry point to move towards the key objectives of Resilient Melbourne, especially in terms of empowering communities to take active responsibility, and in creating infrastructure and activities that promote social cohesion. Five sites have been identified by an Advisory Panel including members from the Victorian Government, Local Government, the property sector, and universities, to pilot innovative models of participatory development. Two of the sites are located in inner-city Melbourne (Urban Coup, Brunswick; 383 Macaulay Rd, Kensington), while three are green-field and peri-urban sites (Beveridge North West; Mambourin; and Olivine Estate). These sites, each at different stages of development, provide unique opportunities for longitudinal learning based on different participatory development approaches to, variously: community decision making, research collaboration, collective budgeting and resourcing, and community development. Due to the distinct differences in geography, scale, and participatory development approaches of each site, learning across these five case studies requires a comprehensive conceptual framework.

In order to progress the *Resilient Communities Action*, this report seeks to clarify the relationship between participatory development and community resilience, and proposes a framework to support the monitoring, assessment and learning from five case studies. This report responds to Resilient Melbourne's problem statement: *How do we create and sustain buildings, infrastructure and neighbourhoods that build resilience by genuinely reflecting the needs, values and aspirations of the communities using or occupying these spaces?* In line with Resilient Melbourne's *Resilient Communities Action*, the purpose of this report is therefore to outline how participation in planning processes—and particularly in the production of housing—can contribute to the building of resilient communities.

In order to do so, this report proceeds as follows. We outline the literature on participatory development, community resilience and social cohesion. At present, there is a gap in the literature between participatory development and community resilience. We bridge this gap by highlighting common threads between participatory development process and products—of community development, social capital, and social cohesion—and community resilience characteristics. To animate this literature, we refer to two key case studies to demonstrate firstly how participation can be linked with social cohesion, and secondly, how strong pre-existing community structures can support resilience.

The report proceeds by first bringing a critical lens to participatory development. In addition to describing the wide set of above-listed benefits of participatory development, we also outline some of the fundamental warnings around participation, and the ways in which this may be appropriated, disempower, or exacerbate localised inequalities, ultimately undermining the building of socially cohesive, resilient cities. Reflecting on the participatory development literature, we pose key questions which Resilient Melbourne might wish to ask in order to obtain a better understanding of the specific ways in which 'participation' is conceived in each of its five sites.

In examining the community resilience literature, we follow Resilient Melbourne's definition of community resilience: 'the sustained ability of a community to respond to, withstand and recover from shocks and stressors.' We begin by elaborating upon this definition, emphasising the contextual specificity of community resilience, processes for defining

community assets and resources, and identifying nine key elements of community resilience that emerge from this nascent field of study. We also highlight how the concepts of social cohesion and resilience are linked, which is well evidenced and recognised by Resilient Melbourne. We briefly review a series of indices linked with resilience, so as to better make explicit the different variables Resilient Melbourne would hope to see following the completion of the *Resilient Communities Action*.

As such, this report entails two tasks. The first is to develop a set of questions to guide Resilient Melbourne in categorising and analysing how participation has taken place across the five partners. The second is to develop a set of criteria for defining resilience, so that longitudinal evaluations across the five sites can speak explicitly to how different models of participation might influence different resilience indicators. Taken together, these two components provide the component parts of the proposed framework of analysis for understanding how, and in what ways, the particular forms of participation across each of the five sites is linked with resilience. This is a tool which can be used operationally to guide the five longitudinal studies, or simply as a visual representation which makes more explicit the theory of change which informs the *Action.*

This report does not seek to redefine or reinvent the *Community Resilience Action* and Resilient Melbourne's existing definition of community resilience. Its purpose and scope are to provide a review of the existing evidence base around the concepts of participation and community resilience, with a view to supporting Resilient Melbourne and the Leadership Group's activities progressing the *Action*. This report recognises the experimental nature of the *Action* and its potential for new knowledge production.

Participatory development, community resilience and social cohesion: a review of the evidence

Why participation?

The case for involving local communities in participatory planning processes has been articulated across a variety of international contexts, linked with policy priorities aimed at devolution, fostering inclusion, supporting partnerships, or empowering communities. Major international organisations such as the OECD (OECD, 2001) and the United Nations (UNDESA, 2003) have for quite some time made strong claims around the benefits of citizen participation for delivering on social goods and supporting good governance.

Innovations in participatory planning have manifested in a diversity of institutional arrangements globally: from neighbourhood planning in the UK (Taylor 2007); participatory budgeting in Brazil (Touchton, and Wampler, 2013; Souza 2001), to the collective production of residential units in countries as varied as Thailand (Yap and de Wandeler, 2010), the US (Moore and McKee, 2012), and Kenya (Midheme and Moulaert, 2013). In Australia, the commitment to citizen participation has been explored particularly in the sectors of public health, the environment and planning, and heritage and arts, or for excluded groups (Baldwin and Stafford, 2019; Bath and Wakerman, 2013; Reddel and Woolcock, 2004, Cuthill and Gein, 2005, Lane 2007).

While the specific institutional mechanisms for participation differ, in the above literature there is a shared language around the intended benefits of engaging residents in planning. That is, participation has been lauded a tool to generate more appropriate physical improvements, strengthen community ties, as well as build relationships and trust with local authorities. In this regard aims of participatory planning are linked with the strategic aims of Resilient Melbourne to place '*people at the heart of all cities*' —supporting social solidarity, encouraging capacity-building to engage with local authorities or developers, and generating civic leadership—all of which can be considered vital to the production of resilient communities.

Accordingly, there is much to be learned from a series of innovations involving residents in planning from contexts around the world. While there are a number of such projects located in countries with high-performing economies, it is also instructive to look to cities of the Global South, where stark inequalities and exclusions have sometimes necessitated strong citizen-led responses (see: Butcher and Frediani, 2014; Tomlinson, 2015; Weru, 2004). Across this global backdrop, studies have identified a host of positive benefits which can emerge when residents are *meaningfully*[1] given a say in shaping their environments and participating in decision-making that impacts their lives.

For instance, at its most fundamental, the integration of user perspectives is understood to generate more relevant design and planning outcomes. In Nairobi, for instance, in the neighbourhood of Huruma, collective groups of the urban poor worked with engineers and architects to design a set of new residential blocks that responded to the needs of slum dwellers. This included negotiating for a special planning zone to allow for the construction of reduced (and more affordable) plot sizes, housing design which was incremental (extensions could be added as residents acquired the money), made out of locally-sourced materials residents could construct themselves, and financed through an innovative collective revolving loan system. This case has been well documented to highlight the value of integrating the 'lived knowledge' and experiences of residents with technical expertise or architects and engineers, leveraging on planning regulations and bringing local councillors on board, in a way that addressed long-term stresses around housing vulnerability for the urban poor (Weru, 2004; Butcher and Frediani, 2014).

Elsewhere, cases have explored the collective production housing as mode of challenging wider inequalities linked with housing affordability and land speculation. In cities such as London or Belgium, community land trusts (CLTs) are one such arrangement. In this model, the collective purchase, design, and titling of land has demonstrated numerous positive impacts around fostering community collaboration, financial benefits for residents in the form of cost-reductions on land and housing, and safeguarding housing from unchecked gentrification led by the private market. In Belgium, for instance, it was found that supporting residents in the design and planning of a cooperative housing unit

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[1] The emphasis on 'meaningful' is added to reflect the ambiguity of the term 'participation', which in many instances has been misused and appropriated. These risks will be further explored in this report.

helped increase planning and civic literacy, and foster social cohesion amongst the group (see **Case Study 1, Appendix A**).

Likewise, other cases have foregrounded participation as a way to develop the capacity, expertise, and networks for residents to engage politically. Within this framing, participation in projects supports learning which can be used to influence broader forms of decision-making in the city. In Pune, India, low-income residents have collectively financed and managed public toilet facilities in their neighbourhood, with long-term community health and well-being outcomes (Tomlinson, 2015). Critically, research has highlighted benefits not only in relation to these physical outcomes, but also for how this supported a process of collective learning and relationship building with local authorities, which extended beyond the confines of the particular sanitation project. Key to this success was the strategy of 'precedent setting' through small-scale pilot projects, that is, demonstrating to local councillors as well as international players such as the World Bank, that residents are collectively able to design, finance, and build better neighbourhood improvements. It was found that positive results on these early and small-scale efforts gradually built trust in community-led approaches, which were then scaled out to other cities across India.

In this vein, numerous studies have also sought to capture these 'intangible' outcomes which can emanate from participatory processes. For instance, in a study ten years after the implementation of the 'Neighbourhood Revitalization Programme' in Minneapolis in the US, it was found that participatory neighbourhood forums performed the critical role of building social capital and shared empathy amongst diverse residents. To this point, residents reported their neighbourhood priorities shifting as they understood and empathised with the particular needs of others, changing planning negotiations from a discussion of individual needs, to the discussion of collective aspirations and trade-offs (Fagotto and Fung, 2006). And at the individual level, and particularly for those who take on leadership roles, there is evidence that meaningfully engaging in participatory planning can support the nurturing of personal capabilities—such as self-confidence, increased understanding of legal-political systems, and in some cases, feelings of empowerment.

Participation: Three Key concerns.

While these examples have lauded the benefits of participation in strengthening different individual and community assets, there are equally critical works which have warned of its potentially disempowering impacts. Indeed, a vast literature has confirmed that simply opening up new spaces for citizen participation does not necessarily lead to more inclusive or 'better' planning outcomes. In some cases, this has been referred to as the 'tyranny of participation', (Cooke and Kothari, 2001).

Reflective of this challenge is the vast diversity of ways in which 'participation' is conceived and implemented. It may occur through official channels, or develop through the direct action of organised groups; it may be episodic or continuing; project-based or embedded in a wider process of democratization and decentralisation. Participation done well also entails a series of 'costs'—It can be time-intensive, requires clear financing, and if taken seriously—can generate serious challenges to the core 'business as usual' of housing developers or local authorities. In the UK, for instance, despite legal changes which encouraged neighbourhood planning, it was often found that housebuilders undertook litigation in an attempt to subvert neighbourhood-developed plans in favour of more traditional speculative greenfield development plans (Humphreys, 2016). As such, literature has highlighted that not all forms of participation are equal, failing to deliver outcomes which support local communities.

This suggests that 'participation done badly' risks undermining the possibilities of building resilient communities. As such, this report highlights three questions to explore in any participatory process: *how it is conceived, who participates, and at what scale does it take place*. The next section reflects upon these challenges, making key recommendations on how to negotiate these issues.

Participation: How does it happen?

Key to any debate around participatory planning is the recognition of the vast arrays of models through which participation occurs—from periodic consultations or public meetings, to the creation of formal institution such as neighbourhood planning associations. This varied nature is well-captured by Arnstein's 'ladder of participation' (1969) which outlines the different 'rungs' of participation—from more tokenistic approaches, to those which are genuinely interested in increasing citizen authority. Elsewhere, authors have categorised these levels as: manipulation,

informing, consultation, collaboration, and empowerment (Davidson et al., 2007). Likewise, the distinction by Cornwall and Gaventa (2001) between citizens as *users and choosers* of public service policies, or *makers and shapers* of policies is helpful to clarify the different intentions behind participatory processes.

Critically, both theoretical and empirical work has warned of the profoundly disempowering work of participation. For instance, following a 2001 earthquake in Gujarat, India, the local government sought to promote a model of owner-driven reconstruction, with a strong emphasis on participatory planning. However, analysis of this process demonstrated that participation was conceived in a narrow way, framed as the provision of labour in reconstruction efforts. A lack of true engagement in decision-making processes particularly in the early stages of strategy design led to feelings of disempowerment and disengagement (Jigyasu, 2010). Likewise, in the UK, Taylor (2007) has explored how neighbourhood planning initiatives established within the UK's *Localism Act* increased citizen voice, but not citizen power. The focus predominantly on consultation activities which were then 'added on' to closed and private policy-making processes meant that power was retained by higher-level agencies, limiting how residents perceived their 'empowerment' in these spaces. It is also clear that more tokenistic approaches to participation may hinder collective action during moments of shocks and stress, particularly if residents have had negative experiences in the past (Diers, 2004). Studies of community responses following the Canterbury earthquake in New Zealand demonstrated that those communities which previously had negative experiences in feeling that their voices had influence, displayed less ability to collectively respond and adapt (Thornley et al., 2015, **see Case Study 2, Appendix B**).

Therefore, while there is a robust case for adopting participatory planning mechanisms, if not well implemented this also risks undermining the intention of the *Action* to support more resilient communities. While it is recognised timescale, funding, and legal barriers mean that participatory processes often cannot reach the 'collaborative ideal', it is key to be explicit about the kinds of decisions which are on the table for local communities to shape.

> **Key Recommendations:**
>
> - Set out a 'participation plan' with clearly outlined procedures of participation (the process, timeline, rights and responsibilities, funding implications) to help build open communication from the start of the project.
>
> - Strive to outline a multi-layered participatory process which may engage residents in different ways—from public consultations, focus groups, household interviews or surveys, working with specific community organisations, to hosting community events.
>
> - Explore flexible financing to better respond to community designs
>
> - Support an ongoing process of organisational learning to reflect on what works and what doesn't

Participation: Who is 'the community'

The second key aspect to consider are the kinds of residents which participate, and how different interests are being represented. The notion of 'community' is itself contested, and authors have warned against treating communities as relatively homogenous groups with a shared set of interests. This requires thinking through how multiple (and sometimes conflicting) interests are reflected.

Terms such as 'elite capture' (Dasgupta and Beard, 2007; Rigon, 2014) or 'the usual suspects' refer to the ways in which participation tends to favour the voices of more privileged residents. It is an enduring challenge that it is the 'civic core' of highly educated, socially mobile actors who tend to have the skills and confidence to get involved in forms of community participation. This was highlighted clearly in the case of the Minneapolis Neighbourhood Revitalization Programme (USA), which demonstrated the difficulties of engaging groups such as renters, newcomers, and minorities, with leadership roles often reflecting instead white homeowners. An inattention to these localised power dynamics can therefore risk exacerbating feelings of social isolation for those that don't feel entitled or capable to speak in participatory spaces.

To this point, it is also critical to be explicit about the make-up of the existing communities which are involved in participatory projects, and particularly for how well this reflects more vulnerable communities in the city as a whole. While participation may indeed support 'social capital', it is often the case that affluent, tightly organised communities

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are better able to both draw on social networks and exert pressure on democratic institutions. Again, in the case of the Minneapolis Revitalization programme, this saw social housing units being 'planned out' of more organised and wealthy neighbourhoods. Likewise, in the UK, it was found that neighbourhood planning initiatives often displayed a 'protectionist' approach or 'nimbyism'—resistant to collective goods such as the installation of wind farms or incinerators (Bailey and Pill, 2015). This highlights the inconsistences of participation, in that participatory processes may not inherently generate 'just' outcomes.

These issues are especially relevant in relation to how communities can better respond to chronic stresses experienced at the city-scale, such as unaffordable housing, or increasing social inequality. For instance, if projects do not seek to engage residents from broad range of socio-economic or ethnic backgrounds, protect certain social goods, or are markedly different from surrounding neighbourhoods, this may in fact exacerbate city-wide social inequalities, even while working to the benefit of those that are involved in the project.

Key Recommendations:

- Formation of neighbourhood planning associations with democratic and inclusive representation (potentially through the use of quotas)

- Document and learn from how conflicting views are arbitrated, to make explicit trade-offs and which views are ultimately not reflected in plans

- Consider mandates to require plans address certain social priorities (i.e. targets on number of rental or affordable units built, or provision of key collective amenities).

- Specific participatory activities, capacity-building, or technical expertise targeted at minority or excluded groups (partnering with other organisations)

- Form committees focused on neighbourhood integration

- Outline clear channels of communication from 'leaders' to the rest of the neighbourhood

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Participation: At what scale?

Finally, a key question is the scale of intervention, and how readily this speaks to some of the wider structural factors which may be contributing to long-term stresses. That is, while participation is aimed at enhancing the capacities of local groups, not all processes are best addressed or occurring at the local scale (Mohan and Stokke, 2000). More specifically, it is critical to ask how 'resilient' communities can be expected to be within a context of climate change or a crisis of affordability in the land and housing market. This suggests the need for participatory processes to move beyond the particular projects, to also be linked with higher-level political institutions (McCrea et al., 2015). While not always possible, studies have indicated the value of working within existing or establishing new legal or institutional frameworks which embed participation within broader governance structures.

Though outcomes vary according to different political and historical contexts, there has been a level of experimentation in this regard. For instance, in Kisumu, Kenya, neighbourhood planning associations were embedded in local government structures linked with national devolution reforms, while in the UK the National Strategy for Neighbourhood Renewal created Local Strategic Partnerships (LSPs), which linked public service providers, councillors, private bodies, and local community members. In the now-famous example of Porto Alegre, Brazil, participatory budgeting forums devolved financial control to the neighbourhood level, with priorities for the municipal budget set through large-scale assemblies. In Bolivia, the Law of Popular Participation (1994) allowed for the establishment of 'vigilance committees' with the authority to freeze municipal budgets if expenditures are deemed too far from what was set out in planning processes. Or in Queensland, the 'Cape York Partnership Unit' established 'negotiation tables' which were linked with action plans and regional budgets, and the identification of 'community champions' within state government departments to support resource allocations and decision-making (Reddel and Woolcock, 2004). In each case, there was a concerted effort to link community planning with legal-institutional systems, establishing statutory forms of accountability, and moving beyond project-based 'participation' towards deeper process of democratisation.

Key Recommendations:

- Identify 'champions' (often in mid-level positions) in local government or within developers that can support and nurture outcomes of participatory processes

- Link neighbourhood-level committees with local governance bodies and relevant stakeholders

- Incentivise or reward responsiveness of developers or planners to community-designed plans

- Capacity-building of residents to understand legal rights and procedures

- Explore establishing enduring institutional mechanisms for collaborative planning prosses

- Establish mechanisms for knowledge sharing and precedent-setting

In summary, the creation of spaces for community participation in planning processes holds a series of promises. At best, it can increase civic literacy, help develop bonds of trust and mutual understanding amongst diverse groups, generate more responsive design and planning outcomes, or increase feelings of confidence. While careful attention must be paid to how participatory processes are managed, there is clear evidence to suggest that the meaningful integration of citizen voices can contribute to the well-being of citizens, neighbourhoods, or cities.

While few existing studies or approaches frame participatory planning (especially in housing) with the concept of resilience[2], this report argues that the concepts share an interest in processes of 'community building'. For instance, participation has been linked variously with social inclusion (Hernandez-Medina, 2010), social solidarity (Aernouts and Ryckewaert, 2018), community wellbeing (McCrea et al., 2015), community activism (Engelsman, Rowe, Southern, 2018), and capacity-building around civic engagement (Duncan and Thomas, 2000, Craig, 2007). Likewise, key facets of resilience include engagement in official decision making, community infrastructure and organisation, a sense of community connectedness (Thornley, et al., 2015). The following section seeks to make these links more explicit, by firstly outlining a definition and indicators linked with resilience, and grounding this within a discussion of social cohesion. The final section of Part One bridges these concepts with a proposed framework.

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[2] Where the concept of participation and resilience does appear in relation to urban climate governance, especially linked with discussions of community-based adaptation to climate change, or reconstruction efforts in post-disaster context. Within this literature, involving communities in recovery planning is posited to both support the capacity of residents to adapt to shocks and stressors, as well as better address local drivers of vulnerability (Aylers and Forsyth, 2009; Reid et. Al., 2009).

What is Community Resilience?

Defining community resilience

Resilient Melbourne defines community resilience as 'the sustained ability of a community to respond to, withstand and recover from shocks and stressors.' Acute shocks include disasters like fires, floods, and terror events (Bach, Doran, Gibb, Kaufman, & Settle, 2010), while chronic stressors have ongoing negative health and wellbeing impacts and can include exposure to domestic and family violence, a lack of access to essential services, constrained mobility, adjustment to urban consolidation and intensification and the after-effects of acute shocks (Miller & Rasmussen, 2010; Panter-Brick & Eggerman, 2012; McCrea, et al., 2015). This definition of community resilience recognises that communities with pre-existing community infrastructure are better positioned to respond and adapt to adversity (Thornley, Ball, Signal, Lawson-Te Aho, & Rawson, 2015).

Wide adoption of community resilience frameworks has occurred in recent years in the field of disaster and emergency management. While the UN advises that governments and organisations should maintain an active role in supporting communities through adversity, they also recognise the need to support communities to help themselves in the immediate aftermath and/or when resources are stretched (United Nations, 2014; see also LaLone, 2012).

There is no single, agreed-upon definition of community resilience, but it is generally conceptualised as positive and affirming. Rather than focusing on vulnerability and risk, a resilience approach recognises community capacities, empowerment, adaptiveness and transformative potential. Community resilience is seen as both a characteristic and as a set of processes by which internal and external strengths are harnessed in the face of adversity (Rutter, 1987; Ungar, 2011). It can be seen as a process by which individuals come together to act collectively to cope with or respond to crisis (see **Case Study 2, Appendix B**).

Adoption of community resilience frameworks signal two important social policy shifts. The first is a move away from individualised resilience characteristics, to seeing the collective characteristics of communities. Under a community resilience model, individuals are recognised as being located within social networks and places, that can extend capacities and access to resources. Secondly, considering community resilience as a process means recognising how a community joins together in the face of crisis or stress. Put another way, the emphasis on *community* resilience recognises that communities can self-organise and harness collective capabilities to achieve tangible outcomes (Berkes & Ross, 2013, p. 16; Thornley et al., 2015). Community resilience is therefore not simply the sum total of individual members' resilience but is influenced by community-level factors like community cohesion and efficacy (Thornley et al., 2015). This suggests focusing on capacity building and developing community assets (though, for example increased social supports and access to resources) to decrease risks, trauma, and miscommunication (Kfir, Patel, & Batt, 2018; Tierney, 2003).

A lack of consensus over the definition of community resilience has made it difficult to pin down indices of community resilience, inhibited research, and limited learning across contexts. However, Kfir, Patel and Batt's 2018 systematic review of 80 academic papers on community resilience to disasters identified nine core elements and 19 sub-elements (**Table 1**) that provide a birds-eye-view of the various dimensions of community resilience. These nine elements highlight the complex and contextual dynamics of community resilience.

Conceptualisations of community resilience have been increasingly attentive to local contextual factors. Some scholars refer to contextual factors as the 'social ecology' of community resilience (See for example, Ungar, 2011). Attention to variations in the social ecology of communities complicates the process of defining, measuring and promoting resilience. Each of the elements below (**Table 1**) is moderated by local conditions. In many ways, local neighbourhoods, cities, and regions influence proximity and access to social, economic, political, cultural and environmental resources that will impact the nine constituent elements of community resilience (Kwok, Becker, Paton, Hudson-Doyle, & Johnston, 2019; Mohan & Mohan, 2002).

Across these dimensions there is an unequal experience of risk and exposure to ongoing stressors and acute shocks. In particular, attention to intersections of ethnicity, socio-economic status, and gender have been highlighted as key differentiating factors influencing individual and community resilience (Adi, Killoran, Janmohamed, & Stewart-Brown, 2007; Khanlou & Wray, 2014; Ungar, 2008). Therefore, it is important to ask questions like: which communities will have better adaptive capacities? Which individuals will be more or less resilient than others? How will gender, immigration status, age, socio-economic status, physical and mental ability, influence experiences of the above-listed 19 sub-elements (**Table 1**)? How do individual identity markers influence willingness to engage in collective formation

or processes? A full understanding of contextual factors, along with individual and community identity markers, will shed light on how community resilience is best defined, measured and developed in its unique setting. Though a lack of consensus over definition proves challenging for researchers and policy makers, seen in another light, this limitation is also an opportunity to develop context-specific definitions of community resilience. How we define community resilience will determine how we seek to measure and enhance it (Kfir et al., 2018; Pfefferbaum, Pfefferbaum, & Van Horn, 2015).

Table 1: Constituent Elements of Community Resilience.

Elements	Sub-Elements
Local knowledge	• Factual knowledge base • Collective efficacy and empowerment (e.g. community competence; knowledge of self-reliance, self-help and self-sufficiency) • Training and education (e.g. risk-awareness training; previous experience)
Community networks and relationships	• Connectedness (e.g. community networks and relationships; social networks and capital) • Cohesion (e.g. social connectedness; commitment and shared values; collective cohesion and efficacy)
Communication	• Risk communication • Crisis communication • Effective communication
Health	• Health services • Physical health • Mental health
Governance and leadership	• Infrastructure and services • Public involvement and support (e.g. partnership and engagement; credibility; leadership, participation and representation)
Resources	• Resources (i.e. adequate resourcing, distribution, access; social, natural and economic resources)
Economic investment	• Post-disaster economic development • Post-disaster economic programming
Preparedness	• Planning and mitigation (e.g. preparedness activities; planning and procedures; risk management practices, etc.)
Mental Outlook	• Hope (e.g. vision of community that depicts a better future; community pride) • Adaptability

Source: Kfir, Patel & Batt (2018)

Communities themselves are therefore seen as being best-placed to define their own resilience, community assets and resources. Action-oriented or co-design processes are advocated to define, develop and measure community resilience (Pfefferbaum et al., 2015; Sharifi et al., 2017). A participatory process to define community resilience is also promoted as a way to reflect contextual specificity, and to galvanise communities through the articulation of local aspirations or goals; necessary ingredients for turning resilient characteristics into collective resilient action.

Community resilience acknowledges the unique potentials and positive qualities of communities in a way that can be empowering and respectful. However, community resilience programs that invest in communities to self-manage, in cases of acute shocks and ongoing stressors, should not be considered as a replacement for government and organisational support. There is a need to guard against the rolling back of state and organisational supports in the name of community resilience. Transferring the burden of responsibility onto – often marginalised – communities

without external support has been shown to result in the erosion of community resilience (Coaffee & Fussey, 2015; Davoudi et al., 2012).

In summary:

- Community resilience has increasingly been adopted in disaster and emergency prevention, preparedness and management frameworks

- Community resilience is both a characteristic and a process, it recognises how individuals embedded within communities experience enhanced collective resilience through increased access to resources and capacity to act together

- Community resilience is shaped by contextual factors including local geography/conditions and variations based on identity dimensions (e.g. economic, political, cultural, ethnicity, gender, etc.) and past experience

- Communities experience unequal exposure and degrees of risk that influences their resilience

- Action-oriented, participatory processes can be useful to define community-specific definitions of resilience, common goals and to develop community resilience through the process

- Community resilience frameworks can be used to recognise and invest in community empowerment and self-sufficiency and should be supported by the provision of appropriate, reinforcing support and resources

- Relying solely on community resilience to cope with ongoing stressors and acute shocks risks undermining community resilience

Linking Community Resilience, Social Capital and Social Cohesion

There has been a recent push to consider community resilience from the perspective of social capital. This push has been in response to criticism that disaster resilience has been too focused on physical infrastructure, when it has been well established that social capital and networks are essential to disaster survival and recovery (Aldrich & Meyer, 2015). These networks of bonding, bridging and linking social capital become lifelines for individuals, families and communities to access resources and to act collectively (Aldrich, 2011; Thornley et al., 2015). The push to consider community resilience through a social capital lens has led policy makers to consider the relationship between social cohesion and community resilience. For example, the *Strategic Framework to Strengthen Victoria's Social Cohesion and the Resilience of its Communities* (2015) and Victoria's *Community Resilience Framework for Emergency Management* (2017) both enlist community resilience as key components of disaster prevention and response planning. However, despite policy precedents for linking community resilience and social cohesion, the relationship between the two can often seem opaque.

Social capital is generally understood to be derived from social relations, and harnessed to produce social cohesion and to empower local communities. It has been variously described as an asset (Bourdieu, 2013), a calculation of social ties (Coleman & Coleman, 1994), and as a public good (Putnam, Leonardi, & Nanetti, 1994). Social cohesion is seen to be dependent on the formation and maintenance of social capital (Soroka, Johnston, & Banting, 2006). There are three established types of social capital: bonding capital refers to close, homogenous social ties (i.e. family, religious communities, etc.); bridging capital refers to those that cross boundaries of social groups (i.e. class, minority status, ethnicity, etc.); and linking capital refers to relationships between individuals or groups and their capacity to leverage those relationships to their benefit (e.g. political action). Bonding capital is seen to be like 'super glue', holding together tight-knit communities with both inclusive and exclusive potential (Putnam, 2007). Bridging capital is vital for civic society as it can enable alliance building and extended community action. Linking capital extends the possibilities of alliances or community solidarities for adaptation and transformation.

Social cohesion both elaborates and animates social capital networks. It can be thought of as 'the degree of interconnectedness between individuals that is both a result and cause of public and civic life' (Van Der Meer & Tolsma, 2014, p. 460). Social cohesion is a broad concept that goes beyond social capital to capture the nature of social ties; including slippery notions of commitment, trust, and norms of reciprocity. It is generally realised through participation in civic life – in sporting clubs, neighbourhood committees, voting, and other collective activities. In this way, social cohesion is seen as the development and sustenance of social capital, as social solidarity.

Social cohesion crosses spatial boundaries of neighbourhoods, cities, regions, and nations. The spatial and scalar dimensions of social cohesion provide an important distinction when linking it to community resilience. Mapping the interconnectedness (social capital networks) between individuals and communities provides a way of asking questions central to community resilience: 'who is connected to whom, where, and how?' (Van Der Meer & Tolsma, 2014, p. 461). These questions can lead to better understanding the social ecology of community resilience. *Who is connected to whom* provides a way of defining a community, and seeing the individual factors or dimensions that give shape to that community; *where they are connected* provides insight into the geography and contextual factors; and *how they are connected* emphasises the nature of the bonds between community-members, and refers to the extent (scale) of the community's capacity to act.

In the Victorian context, a socially cohesive society shares a common geography, shared rights, values, and goals. Together, these ingredients are articulated in the Victorian government's Multicultural Policy Statement, *Victorian. And Proud Of It.* (2017). This vision of social cohesion is not a fixed characteristic, but a process that requires ongoing work directed toward a common vision or goal. In the case of *Victorian. And Proud Of It.,* chronic stressors include a continuously changing social landscape (e.g. waves of immigration), while shocks like the 2018 Bourke Street terror attack can lead to social polarisation and vilification of particular communities. Interventions to cultivate social cohesion generate community resilience as a by-product. Reducing barriers to access services, employment, political participation, social and cultural infrastructure are key components of *Victorian. And Proud Of It.* Investment in identifying and supporting 'community champions' (ambassadors), youth active citizenship, and community festivals and events afford platforms for fostering and growing social networks, civic participation and leadership. In this case, enhanced social cohesion becomes the foundation for community resilience, enabling conditions for communities to act together—not turn on each other or fragment—in the event of a crisis.

However, three significant criticisms of social capital and social cohesion highlight threats to community resilience. Critics complain that social cohesion focuses on social capital and common values, while neglecting social, economic, political and other inequalities (Birt, 2009; Galabuzi & Teelucksingh, 2010; Jones, 2013). Critics also observe that conceptualisations of social cohesion do not allow space for different values, different experiences of belonging or loyalties, and fail to recognise the importance of radicalism and agonistic struggle in democratic society (Spencer, 2007). And, led by Robert Putnam (2007), it has been posited that population diversity erodes social trust and with it, social cohesion and community resilience. At best, resilient communities are those with sufficient flexibility, contingency, and capacity to allow for difference, deliberation, and disagreement, while still acting collectively (Amin, 2008; Sandercock, 2000, 2003).

Two related responses to these criticisms are to focus on reducing barriers to civic and social participation, and to increase meaningful contact between different individuals and groups. To cultivate social cohesion in a diverse society, 'contact theory' approaches are promoted whereby opportunities for engagement with others can reduce suspicion of strangers, decrease prejudice and discriminatory attitudes, introduce and improve communication and relationships, and create conditions for community solidarity (Askins & Pain, 2011; Fincher & Iveson, 2008; Hoffman, Wallach, & Sanchez, 2010). This approach prescribes social and civic participation as a platform or program to support social capital and community-building, enhance the conditions of social cohesion, and facilitate community resilience through enhanced community capacity, access to resources, and community efficacy.

In summary:

- The push to consider community resilience through a social capital lens has led policy makers to consider the relationship between social cohesion and community resilience.

- Social capital is a resource derived from social relations and harnessed to produce social cohesion and to empower local communities. It can be seen as an asset, a calculation of social ties, and a public good.

- Social cohesion is seen to be dependent on the formation and maintenance of bonding, bridging and linking social capital.

- Mapping social capital networks involves asking questions central to community resilience: 'who is connected to whom, where, and how?' Answers to these questions lead to better understanding the social ecology of community resilience.

- Resilient communities are those with sufficient flexibility, contingency, and capacity to allow for difference, deliberation, and disagreement.

- Diverse and inclusive civic and social participation provides opportunities to undermine the negative impacts of social cohesion, develop social capital and extend social networks and access to resources, to enhance social cohesion and mobilise community resilience.

Evaluating Community Resilience

The *City Resilience Framework* provides a useful starting point for valuing cohesive and engaged communities, as vital drivers of resilient cities (ARUP, 2015). In ARUP's model, community participation, local identity and culture, and social supports are indicators of robust and inclusive communities that provide the social foundations of resilient cities. Moving from the city to the residential neighbourhood scale sees resilient communities as the building blocks of a resilient city. Scaling down the City Resilience Framework indictors to the neighbourhood level means shifting focus to the fine-grain, community-level experiences of, for example social cohesion, social connectedness, wellbeing and social capital.

Depending on how community resilience (and social cohesion) is defined will determine which indices are most relevant. As previously noted, communities themselves are often best-placed to define context-specific community resilience (Pfefferbaum et al., 2015; Sharifi et al., 2017). Below is a summary of community resilience indicators extracted from Australian data sets and scholarly literature, organised by themes: resilience, wellbeing, social connections, social cohesion and social capital (Weinberg, Franklin, & Tomyn, 2016). These indicators refer to individual and community resilience, which may prove both relevant in evaluating existing levels of community resilience, as well as community resilience outcomes resulting from any participatory processes. They draw on individual, community and society markers of resilience to map factors that can strengthen or weaken community resilience (**Table 2**).

Table 2: Summary of select measures and available indicators/resources

Theme	Indicator	Source
Resilience	• Agency and pathways to achieving goals • Mental outlook: hope and positive thinking • Personal beliefs, self-confidence	Resilient Youth Australia; Australian Multicultural Youth Census; Brief Resilient Coping Scale (Sinclair & Wallston, 2004); The Resiliency Scale (Wagnild & Young, 1993); Connor-Davidson Resilience Scale (Connor & Davidson, 2003)
Wellbeing	• Life satisfaction: standard of living, health, sense of achievement, relationships, safety, community connection, future security • Community wellbeing: social support, satisfaction with personal relationships, feeling part of one's community	The Australian Unity Wellbeing Index; VicHealth Community Survey of Young Victorians' Resilience and Mental Wellbeing; Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985)
Social connections	• Social support network: relationships that provide emotional, employment, and other material support • Loneliness • Neighbourhood relations	OECD Better Life Index; UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978); Social Connectedness Scale (Onyx & Bullen, 2000); Sense of Community Index (Obst & White, 2004)
Social cohesion	• Belonging (shared values) • Social justice and equity (opportunity and trust in institutions) • Participation (political) • Acceptance and rejection, legitimacy (experiences of discrimination, attitudes toward newcomers) • Worth (life satisfaction, happiness, future expectations)	Scanlon-Monash Index of Social Cohesion; Jenson's Five Dimensions of Social Cohesion (Jenson 1998)
Social capital	• Feelings of support, safety and trust • Participation in sport, civic participation, and involvement in community activities • Online community (bonding and bridging)	Australian Bureau of Statistics; Scanlon-Monash Index of Social Cohesion; OECD Better Life Index; The Internet Social Capital Scale (Williams, 2006)

Source: Adapted from Weinberg, Franklin, & Tomyn (2016)

There is no universally accepted community resilience indicator set. Research that distinguishes between, for instance, individual and community resilience is the subject to ongoing study, as is the definition of resilience as a process as compared to an outcome. The indices presented in Table 2 provide a summary set of available indicators that have been drawn out of the constituent elements of community resilience presented in Table 1. These provide a starting point for deliberation over the inidicators most relevant to the *Action*.

Operationalising an indicator set for the purposes of assessing or evaluating participatory development processes involves several steps, including clarity over the resilience outcomes most relevant to the *Community Resilience Action*. McCrea, Walton and Leonard's (2016) examination of the relationship between community wellbeing and community resilience offers one statistical, path analysis method for testing a community resilience and wellbeing conceptual framework to refine their measurement. Their study of four regional sites in Queensland involved a broad data collection to test a wide set of potential individual and community level indices to measure community wellbeing and resilience. The original set—reflective of those listed above (Table 2)—were tested and ranked and resulted in seven resilience measures including: acting strategically, leading, linking, effectively using resources, commitment and perseverance, collective efficacy and trust. This process of experimentation allowed the researchers to create a hierarchy of community wellbeing factors and resilience actions that extended their conceptual model, revealing the primacy of decision making and trust as key components of community resilience.

In line with this 'testing' approach, the following section proposes a conceptual framework tailored to the Community Resilience Action, that emphasises this process of experimentation as a method for refining a set of community resilience indices. It leaves space for both qualitative and quantitative analysis, dependent on the skill-sets of the longitudinal researchers, and organisational demands. Taking into account the five unique study sites, the proposed framework offers a model for extending community resilience research, and testing Resilient Melbourne's hypothesis that participatory development can build social cohesion and community resilience outcomes.

Community Resilience Action Framework

Knitting the various literatures explored above together, it is clear that community participation can play a vital role in generating a supportive social context, through which communities can withstand, recover, and respond to shocks and stressors. Thus, the focus remains on the particular forms of participation, how they build various community assets, and the way they link to desired resilience outcomes. In order to do so, we propose the Community Resilience Action Framework (**Figure 1**).[3]

This framework firstly suggests the need to **systematise and analyse different participatory processes**, so that the particular mechanisms of participation which facilitated (or blocked) 'resilience outcomes' is made more explicit (**Box 1**). Recognising the constraints of housing developers, as well as the very different nature of the five projects, this report recommends that rather than evaluating the five projects for how 'truly' participatory they may be, it is important to instead clarify and make explicit the models of participation on offer, and how this opens up or constrains different community assets, and leads to valued resilience outcomes.

Box 1: Key questions to analyse participatory process	
How is participation conceived?	• What are the procedures in place for participation to happen? Are they clearly outlined and communicated?
	• What accountability mechanisms exist in order to ensure community plans are carried out by developers?
	• What kinds of decisions are 'on the table' to be debated? Is there adequate financing and flexible governance systems to allow this?
Who participates?	• Who is considered a stakeholder? How does it compare with the surrounding neighbourhoods? How does the makeup of this group look in comparison to Melbourne as a city?
	• How are the voices of community members channels to higher levels? Does it include diverse representation, or are there plans in place to engage a broad spectrum of people?
	• How are diverse or conflicting interests within the 'community' mediated?
	• How well do planning outcomes reflect broader 'social goods', and do these need to be safeguarded?
What scale of participation?	• Is this conceived as a one-off project, or seen as a part of broader reforms?
	• How supportive are formal/legal frameworks to participatory planning? Are there devolved levels of fiscal control?
	• Are there institutional mechanisms (committees, platforms) which can link scales—from the neighbourhood to the municipal level?

Secondly, this report argues that examining the intended benefits of participation (particularly in line with the aims of community resilience) is best understood through the concept of '**community assets**.'[4] That is, examining the ways in

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[3] The framework draws upon previous work especially which has sought to operationalise discussions of how to build the 'capabilities' of people towards various valued outcomes (See: Macarthy, Frediani, Kamara, and Morgado, 2017; Frediani, Morgado and Mella Lira, 2017).

[4] The concept of community assets is adapted from the 'Sustainable Livelihoods Approach' (Scoones, 1998) a method of analysis which is based on the understanding that all people have abilities and assets which can be supported and built upon to towards

which participation helps build the **collective capabilities of communities** to achieve the desired resilience outcomes. To this end, this report emphasises a number of key assets which have been highlighted in literature around the benefits and impacts of participatory planning:

> **Physical/Natural:** Access to infrastructure, built environment, and natural spaces which support human flourishing

> **Financial:** Access to cash, credit/debt, savings, or other individual or collective economic assets

> **Social:** Networks, relations, affiliations, and associations through which communities support each other

> **Human**: Skills, knowledge, confidence, health and physical abilities

> **Political:** Trust, skills, access, and leverage over governance structures

Third, the framework (**Figure 1**) refers to the resilience indicators, outlining the different **valued facets of resilience** which the five projects might hope to achieve. These can be defined from existing indicators (i.e. see **Table 2**) or established through participatory debates across the five project sites, which will be discussed in collaboration with Resilient Melbourne.

Finally, the framework refers to the **broader structural or contextual features** in which each of these five projects are embedded, and which will shape the possibilities for both participation and resilience. This might include institutional factors such as planning frameworks or land and housing policies, as well factors linked with social norms, or urban and environmental change.

Figure 1: Proposed Community Resilience Action Framework

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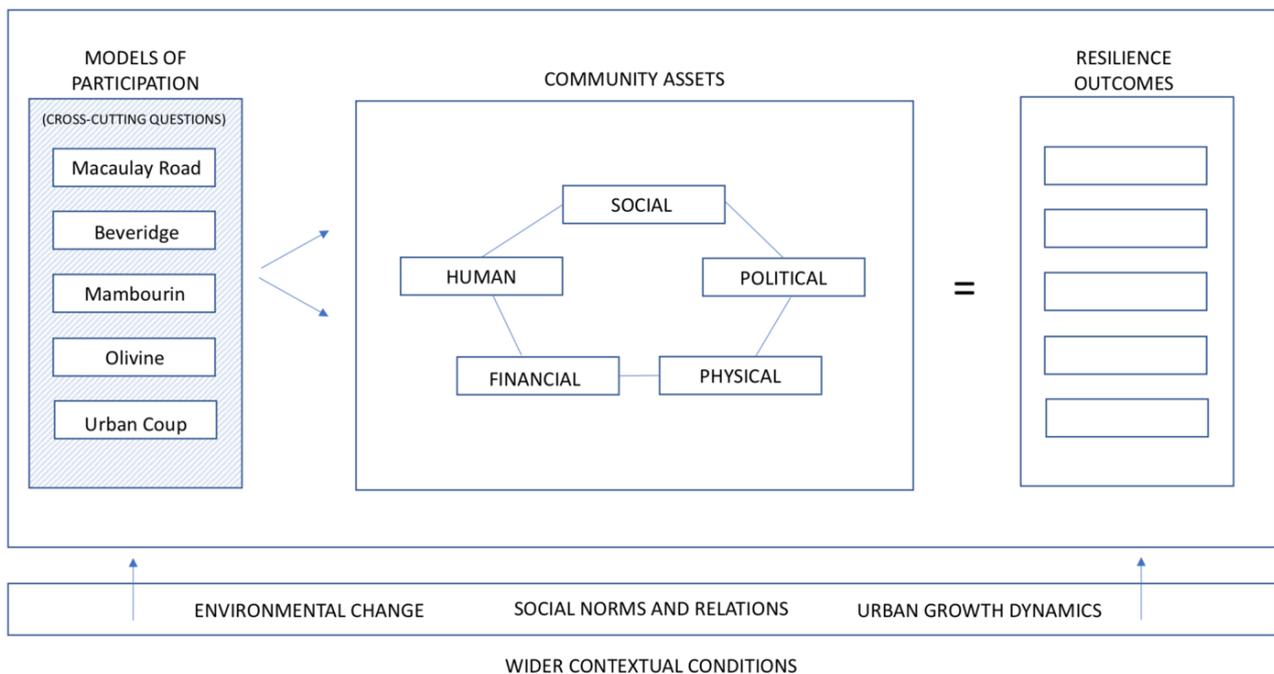
different developmental outcomes. This echoes resilience literature, which also foregrounds the capacities of individuals and groups to respond to shocks and stresses.

Conclusion

Resilient Melbourne's existing definition of community resilience—as 'the sustained ability of a community to respond to, withstand and recover from shocks and stressors'—recognises that communities with pre-existing community infrastructure are best positioned to respond and adapt to adversity. The *Community Resilience Action* emphasises the important role participatory development can play in building stronger, resourceful and robust communities. By bringing together the participatory planning literature with community resilience and social cohesion literature, this report has presented an evidence-base that can guide the progress of this innovative *Action*.

This report provides rich evidence of existing conceptual links between participatory planning, social cohesion and community resilience. As noted, there are clear benefits of engaging residents in planning—to improve built environments that are responsive to community needs, to strengthen community ties through inclusive processes, and to build trust in institutions and local authorities through meaningful engagement processes. Indicators associated with resilience, social cohesion, social connection, social capital, and wellbeing provide a way of capturing these benefits. The proposed Community Resilience Action Framework sets out a way of conceiving of the relationships between different participatory models, the generation or cultivation of community assets, and how they are leveraged by communities to achieve community resilience outcomes.

It is clear that the five Resilient Melbourne pilot sites offer a unique opportunity to explore the critical value of participatory development for cultivating resilient communities. Resilient Melbourne is positioned to take leadership in knowledge production and translation—placing '*people at the heart of all cities*'.

Appendices

Appendix A: Case study 1: Community Land Trusts

Community land trusts (CLTs), evidenced in the contexts as broad as the US, UK, Canada, Belgium, Kenya, Tanzania, and Thailand are a model of community-led housing provision with a clear emphasis on participation. A key legal feature of CLTs is that land titling is held communally in a trust, maintaining the asset with the local collectively-managed body with limited profit-making capacity, as a way of countering speculation and rising rents of the private market. As such, a CLT model (at its best) combines the emphasis on participation and community-driven development, with an institutional structure that actively challenges long-term stresses linked with housing affordability. Reviews of CLTs in various contexts have demonstrated positive outcomes framed as inclusion, empowerment, cooperation, sharing, and self-regulation (Baily, 2013; Mattei, 2012, De Angelis, 2007).

Seeking to produce a 'thick ethnographic' review of a CLT scheme in Brussels, Belgium, Aernouts and Ryckewaert (2018) examined the process and outcomes of a CLTs scheme convened in response to a protracted housing crisis in Belgium. In 2008, two Brussels organisations promoting participation and collective housing united around the concept of the CLT model, lobbying the Brussels Government for financial and legal support. In 2012, the organisations were given a 670,000 Euro subsidy to purchase land for the scheme, as well as official recognition through the 'Housing Alliance' (2014-2018) policy programme, which provides subsidies for low-income and moderate housing.

Critically, this project had a strong emphasis on participatory planning, with workshops carried out in two phases aimed at designing the future dwelling space. In the first, a series of six workshops was held in which residents (23 families of non-Belgian origin) discussed their aspirations for individual dwellings, collective housing projects, and on different aspects of cohabitation. In the second phase, residents could respond to seven different plans submitted by teams of architects and contractors.

Interviews following this process identified three main benefits: capacity building and ability to understand the design and production of housing, empowerment and self-confidence to engage in public forums and political discussion, and the building of social trust (especially across members of different backgrounds) through the pursuit of a common goal. Attendance and participation at the general meetings were seen to increase following the second round of participatory workshops, with residents reporting feeling encouraged that their voices were meaningfully influencing the design process.

This model of participation demonstrates significant potential to generate social solidarity and individual capacity outcomes, as well as offering a form of ownership which directly challenges the structural barriers to affordable housing in the city. Critically, the authors highlight its success less in terms of going to scale (an estimated 30 units a year), but rather as seizing on a political climate to demonstrate alternative housing approaches, which has inspired further policy debates on the unfordable cost of land and seen the integration of participatory processes into other social housing schemes. Creating a network of public housing associations to exchange knowledge on the CLT model has also assisted in 'scaling out'—that is, the dissemination of principles and practices— of the model.

Yet much of the success of this model relies upon both the institutional set-up, as well as wider contextual features. Financial and legal recognition from the Belgian government created a strong partnership in the early stages between public authorities and the organising groups, which helped build trust. Subsidies, or the acquisition of land at a lower cost is critical for the success of CLT or other forms of collective social housing models. Likewise, the commitment to creating long-term working groups which involved residents, architects, contractors, and social workers supported the co-production of housing plans and the capacity-building of residents. The presence of strong and active social organisations which could push for alternative housing models was crucial in getting the scheme off the ground.

Appendix B: Case Study 2: Building community resilience: lessons from the 2010-2011 Canterbury earthquakes

A series of devastating earthquakes occurred in the Canterbury region of New Zealand between September 2010 and December 2011. The February 2011 earthquake was particularly destructive and resulted in 185 deaths. In addition to these disaster events, ongoing stress resulted from aftershocks lasting more than three years. Extensive damage to the built environment occurred, including the loss of 80% of the Christchurch central city district. Crucial infrastructure including drains, sewerage systems, water and stormwater mains, along with road networks and community facilities were all casualties of the quakes. With almost 8,000 homes zoned as uninhabitable, additional challenges including provision of affordable housing for residents and recovery work crews have proved challenging.

In the immediate aftermath and in the time since, communities across the Canterbury region displayed resilience in the face of adversity. Thornley et al., (2015) documented six communities' experiences of responding to the crisis. Interviews and focus group data were analysed to produce a detailed account of the factors that influenced community resilience during this period. Community resilience factors were organised under three domains: individual, community and societal.

Individual wellbeing was impacted by a complex of chronic stressors (i.e. aftershocks, housing conditions, uncertainty, lack of access, etc.) leading to adverse mental health effects that negatively influenced individuals' capacity to contribute to community. Participants who were able to contribute to community efforts often found themselves to be energised by their participation. For those 'used to hardship' (i.e. poverty), pre-existing survival skills were invaluable to their community's adaptive capacities.

Pre-existing community connectedness and community infrastructure were seen as vital precursors for maintaining a sense of community efficacy throughout the shocks and stress. For Communication networks were important for galvanising community, mobilising quickly and providing material and emotional support. This resilient social infrastructure extended across communities. For example, the Ngāi Tahu mobilised quickly thanks to established tribal infrastructure around marae (meeting grounds). Marae provided services and care for large groups, not only Māori. Extended networks of Māori iwi (tribes) across New Zealand coordinated emergency responses and supplied additional resources.

Additional community level factors included community participation and decision-making. Organised community responses tended to rely on pre-existing community organisations (e.g. community radio and volunteer networks) for communication and mobilisation, anchored by consistency and stability afforded by shared cultural values and practices. Where participation in official decision-making was enabled, communities were able to heal. However, community participation was adversely affected by negative past experiences of procedural injustice and a lack of responsiveness by authorities to communities seeking to achieve community benefits had disempowering effects.

Community resilience was reinforced where there was flexible and responsive external support from societal agencies. Funding, consultation and advocacy for disaster relief efforts extended community capacities and enabled activation of community assets. Agency inflexibility, insufficient funding, and slow response times hindered recovery. For communities with previous experience of socioeconomic deprivation, hardships were compounded by the earthquakes. Many residents were forced to live without essential basic services and access to running water or sewerage. Moreover, material devastation was generally worse in their communities where, for example, there already was pre-existing housing insecurity. The interaction of compounding and intersecting stressors reduced capacity for community mobilisation.

Examination of these Canterbury experiences reveal lessons for both communities and authorities. Pre-existing community connectedness and infrastructure were shown to be critical to effective coping and response to crisis. This finding strongly supports community development approaches to resilience building. Robust relationships within communities positioned them to self-organise, problem-solve, creatively improvise, and act rapidly. Greater involvement in decision-making, responsive to specific community needs was seen to contribute to stronger sense of self-determination and wellbeing. Finally, the Canterbury case shows that communities need to be sufficiently resourced to carry out their vital role, and to both reduce existing and prevent exacerbation of hardship by disadvantaged communities. In sum, community resilience relies on effective collective action and local organisation before a crisis develops.

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