

# **Business Engagement in Developing Community Resilience to Natural Hazards**

## **Research Report (December 2019)**

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## Executive Summary

### Background

As part of a broader public policy focus on building resilience, 'communities' are being pushed to take on more responsibility for their ability to respond to emergencies, including natural hazards. The idea of local businesses as part of these communities, and as a potential source of support or resources to be mobilised in response to emergencies, is however somewhat under-developed. Official guidance from the Scottish Government, and support from Local Authorities, encourages community groups to develop resilience plans and registers of local volunteers and assets to be deployed in the event of an emergency situation. While responders are encouraged to consider businesses as one element of resilient communities, there is little guidance on the role that they can play in emergencies or on how communities can engage with them.

This research project, funded by the National Centre for Resilience, sought to explore the role that businesses play in community resilience planning and response, through a national survey of community groups across Scotland and interviews with community representatives, businesses and local authority resilience officers.

### Results

The practice of formal community resilience planning is still developing in Scotland. Around a quarter (24%) of the 189 community groups responding to the survey had a community resilience or emergency response plan in place, and a further 14% were in the process of developing one. The majority of these groups had some sort of support from their local authority to help with this process, while some had also made use of the Scottish Government's guidance material or were supported by other organisations. Where groups did not have any formal plan, this was usually because they had not considered it or did not have adequate time or resources to develop one.

Local businesses can help their communities to respond in a variety of ways. Of those communities that had responded – in either a planned or unplanned way – to an emergency situation in the last two years, businesses had made some sort of contribution in 58% of places. The most common type of resource that they were able to provide was machinery or equipment, including, for example, the use of heavy machinery to clear roads of fallen trees or snow, or generators where there was an interruption to power supplies. However, businesses also made a more varied range of contributions, including the time of their employees, helping volunteers to reach remote or vulnerable residents, and supplying hot food for volunteers or other affected members of the community. Businesses can also help to raise the capacity of communities through, for example, providing storage for equipment or contributing financially to local fundraising initiatives.

Despite these positive experiences, only a minority of community groups had considered or engaged with local businesses in developing their resilience plans, and the potential contribution of businesses is not seen as very important to the development of community resilience relative to other elements.

A number of factors can be identified as inhibiting the engagement of businesses in community-level resilience activity:

- Many community councils and groups appear unlikely to consider the potential role that local businesses can play in planning and responding to emergencies or natural hazards. In addition, there is a perception amongst some community groups in very rural areas that there are no or very few businesses in their areas.
- The guidance material for community groups gives little direction on how they can engage with business. The 'asset register' system used by community resilience groups was primarily designed as a register of individual local volunteers, rather than for identifying the distinctive contribution that could be made by local businesses and their assets.
- Engagement of businesses in community-level resilience planning appears to be almost exclusively the domain of very small and locally-owned firms. Although there is some anecdotal evidence of larger firms – such as supermarket or pub chains – providing ad hoc responses, where there is not at least some degree of local autonomy these appear unlikely to be approached by or engage with groups like community councils.
- Questions around insurance, liability and risk are also of concern to businesses and are a disincentive to engagement. There is also resistance on the part of some businesses to the idea that such activities should be their responsibility, rather than that of local authorities or other responders.

### **Policy Implications**

- The resources produced by the Scottish Government and local authorities – such as guidance and templates for compiling community resilience plans and asset registers – could do more to prompt community groups to consider what assets and resources businesses in their community might be able to contribute. This might include, for example, a dedicated section in communities' asset registers identifying businesses in their area.
- If voluntary groups – and predominantly community councils – are to be the main mechanism for developing local community resilience, they are likely to require additional support if they are to effectively include local businesses in this process. In particular they would need help in reaching larger businesses, local branches owned elsewhere and others that are outside their existing informal networks. There may be scope here to build more local connections

with other local authority departments, chambers of commerce, or enterprise agencies with a view to drawing more firms into community resilience planning.

- In practical terms, there is demand for further clear advice for community groups, potential volunteers and businesses engaging in community resilience activity about what would and would not be covered by existing insurance policies.

Encouraging local planning by voluntary groups is well established as the preferred approach to developing community resilience. These findings highlight the potential contribution that local businesses can make to emergency response, and the scope to facilitate the more widespread engagement of business in community resilience activity.

## 1. Introduction

As part of a broader public policy focus on building resilience, ‘communities’ are being pushed to take on more responsibility for their ability to respond to emergencies, including natural hazards. In Scotland, the main mechanism for promoting community resilience in this way has been through encouraging local groups – mostly community councils but also dedicated resilience groups or flood groups – to develop localised resilience or emergency plans. In this approach, the resilience of communities is linked to the capacity of these groups, made up of individual volunteers, to effectively plan for emergencies and to put these plans into operation, liaising with those agencies that have a statutory role as emergency responders where appropriate.

The idea of local businesses as being part of these communities, and as a potential source of support or resources that could be mobilised in response to emergencies, is however somewhat under-developed. There is limited academic research looking specifically at the contribution and engagement of businesses in communities’ emergency response, and particularly that of small business. In policy terms, while the Scottish Government’s guidance does encourage responders to consider businesses as one element of resilient communities, consideration of the practical contributions that businesses can play in emergencies, and how this might be promoted, is limited.

This research project, carried out by researchers at the University of Glasgow’s Dumfries Campus and funded by the National Centre for Resilience, sought to address this gap through a national survey of community groups and interviews with community representatives, businesses and local authority resilience officers. In particular, the proposed research explored the role played by businesses in the resilience of communities to natural hazards through seeking to address the following specific research questions:

- To what extent do local community or resilience groups attempt to engage businesses in emergency planning and response? What influences this (lack of) engagement?
- How do businesses contribute to communities’ planning for, responses to and recovery from the impact of natural hazards?
- What factors could inhibit or facilitate the effective contribution of businesses to community resilience efforts?

## 2. Background and Context

### 2.1 Research Perspectives

Resilience has in recent years become “an increasingly-ubiquitous concept” (Skerrat, 2013, p36), both in the academic literature and policy approaches across a number of fields. As such it has developed a diversity of meanings and definitions (Mackinnon and Derickson, 2012; Brown, 2013; Skerrat, 2013; Twigger-Ross et al., 2015). Christopherson et al. (2010, p3) see this ‘malleability’ as one factor in the popularity of the concept. Throughout the literature there is some tension between a tendency to see resilience as the ability to resist or ‘bounce back’ from some external shock (reflecting the concept’s origins in the natural sciences) and a more dynamic understanding based around adaptive capacity to more profound change (MacKinnon and Derickson, 2012; Brown, 2013; Steiner et al., 2016).

The majority of research on community resilience to natural hazards and emergencies has tended to focus on the preparation and response of government and public sector agencies or community groups, with little attention paid to the role of firms. The consideration of business in the resilience literature is restricted to two broad themes (summarised in Figure 2.1).

Firstly, researchers in entrepreneurship and management have examined the resilience of businesses themselves (see for example Wedawatta and Ingirige, 2012; Doern, 2014), both in the face of natural hazards or other crises, often through the lens of business continuity, and in response to longer-term challenges (e.g. Wishart, 2018). This work has sought to identify factors that influence the ability of businesses to survive, and to maintain revenue and employment, with preparedness seen as a key determinant (Orhan, 2016). This research does however tend to focus on larger organisations rather than SMEs (Herbane, 2010; Sullivan-Taylor and Branicki, 2011). Orhan (2016), in an extensive review of existing research, notes a range of variables – including business size, sector and age, financial situation, occupancy tenure, market range and previous disaster experience (see also Atkinson, 2014) – that influence preparedness. SMEs in particular are more likely to be vulnerable (UNDP, 2013) and under-insured, and less likely to have contingency plans (Crichton, 2006). Furthermore, there is evidence that firms are only likely to engage in preparedness activities when they are easy and do not require substantial investment (Tierney and Webb, 2001). In addition to these internal firm characteristics, the capacities and responses of the wider community, including the state, are identified as contributory factors to business resilience (Doern, 2014).

Secondly, a distinct strand of research has explored the role played by small business in the resilience of places or communities, but has tended to focus on how they contribute to places adaptation or sustainability in the face of economic shocks or longer-term changes (such as ageing populations). Steiner and Atterton (2014) for example stress the importance

of diverse employment opportunities and private sector enterprises' adaptive capacity in contributing to rural areas' wider resilience. In a similar vein, Maybery et al. (2009) present a model of community resilience based on local strengths and resources that include factors such as relationships and shared values as well as economic resources such as employment opportunities, income and certain services. Research on local ownership of assets (Leach, 2013), mostly with regard to land and natural resources (see for example Varghese et al., 2006; Skerratt, 2013) also suggests this as a potential factor in the resilience of rural places.

Where research has addressed the private sector contribution in the context of natural hazards or emergencies (often based on examples from the USA), this has largely been concerned with the contribution of large firms to disaster response and recovery either in the form of corporate philanthropy, perhaps driven by notions of corporate social responsibility (e.g. Besser and Jarnagin, 2010; Tilcsik and Marguis, 2013), or in commercial activities where revenue is generated from the provision of disaster-related goods and services. McKnight and Linnenlueke (2016) seek to distinguish here between firm- and community-centric 'postures' on the part of business, where the former implies a set of responses prioritising business needs, while the latter takes into account the broader advantages of engagement with community stakeholders, whether based on instrumental aims such as reputational benefits or a sense of moral or compassionate duty. The role of private sector firms as owners and operators of critical infrastructure is also a growing area of interest (see for example Stewart et al., 2009).

There are also potential links to be made here with the broader socio-economic characteristics of places and their populations as the context within which community resilience to emergencies exists. The work of a number of authors (see for example Cutter et al., 2003; Norris et al., 2008; Colten et al., 2008) has highlighted the role of social inequalities, unemployment and low income as a source of vulnerability and lack of resilience. Kazmierczak et al. (2015) note that impacts on employment provided by businesses affected by natural hazards is a potentially important aspect of social vulnerability, with particular relevance to casual or low-income workers or low-income groups. The ability of businesses to continue operating and employing people is also important element of community recovery (Kapucu and Sadiq, 2016). Various examples of community resilience measures often include indicators to capture the strength or diversity of the local business base – there is however no clear consensus across the different approaches on what should be measured, how and why (Cutter, 2016).



**Figure 2.1: Perspectives on Intersection of Business and Community Resilience**

	Short Term	Long Term
<b>Firm Level</b>	Factors in business continuity and resilience to emergencies (Atkinson, 2014; Orhan, 2016), and as an aspect of community recovery (Kapucu and Sadiq, 2016); Firms as owners of critical infrastructure (Stewart et al., 2009)	Characteristics, capabilities and personal resilience of managers and leaders; business characteristics; business models and processes; external factors (e.g. access to finance) (Wishart, 2018)
<b>Community Level</b>	(Large) business contribution to emergency response – e.g. Hurricane Katrina (Besser and Jarnagin, 2010; Tilcsik and Marquis, 2013); Based on firm- or community-centric motivations (McKnight and Linnenluecke 2016)	Importance of enterprise and diverse employment opportunities (Steiner and Atterton, 2014) and local ownership of assets (Leach, 2013, Varghese et al., 2006; Skerratt, 2013) in places’ resilience to socio-economic change; links to regional development and evolution

## 2.2 Scottish Policy Context

In the Scottish context community resilience is defined as “communities and individuals harnessing resources and expertise to help themselves prepare for, respond to and recover from emergencies, in a way that complements the work of the emergency responders” (Scottish Government, 2013a). This view, of community resilience as the ability of local people and groups to “help themselves in an emergency” (Cabinet Office, 2011, p4) is interpreted by some as an attempt to transfer agency and responsibility for emergency response away from the state to individuals and groups, particularly volunteers (Bulley, 2013; Steiner and Markantoni, 2013). This sits alongside a broader set of trends in which, in the name of community empowerment or localism agendas, government has sought to promote a shift towards ‘bottom up’ rather than ‘top down’ focused service provision as part of a transition towards an ‘enabling state’ (Markantoni et al., 2018). At the same time local government, which is in many cases at the front line of delivering these shifting priorities, has been disproportionately affected by the ongoing cuts in public sector expenditure since 2010 (Gray and Barford, 2018).

The Civil Contingencies Act (2004) and the Civil Contingencies Act 2004 (Contingency Planning) (Scotland) Regulations 2005 form the legal basis for emergency preparedness in Scotland. Among other things, they define the legal responsibilities for responder organisations, known as Category One (including emergency services, local authorities, NHS and SEPA) and Category Two (for example utility suppliers and some transport operators)

responders – these have statutory obligations to co-operate in emergency preparation and response. Community councils and other voluntary groups do not.

The Scottish Government’s framework for developing community resilience is set out in Building Community Resilience: Scottish Guidance on Community Resilience (Scottish Government, 2013a). In practice, this has been taken forward by many local authorities working with community councils and other local groups to develop community resilience plans that seek to identify potential risks and resources for particular places. While there is some national guidance around these, the take up and form of community resilience plans varies between local authorities and communities, based on different approaches and capacities. From the point of view of responders, these plans also act as a guide to what communities are able to do for themselves or the support they may need, by setting out pre-defined roles in an emergency (Lyon and Fazey, 2015). The central role of community and voluntary groups in this approach means that “creating local activism is key to long-term success” (Scottish Government, 2013a).

Responders are encouraged to consider businesses as one element of resilient communities (Scottish Government, 2013a) – however, the ways in which these are seen to be linked is not explicitly stated beyond that “organisations that promote resilience in their workforce will enhance their own resilience, that of their staff and that of other communities of which their staff are part” and that “organisations that have considered how they can contribute to the resilience of the communities in which they operate will strengthen local community resilience” (p8). The policy approach to the resilience of businesses themselves is dealt with in Preparing Scotland: Having and Promoting Business Resilience (Scottish Government, 2013b). Guidance on the practical role that businesses can play in community resilience to emergencies is limited to the observation that:

*“Local services such as shops and pubs can also act as a communication hub within communities, and in recent emergencies, people who run these businesses have acted as the point of contact between communities and responders.”* (Scottish Government, 2013a, p22)

The policy framework therefore can be broadly seen as taking an ‘emergency response’-focused view of community resilience. While there appears to be a recognition that within this there is a potential role for businesses, this is not clearly articulated within national strategies and guidance.

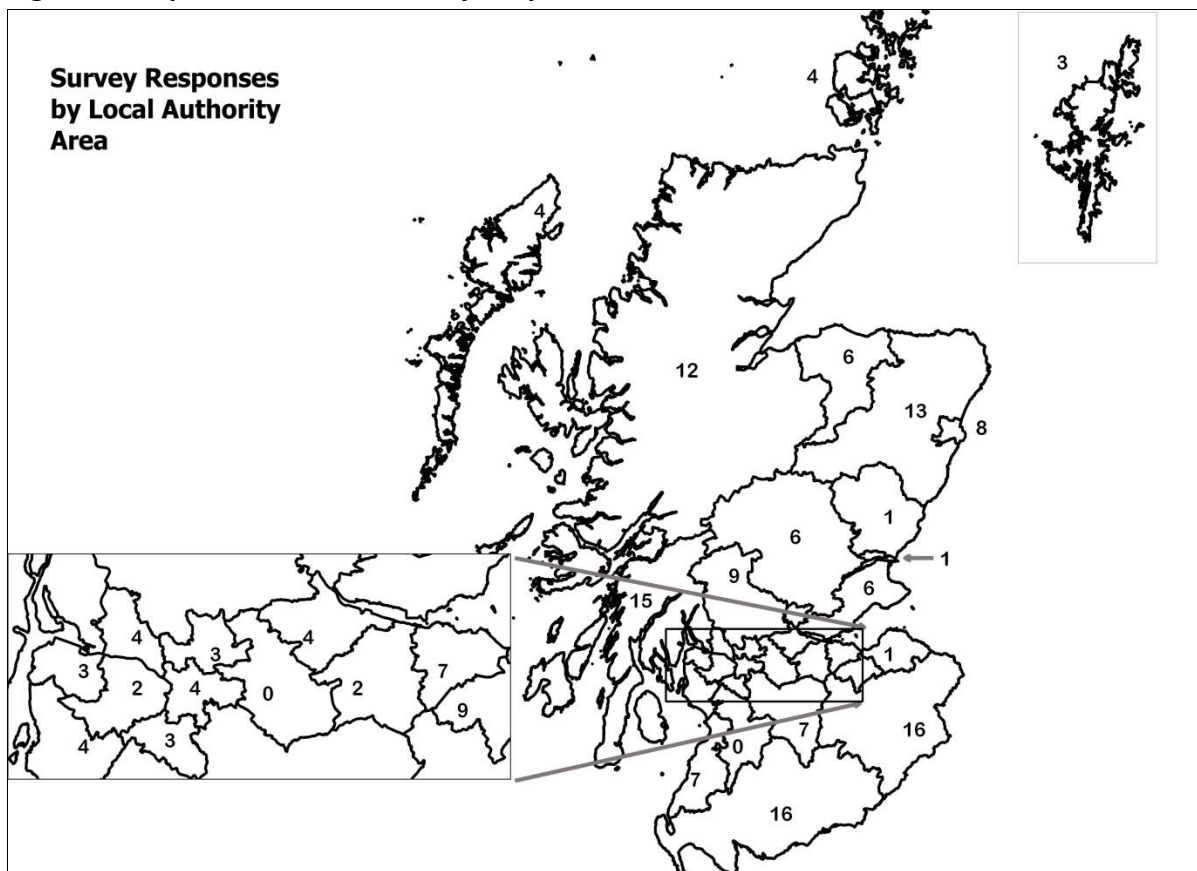
### 3. Research Methods

The research set out to address three specific research questions in the Scottish context:

- To what extent do local community or resilience groups attempt to engage businesses in emergency planning and response? What influences this (lack of) engagement?
- How do businesses contribute to communities' planning for, responses to and recovery from the impact of natural hazards?
- What factors could inhibit or facilitate the effective contribution of businesses to community resilience efforts?

The approach to this consisted of two elements. The first and most substantial of these was a national online survey of community councils and resilience groups that sought to gather information on their current level of resilience activity, their experience of emergency response and the level of engagement with local businesses, through a combination of closed and open questions. This data was collected during March and April 2019.

**Figure 3.1: Spread of Online Survey Responses**



Email contacts were identified for representatives of around 870 active community councils and local resilience groups and these were invited to participate in the online survey. 189

responses to the survey were received (a response rate of over 20%), with at least one response from 30 of Scotland's 32 local authority areas (see Figure 3.1). The obvious limitation of this approach is that it only gathers information about those communities that already have active community groups engaged in community resilience activities. Through an analysis based on matching community groups' locations to datazones, it was established that nearly 80% of respondents represented groups from areas categorised as rural in the Scottish Government's Urban/Rural Classification.

The second element of the research sought to augment the survey results with a small number of more in-depth interviews (n=9). These were carried out with representatives of community groups (who had responded to the survey and agreed to be contacted for a follow-up interview), local government officers with responsibility for promoting community resilience activity, and business owners/managers who had been identified as participating in community-level planning or response.

## 4. Engagement of Business in Community Resilience Activity

### 4.1 Local Resilience Planning

As discussed in section 2.2, official guidance from the Scottish Government, and support from Local Authorities, encourages community groups to develop resilience plans and registers of local volunteers and assets to be deployed in the event of an emergency situation. This research suggests that this practice of formal community resilience planning is still spreading in Scotland. Around a quarter (24%) of the 189 community groups responding to the survey already had community resilience or emergency response plan in place, and a further 14% were in the process of developing one. The majority of these groups had some sort of support from their local authority to help with this process, while some had also made use of the Scottish Government's guidance material or been supported by other organisation such as the Scottish Flood Forum.

Conversely, of those groups without a formal plan, 46% said that it was not something they had considered, despite the effort being put into promoting community resilience planning, and 33% put this down to not having sufficient time or resources. Only 14% said that they had given it consideration and decided that was not necessary.

The approach to community resilience planning varies between local authorities – in some regions there is an emphasis on encouraging the development of plans across all community council areas, while in others the existence of a formal plan is seen as less crucial. However, the creation of a local resilience plan is also dependent on the existence of an active community group (usually a community council) to take this forward. The existence of active community councils varies across Scotland, with evidence that they are less common in areas with high levels of multiple deprivation (Scottish Government, 2013c).

### 4.2 Business Involvement in Resilience Planning

Just over half (54%) of those community groups that had a formal resilience plan for their areas in place or in development said that they had considered the potential contribution that local businesses could make to emergency planning and response. Most commonly, local businesses tend to be included in resilience plans as potential contributors where they have previously helped the community on an ad hoc basis during unplanned responses to emergency situations.

Only a small number of groups said that the idea of identifying and including local businesses that might be able to contribute had been suggested by the local authority or other source of support during the planning process. Interestingly all of those that did were in different local authority areas, suggesting that this is not prioritised in any particular parts of Scotland. There is no common overarching approach to promoting community resilience

across Scotland's local authorities; nevertheless, there is little reference to business in any of the guidance or resources reviewed as part of this study.

Where owners and managers of local businesses are also members of these community groups, the potential role of businesses was much more likely to have been considered. In these cases there is some blurring of the motivation and roles of these members as individual volunteers and as businesses.

Only 34 (18%) of the community groups said that they included members from local businesses. The most common types of businesses represented, both on over half of these groups, were accommodation, food and drink or tourism, and agriculture, forestry or fishing. A small number of groups also included members from retail and construction firms.

All of those business people represented on community groups were either sole traders/self-employed people or responsible for running locally owned or managed firms. None of these groups said they had representation from large businesses or from local branches of national or international firms – although in the case of community councils, they are notionally elected bodies and it is not one of their functions to include representation from business in their membership.

It was suggested that the relatively low number of groups that have active business owners or managers amongst their membership is likely to be related to the age profile of those volunteers involved community groups – a significant proportion of whom are of retirement age. However, many of these members may still have networks and contacts in the business community.

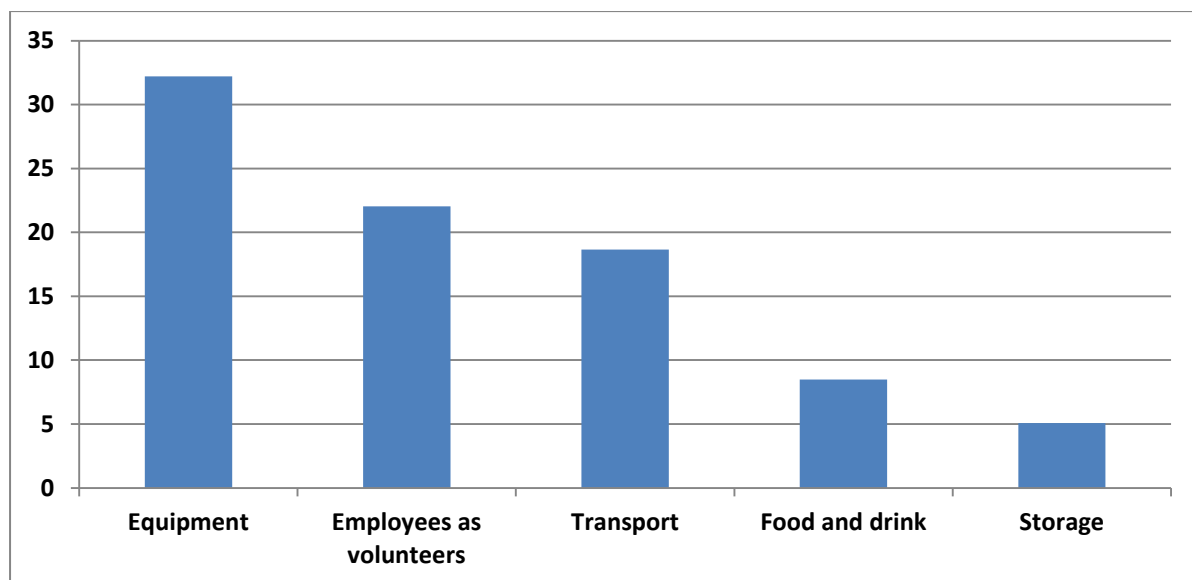
It should also be stressed that the absence of formal planning does not necessarily mean that communities do not include the attributes that would be considered to support 'resilience'. Some community group representatives stressed the importance of informal networks, often including businesses, which they were confident would mobilise an effective response to an emergency situation even in the absence of a written plan. One interviewee also suggested that from a business point of view being signed up to more formalised arrangements was not attractive.

#### **4.3 Businesses' Contribution to Emergency Responses**

Local businesses had helped their communities to respond to natural hazards in a variety of ways. Of the 59 community groups participating in the survey that said they had responded to some sort of emergency – either planned or unplanned – in the last two years, businesses had made some sort of contribution in 58% of places. The most common type of resource that they were able to supply, cited by around a third of groups (see Figure 4.1), was

machinery or equipment. This included examples such as the use of heavy and specialised machinery to clear roads of fallen trees or snow, or generators where there was an interruption to power supplies. Businesses also provided a more varied range of contributions. For example, there is evidence of businesses deploying their employees as ‘manpower’ to help communities respond to emergencies (in one case closing their businesses in response to a flood alert and asking their staff to help move sandbags to properties at risk). Businesses with vehicles (particularly in land-based sectors, which tend to have access to 4X4s) had also helped volunteers or service providers to reach remote or vulnerable residents. Other examples included shops, pubs and restaurants supplying hot food for volunteers or other affected members of the community. Some businesses also provide more ongoing support to local groups outside the particular emergency period – including storage for resilience equipment, financial donations and administrative support.

**Figure 4.1: Types of Business Contributions to Emergency Response (% of Affected Communities)**



#### 4.4 Facilitators and Barriers to Business Engagement

The interviews and more qualitative parts of the survey attempted to gather participants’ views on both why examples of positive business engagement and contribution had come about, and why this was not more widespread. The main factors identified are summarised in Figure 4.3. However, a few points are worth highlighting.

From the point of view of businesses where they were engaged with community resilience activity, this tends to be attributed to a sense of community ‘spirit’ or responsibility, often stimulated by previous shared experiences of natural hazards. In some cases there is also a degree of self-interest involved – where, for example, businesses help to clear blocked roads that inconvenience them as well as other members of the community, or where they are

thinking about how other members of the community, perhaps as potential customers, might perceive them.

There are, however, a number of factors that can be identified as potentially inhibiting the contribution of businesses to the resilience of their communities in terms of emergency response.

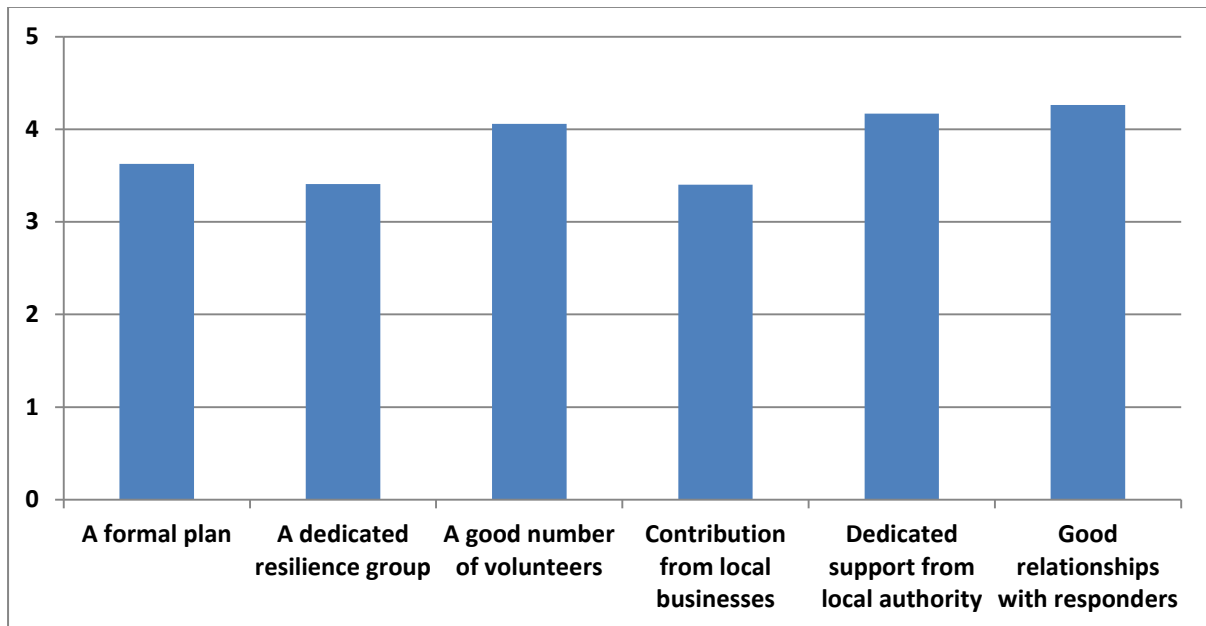
In practical terms, questions around insurance, liability and risk are of some concern to both community groups and businesses. This has been identified as an issue in previous research around community resilience plans in Scotland (Lyon and Fazey, 2015). Community council members and volunteers are covered by insurance policies arranged by local authorities, and there have been efforts in recent years to clarify the terms of these. There remain, however, concerns that businesses voluntarily undertaking activities on behalf of the community could be at risk either incurring financial losses through damaging their own equipment or from being liable for accidents involving other people and property.

As explained above, many community groups appear unlikely to consider the potential role that local businesses can play in planning and responding to emergencies or natural hazards. Despite the examples of positive contribution set out above, support from local business is ranked as fairly low by community representatives in terms of its importance to community resilience, relative to other factors (see Figure 4.2):

- This is perhaps influenced by the fact that most survey respondents had not experienced or planned for an emergency situation, and were therefore likely to be unaware of the potential support that businesses could provide.
- There is a perception amongst some community groups in very rural areas that there are no or very few businesses in their areas – ‘only farms’ that are thought of as ‘not really businesses’.
- It may also reflect the very limited attention that this receives in any of the official guidance to community groups on developing resilience. The ‘asset register’ system used by community resilience groups was felt to be primarily designed as a register of individual local volunteers, rather than for identifying the distinctive contribution that could be made by local businesses and their assets.



**Figure 4.2: Perceived importance of different factors in community resilience planning and response (1=Not at all; 5=Very)**



From the perspective of business owners and managers, there is some resistance to the idea that their businesses should necessarily have any role in this type of community resilience response, particularly where they see activities such as clearing roads as being the responsibility of local authorities or other responders.

More fundamentally, the engagement of businesses in community-level resilience planning appears to be almost exclusively the domain of very small and locally-owned firms. Although there is some anecdotal evidence of the local units of larger firms – such as supermarket or pub chains – providing ad hoc support in the event of emergencies, where there is not at least some degree of local autonomy, firms appear unlikely to be approached by or engage with groups like community councils. These larger companies are more likely to have direct relationships with statutory responders.

**Figure 4.3: Factors influencing (lack of) business engagement in community resilience**

	<b>Motivators/Facilitators</b>	<b>Barriers</b>
<b>Enterprises</b>	<ul style="list-style-type: none"> <li>• Community-centric stances – sense of altruism, responsibility or shared interest with community</li> <li>• Self-interest – practical or reputational</li> <li>• Participation of owner/manager in community groups as an individual volunteer</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns around insurance, liability and risk</li> <li>• Resistance to taking on roles (e.g. clearing roads) seen as responsibility of local authorities</li> <li>• Ownership or management elsewhere</li> </ul>
<b>Community Groups</b>	<ul style="list-style-type: none"> <li>• Existence of active community groups a basic prerequisite, with informal networks, members with businesses etc.</li> <li>• Experience of business contribution in previous emergency</li> <li>• Active support from local authority or other source</li> </ul>	<ul style="list-style-type: none"> <li>• Resilience plan and asset register templates not designed to include business</li> <li>• Perception in some rural areas that they have no businesses – ‘only farms’</li> <li>• Lack of capacity, resources or knowledge to carry out pro-active engagement with business community</li> </ul>

Source: Survey and Interviews

## 5: Conclusions and Policy Implications

### 5.1 Summary

This research project has sought to explore the role that businesses play in community resilience planning and response. Thus far there has been relatively little consideration of the idea of businesses as members of 'the community' in terms of the immediate response to natural hazards and other types of emergency.

The main mechanism in Scotland for promoting community-level resilience has been through encouraging local groups of volunteers to develop resilience or emergency plans for their area. The evidence here shows that the practice of formal community resilience planning is still developing. Only 38% of the community groups responding to the survey had, or were developing, a community resilience or emergency response plan.

Only a minority of community groups had considered or engaged with local businesses in developing their resilience plans, and the potential contribution of businesses is not seen as very important to the development of community resilience relative to other elements.

Nevertheless there is evidence that local businesses can support local resilience groups and help their communities to respond in a variety of ways. Businesses hold a variety of assets including equipment, manpower and transport that can make a contribution to communities' emergency responses. Where businesses have contributed to unplanned responses, or where business owners or managers participate in community groups as volunteers, this prompts greater consideration of how to incorporate them into formal planning.

A number of factors can be identified as inhibiting the engagement of businesses in community-level resilience activity:

- Many community councils and groups appear unlikely to consider the potential role that local businesses can play in planning and responding to emergencies or natural hazards. In addition, there is a perception amongst some community groups in very rural areas that there are no or very few businesses in their areas.
- The guidance material for community groups gives little direction on how they can engage with business. The 'asset register' system used by community resilience groups was primarily designed as a register of individual local volunteers, rather than for identifying the distinctive contribution that could be made by local businesses and their assets.
- Questions around insurance, liability and risk are of concern to some businesses and can be a disincentive to engagement. Some businesses also feel that such activities should be the responsibility of local authorities or other responders.
- Engagement of businesses in community-level resilience planning appears to be almost exclusively the domain of very small and locally-owned firms. Larger firms appear unlikely to be approached by or engage with groups like community councils on matters related to resilience.

## **5.2 Moving Forward: Linking Local Business with Community Resilience**

The relatively benign winter of 2018/19, after the more widespread incidence of storms, flooding and heavy snow in recent years, has perhaps reduced the profile of resilience activity. Nevertheless, the current approach to developing community resilience through promoting local planning by voluntary groups is now well established in many parts of Scotland. These findings highlight the potential contribution that local businesses can make to communities' capacity to respond to emergencies, and suggest a number of practical steps that could be taken to facilitate this:

- In practical terms, there is demand for clear advice for community groups, potential volunteers and businesses engaging in community resilience activity about what would and would not be covered by existing insurance policies. Local authorities have already made attempts to clarify their specific terms and conditions, and to communicate these to community councils – there is evidence however that this remains a concern and a potential barrier, particularly for businesses.
- The resources produced by the Scottish Government and local authorities – such as guidance and templates for compiling community resilience plans and asset registers to be activated in event of an emergency – could do more to prompt community groups to consider what assets and resources businesses in their community might be able to contribute. This might include, for example, a dedicated section in communities' asset registers identifying businesses in their area.
- If voluntary groups – and predominantly community councils – are to be the main mechanism for developing local community resilience, they are likely to require additional support if they are to effectively include local businesses in this process. Community councillors have already identified public participation and engagement as the biggest areas where they need training (Paterson et al., 2019), and there are likely to be additional challenges in engaging with businesses, given that this has not historically been one of their key roles. In particular they would need help in reaching larger businesses, local branches owned elsewhere and others that are outside their existing informal networks. Local authorities already provide support to community councillors in a variety of ways – in some areas there is a dedicated liaison officer, while others work on a ward or locality basis. There may be scope here to build more local connections with other local authority departments carrying out business engagement, chambers of commerce, or enterprise agencies with a view to drawing more firms into community resilience planning.

## **5.3 Further Research**

The findings outlined above, and the limitations of this particular project, highlight a number of potential areas for further investigation.

- As this project is largely based on responses from community resilience groups, and only a small number of interviews with business owners and managers, future research in this area should focus on attempting to gather the perspectives of businesses on the mechanisms and processes for developing community resilience and how they might be more effectively engaged.
- There is also a question of how indicators of business density, characteristics and engagement can be factored into attempts to measure community resilience more broadly. This could be based around the development of index-type measures of

resilience that include indicators of business activity, ownership or preparedness, or around incorporating business data into existing measures of social vulnerability (Kazmierczak et al., 2015).

- As the principle of community-led resilience activity has spread internationally, there could be some benefit in exploring how the question of business engagement is approached in different social, economic and policy contexts.
- Given current and emerging policy agendas around the importance of 'place-based' and 'community-led' development (notably in the South of Scotland with the creation of a new enterprise agency) there is potential to investigate how emergency response-based notions of resilience might be connected to the broader socio-economic resilience of places; and also how existing business engagement activity undertaken by local authorities, enterprise agencies and others might be utilised to link businesses into community resilience activity.

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