REPORT



Governance of participatory planning for resilient communities

January 2021







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Acronyms

CEO Chief Executive Officer

DELWP Department of Environment, Land, Water and Planning (Victoria, Australia)

IAP2 International Association for Public Participation

IPD Integrated Project Delivery

RICS Royal Institution of Chartered Surveyors

Glossary

Governance: Formal and informal processes and institutions that are established to drive decisions associated with management of common affairs (Carlsson et al., 1995; Clegg, 2019; Wiseman et al., 2012).

Resilience: Ability of a system to perform under a variety of conditions including stressors and unexpected shocks (Ayub et al., 2020; Meerow et al., 2016; Naderpajouh et al., 2018).

1 Executive summary

1.1 Context

Participatory planning has been discussed and applied since the 1960s, but debates about best practice approaches, barriers and challenges, and democratic legitimacy are still ongoing. In the current time of increasing spatial socio-economic disparities, it becomes clear that building social cohesion is a crucial element in urban development. While there is a growing number of positive examples of participatory planning being applied well, there are also critiques of its effectiveness. These critiques are associated with the challenges of governance of participatory planning, including engaging with a wide range of stakeholders and their vested interests. For example, tenants and community organisations usually value participatory planning as a means of driving social cohesion, while policy makers, planning authorities and property developers often associate participatory processes with increased costs and possible delays in development.

In recent years, new participatory models such as co-design and urban living labs have informed the debates about participation. For example, there has recently been a call for more experimentation and innovation in the governance of participatory processes in different development contexts – from small-scale urban regeneration projects to large-scale master planned estates. Still, key questions around the governance of participation remain: who should participate, who can moderate and drive the process and how should participation be conducted? Furthermore, what are the practical implications of participatory planning to build resilience of the communities? The aim of this research is to respond to these questions by exploring the governance of participatory planning as it relates to building community resilience in residential and mixed-use developments.

1.2 Methodology

The aim of the research is to examine a range of participatory planning and development models, and identify and share lessons that can be used to increase the resilience of new communities. This research is informed by five case studies of development projects in Melbourne that represent a range of innovative forms of participatory planning, including community-led, developer-led and government-led models. Melbourne was selected as the housing market has rapidly grown in recent years, with increasing population, resulting in stress on the housing market that necessitates alternative approaches to housing development. Through an exploratory and grounded study based on interviews with a range of actors across these developments, the aim is to describe and assess the governance of participatory planning by identifying the involved actors, their interactions, incentive mechanisms and associated decision-making processes. The case studies involved semi-structured interviews, and as part of the analysis of the interviews and project documents, a matrix was developed to provide a systematic representation of the stakeholder networks. Further analysis is presented on the perceived benefits, challenges and drawbacks of the models applied across these cases. The report concludes with the social implications of these alternative development approaches through the theoretical lens of community resilience.

1.3 Results

The findings suggest that participatory planning varies by the range of actions that are centred on involvement of a wide range of stakeholders compared to traditional top-down development. The existing or future community is the core stakeholder within the list of involved actors. As a result, the development process can be tailored to include a participatory component based on the context of the projects, suggesting a wide opportunity for innovation. To overcome the challenge of governance in an open approach, the key principles of participatory planning are categorised and discussed along with the types of incentive mechanism, and potential benefits and challenges. In addition, a discussion is presented on practical implications to build resilient communities through participatory planning. These findings can help communities, planners, developers, and government bodies shape the governance structure for different contexts towards resilient communities.

Key principles of participatory planning: We observed that participatory approaches can be applied across different stages of planning and development; they can work at different scales, from a precinct down to an individual residential complex; they can be initiated by different actors; and they can include different degrees of participation from each stakeholder group. The case studies provided context for a comprehensive set of principles that included:

- (i) being accessible to a wide range of stakeholders,
- (ii) including and involving multiple stakeholders in the decision-making process,
- (iii) being open and receptive to accommodate conflicting ideas,
- (iv) being community centred,
- (v) enabling authentic engagement,
- (vi) being transparent,
- (vii) making informed decisions,
- (viii) having open communication and information sharing,
- (ix) setting realistic goals through an inclusive approach,
- (x) taking ownership and sharing risks,
- (xi) being supported by a clear and specific governance framework.

Governance framework - network of actors and incentive mechanisms: Observations across cases suggest that the governance framework can be established based on the structure of stakeholder networks and the chronology of their interactions throughout the development process. These frameworks inform a range of key decisions throughout the development process. Such decisions are shaped by incentive mechanism of each stakeholder, which can include:

- (i) value creation and business appeal in competitive housing markets,
- (ii) drivers for addressing community needs,
- (iii) financial drivers such as ethical funding requirements,
- (iv) power relations, such as the ability of an actor to influence the process,
- (v) individual leaders and instigators,
- (vi) values creation through understanding of the context,
- (vii) political motivations and public appeals, and
- (viii) sharing responsibilities and risks.

These incentives drive and shape the governance frameworks of participatory planning.

Benefits and challenges for achieving resilient communities: Participatory planning may provide a range of benefits, including physical/design, economic, market, social, organisational, political, health and wellbeing, knowledge creation, and relational. Examples of these benefits are elaborated in the report. However, benefits are often accompanied by challenges, such as difficulties in developing authentic processes, ensuring commitment, complexity of trialling novel governance, requirements for more early investment, reduced market efficiency, challenges of engagement, uncertain outcomes and compromising in the case of competing interests. Regardless, the process has a clear impact on the resilience of the involved community, as a result of polycentric decision-making across the stakeholder network. This structure of decision making will impact:

- (i) psychological resilience through building social cohesion and identifying needs of diverse community members,
- (ii) social resilience through community building and increasing social capital,
- (iii) ecological resilience through cooperative management of resources and sustainable and locally-contextualised practices,
- (iv) economic resilience through long-term partnerships, and
- (v) resilience of the built environment by addressing infrastructure needs through integrated design and development process.

1.4 Key lessons

The lessons learned from this study can be summarised into ten major themes:

- (i) participatory planning requires a **strong partnership among key stakeholders** such as state government agencies and authorities, local councils and developers,
- (ii) partners need to **maintain their commitment**, as the process of participatory planning is often complex and time consuming,
- (iii) **realistic planning goals** should be established as stakeholders may articulate different, sometimes conflicting interests,
- (iv) a major facilitator to balance these conflicting ideas is to promote **understanding of the perspectives of other stakeholders** through approaches such as roleplay games,
- (v) there is a need to **prioritise the needs of communities** in considering liveability in the built environment,
- (vi) a **structured process** should be established to involve ground rules for decision making via a governance framework tailored for specific projects.
- (vii) there is also a need to **engage supply-side stakeholders**, such as builders, in the co-design process; and move beyond the typical focus of participatory planning on engaging future residents, architects, and regulators,
- (viii) considering its resource intensity, there is a need for **adequate resource planning** for participatory planning.
- (ix) **the polycentric decision-making structure** facilitates building community resilience within the governance structure of participatory planning.
- (x) finally, there is a need to **understand the challenges and drawbacks** as well as compromises to achieve the desired outcomes.

2 Introduction

Residential and mixed-use developments, both on a small scale in urban infill settings and on a larger, precinct scale in newly-established 'greenfield' settings, are commonly delivered through established processes of planning, design and construction. Since these developments shape urban morphologies to a great extent, the process of development has substantial long-term societal implications. However, communities have increasingly faced challenges such as ill-suited designs that create social frictions rather than promote social cohesion. Observing these challenges resulted in the emergence of alternative development strategies, including participatory planning. However, implementation of participatory planning has also raised novel challenges that need to be addressed. In this report, we explore participatory planning and its aims to involve a wide range of stakeholders in the decision-making process of planning, designing and building mixed-use developments. Specifically, we focus on the governance of participatory planning for integrated, sustainable and resilient community outcomes to identify challenges and opportunities for large-scale application in future urban development.

3 Background

3.1 Features of participation in planning

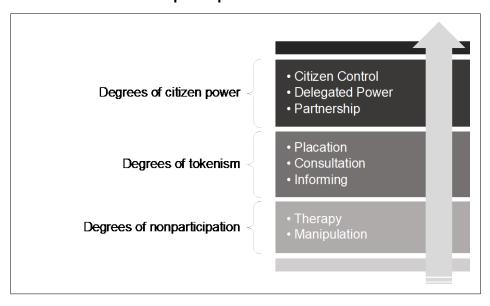
During the 1960 and 1970s the dominant top-down approach of urban planning was challenged as a result of societal and environmental movements. Pivotal to this trend was the impact of Jane Jacobs on shifting perceptions about place and the role that citizens could play in countering top-down, broadbrush planning interventions. In *The Death and Live of Great American Cities* (1961), Jacobs articulated her "unorthodox remarks" about urban planning to describe the characteristics of cities designed for people; this reinforced the messaging she championed through extensive activism, and has become standard text for urban planning students globally. Promoting engagement of the community in the planning and development process has since been identified as a strategy to enhance social cohesion, improve housing affordability and form meaningful connections within

society so that it can be more inclusive, and in the long term, more resilient (Hunting, 2015; Sharam & Bryant, 2017).

This process is often informed by different degrees of community participation in planning processes, represented by Arnstein (1969) as a ladder that ranges from non-participation to tokenism and ultimately to citizen power. As can be observed in this spectrum, public participation can manifest as manipulation of people (non-participation), having no real impact on the process, or simply informing people about the plans, to the ultimate level of participation, i.e., delegating the power of decision-making and control to the public (citizen control).

In practice, the concepts presented in Arnstein's (1969) seminal work have been adopted by the International Association for Public Participation (IAP2, 2014) to advocate for public participation in decision-making. IAP2's vision of public participation presents five levels of participation: *Inform, Consult, Involve, Collaborate* and *Empower* (Beierle, 2002). As presented in *Table* 1, other studies have also deliberated about participation in decision-making processes and presented their classifications or frameworks on the basis of different principles such as levels of power distribution, motivations behind public participation practice, differences in institutional design and levels of control over information flow.

Figure 1. Arnstein's ladder of citizen participation



Source: Adopted from Arnstein (1969)

In addition to the level of participation, other considerations such as the form of participation (Johnson, 1984), nature and scale of decisions (Johnson, 1984), reasons of participation (Innes & Booher, 2000) and types of relationships between participating parties (Brown & Keast, 2003; Head, 2007) are also discussed in the literature. To formalise a range of categories for public participation, Fung (2006) proposed a three-dimensional approach to participation that can be used to plot each case in view of the participant selection methods, their modes of communication and decision and the extent of authority and power. The proposed model has been used to develop governance mechanisms for participation considering the complexity and uncertainty of the context of each case (Fung, 2006; Chu, 2018).

Table 1: Various classifications for public participation

Articles	Differentiating principle and proposed classifications
Connor (1988) Cornwall and Jewkes (1995) and Probst et al. (2003) Fung (2006)	The level of participation depends on the required outcome and motive of the planning endeavour; seven levels are classified: - Education - Information Feedback - Consultation - Joint Planning - Mediation - Litigation - Resolution/Prevention The level of participation is based on power distribution and it ranges from power consolidation to a single actor to power distribution to multiple actors. The institutional design determines the level of participation and classifications are based on: - Participant selection - Communication and decision - Authority and power
Barreteau et al. (2010)	The level of participation depends on the level of control over information flow.
UN Habitat (2009)	Classifications depend on the type of participation and include: - Nominal - Consultative - Instrumental - Representative - Transformative
Bréthaut (2016)	Levels of participation are dependent on the participation processes and include: - Information - Consultation - Deliberation - Coproduction

Source: Modified from Bréthaut (2016)

3.2 Participatory planning and urban development

Within the discourse of public participation in the planning process, *participatory planning* presents itself as a planning paradigm which aims to "address a specific issue, opportunity or problem with the intent of resolving or exploiting it successfully through the collaborative efforts of the crucial stakeholders" (UN Habitat, 2001, p.20). Based on the works of Arnstein (1969) and Mitchell (1997), Ahmed and Swapan (2009) developed degrees of citizens' participation in the urban planning context from lower levels of illusive participation and passive participation, to information giving, consultation, active participation, functional participation, interactive participation and ultimately self-mobilization. Studying the planning cultures and corresponding levels of participation, Lane (2005) presented the conception of planning and the role of participation in each planning culture on the basis of the seminal works of Arnstein (1969), Friedmann (1987) and Hall (1992). A synthesis of different planning approaches and their associated participation strategies with a major focus on proposed frameworks by Lane (2005), Ahmed and Swapan (2009) and IAP2 (2014) is presented in *Table* 2. The table

includes an overview of various concepts, approaches and levels of participation in different planning cultures and correlates these with general planning paradigms.

Table 2: Participation and planning approaches

o N	Partic	cipatio	n		Plannir	ng		
2	Category	Level	Туре	IAP2 Spectrum	Nature	Tradition	School	Models
1	Non-participation	Manipulation	Illusive	ľ	The selected elite are placed on "rubberstamp advisory committees" without citizen participation.	Societal guidance	Blueprint	Blueprint planning Geddes, Howard Traditional precinct planning
2	Ž	Therapy	Passive Participation	Inform	People are informed about the plans or what has already happened, without any influence over decisions and are only provided with information by external professionals.	S		Blu G Traditional pr
3	Tokenism	Informing	Participation through information giving		People are informed about the plans and their feedback is collected by questions and answers posted by the authorities. They cannot influence the decision, neither are consulted about the final outcome.		Synoptic	Mixed scanning Incrementalism Synoptic planning
4		Consultation	Participation by consultation	Consult	People are consulted and are listened to by the authorities. The authorities modify the plans, and the power of decision making still lies with them without any obligation to incorporate public opinions.			
5		Placation	Active participation	Collaborate	People participate by advising or planning "ad infinitum" but the merit and legitimacy of the plans lie with the authorities.			

6	Citizen Power	Partnership	Functional participation		People participate by forming groups and power is redistributed. Decision-making is a shared responsibility between the people and authorities, and plans are finalised through negotiation.	Societal transformation	Pluralism	Communicative Bargaining Marxist Advocacy Transactive
7		Delegated power	Interactive participation	Empower	People have a significant level of power over decision-making. They participate throughout the planning and implementation phases.	Soc		
8		Citizen control	Self- mobilization	•	People start initiatives themselves to institute change. Although the start is community mobilized, people can seek help from authorities and work with them to achieve goals.			

Source: adopted from Lane (2005), Ahmed and Swapan (2009) and IAP2 (2014)

3.3 Governance of participatory planning in development

Governance refers to formal and informal processes and institutions that are established to drive decisions associated with management of common affairs (Carlsson et al., 1995; Clegg, 2019; Wiseman et al., 2012). Within the urban context, governance is mainly concerned with the processes used to organise, manage and deliver plans, and their associated decisions, including the interaction of involved stakeholders (Devas, 2014; Raco, 2009), both at the urban/precinct and project levels.

Controller Project Driver Passive

NonStakeholder

Figure 2: Illustration of stakeholder relationships

Source: adopted from Mainardes et al. (2012)

Governance frameworks can be defined based on the interaction of stakeholders classified in the stakeholder theory by Mitchell et al. (1997), and in public organisations by Mainardes et al. (2012), including: the regulator, controller, partner, passive, dependent and non-stakeholder. Interactions between these stakeholder classes and the project driver (often the main developer) are presented in Figure 2, in which the direction of influence is presented by arrows and the thickness of arrows indicates the strength of influence. A regulatory stakeholder emerges when developers have no influence over that stakeholder and in return that stakeholder holds influence over the developers. The stakeholders that have stronger influence over the project driver are referred to as controller stakeholders. When the project driver and a given stakeholder have the same level of influence over each other in equilibrium, the stakeholder is referred to as a partner stakeholder. On the contrary, when the influence is mutual but the project driver has a stronger influence over the stakeholder, the latter is referred to as a passive stakeholder. When the stakeholder has no influence over the project driver but it depends on the project driver, it is referred to as a dependent stakeholder. Lastly, if neither party has influence over the other, they both can be categorised as non-stakeholders. Through this model, it can be argued that the aim of participatory planning is to provide the opportunity for the stakeholders to be involved based on the needs of the project rather than the power structure of the stakeholders. In addition, stakeholder relationships can be classified as: (i) informal short-term cooperation, where stakeholders remain autonomous and outcomes are independent; (ii) more formal medium-term coordination, where joint planning is involved but stakeholders remain autonomous; and (iii) formal long-term collaboration with the sharing of power and resources along with joint decisionmaking (Brown & Keast, 2003; Head, 2007).

Figure 3: General illustration of stakeholders in extended project space

The engagement and participation of stakeholders in the planning and development process is conceptualised by an extended project space wherein a wider range of possible stakeholders exists (Figure 3). Commonly, the engagement process is organised by an internal stakeholder (Lehtinen & Aaltonen, 2020), which can be a single organisation, such as developer, council or landowner, or can be an alliance of such organisations. In practice, the engagement process can result in formal and informal relationships between stakeholders (Frankel et al., 1996). Formal relationships can either be legally binding such as relationships established through contracts, or non-binding such as relationships established by memorandums of understanding and letters of intent (Mantysaari, 2010). To recognise such arrangements, three engagement spaces are presented in Figure 4, including: formal contractual engagement (for formal and legally binding contacts), formal noncontractual engagement (for formal but legally nonbinding contracts) and informal engagement space (for informal, nonbinding engagement). Participatory planning allows for a wider range of these arrangements and increases the type and frequency of interactions.

3.4 Resilience, participation and governance

Resilience has become an important goal in order to future-proof cities in the face of a variety of disruptions (Ayub et al., 2020; Fastenrath & Coenen, 2020). At the same time, the understanding of resilience as a theory and its application in practice is constantly changing and diversifying (Naderpajouh et al., 2018; Meerow et al. 2016; Fastenrath et al. 2019). Most commonly, *urban resilience* refers to the collective capacity of communities, and associated socio-technical and socio-ecological systems to face a range of chronic stresses and acute shocks (Ungar, 2011; Spaans & Waterhout, 2017). Seven characteristics in urban resilient are suggested as *robust, reflective, redundant, resourceful, inclusive, integrated* and *flexible* (The Rockefeller Foundation and Arup, 2014). Urban resilience can be observed within three broad categories of *planning, community* and *governance* (Wang et al., 2018).

Primarily, an innovative, open, and enabling environment within local government, along with collaborative planning strategies, facilitates transformation and resilience (James et al., 2015). For example, participatory planning tends to be a flexible process compared to traditional planning processes (fixed and formalised), which may increase adaptivity (Hassenforder et al., 2016). The systemic structural shift from monocentricity towards polycentricity results in dissolving the powers across scales, which in turn creates institutions that can deal swiftly with changes and disturbances (Schoon et al., 2015). It also provides diversity and redundancy that mitigate risks and minimise errors in governance (Carlisle & Gruby, 2019; Schoon et al., 2015). As empowered communities actively participate in multifaceted decision-making and participatory processes, the process can facilitate the generation of social capital that affects community resilience (Aldrich & Meyer, 2015; Brown & Ashman, 1996; Claridge, 2004). Social capital is among the strong predictors of community resilience (Kerr, 2018). Additionally, factors including shared information, community participation, leadership, sense of community and trust, are also positively correlated with community resilience (Khalili et al., 2015).

However, these benefits come with their own requirements, inherent complexities, and challenges as a new urban planning paradigm (Andersson et al., 2007), which necessitates a balanced approach (James et al., 2015). Engagement of stakeholders in any project is an iterative process, which is time dependent and shaped by the process of framing, legitimising, maintaining and expanding the engagement actions (Valentin et al., 2018; Lehtinen et al., 2019). As a result of these challenges, there is an evolving critical debate about the understandings of participation and the challenges for realizing democratic planning outcomes (Zakhour, 2020). Some scholars have recently raised the question of whether there is a crisis in participatory planning; for example, Legacy (2017) has highlighted the problem of politicisation of the process.

In addition, the extensive existing literature on participatory planning is not well connected to the literature on resilience. This research aims to address this gap by investigating the impact of participatory planning on the resilience of communities.

4 Case studies and methodology

The case studies were drawn from the Resilient Communities program, an action from the Resilient Melbourne strategy. Resilient Melbourne was established under the auspices of 100 Resilient Cities – Pioneered by The Rockefeller Foundation, and its strategy was developed in collaboration with the 32 metropolitan councils of Melbourne, the Victorian State Government and representatives from the private, not-for-profit, and academic sectors. Resilient Melbourne was initiated in response to the stresses associated with metropolitan Melbourne's rapid growth and the associated forms and patterns of development. According to the Resilient Melbourne strategy, "Although the rapid pace and large-scale of development across Melbourne can act as barriers to consultation, meaningfully involving people in making decisions about their built and natural environment can foster stronger community identity and make places more desirable, in new and established areas" (Resilient Melbourne, 2016, p.117). The Resilient Communities program has sought to test the hypothesis that involving future residents in decision-making about their developments and neighbourhoods can lead to stronger community connections and a built environment that better meets their needs. In addition, it aims to explore the hypothesis that greater community connectedness will result in better, more cohesive responses to shocks and stressors, improving community resilience.

In practice, Resilient Communities was designed as a collection of pilot projects to test models of participatory planning and development across residential and mixed-use sites of different scales and in different contexts (from urban infills to greenfields). Selection criteria outlined in the Resilient Melbourne 2016 expression of interest for participation dictated that pilots must:

- (i) involve a confirmed future or current development site,
- (ii) include an 'innovative' approach to future resident engagement, and
- (iii) be open to working with academic researchers to capture lessons from the on-site experience.

Five development projects were selected through an expression of interest and Resilient Melbourne established three-year initial agreements with each partner (Table 3). The cases, at different stages of development, employ a range of activities associated with participatory planning. The sites range from greenfield precinct developments of up to 50,000 expected residents to small brownfield multistorey residential blocks. This mix of scale has provided a wide spectrum to explore real-world application of participatory planning processes and associated implications for community resilience. Each site represents a different adaptation of the principles of participatory planning and is unique in its governance process; as a result, for this research each site was considered as an individual subcase for which multiple sources, i.e., multiple actors involved in a project, were interviewed for data collection. The design setting used one holistic case, i.e., the case of metropolitan Melbourne, which was defined and informed by embedded sub-cases, i.e., cases of each of the five development projects.

Table 3: List of selected projects along with their descriptions

SR		· · ·	along with their descriptions
	Code	Туре	Key features
1	Project A	Brownfield / urban infill apartment block (~75 units) Under construction	 Developer-led project responsive to potential resident input via surveys and focus groups. Presents a new pathway to homeownership, bridging the gap between renting and owning an apartment in the development. Aspires to establish strong communities in apartment settings. Incorporates design elements to achieve high levels of environmental performance and respond to other community concerns.
2	Project B	Greenfield precinct (up to ~50,000 residents) Precinct Structure Plan under review	 Large growth-area precinct with planning co-led by state and local government and majority landholder. Primary landholder organisation envisions future development that includes strong environmental and social outcomes. Focuses on housing diversity, including targets for higher residential density and greater levels of affordable housing than are typically included in greenfield developments. Council focus on early delivery of social infrastructure and services. Decision-making informed by formal partnership group with representatives from state government departments, affordable housing providers, health services, education, recreation organisations and other social service areas. Includes co-development of a precinct-level resilience plan by partnership members.
3	Project C	Greenfield mixed-use development (>3,400 residents over 1,200 lots) Under construction	 Developer-led master-planned community. Primarily residential but includes retail, civic and social infrastructure in a new town centre. Focuses on convenience, discovery and wellbeing, with an emphasis on early community development. Draws on collaboration among developers, consultants and social enterprises applying placemaking principles. Includes planned workshops, events and other modes of engagement with residents upon their arrival, through the application of placemaking principles to establish community connections, identify local leaders and develop governance structures for shared amenities. Considers early delivery of social infrastructure at the site.

4	Project D	Greenfield mixed-use development (2,250 residential lots) Under construction / partially completed	 Developer-led master-planned community. Primarily residential but includes retail, civic and social infrastructure. Focuses on supporting families with children through the early provision of amenities such as a school, parks, adventure playgrounds, and a community hub with a social enterprise cafe. Relies on partnerships established by project driver with social enterprises and placemaking organisations for the provision and running of community infrastructure. Applies collaboration principles via a planning tool with another project stakeholder.
5	Project E	Brownfield / urban infill apartment block (~30 units) Under construction	 Community-led co-housing group with the goal of building an intentional community based on principles of deliberative development. Focuses on development of a multi-unit residential building with an emphasis on communal spaces and amenities. Partners with other organisation seeking to deliver environmentally sustainable housing with capped profits and a strong focus on community connectedness. Applies modified-consensus decision-making model providing formal but inclusive structure for members to participate in all aspects of decision-making activities.

A semi-structured interview approach was employed to allow emergence of themes and ensure flexibility, depth and breadth of the inquiry (Britten, 2006; Miles & Gilbert, 2005). The development of the semi-structured interviews included prerequisites identification based on the synthesis of literature presented above, obtaining and using pertinent knowledge, preliminary guide formulation, pilot testing and finalisation (Kallio et al., 2016). Ultimately, a total of 34 interviews (including six residents) were conducted either face-to-face or over the phone, which provided thematic saturation (Hagaman & Wutich, 2017). All interviews were audio-recorded and then transcribed. Details of the roles, designations and positions of the interviewees are provided in Table 4.

Content-driven, in-depth exploratory data analysis was adopted to identify patterns, themes and processes related to participatory planning and associated outcomes and expectations (Guest et al., 2011). Data exploration was conducted using a thematic analysis method to identify implicit and explicit dimensions of the phenomena from the data (Braun & Clarke, 2006; Guest et al., 2011). The coding was inductive and deductive based on the focus of research. That is, two senior researchers coded two interviews and then compared and contrasted the coding framework and their associated nodes. The resulting coding framework was used by the researchers to code the data, while additional sub-nodes were generated during this process. The coding process was constantly discussed to ensure consistency. Furthermore, triangulation was performed by contrasting the transcribed interviews with public policy documents, with the aim to enhance the validity and credibility of the findings (Denzin, 2017).

Table 4: List of targeted roles, designations and positions from the identified projects

SR	Roles and Titles	Stakeholder Group		
1	Future Resident (6)*	Community		
2	Consulting Associate	Consultants		
3	Founder/CEO			
4	General Manager			
5	Coordinator Social Policy, Advocacy and Partnerships	Councils		
6	Director Advocacy and Community Services			
7	Manager Community Strengthening			
8	Senior Strategic Planner			
9	Social Planner			
10	Social Policy and Projects Officer			
11	Urban Planner			
12	Community Development Manager (2)*	Developers		
13	Development Manager (2)*			
14	Head of Community]		
15	Landscape Manager			
16	Land Use Planning and Engagement Expert			
17	Senior Development Manager			
18	Sustainability Manager			
19	Manager Planning Projects	Governmental Agencies and		
20	Manager Places and Precincts	Departments		
21	Project Officer			
22	Strategic Planning Manager			
23	General Manager, Growth Futures	Landowners		
24	Project Manager	1		
25	Urban Development Manager			
26	Enterprise Owner	Social Enterprises		
27	Place Manager	1		

^{*} Interviewees include one from each role, except six future residents, two community development managers, and two development managers, totalling 34 interviewees.

5 Results and discussion

5.1 Conceptualization and definition of participatory planning

We asked interviewees to define the concept of participatory planning or explain what participatory planning meant to them. The interviewees referred to the concept of participatory planning with different terminologies including participatory design, participatory development, a place-based approach, co-design, collaborative planning, stakeholder engagement and community engagement. Though theoretically each of these terms may refer to a different concept, the inclusion of participation and engagement of multiple actors is a common feature among them.

5.1.1 Interpreted as a range of actions

Interviewees referred to participatory actions as "broad sweeping terms", noting that in practice a range of actions are labelled as participatory. This observation further suggests that the notion of participatory planning is not yet established as a clearly defined practice and includes a wide range of approaches. That is, while participatory paradigm in practice aims for a shift from non-participation to higher levels of interaction and engagement (as per Table 2), its extent can still range from passive participation to self-mobilisation. This lack of clarity in terminology is practically important as it may instigate its misuse.

5.1.2 Role of actors and definition

The difference in how interviewees interpreted the concept of participatory planning can be attributed to the differences in their professional backgrounds and project roles. For example, planners referred to participatory planning as activities at "a high strategic level", that aim to increase collaboration within the involved stakeholders. Developers and their representatives used the term of participatory development, while other project members, such as future residents and advisors, used the terms "co-design" and "participatory design" to refer to participatory planning. These interpretations naturally reflect more project-based, delivery-oriented applications.

5.1.3 Stage of project and definition

An important distinction between the terms *participatory planning* and *participatory development* was perceived to be related to the project stage for each case. The *planning* phase of a project was described as including approvals, designs and processes before physical execution at the urban and precinct level, which includes planning for community and community infrastructure. Participatory *development* rather refers to the physical development which includes the physical delivery of the project.

5.1.4 Community as a core focus of the definition

The community in the participatory planning process should be, as suggested by an interviewed community member, "represented in their wishes, ideals, hopes and dreams. Being able to have a voice, be heard, and recognised." The main purpose for the participatory process is to encourage the engagement of community; as an interviewee from the public sector suggested, this is through "getting involved in decisions that affect them, informing, being participants in their own lives, and in the decision-making process as well." Community participation implies the ability of a range of stakeholders to raise their voices, communicate their concerns and be able to participate and influence decision-making, with a focus on both the general public and future residents. It was also highlighted that participatory planning advocates for the empowerment of the community, especially those who are going to live in the development and are influenced by the project outcomes.

5.1.5 Involving a wider range of actors within the definition

Participants can include resident communities, neighbours, business owners, landowners and potential future communities. The analysis pointed to higher emphasis on future residents, and participatory actions did not suggest extended involvement of supply-side stakeholders such as builders and suppliers. Therefore, the contemporary understanding of participatory planning can be extended and cross-fertilised with concepts such as alliancing or integrated project delivery (IPD). In this sense, participatory planning would imply engagement of all the individuals who are going to be impacted by a proposed plan and their active participation in the planning process.

Generally, the aim of participatory planning is to create an open, accessible, innovative, and flexible engagement style that allows relevant stakeholders to engage throughout the process and reduces the impact of stakeholder conflict. The interviewees suggested that this objective necessitates designing a method to engage stakeholders, while facilitating involvement of emerging actors into existing processes. In addition, the involved actors should be allowed an appropriate level of

involvement in terms of access to information and power to influence the decision-making process so that they can contribute to the wider aspects of planning, design and development. Depending on the understanding of the involved actors and the demands of the project, various level of participation can be adopted, as highlighted in Table 2.

5.2 Principles of participatory planning

Eleven principles of implementing participatory planning emerged from the data, which are summarised in Table 5 with details of what each principle encompasses, based on interviewee reflections.

Table 5: Analysis results on the principles of participatory planning

SR	Principles	Description	Supporting Statements
1	Being accessible	Provide a wider range of stakeholders with access to decision- making processes	 The process of participatory planning should be accessible to the stakeholders (Interviewee 1) Providing the opportunity to approach developers of the projects (Interviewee 16) Giving voice to the underprivileged and underrepresented stakeholders (Interviewee 31)
2	Being inclusive	Include and involve broader stakeholders in decision-making processes	 Being inclusive (Interviewee 9,17,18,31,32) Providing the ability for stakeholders to raise their concerns (Interviewee 5) Considering all stakeholders along with diversity of participants in involvement (Interviewee 34) All parties involved should be respectful (Interviewee 4)
3	Being open- minded	Include a willingness to accommodate differences and resolve conflicting ideas	 All actors should consider themselves as a catalyst of change and motivate others to challenge the established mindset of development (Interviewee 15,16) Open-mindedness and acceptance of opinions and views should be reflected in the conduct of the actors to ensure trust (Interviewee 1,8,13)
4	Goals need to be community-focused	Focus of the goals should be on the community in participatory processes	 Should have goodwill for the community and other stakeholders (Interviewee 2) Prioritizing community needs (Interviewee 24,27), and thinking beyond physical development (Interviewee 13, 22)
5	Enabling authentic engagement and participation	Rise above tokenism towards genuine and meaningful participation	 Parties driving the participatory processes should not be faceless (Interviewee 21) Within stakeholder engagement, developing genuine partnerships (Interviewee 14,17,18,32), having early, genuine and honest communication (Interviewee 20,33) along with dedicated community consultation (Interviewee 26) is important

6	Being transparent	Ensure a transparent participatory process	- Being transparent about the process, expectations and outcomes (Interviewee 2,3)
7	Making informed decisions	Seek information from the community and consider community input in decision- making	 There should be a spectrum of participation levels (Interviewee 12,31) informed by discussions (Interviewee 24,26) and consultations (Interviewee 20,26) Going beyond physical development, decisions should be informed and led by the community (Interviewee 13, 22) and consider sustainability and other communal concerns (Interviewee 9) Understanding community needs (Interviewee 19,34)
8	Having open communication and information sharing	Enable open communication and an information sharing ecosystem	 Information should be sought from multiple sources to facilitate decision-making Promoting open and honest communication between stakeholders (Interviewee 1) Providing feedback to the community to keep them informed (Interviewee 4)
9	Setting goals in a realistic and inclusive way	Define realistic goals through an inclusive approach	 Set realistic targets and curb unrealistic expectations (Interviewee 1,12,18) Strive for the set goals as finalized by all stakeholders (Interviewee 22)
10	Taking ownership and sharing risks	Ensure that stakeholders take ownership of the consequences of the decisions and share the risks	- All actors should take ownership of the issues (Interviewee 10) and share risks (Interviewee 21) associated with the outcome (Interviewee 27,34)
11	Being supported by the governance framework	Institute an effective governance structure to support the participatory process	 Participatory planning implantation should be structured and regulated (Interviewee 5,17,19) Governance framework should be implemented according to the scale of the project (Interviewee 21) The ground rules and processes should be set and be flexible (Interviewee 5,19) for general implementation and special provisions such as conflict resolution (Interviewee 9,10)

The interviewees acknowledged that the principles of participatory planning must be utilised in a thoughtful and balanced manner. For example, the results suggest that being inclusive can generate concerns about the number of actors engaged in a resource-limited environment. In communities, often the more powerful voices may be heard, which some interviewees referred to as "[the] loudest voices in the room"; this may not represent the whole community. Accordingly, these principles need to be addressed in the governance framework based on the context to reduce selectivity bias in the engagement process.

5.3 Governance of participatory planning

The governance framework is discussed in view of the network of involved stakeholders, their interactions, key decisions, communication and engagement methods, as well as incentive mechanisms.

5.3.1 Network of involved stakeholders

The identification of stakeholders, their effective engagement and the satisfaction of their interests are pivotal to the success of the project (Williams, 2016). The interviewees were asked to highlight the stakeholders that have been involved or are going to be involved in the projects. The identified stakeholders were then classified based on their characteristics, presented in Table 6. The extent of stakeholder groups identified indicates the complexity of the planning process. The interviewees expanded the categories of stakeholders from the literature of housing (e.g., Ayub et al., 2020) and included services and utilities stakeholders, special initiative organisations, tourists and indigenous landowners and communities. This is an indicator that a key element of participatory planning is inclusion of a wide range of stakeholders.

Table 6: List of identified stakeholders in the participatory planning process

SR	Group	Subgroup	Interviewees that identified the stakeholders
1	Architects	-	Interviewee (4,5,10,12,21,22)
2	Business	Retailers	Interviewee (19,16,13)
	Community	Business Community	Interviewee (23,32)
		Small Businesses	Interviewee (20,21)
		Commercial Enterprises	Interviewee (20)
		Employment Providers	Interviewee (18)
		Local Employment Providers	Interviewee (18)
		Traders	Interviewee (14)
3	Community Groups	General Interest Groups	Interviewee (8,13,18,20,23,31,32)
		Cultural Groups	Interviewee (31,32)
		Internal Community Committees	Interviewee (12)
4	Construction	Builders	Interviewee (2,20,23)
		Contractors	Interviewee (20,21,23)
		Suppliers	Interviewee (20,21,23)
		Subcontractors	Interviewee (2)
5	Consultants	General Consultants	Interviewee (4,8,10,12,21,22)
		Design Consultants	Interviewee (3,18,34)
		Planning Consultants	Interviewee (3,34)
		Project Managers	Interviewee (3,4)
		Research Consultants	Interviewee (18,32)
		Focus Group Organisations	Interviewee (16)
		Legal Consultants	Interviewee (22)
		Negotiators	Interviewee (22)
		Youth Development Consultants	Interviewee (18)
6	Councils	Councils	Interviewee (1,4,5,7,8,11,12,13,14,15,16,19,20,21,22,27,28,29,30,34)

	Local Government Interviewee (17,18,21,23,23,26,31)			
7	Current	Community	Interviewee (2,5,13,14,19,21,26,27,30,32,33)	
	Residents and	Members and Families	Interviewee (12)	
	Community	Project Members	Interviewee (22)	
8	Developers	-	Interviewee (1,13,16,19,27,29,30,33)	
9	Financers	Financiers	Interviewee (4,5,10,22)	
		Banks	Interviewee (34)	
		Superannuation Funds	Interviewee (5)	
10	Future	Future Communities	Interviewee (1,2,6,10,14,17,19,32,34)	
	Residents and	Buyers	Interviewee (8,16,19)	
	Community	Potential Buyers	Interviewee (8,10,17)	
11	Governmental	Regulatory Bodies	Interviewee (2,9,13,14,20,21,23,24,26,30,31,33)	
	Agencies and	Planning Authorities	Interviewee (7,9,10,11,15,16,17,20,21,28,30)	
	Departments	Transport Department	Interviewee (9,14,19,20,21,30)	
		Health Department	Interviewee (6,15,16,21,24)	
		Education Department	Interviewee (6,15,21)	
		Water Department	Interviewee (9,34)	
		Family Support Services	Interviewee (24)	
		Governmental Architects	Interviewee (5)	
		Parks Services	Interviewee (20)	
12	Indigenous	Traditional Landowners	Interviewee (8,23,30)	
	Landowners and Communities	Indigenous Communities	Interviewee (20)	
13	Landowners	-	Interviewee (1,2,6,9,22,24,30)	
14	NGOs,	Special Interest Groups	Interviewee (5,8,17,20,23)	
	Advocacy and Watch groups	NGOs	Interviewee (14,33)	
		Environmental Groups	Interviewee (31)	
		Watch Groups	Interviewee (33)	
15	Political Members	-	Interviewee (6)	
16	Extended Community	Surrounding Communities	Interviewee (1,2,5,8,16,22,32,34)	
		Broader Communities	Interviewee (9,23,31)	
		Regular Visitors	Interviewee (13)	
		Workers	Interviewee (34)	
17	Religion,	Religious Organisations	Interviewee (21,33,34)	
	Culture, Art, Recreation,	Sports Organisations	Interviewee (16,18,19)	
	Leisure and Sports Groups	Arts Organisations	Interviewee (8)	
18	Services and	Schools	Interviewee (6,8,9,16,18,19,21,33,34)	
	Utilities	Water Services	Interviewee (6,7,11,15,19,20,28)	
		Fire Services	Interviewee (16,19,21)	
		Hospitals	Interviewee (6,18,24)	
		Education Providers	Interviewee (24,28)	
		Health Services	Interviewee (28,33)	
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		Communication Services	Interviewee (19)
		Electrical Services	Interviewee (19)
		Gas Services	Interviewee (19)
		Infrastructure Providers	Interviewee (23)
19	Social	Social Enterprises	Interviewee (20,33)
	Enterprises	Community Centre	Interviewee (8)
		Community Development Organisations	Interviewee (33)
20	Special Initiative Organisations	-	Interviewee (8,12,15,17)
21	Tourists	-	Interviewee (23)

5.3.2 Interactions in the network of involved stakeholders

Based on the interview insights into the dynamics of stakeholder and community engagement for the five case studies, various relationships exist among stakeholders in the planning process. In the case of larger planning endeavours, such as precinct planning, inputs and project initiation are governed by the state government through legislation and are regulated by various departments and agencies, such as the Victorian Planning Authority (VPA) and the Department of Environment, Land, Water and Planning (DELWP). Interviewees were asked to elaborate on their relationships with various stakeholders. Based on their responses, Table 7 presents a matrix showing the range of relationships between the stakeholders identified, informed by the literature (see Figure 3). In order to interpret the matrix, the rows are considered as the initiators of relations and columns are the receivers, e.g., landowners have a passive (V) relationship with the developers as shown by the orange arrow in Figure 3, or councils have partnership (P) relation to special initiative organisations (such as Resilient Melbourne) as shown by the red arrow in Figure 3.

The dynamics of these relationships suggest a complex view of the power dynamics and information exchange between the stakeholders. Based on the identified interactions of each stakeholder (Table 7), we observed the relationships of the developers with other stakeholders as the highest controlling relationship. However, we observed community stakeholders having substantial passive interactions. This observation suggests that the level of tokenism is still high in participatory planning in practice and there is a potential for communities to gain relatively higher influence over other stakeholders through the possibility of building alliances and coalitions with community stakeholders to drive decisions.

5.3.3 Chronology of interactions

The timeline of stakeholder interactions and their relative weights are specifically important in actualising the potential of participatory planning. For example, in project E the future residents and community had an early partnership with the developer that indicated self-mobilisation. We observed varying project drivers for developers, landowners or future residents in each context. This variation indicates the potential for project governance structures, including underlying project processes and their timelines, to be adapted in line with participatory planning principles (Table 5) and applied to specific contexts. A range of actions and their sequencing across the cases are presented in Figure 4. As seen, the practice of participatory planning opens the possibility for innovation at each stage compared with the prescribed traditional development process. For example, the landowner, community or local or state government can all initiate the planning process instead of relying on the developer to do so. Moreover, formal contractual interactions between stakeholders are

complemented or can be even preceded with noncontractual interactions which increase the level of understanding and trust between the stakeholders.

Table 7: Stakeholder relationship matrix across the case studies

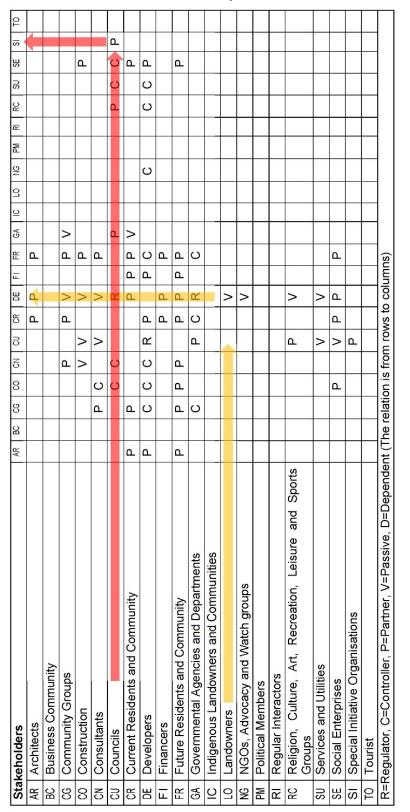
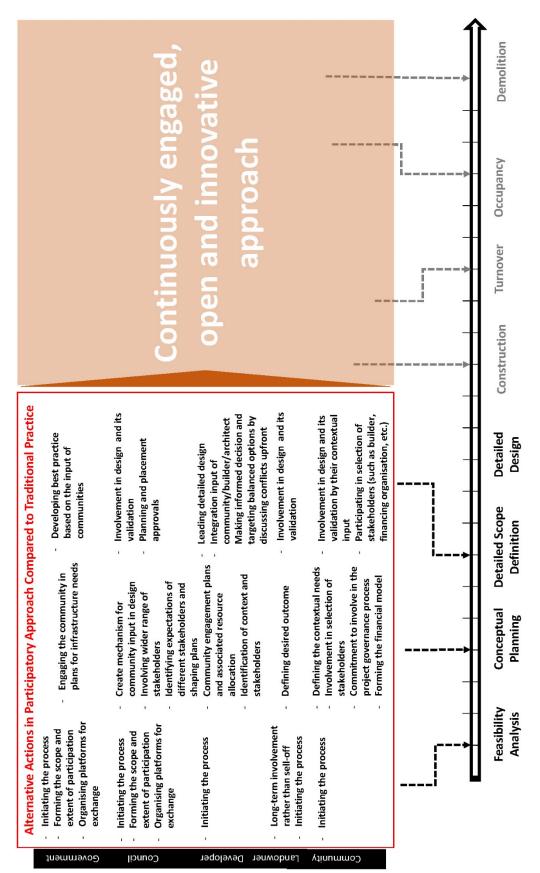


Figure 4: The spectrum of alternative decisions in participatory planning



5.3.4 Key decisions

In order to understand the governance structure for a given project, it is important to identify a range of key decisions in the process from the data corpus. Since participatory planning happens differently in each case, the key decisions and decision-makers may need to be tailored according to context. For example, case B and E are related to two distinct levels of planning, macro-level (precinct planning) and micro-level (project planning and development), which present different key decisions. As shown in Figure 5, for the case of the precinct-level plan, landowners were crucial in initiating the project. In the case of participation at a project level, landowners only had a peripheral role in selling the land, while the community initiated the project. Evidence from these two cases indicate the potential for scalability of participatory planning processes from single buildings to higher levels, such as the precinct level.

The stakeholders involved in the planning and development processes from the cases were asked to describe the critical moments where decisions were made via participatory planning approaches. A synthesised list of key decisions with decision makers is given in Table 8. As expected, many of the decisions indicate the adoption of principles of participatory planning, such as being inclusive, being accessible and making informed decisions. Depending on the context, the stakeholders may participate in different key decisions to facilitate self-mobilization based on the literature as synthesised in Table 2.

Figure 5: Key decision-makers for the participatory planning process for the two main levels of development considered by the five cases: project and precinct levels

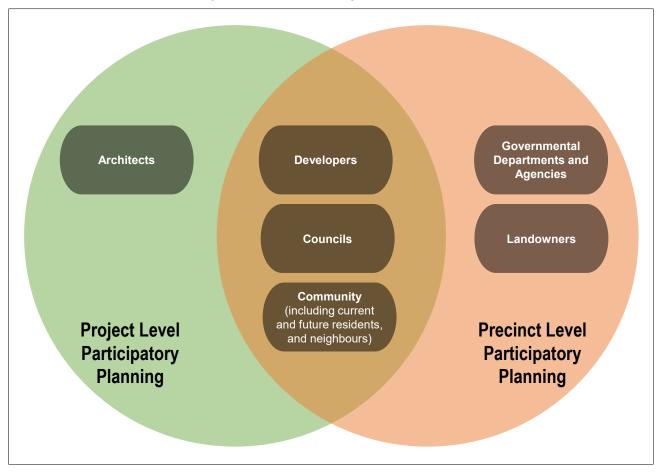


Table 8: List of examples of key decisions in the participatory planning process

Stakeholder	Key decisions
Councils	 Adoption of appropriate financing models for the development to suit the needs of the majority of community members (Interviewee 10) Deciding to build trust and community connections through engagement and institutionalization (Interviewee 22) Deciding to be involved in the participatory process and pledging commitment (Interviewee 12) Deciding to convey community aspiration such as sustainability in outcomes and providing design inputs to the engaged stakeholders (Interviewee 5,12) Setting expectations earlier in the planning process by highlighting key areas and defining the outcomes (Interviewee 22) Deciding to involve other stakeholders to facilitate planning and decision-making, especially consultants and architects (Interviewee 22) Creation of specialized teams within the organisation to design framework of work (Interviewee 6) Deciding to change business as usual approach to facilitate better outcomes for the development (Interviewee 19) Designing engagement strategies and communications plan for involvement of stakeholders for the development (Interviewee 17) Deciding to involve a wider range of non-traditional stakeholders such as special initiative organisations and social enterprises. (Interviewee 6,17) The decision to build a partnership with developers for the engagement of additional stakeholders (Interviewee 17) Physical planning decisions such as placement of major design elements and physical infrastructure (Interviewee 9) Researching for potential future community and engagement with research consultants for informed planning and decision-making (Interviewee 6) In the initial planning phase, developing a clear understanding and setting up expectations regarding the goals, areas of key focus to address and potential outcomes (Interviewee 6, 17, 19)
Developers	 Design strategies and plans for substantial stakeholder and community engagement (Interviewee 2,20) Deciding to engage a wide range of stakeholders in the planning process (Interviewee 20) The decision to involve contractors, builders and suppliers to provide constructive feedback (Interviewee 2) Deciding to drive the decision-making process based on the needs and desires of the community (Interviewee 2,16) Deciding key areas of focus to set goals, manage expectations and achieve better outcomes (Interviewee 8,16) Transformation and addition of delivery and financing options to facilitate homebuyers (Interviewee 3)
State Government Agencies and Departments	 The decision to explore and develop plans for interim opportunities for social infrastructure in new developments (Interviewee 13) The decision for early involvement of the Community for the development of social infrastructure (Interviewee 13) The decision for early involvement of key stakeholders during conceptualization and planning, especially for greenfield developments (Interviewee 1)

	 Deciding to have an open and iterative community engagement plan for continual interactions (Interviewee 17) Deciding key areas of interest to set expectations earlier in the planning process (Interviewee 1)
Landowners	 The decision to innovate and change business as usual approach to planning and development (Interviewee 28) Setting up expectations from the development by focusing on key areas of concern for traditional developments such as social issues, lack of services and community activation (Interviewee 28) Defining key areas of concern and focus for the development (Interviewee 28) Deciding to plan long term involvement in the development (Interviewee 11)

5.3.5 Engagement and communication approaches supporting decision-making

Stakeholder engagement and communication plays a vital role in sharing information, seeking inputs and supporting decision-making during the participatory planning process. The types of inputs contributed by stakeholders depend on the scope of the planning or development. For example, planning of Projects A and E concerns the design and delivery of a single building, thus stakeholder and community engagement addresses the functions, features and designs of those particular buildings, and associated financial planning for their delivery. For a project at the precinct or neighbourhood scale, the inputs are related to various aspects of living, infrastructure features, design elements, services, utilities and amenities needed by the communities for activation and development upon the arrival of residents, such as modes of energy preferences and park elements. The nature of engagement and communication and their level of formality depend on the stage of planning or development being undertaken.

A summary of the engagement and communication approaches identified from the precinct participatory planning and development at the macro level is presented in Table 9.

Early planning

In this stage, a partnership approach is useful in promoting communication among the key partners of state planning authority, local council, developers and other relevant important parties. Through regular and active communication, key partners collaboratively determine the strategic directions and priorities for the planning.

Formulation of precinct structure plans

During this stage, a number of engagement methods have been identified to seek external and community input to refine the plans, such as seeking expert insights through external networks, engaging local landowners for input through urban design workshops, and collecting public feedback through public exhibition. The public sector guidelines and frameworks (e.g. Green Star Communities framework, structure planning guidelines), which suggest established processes, have been used as guidance for stakeholder engagement during the planning process.

Community engagement stage

During this stage, engagement workshops or information sessions are organised to engage and seek feedback from future residents within the community as well as from surrounding communities. Identifying community leaders during the community engagement process has been recognised as an effective way to strengthen the relationships between the local council and developer and the community, and to facility the early connections between community needs and community plan and design. Developers are considered to play a vital role in the engagement stage as they help to "build a bond with the community." Extensive communication has been also identified between community

development managers and supply side stakeholders such as facility providers to ensure relevant facilities and infrastructures are appropriately planned and delivered to the future community.

Table 10 lists the engagement and communication approaches identified from the individual cases at the micro level.

Community-led participatory planning and development projects

In the scenario where participatory planning and development is led by the community (e.g. a buyer group), a partnership approach has been adopted by the buyer group to access external architectural and project management expertise. Central to the participatory planning and development process is a series of workshops, where project partners co-design the residential building project. Surveys are used to supplement the workshops to collect additional feedback and comments from the buyer group, which are subsequently evaluated and considered by architects in the building design process. Within the buyer group, a committee system is recognised as a useful mechanism to facilitate effective communication and decision-making. Additionally, an external independent facilitator has been engaged to facilitate negotiation and conflict resolution within the buyer group.

Table 9: Engagement and communication approaches identified from the precinct participatory planning and development

Precinct or community participatory planning and development			
Engagement or communication approaches	Key characteristics / activities		
A partnership approach between local council, state planning authority, developers and other relevant important parties (Interviewee 6, 7, 15, 16)	 Non-hierarchical communication style Regular partnership meetings to structure and discuss agenda for the planning process All partners are equally represented and have the opportunity to bring up new items to the agenda Council often acts as a facilitator in the partnership Partners collaboratively identify key issues and challenges to be addressed through the participatory planning process 		
External network for seeking development planning advice (Interviewee 7)	Input is sought from relevant experts (e.g. social planning researchers) for insights about challenges with precinct planning and development		
Urban design workshops to engage local landowners (Interviewee 1)	 Landowners are engaged to provide input regarding land uses Landowners' comments are sought for draft precinct structure plans and subsequent revision 		
Public exhibition to seek public views on plans (Interviewee 1)	 Precinct structure plans are made available to public Multiple channels can be used to advertise the plans depending on the area and location, e.g. advertisement on newspaper, websites, flyers, media releases Public comments are sought for further revising the plans 		
Structure planning guidelines to guide stakeholder communication and engagement (Interviewee 9, 19)	 Stakeholder communication and engagement are guided by structure planning guidelines set out by the state planning authority Stakeholder communication and consultation follow established process for precinct structure planning 		
Public sector framework (e.g. Green Star Communities	- Stakeholder engagement is shaped by template document, e.g. stakeholder engagement plan as part of		

framework) to guide stakeholder engagement (Interviewee 8, 18)	requirements for six-star green star communities rating through the Green Building Council of Australia - The document is evolving and gets updated regularly to reflect current trends with stakeholder engagement
Community engagement sessions with surrounding community to get feedback on schemes and designs (Interviewee 18)	 Surrounding communities are invited to provide opinions on proposed schemes and designs Surrounding communities are engaged to voice concerns or thoughts that they may have on the proposed schemes and designs
Community engagement workshops to identify community leaders to facilitate early connections between community needs and community plan and design (Interviewee 8, 18)	 Community leaders are identified from engagement workshops and are equipped with necessary skills Community leaders identify community needs and lead the community to plan and develop amenities and facilities on an ongoing basis Community leaders are supported with resources from developers and councils
Information sessions to inform land lot purchasers and potential purchasers about the development (Interviewee 30)	Information sessions are organised by developers to engage purchasers and prospective purchasers and to inform them about the development
Surveys and focus groups to seek early input from land lot purchasers or prospective purchasers (before the community is formed) (Interviewee 17, 30)	Surveys and focus groups are conducted among purchasers and prospective purchasers to understand their needs and expectations for community amenity and facility design and development
Continual consultation and survey with community reference groups (after the community is formed) (Interviewee 30)	 Community consultations and surveys are conducted to understand what the community wants Community is engaged by developers to deliver community facilities
Extensive communication with individual supply side stakeholders (i.e. facility providers and future businesses) by community development manager (Interviewee 16)	 Community development manager communicates with individual supply side stakeholders to identify them on the map Building relationships and trust through extensive communication

Developer-led participatory planning and development projects

In the scenario of developer-led participatory planning and development, community presentation has been used as the primary engagement approach. Through planned community presentations, the developer introduces the new and innovative development model to potential buyers and tenants with the purpose of attracting interest. Once future residents and tenants are determined (normally through the arrangement of a contract and a deposit), surveys are undertaken by the developer to understand the needs of future residents and tenants in terms of building design. The developer has also actively engaged with the local council during the planning and development process to seek advice and promote the new participatory development model.

Table 10: Engagement and communication approaches identified from the individual participatory planning and development projects

Individual participatory planning and development project				
Engagement or communication approaches	Key characteristics / activities			
Community-led				
A partnership approach between buyer group, architects and project manager (Interviewee 4) Workshops for project partners to conduct co-design (Interviewee 4, interviewee 5, interviewee 10)	 The communication and decision-making processes are shaped by legal documents and a formal structure established among project partners Workshops are organised among project partners to understand each other's interests, expectations and constraints Input is gathered from the members of project partner groups through workshops for the development of design and plans Consensus among partners is achieved through negotiation 			
Surveys to supplement workshops for further feedback collection from future residents (Interviewee 4, interviewee 5 A committee system to internally govern the buyer group (Interviewee 10)	 and constructive discussion in the workshops The workshops are supplemented by surveys through which residents can provide feedback and comments Architects present how they have responded to the feedback and comments in the next design workshop The committee establishes governance processes and policies that are agreed by all members of the buyer group, e.g. a decision-making policy, a joining-leaving policy, and a conflict resolution guideline 			
Independent facilitators to facilitate negotiations within buyer group (Interviewee 4) Developer-led	Conflicts or disagreements among the members of buyer group are resolved through negotiation facilitated by external independent facilitators			
Community presentation to introduce the development model to potential tenants/buyers (Interviewee 2)	Community presentations are organised to introduce the participatory development model and seek interests in the development from potential tenants/buyers			
Surveys to gather input from future tenants/residents for design (Interviewee 2, interviewee 3)	 Future tenants/residents' input is sought through surveys and considered in the design process 			
Active engagement with local regulators to promote the new development model (Interviewee 2)	 Actively engage local regulators into the process and keep regulators fully informed through transparent communication Collaborate with local regulators to promote the participatory model (e.g. through public workshops) 			

5.3.6 Incentive mechanisms in participatory planning

Incentive mechanisms for implementing and engaging in participatory planning processes vary by actor and context. As a result, participatory approaches should acknowledge the specific context of a project and avoid considering the public as a homogenous entity (Aitken, 2017). We synthesised the data to create a catalogue of potential incentives, which include the drivers and motives of different stakeholders including developers, communities, councils and government agencies (Table 11). For example, by creating value and appeal in the project, developers try to distinguish themselves from competitors. In this sense, participatory planning is regarded as an innovative approach allowing developers to engage future residents as their potential buyers in the planning process. Furthermore, the approach is appealing for the potential residents as they have more avenues to customise their future dwellings and broader residential environments. The process also results in forming connections within the community.

Table 11: Incentives for participatory planning

SR	Theme	Examples
1	Appeal and value creation	 Developer creating 'buying appeal' for the project and increasing marketability (Interviewee 2,16,21) Developer creating a narrative for marketing appeal by telling a story (Interviewee 16) Developer creating value in the project by offering a novel market practice (Interviewee 16,21) Developer wanting a competitive advantage by being an example in the market (Interviewee 3,16,29,33) Organisations wanting to leave a legacy and manage their reputation (Interviewee 5,12,21,30)
2	Community drivers	 Desiring to achieve better and innovative outcomes for the community (Interviewee 16,19,23,27) Needing to address community health and wellbeing, especially pertinent issues in greenfield developments (Interviewee 7,16,21,24,26) Facilitating community needs (Interviewee 19,33,34) Empowering communities (Interviewee 18,32)
3	Financial drivers	 Changing financial value as compared to business as usual developments (Interviewee 1,2,10,13,30) Responding to a requirement from ethical investors (Interviewee 12,21) Responding to incentives from other stakeholders (e.g., funding agencies) (Interviewee 16) Establishing long-term revenue stream for developers, such as retail profits (Interviewee 30)
4	Goal achievement	 Needing actors to discuss the accomplishment of goals and outcomes through participation (Interviewee 14,30,34)
5	Ability to influence	 Responding to potential homeowners not being able to find their preferences in the current market (Interviewee 4) Allowing the community to be able to share its vision (Interviewee 12) Having the ability to influence the decision-making process, especially the community (Interviewee 1,9,17,32)
6	Leadership	 Demonstrating motivated and forward-thinking leadership (Interviewee 3,15,21) Demonstrating self-interest of stakeholders (Interviewee 1,5)

7	Realized opportunities and values	 Responding to the significance of the project (Interviewee 15) Demonstrating employee-driven change (Interviewee 8) Responding to acceptance of the existing community and reducing backlash (Interviewee 1) Providing orderly exit from the project for developers (Interviewee 16) Developer realizing the need for investment in community development (Interviewee 29) Seizing on the opportunity to change business as usual (Interviewee 2,11) Increasing an ability to deliver better outcomes from experience (Interviewee 7) Realizing opportunities for business expansion and growth (Interviewee 6,7,11)
8	Political motivation	 Demonstrating political motivation (Interviewee 13) Meeting governmental policy aspiration (Interviewee 7) Responding to motivations of councils (Interviewee 5,15) Creating projects that are more appealing to councils (Interviewee 4)
9	Realised responsibilities	 Demonstrating a custodianship attitude (Interviewee 11) Councils promoting participatory process through their active involvement (Interviewee 15) Demonstrating corporate social responsibility (Interviewee 11,21)

5.4 Practical implications: benefits versus challenges

To facilitate cost-benefit comparison for participatory development, it is important for stakeholders, especially project drivers, to understand and see examples of potential benefits. Benefits that are perceived from adopting participatory models are identified by the interviewees as presented in Table 12.

The process of participatory planning is "incredibly time-consuming", "very resource-intensive" and "laborious," as noted by participants. From the interviews, major drawbacks identified relate to limited resources, including cost and time, echoing the literature on the resource-intensive nature of participation (Aaltonen & Kujala, 2010). Uptake of participatory planning can be slow, therefore, as tailoring approaches to individual development projects is time-consuming, as noted by a planning official. The slow speed of progress is not only due to the design of the processes but is inherent to the nature of engagement itself, as noted by another interviewee: The process "takes more time depending on how far you want to take it [where] it can slow down a development, which may slow down or impair the financial seed," as noted by an interviewee. It also takes more time because, as suggested by another interviewee, "it complicates planning a little bit [...] with more opinions around the table". Organisations may have to acquire additional resources, such as community development managers and workers, thus "relying on professionals" to "catalyse widespread community involvement and engagement", which generates new costs. There are also costs associated with the "time that people commit to meetings [and] stakeholder management plans," as suggested by a planning expert. Another drawback may be lower short-term profits due to the up-front investment in engagement. Some developers suggested that the "returns are less [...] than what they would be in a conventional off the plan approach but, at the end of the day, there is still enough incentive there to justify doing it." However, these lower returns must be considered in the context of an individual development's business model. Some interviewees noted that participatory processes do not have "any kind of negative impact on profit margin", but that lower returns are instead associated with the financing models associated with a given project. In spite of challenges, respondents generally believed that in the long-term the participatory planning process has benefits that "outweigh" the drawbacks. However, they still believe that a range of issues with participatory planning need to be addressed and managed properly. Table 13 presents a list of challenges to participatory planning execution.

Table 12: Perceived benefits and outcomes the participatory planning developments

SR	Theme	Description	
1	Benefits to government	 Ensures early provision of amenities and utilities may reduce reliance on councils and build engaged communities (Interviewee 19) Provides essential facilities such as educational and healthcare institutions which may lessen the burden on state and local governments (Interviewee 22) 	
2	Benefits to development organisations	 Provides opportunities for sales improvement and market share for developers (Interviewee 17,29,19) Builds brand recognition and prestige for organisations involved in better-performing projects and creates appeal in their future projects (Interviewee 1,15,17,19) 	
3	Potential reduced bureaucracy	Openness and non-adversarial relationships between stakeholders reduce bureaucracy of potential conflicts (Interviewee 10,14,19)	
4	Community development	 Creates appeal and loyalty within the community, facilitating community development process (Interviewee 1,13,27) Induces leadership within the community to support continuous development and communication (Interviewee 24) Provides better community structure and improves community cohesion (Interviewee 5,17) Provides sense of place and ownership in the community (Interviewee 3,20,26,32) Encourages community involvement in the communal matters (Interviewee 5,26) Provides social infrastructure which may facilitate development of social capital (Interviewee 13,24) Creates a vibrant community (Interviewee 26) 	
5	Social benefits and wellbeing	 Provides comprehensive benefits related to health and wellbeing within the community (Interviewee 6,13,17,19,20,25,30) Potential positive impact [on social indicators such as] lower divorce rates, lower levels of mortgage stress, lower levels of domestic violence and mental health issues (Interviewee 3,22,24,27, 28,33) Potentially reduces issues such as social isolation (Interviewee 3,22,24,28,33) Builds a connected and safer community (Interviewee 26,29) Facilitates development of community members through interactions and experiences (Interviewee 10) 	
6	Economic benefits	 Encourages strong local economy and retail sector which benefits various stakeholders (Interviewee 13). Provides profitable opportunities for various organisations, especially developers, to improve market share even in declining markets (Interviewee 15,16,19). Provides better community outcomes which improves sales for the developers (Interviewee 21). 	

		 Adds value and premium to the land and the development (Interviewee 1,13,16,29).
7	Knowledge creation	 Generates new data and information with on-ground interaction and feedback with various stakeholders (Interviewee 3). Benefits planning of future developments by generating information, creating processes, presenting lessons learned and moving towards evidence-based practice (Interviewee 8,19,27).
8	Long-term relationships	 Creates long-term relationships between stakeholders, encourages better collective outcomes and creates future collaboration opportunities (Interviewee 3,17,26).
9	Market improvement	 Encourages elimination of 'bare minimum' mentality inducing disruption towards market mindset, structure and dynamics (Interviewee 27,28). Facilitates owner-occupied housing, especially in greenfield construction, which makes it sustainable and attractive (Interviewee 16,26).
10	Physical benefits	 Improves liveability of towns and new centres (Interviewee 30) Caters for a wider array of needs of various stakeholders than off the plan development model (Interviewee 2). Provides high quality, developed and diverse physical infrastructure earlier in the settlement process (Interviewee 6,19,24,32).
11	Tailored outcomes	 Provides better value for money in terms of sustainable and quality outcomes for the community (Interviewee 5,20,25,30). Provides better product satisfaction for stakeholders, especially communities (Interviewee 17,20). Delivers developmental outcomes based on communal concerns, needs and agendas (2,14,15,25). Provides an attractive housing solution combined with alternative financing models such as build-to-rent, rent-to-own and shared equity as options to the consumers (Interview 2,3,28).

Table 13: Challenges associated with the participatory planning process

SR	Themes	Description
1	Difficulty in achieving authenticity	 It is a challenge to keep the process authentic to the principles of participatory planning due to competing agendas (Interviewee 13) Genuine and authentic participation takes time (Interviewee 30) Stakeholders may hesitate to get involved in participatory processes due to time and resources conflicts (Interviewee 17)
2	Diminished commitment	 In the participatory process, the assumption is that all involved stakeholders share values and vision in approaching common goals (Interviewee 5,30) Partners can lose commitment and withdraw or not share the same vision (Interviewee 6,15,33)
3	High level of complexity	 Participatory planning can be a long and resource-intensive process (Interviewee 15,24) Intensive processes and engagement of a large number of stakeholders induce further complexity in planning and execution (Interviewee 7,32)

		 Owing to this complexity, designing a process that truly anticipates the needs and caters to diverse groups is a challenge (Interviewee 33)
4	Requirement of early investment	 Finances required for early provision of services, nurturing partnerships and engaging a wide range of stakeholders is a challenge to the project driver as they must bear the cost of participation early in the project (Interviewee 24)
5	Low efficiency	 Participatory planning processes have a slower rate of decision- making than traditional development processes (Interviewee 10) thus impacting the project efficiency (Interviewee 3)
6	High engagement efforts	 It can be a challenge to motivate stakeholders at first (Interviewee 29) as it requires additional efforts by the actors to get involved and contribute to the process (Interviewee 10) Since participatory planning processes are tailored to every development project, the response of communities to a given process is unknown; they may lack the capacity to meaningfully engage in the process as proposed (Interviewee 29,33)
7	Unsupportive political environment	 Governmental and regulatory policies may not be supportive of participatory planning due to its variable nature (Interviewee 24)
8	Risky outcomes	 The outcomes might not materialize as planned (Interviewee 6) As the benefits may materialize in the long-term, it may be hard to show commercial viability (Interviewee 19) It is a challenge to remain focus when managing expectations from different stakeholders (Interviewee 24)
9	Compromised stakeholder satisfaction	It is important to understand that each demand and expectation needs to be addressed or responded to, and there will always be compromises in what is delivered (Interviewee 28)

Source: authors

Portraying participatory planning as a panacea for all challenges in planning and development may not be appropriate. The practice does have limitations: Initial investment costs, especially in terms of early provision of services and utilities that are demanded by the communities, and acquiring resources such as staff, may not be viable for every organisation. Challenges in participating were also observed in the cases, especially for community members experiencing changes in their circumstances, such as having a family, moving to another city or interstate or changing jobs. In these cases, community members realised that the processes did not materialise as they would have expected. While the process advocates the aim to "canvas every single person's idea and try to implement [it]", it should be acknowledged that there is a limitation that not everything can be implemented and not everyone can be satisfied, as noted by a developer. As a result, the conflict of interests among stakeholders should be expected and plans should be in place to address them effectively.

5.5 Participatory planning and community resilience

Newer settlements, and especially greenfield development projects, face several issues, including lack of social cohesion, significant reliance on governmental support, social and economic segregation, domestic violence, mortgage stress and an overall loss in sense of belonging and community (Ayub et al., 2020). Interviewees suggested that causes of social isolation are due in part to the "processes and structure of modern society." This suggests that non-participatory and top-down practices of urban development, which do not consistently support community connection and relationship-building, are likely to have a negative impact on modern communities. As one project lead suggested, when communities move into a new development, "there's nothing around them, and nothing to pull them together." However, as another project lead noted, when a community is

empowered and "you give people the tools, they'll do it for themselves." On this basis, our analysis pointed to associations between participatory planning and various dimensions of resilience.

5.5.1 Psychological resilience

The process of engagement between institutional stakeholders and the community, including future residents, is at the core of participatory planning. It therefore has implications for individual resilience by building connections with "social networks and relationships that get people through catastrophic events, and that they have access to the information and support networks that they need," as suggested by a project lead. Such connections are particularly important to marginalized individuals and demographic groups, such as LGBT communities, where the lack of inclusion has resulted in "massive mental health challenges, [...] depression, anxiety [...] on a regular basis," as suggested by a resident. In these cases, community building happens during the decision-making process, which systematically integrates diverse needs and perspectives into plans. Where bonds have been established, social cohesion is further shaped following occupancy of new developments "over sharing of meals and [...] sharing facilities."

5.5.2 Social resilience

Through the "process of engagement, you can actually bring the community together," as suggested by a planning professional interviewed. When a community engages and participates in processes that are "difficult and long-term, it develops special relationship and trust. [... which is the] the reason people help each other and can do quite complicated things and sacrifice for each other," as suggested by a potential future resident of a case study site. A developer suggested that from this improved sense of community and the social connections made during the engagement process, a "strong community [is created] that is [more] connected [and more] self-organising." They are more likely to look out for each other if there is an extreme weather event or if there is any potential crime issue; they come together and they address the issues themselves". Engagement by community members with each other and other stakeholders improves "cooperation skills, ability to listen to and hear and take account of and respect individual differences, reviews of other people and the needs of other people," as suggested by a resident. These claims are further reinforced by anecdotal evidence from developments with strong communities, which have motivated the developer to explore more structured engagement strategies for future projects. In general, participatory planning and development encourages higher rates of community and civic participation overall, avenues for information sharing, and potential for forming relationships between communities and institutional stakeholders to develop trust and a sense of community that can be assessed by social capital measures.

5.5.3 Economic resilience

Although there is no direct relationship between social capital and economic resilience, local economies are still considered as the potential long-term implications of social capital (Sabatino, 2019). In this sense, participatory planning is regarded by developers as a motivating factor to develop alternative business models that extend their engagement with projects beyond the construction phase. For example, developers may identify financial benefit from creating revenue stream that include value generation after construction, such as through managing the development over time. Some developers also identify participatory planning as a way to stand out in a competitive market and create appeal for potential buyers. Furthermore, involving the local business community in planning increases their viability and longevity, and is perceived as a strategy to face market recessions. Developer engagement with business operators results in relationships built over time, which increases developers' connection with and understanding of the local economy. These factors are likely to contribute to the economic resilience of the communities indirectly, as local businesses are better supported to thrive.

5.5.4 Built environment resilience

Built environment resilience includes early provision of services and utilities, especially in greenfield projects. For example, one interviewee from the development sector suggested that their goal is to plan provision of services over time based on the requirements of the community as it evolves, and to ensure that services are delivered in line with when they are needed, not lagging residents' arrival. Therefore, the design and delivery of physical infrastructures is tailored to the needs of stakeholders, especially the community that is going to live in the development. These infrastructures are identified from the inputs of a wide range of stakeholders involved in the planning process. Since participatory planning is perceived to improve the usefulness and timeliness of infrastructure delivery compared to traditional development approaches, the process can also potentially improve the built environment resilience of infrastructure and the communities it services (Labaka et al., 2016).

5.5.5 Ecological resilience and sustainability

Participation of a wide range of stakeholders, and especially the local community, increases planners' knowledge of local ecology of a given development site. This knowledge can positively influence planning decisions that have an impact on local ecology and the environment. As observed in one case, local community input on decisions about horticulture and design of green areas was key in the developer including native trees that were likely to survive in the long run and generate a positive impact on the overall ecosystem. Such inputs suggest how the concerns of communities and other stakeholders about climate change, clean energy, recycling and other sustainable practices can impact ecological resilience of projects.

5.5.6 Governance framework and resilience

The relationship between participatory planning and community resilience relies heavily on the flexibility and adaptability of participatory processes and the ability for inputs from a wide range of stakeholders to contribute to responding to shock events. A paradigm shift from traditional planning towards a participatory planning approach presents an opportunity to create new connections between stakeholders from various parts of the urban planning systems and structures. This can include long-term connections within the community, connections between community and government officials and other stakeholder organisations such as developers, consultants and social enterprises. These connections can alter systemic structures from a traditional top-down pyramidal governance structure towards a more connected polycentric structure (Figure 6).

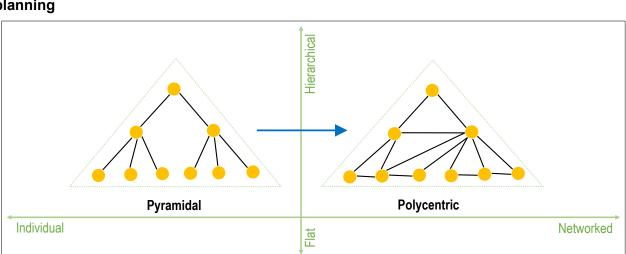


Figure 6: Systematic change in governance structure of participatory planning from traditional planning

Source: adopted from Ayub et al. (2020); Cumming (2016); Cumming and Peterson (2017)

In summary, we observed that participatory planning as an alternative planning paradigm can contribute to building resilience of communities on multiple fronts, including psychological, social, ecological, economic and built environment dimensions. We also observed an inherent change in the governance of urban planning as it presents a unique opportunity to build resilience by changing the systemic structure to polycentric decision-making and improving granular characteristics of the systems.

6 Conclusions and lessons learned

Through an exploratory study of five cases of residential and mixed-use development projects in metropolitan Melbourne, Australia, an outline of a range of governance frameworks for participatory planning is presented to facilitate future planning and development. The aim of this study was to further illuminate the formal and informal decision-making frameworks that stakeholders and community members can apply, moving towards the creation of better designed and serviced, healthier, connected and more resilient communities. The findings suggest that motivation of stakeholders for positive outcomes, the involvement of a wider range of stakeholders in horizontal engagement processes and diverse modes of engagement help in changing perspectives and attitudes of individuals and organisations towards participation; this makes the planning process more informed, less adversarial and more open, helping to achieve collective and broader goals in urban planning that serve the wider society. However, these benefits come with their own challenges, such as laborious and resource-intensive processes, which are time-consuming and incur more cost than traditional planning and development processes. As a result, pursuing participatory approaches requires involved stakeholders to believe that the benefits in the long run outweigh the short-term drawbacks.

6.1 Lessons learned for participatory planning and development

6.1.1 Precinct-level participatory planning and development

Develop strong partnerships and collaborative relationships between key stakeholders

A strong partnership between key stakeholders, such as state government agencies and authorities, local councils and developers, can be an effective way to pursue successful participatory planning and development. One participant recommended that a partnership approach is "really applicable across any different setting" and should be used in all precinct planning and development projects. In addition, participants emphasised that strong relationships between partners, such as local councils and developers present a significant opportunity to improve planning and development processes. A local council needs to be adaptive to new planning processes and provide support to developers. A participant who was a community development manager for a development company expressed the frustrations about managing relationships with the local council: "But councils are still very, very big dinosaurs when it comes to getting them to do things a bit differently. So, a place-based approach, or participatory development approach really required brokerage within a council agency, and more broadly, to make this thing work properly. But if you're getting to the point with council, and it hits a brick wall, then that disappoints and undermines the process... So, I'm really hopeful that from that lesson and that problem, that there's a better structural response" (Interviewee 16).

Maintain the commitment of partners

The participatory planning and development process is often complex, time-consuming and coupled with uncertainties. These challenges may prove difficult for the involved stakeholders, resulting in their possible withdrawal from their commitment. Therefore, it is important to constantly remind partners of the purpose and value of participatory planning and development to maintain their commitment. The value of participatory planning and development should be constantly acknowledged, i.e. "It's about creating places for people to live and really, it's got to have the community at the heart all the time" (Interviewee 7).

Participants also commented that it takes time for developers to understand the implications of participatory planning and development and commit to it. From a developer's perspective, it is important to be aware of the positive social impact of participatory planning and development and the potential financial benefits in the long term. Government and planning authorities should clearly articulate the value (social and financial) of participatory planning and development to developers to gain their commitment: "So anything that's quite new for a business, the lesson being is that you have to allow quite a long lead time. So if government or other third party organisations, let's say want to roll out initiatives or incentives, they've got to be prepared that it can sometimes take quite a while for organisations to navigate exactly what the program is going to mean to the business and how it's going to impact and how it's going to benefit. So, it's really important that if there's schemes like...the value proposition to the participants is well articulated. If not, it can struggle to get traction internally" (Interviewee 18).

Set realistic planning objectives

Stakeholders tend to articulate interests and expectations from their own perspectives during engagement processes, often creating tensions between competing interests. Despite that, it is important to listen to and consider different opinions; it is also unlikely that all individual interests and expectations can be satisfied. Therefore, key partners need to critically evaluate different interests and expectations and set realistic objectives for the planning process. Equally important is to collect as much information as possible to inform the evaluation process. As mentioned by Interviewee 1: "...when you start talking [built] form without information you get unrealistic expectations of what can be achieved and what can be an outcome, I think that's dangerous for every party involved...".

Promote perspective-taking

Given that stakeholders often hold different perspectives, it has always been a challenge to balance diverse interests in the participatory planning process. One interviewee suggested that game approaches (e.g. role play) can be adopted as strategies to encourage stakeholders to step into each other's shoes and attempt to understand others' perspectives. Interviewee 1 shared his experience with game approaches to promote understanding of others' perspective: "I have had amazing experiences of watching the CEO of a development company have to act like the local resident in the game and suddenly understanding the perspective of the person next to them and it's a very different context having a twenty five story building built next door to them and by the same token I have seen a local resident have to act like the developer and balance their financial returns and make very different decisions, I think it's a great way of building empathy and understanding within the urban development context". Such game approaches facilitate a shared understanding among stakeholders, and a channel through which the optimal outcomes can be achieved.

Understand the prioritised needs of community

The purpose of participatory planning and development is to create a liveable community that meets the needs of its residents. Understanding what is most wanted by the community can be useful to attract future residents. Interviewee 30, who has been involved in more than one precinct-level planning and development process, observed that a school is one of the prioritised needs of community and should be given top consideration: "One (lesson) has certainly been about the delivery of a school which has to be a private school because, as I mentioned before about the state government's ability to deliver early. So, about a private school, and that while we knew education is important to parents, it was only through the learnings that it becomes such an important driver of sales, that a school is there. And it's really through the first one that we went, this is really strong here, this is the number one need of these purchasers in the community, we need to be delivering a school in each of our developments".

The polycentric decision for building community resilience

The relationship of participatory planning and community resilience relies heavily on the flexibility and adaptability of participatory planning processes and the inputs of a wider range of stakeholders to meet future demands, to sustain, adapt and recover after disturbances. Formal and informal relationships, such as long-term connections within the community, connections between community and government officials and other stakeholder organisations such as developers, consultants and social enterprises can alter the systemic structure from the traditional top-down pyramidal structure of the governance system of urban planning towards a more connected polycentric structure. Examples of the observed elements of polycentric decision-making to support community resilience-building include the interest of developers to maintain presence in their developments for a longer period of time beyond the construction, the involvement of the business community in planning, emphasis on localization of economy, and creating living appeal for future residents in these new developments. As one interviewee suggested "It is working to get as many of the people who are going to be impacted by a plan that's being produced to engage and participate in the process of developing that plan."

Anticipate the drawbacks and challenges

The process of participatory planning is very resource-intensive, complex and long, and the involved stakeholders need to have a clear understanding of these challenges. The stakeholders require a specific skillset to address the challenges rooted in the involvement of multiple stakeholders, integrating their knowledge and managing vested interests. Therefore, it is imperative to set clear expectations, establish challenges and compromises that might be faced, and what the expected and desired outcomes are. As one interviewee noted, "I guess I would have been disappointed when we started if [I knew] it had taken more than three or four years, I realised it is a journey, ... I think the time has not been wasted, we have built community, we have learnt to, I guess what we have learnt is that community is more important than place and we've got to know very well ... from that point of view it has been an investment in the future."

6.1.2 Project-level participatory planning and development

Establish structured processes and ground rules for decision-making

In the community-led development project, community members have acknowledged the importance of having structured processes and ground rules for shared decision-making. It is understood that many members have known each other for a long time and have become friends. In this circumstance, it is critical to have agreed processes and ground rules in place to guide communication, negotiation and decision-making. This is to ensure that decisions are made in a fair and transparent way without jeopardising relationships. As interviewee 4 mentioned that "So it matters – trust, friendship, process. In our process, you can't actually just give up your apartment for somebody else. You can't just rock up and say, "Okay, I'll swap with you. It's fine". We have a process and the process says that people in the queue have certain rights".

Engage more supply-side stakeholders in the process

In developer-led participatory planning and development projects, the co-design process normally engages multiple stakeholders, such as future residents, architects and local regulators. Specifically, during the co-design process, future residents articulate their expectations for building design, architects aim to understand future residents' needs, and local regulators provide advice about requirements for the project. The interviews suggest that developers should also consider involving supply-side stakeholders who are often not present in the co-design process, such as builders. This not only enables builders to understand the standard of quality expected from them but also provides the opportunity to seek their input to improve constructability and efficiencies. Interviewee 2 shared their experience: "So another level of participation is we had engaged a builder from the beginning to pretty much follow the design the whole way and were able to advise along the way construction efficiencies. Like we changed our design to deal with construction efficiencies, materials."

Better resource planning for the participatory process

The participatory development process involves considerably more work and higher demands than the traditional project development process. In the case of developer-led participatory development projects, it is important for the developer to allocate adequate resources in early stages of the project and clearly define roles and responsibilities for employees involved in the project. Interviewee 3 shared their experience: "I would just more clearly define the roles because it was a bit all hands on deck. We had Name A our Marketing Manager and Name B our Senior Marketing Manager come onboard in the second half of the year but I think we really should have had them at the beginning of the year because it was just too much..."

7 Final remarks

Through this study, we put forward cases as experiential incubators that show the connections and understandings developed during the application of participatory planning processes. These processes serve the purpose of increasing social capital and community resilience. We further show that local knowledge, physical, social and environmental elements of the community, and the means of engagement in the planning process impacts development outcomes. It is important to acknowledge again that there is no single and standardised approach to participatory planning, as it is an overarching paradigm. The governance of a participatory planning approach can take several forms, and can be led by local government, the development sector or the community itself. Whatever the case, setting ground rules and expectations for each stakeholder involved and creating a formal engagement structure are among the crucial factors for legitimising and successfully implementing participatory planning.

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