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2.2 SOCIAL INFRASTRUCTURE AND COMMUNITY RESILIENCE

June 2022

DRRPathways.ca



CO-CREATING NEW KNOWLEDGE
FOR UNDERSTANDING RISK AND
RESILIENCE IN BC

This article is part of the Resilience Pathways Report. The report has the following objectives: a) to share knowledge about existing practices and recent advances in understanding and managing disaster and climate risk in BC, including some information on relevant federal programs, and b) to provide insights on gaps and recommendations that will help build pathways to resilience in BC.

This article belongs to *Chapter 2 Climate and Disaster Risk Management: Practice*. To read all articles in the report, see DRRPathways.ca.

The Resilience Pathways Report is a project of Natural Resources Canada.

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SOCIAL INFRASTRUCTURE AND COMMUNITY RESILIENCE

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ABOUT SOCIAL INFRASTRUCTURE

OVERVIEW

In the wake of disasters, survivors emphasize the importance of community-based support systems, including neighbours, grassroots groups, organizations, and businesses that mobilize and deliver aid in response to the failure of basic services. These community-based assets make up networks of social infrastructure (SI) and include programs and services, physical facilities and spaces, and people—informal networks, deep relationships, knowledge, and resourcefulness that support and enable social interaction and hold social purposes.¹

Networks of SI play a fundamental role in strengthening social fabric and community resilience by fostering

¹ SI has also been defined as social services that serve people across lifespans, or address lifelong needs, and include physical spaces, buildings and facilities as an element (Davern et al, 2017). Sociologist Eric Klinenberg drew attention to the concept of SI among academic and mainstream audiences with his 2018 book *Palaces for the People: How SI Can Help Fight Inequality, Polarization, and the Decline of Civic Life*. He describes SI as “the physical places and organizations that shape the way people interact” (Klinenberg, 2018, p. 5), and argues that physical conditions and places are important for building social connectedness and social capital.

social connections, improving equity, reducing disaster risk and vulnerability, and facilitating collective action and essential services through crises, emergency response, and recovery. SI takes a relational approach to community-building and is “predicated on practices, policies and social covenants that increase individual agency and dignity; collective resilience; and human-centred networks.”² Still, SI is often considered to be an optional investment in government budget and capital planning cycles, rather than essential. Yet investments in SI are an underutilized mechanism for risk reduction and resilience building, despite delivering “hard-hitting, tangible impacts ensuring that all members of society can fulfil their basic needs, realize their potential, and experience a deep sense of belonging and well-being.”³

Networks of SI play a fundamental role in strengthening social fabric and community resilience by fostering social connections, improving equity, reducing disaster risk and vulnerability, and facilitating collective action and essential services through crises, emergency response, and recovery.

Often, SI is equated with non-profit and charitable organizations, though this is not always the case. In the broadest sense of the concept, SI spaces may be owned or administered by public, non-profit, or faith-based entities, as most are, but they may even be social enterprises or commercial establishments, or even simply informal associations. Community centres, libraries, schools, healthcare centres, and parks all fall under the category of SI, yet they are typically owned and operated by government agencies. Businesses such as coffee shops, bookstores, salons and barbershops can also fall under this category, despite being for-profit, if people use them as a space for socializing. They all have a common function of bringing people together.

This article will largely focus on SI in the form of public and non-profit organizations (or social infrastructure organizations, SIOs) and their facilities because their primary purpose is to enable social connections and deliver services at the local level, and they rely in large part on public financial support, donations, and philanthropic grants, which creates particular funding challenges. The sheer number and variety of SIOs is staggering, and their decentralized locations offer unique opportunities for place-based planning. In BC, there are over 29,000 non-profit organizations that employ 86,000 people and contribute \$6.7 billion to BC's economy.⁴ There is also a growing discussion and collaborations around social purpose real estate (SPRE), referring to real

estate or property that hosts facilities and/or open outdoor space used for social purposes. In 2009, a group of funders, investors and government bodies in BC formed the SPRE Collaborative to mitigate the effects of the real estate affordability crisis on non-profit and social enterprise organizations. SIOs compete primarily in the commercial real estate market to find land and property, and sharply increasing real estate prices, property tax values, and redevelopment pressures create significant challenges for these organizations.

ALIGNMENT WITH THE SENDAI FRAMEWORK

As of 2022, the Government of Canada, Government of British Columbia, and several municipalities (including the City of Vancouver) have adopted the *Sendai Framework for Disaster Risk Reduction 2015–2030* to guide their disaster risk reduction activities. The Sendai Framework emphasizes the criticality of civil society in disaster risk reduction and outlines an all-of-society approach under guiding principle “d.”ⁱⁱⁱ Guiding principles “f” and “i”^{iii,iv} recognize the importance of understanding the local and specific characteristics

ⁱⁱⁱ Principle “d” in the Sendai Framework: “Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens.”

of disaster risks and empowering local authorities and communities to reduce risks. Engagement and partnerships must be inclusive, accessible, and empower all people—particularly those disproportionately impacted by disasters—to participate in risk reduction efforts. SI plays a critical role in shaping civil society and in the “all-of-society” approach by elevating the needs and rights of those disproportionately impacted by disasters in risk reduction efforts. Additionally, Priority 1 of the Sendai Framework (Understanding Risk), directs governments to develop policies and practices for disaster risk management based on all dimensions of vulnerability (including socioeconomic vulnerability).

ALIGNMENT WITH INTERNATIONAL, NATIONAL, AND REGIONAL FRAMEWORKS

UN SUSTAINABLE DEVELOPMENT GOALS

Nearly all of the Sustainable Development Goals are relevant to the type of work performed by SIOs, including but not limited to the eradication of poverty, inequity,

ⁱⁱⁱ Principle “f” in the Sendai Framework: “While the enabling, guiding and coordinating role of national and federal State Governments remain essential, it is necessary to empower local authorities and local communities to reduce disaster risk, including through resources, incentives and decision-making responsibilities, as appropriate.”

^{iv} Principle “i” in the Sendai Framework: “While the drivers of disaster risk may be local, national, regional or global in scope, disaster risks have local and specific characteristics that must be understood for the determination of measures to reduce disaster risk.”

food insecurity, and improvement of health and wellbeing, sustainability, and climate action. Most if not all of these goals are addressed by various SIOs. Moreover, goals 9 and 11 have more direct implications for the physical spaces through which SIOs operate. Goal 9 calls for governments to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation,” again demonstrating a focus on “traditional infrastructure” like transportation networks, power, and more. Yet, goal 11 recommends that governments “make cities and human settlements inclusive, safe, resilient and sustainable.” While this section primarily describes the built environment of communities, including public transportation and public spaces, it also articulates the critical role of civil society and non-governmental organizations.

Increasingly, institutions and networks are recommending the integration of sustainable development goals and the Sendai Framework to holistically address risk and resilience in all of its dimensions and bolster the role of civil society or SIOs. Concurrently, “governments are beginning to recognize the value of social infrastructure—both from a pragmatic economic investment standpoint reducing health care, incarceration and demographic-ageing expenditure, and as a way of promoting a peaceful and democratic society amid increasing civil unrest.”⁵ Still, there is a need for a more direct focus on the physical spaces and facilities of SI because SIOs struggle to access

adequate investment for this purpose.

Smaller, locally based SIOs that have [deep-rooted] relationships in community are often left out of formal response and recovery efforts.

NATIONAL POLICY AND INVESTMENT

In the Government of Canada’s *Investing in Canada* plan, SI was a key funding stream (including “investments in Indigenous communities, early learning and childcare, affordable housing, home care, and cultural and recreational infrastructure”).⁶ The federal government also launched the Canada Community Revitalization Fund (CCRF), a two-year, \$500-million national infrastructure program providing project funding to community infrastructure projects.⁷ While these funding streams are an encouraging trend, the sector has been chronically underfunded for decades, leaving major lag time in these investments’ ability to producing measurable results in the strength and vitality of the sector. In addition to inadequate day-to-day funding, there is also a lack of appropriate funding and resourcing for SIOs within the disaster risk reduction sector. Funding streams to address long-term and operational funding for organizations is inadequate in the face of the expenses accrued by SIOs

during disaster response and recovery. At present, only a small handful of grants are offered by philanthropic agencies and local governments to support SIOs to participate in disaster risk reduction, emergency management, and climate adaptation.

PROVINCIAL EMERGENCY MANAGEMENT POLICY AND INVESTMENT

SI is not currently a focus of existing provincial emergency management legislation. BC’s *Emergency Program Act* (EPA), passed in 1993, provides the legislative framework for the management of disasters and emergencies in BC. The Province is currently updating the legislation (EPA Modernization)⁸ and the proposed changes consider the role of volunteers, non-governmental organizations, and service providers. Existing agreements exist between large non-profit organizations like the Red Cross and Salvation Army. While these organizations play a crucial role in response and recovery, they typically mobilize and establish themselves within disaster-impacted communities at the onset of an emergency but are not necessarily grounded in these communities to provide regular services prior to the event. As a result, they seldom have deep-rooted relationships with local communities. Smaller, locally based SIOs that have these relationships in community are often left out of formal response and recovery efforts. Trust and relationships are critical both in reaching disaster-affected community members quickly in critical moments and addressing the

needs of communities who are left out of formal response and recovery planning. While legislation plays a directive function that cannot be applied to an independent sector like SI, formal acknowledgement of the importance of place-based and embedded SIOs and their facilities could serve to promote engagement between disaster management professionals and the SI sector.

SOCIAL INFRASTRUCTURE IN DISASTER RISK REDUCTION

SOCIAL RESILIENCE AND SOCIAL VULNERABILITY

A core benefit of SI is that it plays a crucial role in risk reduction at the local level by decreasing individual and community vulnerabilities and building collective capacities and actions. Largely, technocratic approaches to Emergency Management, Disaster Risk Reduction, and Climate Adaptation focus on addressing physical exposure to hazards and physical vulnerabilities. Social vulnerability is often left out of formal Disaster Risk Reduction programs, projects, and policies, even though vulnerability underpins disaster impacts.

SI builds community resilience strengthening social capital and social cohesion, and it supports more inclusive and sustainable economic

development—which is important for minimizing a community's vulnerabilities to the negative impacts of a disaster and strengthening capacities for recovery and reconstruction.^{9,10} Local leaders and professionals increasingly appreciate the role of spaces along with social capital networks in community resilience. In reviewing the research literature on community resilience, “there has been little coordinated effort to address the complex interactions between physical, social, and economic infrastructure that enable community resilience. Instead, most studies have focused on a single hazard (often earthquakes) or specific infrastructure (e.g., health care facilities).”¹¹ Practitioners should focus on the ways that communities build social cohesion and address ongoing social and economic stresses in order to minimize vulnerabilities to the impacts of disasters.¹²

SIOs play a crucial role in fostering the conditions that support resilience. In many cases, SIOs form to fill gaps in government services and assist people who are systemically excluded from formal government supports. While a majority of SIOs provide direct services, they also act as advocates and conveners between government and equity-denied communities, leading to direct improvements and

⁹ SI allows people to come together and interact, and this is important for building social connectedness and social capital. Klinenberg (2018) draws on many other scholars to describe this connection to social capital. Latham and Layton (2019) outline the relevant literature on public space, social interactions, and SI. Aldrich and Meyer make the case for the importance of social capital networks for communities in disaster response and recovery.

access to governmental services. This role of SI in addressing root causes of vulnerability and advocating for the rights and wellbeing of equity-denied and systemically marginalized communities is irreplaceable. To reduce risk and build resilience, practitioners must connect directly to work that is reducing socioeconomic vulnerability and ultimately advancing justice. SIOs are an important partner in this work. The disaster and emergency management field does not leverage the full potential of SI to contribute to more holistic and comprehensive risk assessments and risk management.

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UNDERSTANDING AND ASSESSING RISK

Historically, risk assessments have been conducted primarily by state-defined experts and professionals, with little community involvement, and are presented as relatively objective truth. Defining and assessing risk is a process that is laden with emotion, bias, and value judgement, regardless of whether the

NEIGHBOURHOOD HOUSES, SOCIAL CONNECTION AND COMMUNITY BUILDING



Figure 1: Neighbours attend a Resilience Walk during Emergency Preparedness Week in 2019, starting at the Mount Pleasant Neighbourhood House (Photo: Neighbour Lab).

Neighbourhood houses (NHs) focus on building community, are place-based and open to anyone, and offer many programs, services, and activities for a range of target groups (children, youth, seniors, adults, newcomers, and more). In their multi-year survey and research of NHs in Metro Vancouver, Lauer and Yan found that NHs contribute to two key aspects of community building in a neighbourhood: the development and maintenance of relationships and friendships, and the development of social capacity, which they define as the “ability to work with others to achieve shared goals.” While NHs organize activities in schools, libraries, community centres and parks, their own facilities are crucial to enable their community-building role (Figure 1). NHs are found in Canada, the United Kingdom, the United States, Australia, and other places, but they are each unique as they serve the needs of local communities.

person conducting the assessment is a formal expert or a member of the public.¹³ Those who define risk also determine the focus of risk reduction actions.¹⁴ As an example, extreme heat response has historically focused on outdoor interventions like spray parks, or indoor interventions like centralized and public cooling centres. These interventions are critical but leave out socially isolated seniors and people with complex health conditions who may not be able to leave their homes to reach this supportive infrastructure. Involving SIOs in risk assessments early on allows them to inform practitioners about the specific needs of the community they serve and to guide disaster management practitioners

in coming up with interventions that will best serve those who are the most vulnerable.

In addition, SI sometimes plays a direct role in reducing social vulnerabilities. Social vulnerability is a core component of hazard, risk, and vulnerability assessments, but it is often misunderstood and distilled into reductionist individual characteristics. Many practitioners in emergency management, disaster risk reduction and climate adaptation use social vulnerability indices as the primary mechanism for understanding social vulnerability. Many such indices build on the pioneering work of Susan Cutter and colleagues, who developed place-based, local-level models for measuring social vulnerability and

community resilience.¹⁵ Within these indices, which are typically based on census data, characteristics like age, gender, economic status, education, and more are used as proxies for social vulnerability so that they can be used comparatively across communities. However, indicators used in these indices do not accentuate the underlying systems at the root of social vulnerability.

Social vulnerability, at its core, is determined by systems of power—who holds power and resources, and who does not. People who face systemic oppression, exclusion, and marginalization receive labels of vulnerability based on demographic characteristics. Yet demographic characteristics are not an inherent

vulnerability (e.g., being a racialized person is not a vulnerability—being a racialized person and living in a racist society is the vulnerability.)

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Another challenge with commonly used social vulnerability methodologies is that they do not illustrate whether people have access or proximity to community assets in their neighbourhood (organizations and facilities for social services and activities) that they can turn to for information, basic needs, and collective action during emergencies. Moreover, to date, most social vulnerability indices have not captured bonding, bridging, and linking social capital—which support adaptive capacity.¹⁶ Reducing disaster risk and building resilience is contingent on policies, programs, and processes that address the root causes of vulnerability, not just response

solutions for individual characteristics. Disasters are not just about hazards; they are, at their core, historical and political processes, and practitioners must work with communities to understand socioeconomic conditions and historical drivers of risk in order to identify the best measures to reduce risk. Tools and methodologies for capturing social vulnerability need to become more nuanced to capture not only root causes of vulnerability, but also reflect adaptive capacities so that risk reduction investments can build on strengths and address gaps.

Through the EPA Modernization, local governments are facing an increasing responsibility to conduct hazard, risk, and vulnerability assessments to inform risk reduction efforts. In recent years, federal funding was made available for local government disaster mitigation and climate adaptation efforts, including the National Disaster Mitigation Program, Municipalities for Climate Innovation Program, Disaster Mitigation and Adaptation Fund, First Nation Adapt Program, and the Community Emergency Preparedness Fund. As the obligations, responsibilities, and support for local authorities increases related to climate and disaster risk management and mitigation, they will rely on SI for effective and equitable assessment, planning, and action. This must be acknowledged and reflected in policies, legislation, and resource distribution. Governments are required by law to conduct hazard, risk, and vulnerability assessments (HRVA). Under the existing *Emergency Program Act* there is no direction to develop HRVA using participatory

approaches that engage diverse stakeholders, resulting in inconsistent standards, quality, and approaches to assessing risks. At the time of writing this article, the HRVA design and process is under evaluation by Emergency Management BC; the findings and new directions could be included in the EPA Modernization.

This coincides with historical processes in which “climate adaptation and hazard mitigation take a technocratic approach, one that privileges quantitative data above people, and argues for colour-blind risk reduction.”¹⁷ Such an approach sidelines equity-denied communities in the shaping of risk narratives and the development of solutions. Communities bear the brunt of risks, despite not having created these risks themselves. SIOs can host and mediate participatory discussions about risk and the co-creation of risk reduction actions that meet the needs of communities.

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Few SIOs have seen or participated in risk assessments for their own geographic areas, or developed continuity plans and long-term resilience strategies. There is increasing focus on the role of volunteer networks and social missions or community-based organizations during emergency response and disaster recovery,¹⁸ and

guides and toolkits are available for such organizations to conduct risk assessments and emergency planning and training.¹⁹ However, there is little research on how many social-purpose organizations have completed risk assessments or undertaken resilience planning,²⁰ or the kinds of plans and measures these organizations adopt and their motivations for them.²¹

While there are no surveys to gather data on this topic from the SI sector in BC, this is a common challenge for organizations in the social sector in many places. They often struggle with short-term project cycle funding, securing core operational or long-term funding, and limited and overburdened staff capacity for current service needs. This makes it challenging for

RESILIENT NEIGHBOURHOODS PROGRAM IN VANCOUVER

In 2017, the City of Vancouver launched the Resilient Neighbourhoods Program, aimed at transforming the way the City and communities collectively build resilience to a range of shocks and stresses. This program focused less strictly on emergencies and emphasized that social networks and relationships matter just as much, if not more, than emergency kits. Ultimately, community resilience is “based on collaborative problem-solving, and built at the speed of trust.” This pilot was run in conjunction with the development of the Resilient Vancouver Strategy. From 2017 through 2019, City staff partnered with four (SIOs) in four neighbourhoods that each received a \$50,000 grant to participate.

Each partner was encouraged to identify the shocks (acute events) and stresses (chronic challenges) that were of greatest concern to their communities. These ranged from social isolation, the opioid poisoning epidemic, earthquake risk, and racism. Over the course of the pilot, SIOs, community members, and City staff held engagement events, conducted social and physical asset mapping (Figure 2), completed resilience evaluations and conversational hazard, risk, and vulnerability assessments to ground actions in relevant potential disruptions. The pilot culminated in the development of neighbourhood resilience

action plans to address both shocks and stresses. From the beginning of the pilot, SPO partners raised the critical need to incorporate anti-racism and equity work, poverty reduction, food security, and social connection into emergency planning efforts. These partners innately understood that addressing disaster risk and resilience required addressing the underlying conditions that result in disproportionate and compounding impacts to communities. Moreover, these SIOs were already working to address these stresses in their day-to-day programming and had deep, trust-based relationships with equity-denied community members (those impacted by power and resource imbalances). While this program paused through the first two years of the COVID-19 pandemic, staff are re-launching the program in 2022 with lessons from the pandemic and 2021 heat dome event incorporated into a revised model.



Figure 2: Community leaders share ideas and identify neighbourhood assets in the Downtown Eastside during the Resilient Neighbourhoods Program Asset Mapping Workshop at 312 Main in 2019 (Photo: City of Vancouver).

them to devote staff and resources to general long-term planning or risk, emergency, and continuity planning. During the COVID-19 pandemic, these challenges were reflected and emphasized in *Imagine Canada's* advocacy in response to the federal government's approach to emergency aid packages and inadequacies based on the needs of the non-profit and social sector. It included the ability to sustain facilities and operations in its call for a Sector Resilience Grant Program to provide core operating support of the full sector.²²

ENHANCING PREPAREDNESS, RESPONSE, AND RECOVERY

EMERGENCY RESPONSE

When disasters strike, SIOs and informal groups are often the first to activate to meet community needs well before government agencies have time to mobilize formal response plans. SIOs collect and distribute supplies, mobilize volunteers, offer spaces for people to gather, and more.²³ SIOs, and the staff and volunteers who run them, have unique knowledge, skills, and trusting relationships with community members which allow them to identify and address needs via adaptable and tailored supports, particularly for equity-denied communities and those who are considered to be socially vulnerable.²⁴ SIOs often addresses major gaps and inequities in existing governmental response frameworks. These organizations are key partners

in delivering services in an equitable, timely, and culturally appropriate way.²⁵

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Governments, on the other hand, have formal roles to play in emergency response, but often lack key relationships, or even basic awareness of the location and needs of vulnerable community members. Government response plans and services are often generic and inflexible, meaning they rarely meet the needs of large percentages of the population. In particular, they often fail to meet the needs of those most vulnerable. Standardized programs and support offered by government agencies in many cases do not work for equity-denied groups because they are laden with rigid bureaucratic procedures that slow

down or exclude access to services, even further traumatizing disaster victims.²⁶ Indeed, the “need to stick to consistent procedures can serve to mask unjust actions and excuse the failure to put human rights of survivors first and foremost.”²⁷ SIOs, on the other hand, work in hyper-local and relational ways, making them much more responsive to emerging needs during a disaster.

DISASTER RECOVERY

SIOs also play an important role in long-term disaster recovery by supporting the psychological health of survivors. SI enables people to participate in physical and psychosocial recovery. Community spaces and facilities will always be needed to host support services and community-building activities.²⁸ People will need places to work together to rebuild the social and economic fabric of society.²⁹ Still, while disasters strengthen social ties in some cases, they can also sever social networks, particularly when residents are displaced on a large scale. The loss of community ties and social cohesion is traumatizing and can be described as a secondary disaster.³⁰ Disasters are inherently traumatic experiences, and SI often supports and even facilitates the collective processing of trauma and healing. SIOs are also subject to displacement, but not to the same extent as individuals, which allows these organizations to do what they do best: bring together community members to connect, share, heal, celebrate, and offer ongoing services that meet basic needs.

COVID-19 RESPONSE AND COMMUNITY RESILIENCE

At onset of the COVID-19 pandemic, City of Vancouver staff gathered to begin assessing potential impacts not only of the virus itself, but of some of the unintended consequences of government restrictions. Initial direction for physical distancing triggered widespread closures of businesses, organizations, and community spaces. The closure of these spaces brought forth a secondary disaster, one in which the loss of free meal programs, public washrooms, and other amenities had devastating consequences for equity-denied communities and people already experiencing poverty, loneliness, limited mobility, and reliance on social services. Organizations that kept their facilities open were inundated and overextended.



Figure 3: Residents enjoy a Pop Up Plaza during the summer of 2020 (Photo: City of Vancouver).

To address these gaps, City staff formed a Community Resilience Branch in the Emergency Operations Centre and worked closely with SIOs to identify impacts and needs and also collaborate on solutions and build capacity to meet surging demand. SI played a critical role in delivering services like grocery hampers to low-income residents, preparing and delivering culturally appropriate meals to seniors, setting up outdoor gathering spaces like parklets, increasing access to sanitation and hygiene facilities, staging emergency shelters, providing storage space for personal protective equipment, and disseminating important messaging about health orders and guidance to people without regular or direct access to the internet (Figure 3). None of these actions would have been possible without the knowledge, relationships, and resourcefulness of SIOs.

Another key role of SIOs in the context of recovery is advocacy. Disasters expose and exacerbate our deepest pre-existing inequities, as impacts are not equally distributed among populations and communities. Government-led disaster recovery programs and policies are designed “to compensate for measurable monetary losses, with no real consideration of need, resulting in . . . the perpetuation of existing inequalities.”³¹ SIOs are closer to community, both geographically and relationally by way of offering front-

line services that require face-to-face interactions. They have experience navigating government and philanthropic grants, and often have relationships with government staff or elected officials. This allows them to use their positional power to advocate for unmet needs in communities. At the same time, SIOs are often subject to the same disaster impacts as the communities they serve. According to the Vantage Point *Unraveling* report on the impact of COVID-19 on non-profits across BC eight months into the pandemic, of the organizations that serve specific populations, those

that serve racialized people (61%) and adults (60%) were most likely to be concerned about having to shut down.³² Recovery support for communities and SI must address these inequities.

POLICIES IN THE MUNICIPAL CONTEXT

To date, at the local level, only two municipalities in Metro Vancouver have recent policies or strategies that focus directly on SI.

The City of Richmond’s *Building Our*

*Future: A Social Development Strategy for Richmond*³³ includes a strategic direction to “strengthen Richmond’s SI,” and the city has a Non-Profit Organization (NPO) Replacement and Accommodation Policy. Under this policy, if NPOs are displaced through development, they receive support for a temporary location or replacement space and moving costs, and they have the first right of refusal to return as a tenant in the new development. If the NPO tenant declines to return to the new development, the space is reserved for another NPO acceptable to the City of Richmond.

The City of Vancouver has two strategies that directly link resilience and SI. In 2019, the City of Vancouver approved *Resilient Vancouver*,³⁴ includes several objectives and actions specifically designed to reframe and transform the role of SI in disaster risk and resilience. These objectives include: “Cultivating community connections, stewardship, and pride through actions like participatory budgeting processes” (1.1); “Empowering communities to support each other during crises and recover from disasters through actions like scaling the Resilient Neighbourhoods Program and training community centre staff to support disaster preparedness” (1.2); and “Strengthening social and cultural assets and services through actions like evaluating the resilience of food assets and meal programs” (1.4). These actions signify a shift away from traditional, individualistic approaches of personal preparedness towards a more collective, socially

collaborative approach.

More recently, the City of Vancouver approved its first strategy dedicated exclusively to SI. The city council approved *Spaces to Thrive: Vancouver SI Strategy Policy Framework* in December 2021. *Spaces to Thrive* takes a human rights-based approach that emphasizes addressing the needs of those most disproportionately impacted by shocks and stresses. Directions within the strategy cover a broad range of supportive policies, including: building partnerships and capacity; addressing persistent facility deficits (quality, quantity, and location); prioritizing reconciliation, equity, and resilience in supply; investing in operational funding for the health and vitality of the sector; and optimizing the SI ecosystem to improve resilience and adapt to pressures from climate change and disasters.³⁵

Government agencies can improve resilience outcomes for communities by funding and supporting comprehensive packages for SI that recognize the importance of the operational costs, staff, facilities, and physical assets that make services, programs, and social connections possible.

OPPORTUNITY

RECOMMENDATIONS

Many meaningful actions can be taken to support SI in its role contributing to community resilience and disaster risk reduction. These are presented under two key ideas, one that supports and strengthens the ongoing work of SI in communities and another that specifically identifies opportunities to integrate SI into the work of disaster risk reduction.

FUNDING FOR STABILITY, LONG-RANGE PLANNING, AND ADAPTATION

Government agencies can improve resilience outcomes for communities by funding and supporting comprehensive packages for SI that recognize the importance of the operational costs, staff, facilities, and physical assets that make services, programs, and social connections possible.

Core funding and operational

grants: Many organizations have called for changes to existing philanthropic models that largely offer project-based or innovation funding. Organizations require longer-term operational grants to maintain their core programs and services and conduct long-term planning. Many SIOs are continually creating new programs to qualify for grants, while struggling to fund their existing and impactful work. An ongoing lack of operational funding prevents organizations from planning for long-term administrative costs and creates

instability in programming, staffing, and even facility maintenance.

Contingency funds and flexible funding during emergencies:

A dominant misrepresentation of overhead costs as excessive and unnecessary for social purpose organizations contributes to the problem of insufficient operational funding and a lack of contingency funds for these organizations. Availability of operational funding and contingency funds would allow organizations to adequately pay staff, resource ongoing programming appropriately, and proactively plan and respond to emergencies. During the pandemic, many government and philanthropic funders notified SIOs quickly that their funding would be flexible. This allowed organizations to keep their staff and adapt their programs and service delivery methods during the pandemic emergency. This lesson should inform standard approaches for flexible funding through emergencies in the future.

Capital funds and real estate

tenure: In cities in BC and across Canada, sharply increasing real estate prices, property tax values, and redevelopment pressures are creating insecurity and displacement pressures for organizations owning or renting properties for social purposes. The pandemic compounded these pressures. The SPRE Collaborative's 2021 survey of the BC social purpose sector found that lack of affordable space, suitable space, and declining tenure and long-term security in

terms of ownership and leasing of space are the biggest challenges the sector faces, and these challenges directly affect the quality or extent of programs and services offered.³⁶ Mechanisms are needed to help these organizations stay close to the people they serve.

Capital funds for resilience and adaptation:

At a practical level, SI spaces are a collective investment in resilient and protective facilities and services for communities. A significant number of residential buildings in BC are not designed beyond life-safety code for earthquakes, are built in flood plains, have limited air filtration for pollutants and wildfire smoke, and are not designed for thermal safety in heat waves. As climate change increases the frequency and severity of extreme weather (like the heat dome of 2021) and BC faces persistent and significant earthquake risk, investments in SIOs offers a temporary stop-gap. SIOs need capital funding to upgrade and replace aging facilities and construct flexible-use spaces that can accommodate emergency response activities like shelters or mass feeding.

SI AS KEY PARTNER IN DISASTER RISK REDUCTION

Support for the SI sector should receive serious consideration in the modernization of BC's EPA legislation and should be considered in the renewal of Canada's *National Strategy for Critical Infrastructure* (2021–2023).³⁷ There should be more connections among the disaster risk

and emergency management fields, the social sector, and communities. Communities and municipalities rely heavily on SIOs during disasters, and local authorities should be encouraged to seek out partnerships with SIOs in advance of disasters. There should also be clear pathways of government funding and compensation for SIOs that take on response and recovery roles.

Liability considerations for the role of SI during emergencies:

Current documents on the BC EPA modernization process include consideration of civil liability protection for registered and convergent volunteers during emergencies. This could include protection from undue liability for service providers using their facilities for emergency response activities, even those that do not have a mission to engage in emergency response but that step in to fill a need in their neighborhood.

Insurance and financial backstops:

SI owners and operators need accessible and reasonably affordable insurance products and services, and regulations to ensure that they do not encounter excessive cost increases, exclusions, or complete denial of insurance coverage or renewal during emergencies and disasters, as many have during the pandemic.

Incorporating SI into hazard, risk, and vulnerability assessment (HRVA) processes and comprehensive recovery plans:

SIOs must be included as partners in shaping HRVAs. They are essential

for developing comprehensive and relevant hazard, risk, vulnerability, and capability assessments and in supporting participatory processes that involve civil society and diverse communities. This requires a fundamental shift in what type of knowledge we elevate, and a willingness to see non-traditional and non-technical knowledge as valuable expertise. It also requires appropriate resources for SIOs to have the capacity to participate in these processes.

Communication, coordination, and collaboration in emergencies:

Emergency situations involve rapidly changing conditions, logistics, required provisions, and available supports, so SIOs need to receive information and resources in a timely manner as they decide how to adapt their services and support residents. Emergencies also necessitate quick and flexible collaboration, and, often, staff of local government and philanthropic grant-making institutions will play an informal coordinating role to help SIOs and community leaders connect with each other, share resources, or identify gaps in services that need to be filled. For a lasting and supportive relationship between local authorities and SIOs, it is necessary for local authorities to ensure clear and effective support for SI across all municipal departments during emergencies. For example, though social policy departments tend to have the most direct engagement and relationships with community partners, SIOs and smaller community groups may need permits for new or

temporary facilities or activities, or may need to use municipal-owned property. For this, they must deal with building permit departments that may have a different understanding of how or whether the local government should support community groups.

Governance and decision-making mechanisms for local SI networks are also important. A general lack of coordination, formal roles, and decision-making frameworks to allocate resources and aid in disasters abounds, but should be established to ensure that key emergency response services such as food provision are provided without interruption, and that appropriate facilities are kept available for use, whether by their normal operators or other operators that can step in during emergency contexts.

THE CHALLENGE

Practitioners in the fields of disaster risk reduction and resilience increasingly recognize that preventing, responding to, and recovering from disasters is not only predicated on our physical environment, but equally contingent on the strength, flexibility, and equity of our social and economic systems. To address disaster risk in all its complexity and dimensions, we need to see the social dimensions of disasters as equally valid and equally ripe for risk reduction action. The stresses that erode community resilience on a continual basis are just as critical to address as the shocks that cause acute disruptions. The challenge often seems to be that practitioners do not

quite know how to do this—but social infrastructure can help. Involving social infrastructure in comprehensive disaster risk reduction efforts is a crucial step in achieving a whole-of-society approach, extending both the breadth of potential disaster risk reduction actions and the depth of these actions. Building relationships and investing in these social-purpose places opens up new knowledge, new potential plans, and new interventions to ensure that community needs are centred in immediate and long-term disaster risk reduction work.

RESOURCES

1. Recent municipal policies or strategies that cover SI:

City of Richmond. *Building Our Social Future. A Social Development Strategy for Richmond, 2013–2022*. 2013. https://www.richmond.ca/_shared/assets/socialdevstrategy34917.pdf

City of Vancouver. *Resilient Vancouver Strategy*. 2019. <https://vancouver.ca/files/cov/resilient-vancouver-strategy.pdf>

City of Vancouver. *Spaces to Thrive: Vancouver Social Infrastructure Strategy*. 2021. <https://council.vancouver.ca/20211208/documents/cfsc1.pdf>
<https://council.vancouver.ca/20211208/documents/cfsc1StaffPresentation.pdf>

2. An introduction to the concept of social infrastructure and cases and evidence of how SIOs and their physical spaces strengthen social connections in communities, reduce vulnerability to disasters, and play a role during emergencies:

Klinenberg, Eric. *Palaces for the People: How SI Can Help Fight Inequality, Polarization, and the Decline of Civic Life*. New York: Penguin Random House, 2018.

3. Multi-year research on the role of Neighbourhood Houses in Metro Vancouver:

Lauer, Sean, and Miu Chung Yan. *Neighbourhood Houses: Building Community in Vancouver*. Vancouver: UBC Press, 2021.

4. These 2013 and 2021 studies demonstrate the challenges that SIOs face in terms of real estate affordability in BC and the need for action to address these displacement challenges:

Real Estate Institute of BC and Social Purpose Real Estate Collaborative. *RENT - LEASE - OWN: Understanding the Real Estate Challenges Affecting the Not-For-Profit, Social Purpose and Cultural Sectors in Metro Vancouver*. Vancouver: 2013. <https://www.socialpurposerealestate.net/resources/2013-rent-lease-own-understanding-real-estate-challenges-affecting-not-profit-social>

Real Estate Institute of BC and Social Purpose Real Estate Collaborative. *Space for Community: Understanding the Real Estate Challenges Affecting the Social Purpose Sector in BC*. Vancouver: 2021. <https://www.socialpurposerealestate.net/RLO2019>

ENDNOTES

¹ Melanie Davern, Lucy Gunn, Carolyn Whitzman, Carl Higgs, Billie Giles-Corti, Keon Simons, Karen Villanueva, Suzanne, Mavoa, Rebecca Roberts, and Hannah Badland, "Using spatial measures to test a conceptual model of SI that supports health and wellbeing," *Cities and Health* 1(2017):2, 194-209, DOI: 10.1080/23748834.2018.1443620

² Jay Pitter, "Equitable Infrastructure: A resource framing infrastructure types using an equitable placemaking lens," *Community Foundations of Canada*, 2021, p. 5, <https://communityfoundations.ca/wp-content/uploads/2019/04/Equitable-Infrastructure-National-Infrastructure-Assessment-Final-English-Ver.-August-10-2021.pdf>

³ Pitter, "Equitable Infrastructure."

⁴ Government of British Columbia, *Non-profit Sector*, Accessed March 15, 2022. <https://www2.gov.bc.ca/gov/content/employment-business/non-profits-sector>

⁵ Pitter, "Equitable Infrastructure."

⁶ Government of Canada, "Investing in Canada plan funding stream: SI," date modified: November 2, 2020, <https://www.infrastructure.gc.ca/plan/si-is-eng.html>

⁷ Government of Canada, "Canada Community Revitalization Fund," date modified: December 21, 2021, <https://www.canada.ca/en/atlantic-canada-opportunities/campaigns/covid19/canada-community-revitalization-fund.html>

⁸ Government of BC, "Modernized emergency management legislation," accessed April 11, 2022, <https://www2.gov.bc.ca/gov/content/safety/emergency-management/emergency-management/legislation-and-regulations/modernizing-epa>

⁹ Eric Klinenberg, *Palaces for the People: How SI Can Help Fight Inequality, Polarization, and the Decline of Civic Life* (New York: Penguin Random House, 2018).

¹⁰ Alan Latham and Jack Layton, "SI and the Public Life of Cities: Studying Urban Sociality and Public Spaces," *Geography Compass* 13(7)(2019), <https://doi.org/10.1111/gec3.12444>

¹¹ Maria Koliou, John W. van de Lindt, Therese P. McAllister, Bruce R. Ellingwood, Maria Dillard, and Harvey Cutler, "State of the Research in Community Resilience: Progress and Challenges," *Sustainable and Resilient Infrastructure*, No Volume (2018), pp.1-21, <https://doi.org/10.1080/23789689.2017.1418547>

¹² D. P. Aldrich, *Building Resilience: Social Capital in Post-Disaster Recovery* (Chicago: University of Chicago Press, 2012).

¹³ Paul Slovic, "Trust, emotion, sex, politics, and science: surveying the risk-assessment battlefield," *Risk analysis: an official publication of the Society for Risk Analysis*, 19(4), (1999) 689-701, <https://doi.org/10.1023/a:1007041821623>

¹⁴ Slovic, "Trust, emotion, sex, politics, and science."

¹⁵ S. L. Cutter, L. Barnes, M. Berry, C. Burton, E. Evans, E. Tate, J. Webb, "A place-based model for understanding community resilience to natural disasters," *Global Environmental Change* 18 (4, 2008): 598-606.

And S. L. Cutter, B. J. Boruff, W. L. Shirley, "Social vulnerability to environmental hazards," *Social Science Quarterly* 84 (2, 2003): 242-261.

¹⁶ Dean Kyne and Daniel Aldrich, "Capturing Bonding, Bridging, and Linking Social Capital through Publicly Available Data," *Risk, Hazards and Crisis in Public Policy*, 2019, 10.1002/rhc3.12183.

¹⁷ Alessandra Jerolleman, *Disaster Recovery through the Lens of Justice*, Springer Nature Switzerland AG, 2019, p. 18. 10.1007/978-3-030-04795-5.

¹⁸ Michelle A. Meyer, "Social Capital in Disaster Research," In *Handbook of Disaster Research*, edited by Havidán Rodríguez, William Donner, and Joseph E. Trainor (Springer International Publishing, 2018) 263–86. https://doi.org/10.1007/978-3-319-63254-4_14.

¹⁹ City of Vancouver, *Resilient Neighbourhoods Toolkit*, 2019, accessed November 15, 2020, <https://vancouver.ca/people-programs/resilient-neighbourhoods-program.aspx>

Federal Emergency Management Agency (FEMA), *Planning Guides*, 2021, <https://www.fema.gov/emergency-managers/national-preparedness/plan>

ProVention Consortium, *Community Risk Assessment Toolkit*, <http://proventionconsortium.net/?pageid=39>

Nonprofit Center of Northeast Florida, *Resources for Disaster and Emergency Planning*, 2022, <https://nonprofitctr.org/research-resources/resources-for-disaster-and-emergency-planning/>

Urban Sustainability Directors Network (USDN), *Resilience Hubs*, 2022, <https://www.usdn.org/resilience-hubs.html>

²⁰ Merja Rapeli, "Assessment of Social Services' Disaster Risk Management: Case Finland," *Journal of Contingencies and Crisis Management* 25 (2017): 4, 389–398, <https://doi.org/10.1111/1468-5973.12160>

²¹ Jenna Tyler, Abdul-Akeem Sadiq, and Grace L. Chikoto-Schultz, "Variations in employees' perceptions of organizational disaster preparedness," *Journal of Contingencies and Crisis Management*, 28 (1), (2020) 2–18, <https://doi.org/10.1111/1468-5973.12281>

²² Imagine Canada, "COVID-19 and the Canadian Nonprofit Sector," accessed April 18, 2020. <https://www.imaginecanada.ca/en/covid19>.

²³ Daniel Rajasooriar and Tammara Soma, "Food access, mobility, and transportation: a survey and key informant interviews of users of non-profit food hubs in the City of Vancouver before and during the COVID-19 crisis," *BMC Public Health* 22(2022):6, <https://doi.org/10.1186/s12889-021-12434-9>

²⁴ Eric Klinenberg, *Heat Wave: A Social Autopsy of Disaster in Chicago* (Chicago: University of Chicago Press, 2015).

²⁵ Robin L. Erising and Kathleen A. Kost, eds., *Surviving Disaster: The Role of Social Networks* (Lyceum Books, 2012).

²⁶ Jerolleman, "Disaster Recovery."

²⁷ Jerolleman, "Disaster Recovery," p. 48

²⁸ D. P. Aldrich and M. A. Meyer, "Social Capital and Community Resilience," *American Behavioral Scientist* 59 (2, 2015): 254–269.

²⁹ Daniel P. Aldrich, *Building Resilience: Social Capital in Post-Disaster Recovery* (Chicago: University of Chicago Press, 2012).

³⁰ Jerolleman, "Disaster Recovery."

³¹ Jerolleman, "Disaster Recovery," p. 62.

³² Vantage Point, Vancouver Foundation, and Victoria Foundation, *Unraveling: Nonprofits, COVID-19, and the Fabric of BC Communities*, February 2021, www.thevantagepoint.ca/unraveling

³³ City of Richmond, *Building Our Social Future: A Social Development Strategy for Richmond, 2013-2022*, 2013, https://www.richmond.ca/_shared/assets/socialdevstrategy34917.pdf

³⁴ City of Vancouver, *Resilient Vancouver Strategy*, 2019, <https://vancouver.ca/files/cov/resilient-vancouver-strategy.pdf>

³⁵ City of Vancouver, *Spaces to Thrive: Vancouver Social Infrastructure Strategy*, 2021, <https://council.vancouver.ca/20211208/documents/cfsc1.pdf>

³⁶ Real Estate Institute of BC and Social Purpose Real Estate Collaborative, *Space for Community: Understanding the Real Estate Challenges Affecting the Social Purpose Sector in BC* (Vancouver: April 2021), pp. 8-14 <https://www.socialpurposerealestate.net/RLO2019>.

And, Real Estate Institute of BC and Social Purpose Real Estate Collaborative, *RENT - LEASE - OWN: Understanding the Real Estate Challenges Affecting the Not-For-Profit, Social Purpose and Cultural Sectors in Metro Vancouver* (Vancouver: 2013), <https://www.socialpurposerealestate.net/resources/2013-rent-lease-own-understanding-real-estate-challenges-affecting-not-profit-social>

³⁷ Public Safety Canada, *National Cross Sector Forum 2021-2023 Action Plan for Critical Infrastructure* (Canada: Her Majesty the Queen, 2021), 1, accessed June 22, 2021, <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2021-ctn-pln-crtcl-nfrstrctr/2021-ctn-pln-crtcl-nfrstrctr-en.pdf>

Recommended citation

Bouikidis, A., Tynan, K., Social Infrastructure and Community Resilience, in Resilient Pathways Report: Co-creating new Knowledge for Understanding Risk and Resilience in BC; Safaie, S., Johnstone, S., Hastings, N.L., eds., Geological Survey of Canada, Open File 8910, 2022 p. 213-229, <https://doi.org/10.4095/330535>