

FOOD RESILIENCE

Department: Corporate Policy Team

File/Ref/ECM Number:

EXECUTIVE SUMMARY

1. In December 2013 the Dunedin City Council (the Council) identified food resilience as a strategic opportunity. The role of the Council in improving food resilience contributes to its strategic objectives to be an environmentally sustainable and resilient city that enables a prosperous and diverse economy.
2. This report provides a discussion document exploring opportunities relating to food resilience in the Dunedin region, recommendations for consideration, and options to consider.

RECOMMENDATIONS

That the Council:

- a) **Notes** the work undertaken (as requested by the Council) to enable:
 - i. a more coordinated internal approach to food-related issues and opportunities; and
 - ii. engagement with city stakeholders, exploring options and mechanisms to address the challenges, risks and opportunities in this area.
- b) **Notes** that some recommended food resilience activities can be achieved within existing budgets, while others are currently unfunded; and
- c) **Considers** the three options presented in this report, and associated funding implications.

BACKGROUND

3. At the Council meeting of 9 December 2013 it was moved (Benson-Pope/Vandervis):

"That the Council notes food as a strategic opportunity for the city and the need to improve our food supply resilience.

That the Council, with the aim of progressing towards a resilient and sustainable food system for Dunedin, requires a staff report, in time for Annual Plan discussions, outlining resourcing and budget requirements that would enable:

A more coordinated internal approach to food-related issues and opportunities; and

Engagement with city stakeholders, exploring options and mechanisms to address the challenges, risks and opportunities in this area."

4. During Annual Plan discussions from 23 January and 27 January 2014 it was moved (Hawkins/Peat):

"That for the purposes of consultation the Council includes Option 3 (a new 0.2 FTE staff resource costing \$22,000) in the 2014/15 draft Annual Plan, noting that this work requires collaboration between the Corporate Policy Team and the Economic Development Unit and others".

5. The six-month Food Resilience project began in November 2014. The discussion document (Attachment B) includes the project's findings and recommendations.

DISCUSSION

6. Overseas, the role of local authorities in building food resilience is increasing. There are numerous examples of city authorities in North America and Europe developing food strategies with the goal of achieving an equitable and reliable supply of healthy, affordable food that is grown locally and sustainably.
7. The Dunedin region produces a large amount of fresh produce, most of which is grown through conventional farming methods and transported for export or for distribution throughout New Zealand. While the region's productivity is potentially favourable for building local food resilience, it also presents challenges when most of this produce is exported and the majority of Dunedin people depend on supermarkets for accessing food.
8. The food resilience project found that each local food system is complex and unique, and that building food resilience requires a mix of local solutions and learning from best practice overseas. It also requires a collaborative and integrative approach, with input and leadership from the business, community and research sectors.
9. The project brought together business groups from across the Council to share ideas and identify opportunities. This was achieved through a series of meetings, an internal survey and workshop. Progress on the project was reported to the Sustainability Audit Committee on 16 April 2015.
10. In addition to research and stakeholder engagement, policy staff worked closely with Environmental Health on the proposed Food Act 2014 regulations, with Parks and Recreation Planning on guidelines for groups applying to develop community gardens on Council reserve land, and with the Economic Development Unit on the Southern DHB food services proposal and the Port Chalmers community response to downgrading the New World supermarket.

A MORE COORDINATED APPROACH

11. The project concluded that food resilience is a good fit within the Council's strategic framework. However, it also found that food resilience policies cannot be implemented effectively unless there is widespread support from Elected Members, Council staff, and the public.
12. The project has identified four areas where the Council is able take further action and provide leadership and direction on food resilience:
 - **Facilitation:** supporting and enabling food resilience through local government mechanisms (refer pp 9-12 Food Resilience – Discussion Document);
 - **Collaboration:** working across sectors to maximise food resilience opportunities;
 - **Advocacy:** influencing other leaders to consider food resilience issues in decision-making; and
 - **Education:** promoting food resilience and related activities through communications and education.
13. The attached discussion document is structured around these four areas, and provides recommendations and actions to build food resilience over the short, medium and long terms. The three options presented in this report are based on cost-neutral food resilience activities, and two to three activities that will require additional funding over the next 12 to 18 months.

OPTIONS

14. The following options have been prepared for consideration for the financial years 2016/17 through to 2017/2018. Attachment A provides the options in table form.

Option 1: Note and agree to a food resilience plan and activities that can be funded within existing budgets:

Advantages:

- No additional resourcing is required; and
- Some food resilience activities relating to a rates review, communications, economic development, events, branding and marketing, and some limited food resilience policy development could be undertaken within existing resources.

Disadvantages:

- No dedicated resource to coordinate and help develop and implement a food resilience plan and actions across the Council;
- Relationships built with external stakeholders might not be maintained;
- Progress on the Council's food resilience objectives would slow down significantly and opportunities to build on Dunedin's food resilience strengths might be lost;
- It would not be possible to commission research on the local food system to help inform robust food resilience policies; and
- Opportunities to meet community, business, education and community objectives through a dedicated food website could be lost or delayed.

Option 2: Note and agree a food resilience plan and activities that can be funded within existing budgets and agree to resource a food resilience coordinator and two research projects:

15. Appoint a 0.5 FTE food resilience coordinator for one year (salary costs based on 95% of SP10 grade 17 position) to oversee the development and implementation of a food resilience plan and activities. Staff appointment costs: \$39,434.

16. Commission two research projects:

- Develop a Dunedin Food Environment Atlas \$19,000; and
- Research stocktake and literature review \$5,000.

17. The total estimated cost of Option 2 is \$63,434. It may be possible for the Council to access research funding assistance of up to \$10,000 from the Dunedin Rural Development Fund, which would reduce the total estimated cost to \$53,434.

Advantages

- A dedicated resource would coordinate a food resilience plan and activities across the Council, and develop and maintain relationships with internal and external stakeholders;
- The Council would be able to share information with key stakeholders and develop evidence-based food resilience policies based on a full understanding of the local food system; and
- Some food resilience activities relating to a rates review, communications, economic development, events, branding and marketing, and some limited food resilience policy development could be undertaken within existing resources.

Disadvantages

- Estimated additional resourcing of up to \$63,434 would be required; and

- Opportunities to meet business, education and community objectives through a dedicated food website could be lost or delayed.

Option 3: Note and agree a food resilience plan and activities that can be funded within existing budgets and agree to resource a food resilience coordinator, two research projects, and develop a food website:

18. Staff appointment costs: \$39,434;
19. Commission two research projects:
 - Develop a Dunedin Food Environment Atlas \$19,000
 - Research stocktake and literature review \$5,000
20. Develop a stand-alone food website. Website development costs are estimated to range from \$10,000 to \$25,000 depending on the site's complexity. Ongoing annual maintenance costs will depend on whether the website is hosted in-house and whether content management can be delivered within existing staff resources.
21. The total estimated cost of Option 3 is \$88,434. (Note that it may be possible for the Council to receive research funding assistance of up to \$10,000 from the Dunedin Rural Development Fund, which would reduce the total estimated cost to \$78,434].

Advantages

- Opportunities to meet business, education and community objectives through a dedicated food website would be achieved;
- A dedicated staff member would coordinate food resilience strategies and activities across the Council, and develop and maintain relationships with external stakeholders;
- The Council would be able to share information with key stakeholders and develop evidence-based food resilience policies based on a full understanding of the local food system; and
- Some food resilience activities, for example, rates review, education, communications, economic development, events, branding and marketing, and some food resilience policy development could be undertaken within existing resources.

Disadvantages

22. Estimated additional resourcing of up to \$88,434.

NEXT STEPS

23. Subject to funding decisions, work will be progressed to implement a food resilience plan, a coordinator would be appointed, an internal steering group formed, and external stakeholders consulted.
24. Following the implementation of the recommended actions, food resilience work would be continually monitored and reviewed and additional food resilience activities, as identified in the Food Resilience Discussion Document, put forward for future consideration.

Signatories

Authorisers:	Nicola Pinfold, Group Manager Community and Planning
	Simon Pickford, General Manager Services and Development

Attachments

- A. Food Resilience Options Table
- B. Food Resilience Discussion Document

SUMMARY OF CONSIDERATIONS

Fit with purpose of Local Government

This decision relates to providing a public service and it is considered good-quality and cost-effective.

Fit with strategic framework

	Contributes	Detracts	Not applicable
Social Wellbeing Strategy	☒	☐	☐
Economic Development Strategy	☒	☐	☐
Environment Strategy	☒	☐	☐
Arts and Culture Strategy	☐	☐	☒
3 Waters Strategy	☐	☐	☐
Spatial Plan	☒	☐	☐
Integrated Transport Strategy	☐	☐	☒
Parks and Recreation Strategy	☒	☐	☐
Other strategic projects/policies/plans	☒	☐	☐

Food security and resilience are connected to the Social Wellbeing Strategy's key priorities. The links between food resilience and the Economic Development Strategy relate to opportunities for business, employment and research. The Spatial Plan states: "Having land available for food production in close proximity to an urban area reduces the length and cost of supply chains and creates local markets for produce" and envisages a Dunedin where "productive lands [...] are providing for local food markets, as well as contributing to the city's economy". Protecting high class soils and other policies to encourage food resilience (such as permitting community gardens in most zones as part of Community and Leisure Activities) are being examined during the development of the Second Generation District Plan.

Māori Impact Statement

The attached report recommends that Māori be consulted as part of ongoing engagement with external stakeholders, in particular to seek their input on food traditions such as mahika kai.

Sustainability

Building food resilience is considered to be a key part of achieving long-term sustainability with respect to building healthy communities, adapting to climate change and encouraging sustainable food production.

LTP/Annual Plan / Financial Strategy

The recommendations and budget implications contained in this report are included in the 2015/16-24/25 LTP deliberations.

Financial considerations

The report provides three options for the following 12-18 months: Option 1 to undertake food resilience activities within existing budgets; Option 2 to undertake food resilience activities within existing budgets and fund two priority activities – total estimated cost \$63,434; Option 3 to undertake food resilience activities within existing budgets and fund three priority activities – total estimated cost \$88,434.

Significance

Decision to resource work on building Dunedin's food resilience is considered to have a low degree of significance.

Engagement – internal

The following people were consulted during the preparation of the attached Food Resilience Discussion Document: Former Community Resilience Forum members; General Manager – Services and Development; Group Manager - Community and Planning; Group Manager and Recreation Planning Officer (Parks, Reserves and Aquatics); City Development Manager, Policy Planner, and Research and Monitoring Officer (City Development); Community Advisors (Events and Community Development); Team Leader (Environmental Health and Animal Control); Manager and EMO (Civil Defence and Rural Fire); Communications Team Leader and Web Team Leader (Communications and Marketing); Group Manager, Water Production

SUMMARY OF CONSIDERATIONS

Manager, Waste Strategy Officer, and Education and Promotions Officer (Water and Waste); Business Development Advisor and Brand and Tactical Marketing Advisor (Economic Development Unit); Botanic Garden Team Leader; Manager (City Property); Transportation Planning Manager; Asset and Commercial Manager; Manager Collections and Access, and Digital Outreach Coordinator (Dunedin Public Libraries). In general, the internal stakeholders consulted during the food resilience project support a role for the Council in building food resilience and identified areas where their business groups are already undertaking work that contributes to food resilience objectives. A number of managers also emphasised that limited food resilience work can be achieved within existing resources. One comment was made that building food resilience is not core Council business.

Engagement - external

The following external stakeholders were consulted during the food resilience project: Ahika Consulting, University of Otago, Our Food Network, ReScape (urban market garden), Food Share, Otago Polytechnic, The Malcam Trust, Auckland Council, Sustainable Business Network, WellSouth, Ministry for Primary Industries, Department of Internal Affairs, Southern DHB, Dunedin Rural Development Incorporated, Otago Farmers' Market, and Sustainable Living Course Coordinator. External stakeholders consulted during the project are in favour of the Council playing facilitative, collaborative, advocacy and educational roles to build Dunedin's food resilience. There was also emphasis from some external stakeholders on the role of grass roots organisations in building food resilience and the Council's role to support these organisations.

Risks: Legal / Health and Safety / Conflict of Interest etc.

There are no known risks.

Community Boards

There are no implications for Community Boards at this point.

Attachment A

Food Resilience Options 2016/17 to 2017/18

Option	Description	Total estimated costs	Advantages	Disadvantages
Option 1	Food resilience plan and activities are undertaken within existing budgets	\$0	No additional resourcing is required Some cost-neutral food resilience activities could be undertaken	No dedicated resource to coordinate and help develop and implement a food resilience plan and activities across the Council Relationships built with external stakeholders might not be maintained Progress on the Council's food resilience objectives would slow down significantly and opportunities to build on Dunedin's food resilience strengths might be lost It would not be possible to commission research to help inform robust food resilience policy Opportunities to meet community, business, education and community objectives through a dedicated food website could be lost
Option 2	A food resilience plan and activities that can be funded within existing budgets Priority 1: Appoint a 0.5 FTE food resilience coordinator for one year	\$63,434	A dedicated resource to coordinate a food resilience plan and activities across the Council Relationships with internal and external stakeholders are maintained Ability to share information with key	Additional resourcing of \$63,434 (note that co-funding opportunities would reduce the total estimated cost) Opportunities to meet community, business, education and community objectives through a dedicated food website could be lost

	Priority 2: Commission two research projects		stakeholders Ability to progress food resilience policies based on a full understanding of the local food system	
Option 3	A food resilience plan and activities that can be funded within existing budgets Priority 1: Appoint a 0.5 FTE food resilience coordinator for one year Priority 2: Commission two research projects Priority 3: fund the development of a stand-alone food website	\$88,434	A dedicated resource to coordinate a food resilience plan and activities across the Council Relationships with internal and external stakeholders are maintained Ability to share information with key stakeholders Ability to progress food resilience policies based on a full understanding of the local food system Opportunities to meet business, education and community objectives through a dedicated website would be achieved	Additional resourcing of \$88,434 (note that co-funding opportunities would reduce the total estimated cost)

Attachment B

Food Resilience – Discussion Document

Purpose

The purpose of this paper is to:

- report on the findings of the Dunedin City Council (the Council) Food Resilience project carried out between November 2014 and May 2015
- provide recommendations and a high level action plan to improve Dunedin's food resilience over the short, medium and long terms.

Executive Summary

Overseas, the role of local authorities in building food resilience is increasing. There are numerous examples of city authorities in North America and Europe, in particular, developing food strategies to ensure an equitable supply of healthy affordable food, bring consumers and producers closer together, reduce food miles and adapt to climate change.

The Dunedin region produces a large amount of fresh produce, most of which is transported for export or distribution throughout other parts New Zealand. While the region's productivity is potentially favourable for building local food resilience, it also presents challenges when most Dunedin people depend on supermarkets to buy food, most of which has been transported from distribution centres elsewhere.

The Dunedin City Council's food resilience project found that every local food system is complex and unique, and that building food resilience requires a mix of local solutions and best practice from overseas experience. It also requires a collaborative effort, with input and leadership from the business, community and research sectors.

The project confirmed that food resilience is a good fit within the Council's strategic framework. However, it also found that food resilience strategies cannot be implemented effectively unless there is widespread support from elected members, Council staff, and the public.

Background

On 9 December 2013 Council agreed:

"That the Council notes food as a strategic opportunity for the city and the need to improve our food supply resilience;

That the Council, with the aim of progressing towards a resilient and sustainable food system for Dunedin, requires a staff report, in time for Annual Plan discussions, outlining resourcing and budget requirements that would enable:

- *A more coordinated internal approach to food-related issues and opportunities; and*
- *Engagement with City stakeholders, exploring options and mechanisms to address the challenges, risks and opportunities in this area."*

During Annual Plan discussions from 23 January and 27 January 2014 Council agreed:

“That for the purposes of consultation the Council includes Option 3 (a new 0.2 FTE staff resource costing \$22,000) in the 2014/15 draft Annual Plan, noting that this work requires collaboration between the Corporate Policy Team and the Economic Development Unit and others”.

A six-month food resilience project started in November 2014 to explore ways the Council, in cooperation with other sectors, can build a food resilient city by:

- Identifying ways to strengthen Dunedin’s food production, manufacturing and processing capacity, create opportunities for food entrepreneurs, and make Dunedin an attractive food destination;
- Planning for natural hazards, climate change, sustainable food production, lower food miles and zero preventable food waste, and;
- Connecting producers and consumers, responding to food insecurity, and empowering Dunedin citizens to become food-resilient.

Definitions

Food security

In 1996, the World Food Summit defined food security as existing “when all people at all times have access to a sufficient, safe, nutritious food to maintain a healthy and active life”¹. Food security usually means the ability to buy or otherwise access enough nutritious food when it is needed, and refers to a specific time and place.

In the New Zealand context, food insecurity has been defined as “limited or uncertain availability of nutritionally adequate and safe foods or limited ability to acquire acceptable foods in a socially acceptable way”.² It is becoming an increasing problem for low socioeconomic groups in New Zealand with the prevalence of food insecurity rising from 28% to 41% in the last 10 years. It is also associated with poorer nutritional outcomes and obesity as energy dense foods that are high in fat and sugar provide consumers with a cheap form of energy.³

Food sovereignty

Food sovereignty asserts that the people who produce, distribute, and consume food should control the mechanisms and policies of food production and distribution, rather than the corporations and market institutions, which they believe dominate the world’s food supplies. Food sovereignty practices include small to medium producers supplying food to meet local demand first and foremost.

The food sovereignty movement is more prevalent in developing countries where food insecurity is high. But countries with highly developed agricultural sectors are also adopting food sovereignty principles as small to medium-sized farming operations find it increasingly difficult to compete. In Canada, for example, some producers are attempting to “take back the middle” of the value chain by managing food processing, packaging, storage, distribution and retail themselves, or in collectives. Direct-to-consumer sales opportunities might include: roadside markets, farm-gate sales, farmers’ markets, pick-your-own operations, food subscription/on-line services, and semi-direct sales to restaurants, grocers, caterers and specialty stores.⁴

¹ <http://www.fao.org/docrep/003/w3613e/w3613e00.HTM>

² Holben (2006) quoted in *Family food environment: barriers to acquiring affordable and nutritious food in New Zealand households* (2010)

³ Smith, Parnell, Brown & Gray “Balancing the diet and the budget: food purchasing practices of food-insecure families in New Zealand”, *Nutrition & Dietetics* 2013; 70

⁴ *Plan to grow: Scaling up local food in Kingston and Countryside* (Stevens, Cleary and Ivens, 2012)

Food resilience

Dunedin towards 2050: A Spatial Plan for Dunedin defines resilience as “the ability to recover quickly from disturbances or setbacks and react to potential crises. Resilience is often used to describe the ability of governments or organisations to identify, assess and respond to a potentially disruptive situation in order to prevent it from becoming a crisis.” Within this context, long term food resilience refers to an equitable, continuous and affordable supply of good quality food that is produced locally and sustainably.

Problem definition

The Australian organisation, Sustainable Table, states that “the world faces looming scarcities of just about everything necessary to produce high yields of food - water, land, nutrients, oil, technology, skills, fish and stable climates, each one playing into and compounding the others”.⁵ Food systems are complex and every region faces a set of different and interconnected problems. For Dunedin these are:

- **Vulnerability to shock:** It is accepted that most Dunedin people rely on supermarkets to buy food. Because of Dunedin’s location, it is, like other provincial cities in New Zealand, vulnerable to food insecurity in the event of a disaster such as a major earthquake. Most people do not grow food, and nearly a third of our food energy source comes from carbohydrates (mainly bread), which is usually bought from supermarkets.
- **Changing land use:** Residential development, dairy conversion and the declining viability of market gardening, means that arable land near Dunedin is being used less for growing food. This is being addressed in part through the Second Generation District Plan (2GP) where land with high class soils will be protected from residential and other urban development. However, agricultural use also includes dairy farming, which does not contribute to food resilience.
- **Conventional farming:** It is unlikely that Dunedin’s food system can be sustained at current levels over the long term owing to climate change, rising sea levels and declining oil supply. Most produce in Otago leaves the region before being distributed elsewhere. Most produce is grown through conventional farming methods that use mechanisation, off-farm inputs (such as pesticides) and irrigation, which may be unsustainable long term.
- **Centralised food storage and distribution:** weaknesses in the local food system are more pronounced when major food sources are stored and transported from elsewhere. This is especially relevant for Dunedin where food resilience depends largely on a reliable, safe and adequate supply of food from Christchurch. This model, which also relies on refrigerated road transport to carry food to and from refrigerated storage facilities and then onto supermarkets for further storage and refrigeration, is unlikely to be sustainable long term.

The following issues are relevant across New Zealand and affect Dunedin equally:

- **Economic conditions:** global financial crises, fluctuating food prices, economic downturns, unemployment and low incomes, over which local government has little or no control, contribute to food insecurity and reduce food resilience.
- **The cost of food:** In 2009 New Zealand food prices were rising faster than in most OECD countries, increasing by 42.5% since 2000. The nature of the retail food market and relative lack of competition are cited as major reasons for New Zealand’s high food prices.⁶ The cost of food in relation to income plays a major role in food insecurity and unhealthy food choices. A further obstacle is exclusive

⁵ <http://sustainabletable.org.au>

⁶ GAIN report by the USDA Foreign Agricultural Service, 2009

contracts between producers and supermarkets that prevent some growers from selling produce independently (e.g. at local farmers' markets or at the farm gate).

- **Climate change:** Climate change and rising sea levels will increase Dunedin's vulnerability to extreme weather events such as drought, storm surges, inundation and flood. Fire risk increases in times of drought and higher temperatures. This variable environment is likely to affect crops, livestock, food storage and supply but it also presents opportunities for growing a wider variety of food crops. In other jurisdictions, a lack of strategic water storage has also been identified as a significant risk to food resilience.⁷

Risks of doing nothing

The potential risks of the Council doing nothing to improve local food resilience could include:

- Inconsistency with Dunedin's vision to be one of the world's great small cities
- Inconsistency with the Council's strategic direction for Dunedin to be an environmentally sustainable and resilient city that enables a prosperous and diverse economy
- Lost economic and employment opportunities
- Unpreparedness for an environment of climate change, rising sea levels and declining oil supplies
- Unpreparedness for shocks such as major seismic and extreme weather events.

Current state analysis

Dunedin's food system

There is no comprehensive information available on Dunedin's food system to measure the city's current degree of food resilience but indications are that a significant part of Dunedin's food supply chain is not immune to shock because of the reliance on supermarkets for accessing food.

Research needs

Before Dunedin's degree of food resilience can be accurately measured, more information is needed on how much food is produced, processed, exported, distributed, and consumed locally. Otago-based research is underway over the next 12 months that will answer some of these questions and potentially provide information for robust evidence-based food policies.

However, this project has identified further information gaps – such as the extent of domestic food gardens, and how many Dunedin households are food insecure – and recommends advocating for or funding further research to get a clear understanding of local food issues. Of particular use would be the development of a “food atlas” – a comprehensive food system analysis that quantifies food assets, and identifies the obstacles and enablers across the food system to stimulate local production and consumption.⁸

Facts and figures

- Across New Zealand, almost 30% of the food we consume is carbohydrate (bread, grains, potatoes etc.), 12% is meat, and around 9% is fresh fruit and vegetables⁹
- Accommodation and food services make up 2% of Dunedin annual GDP and account for 8.1% of employment
- Food, hospitality and personal services account for 1.4% of Otago graduates across all tertiary institutions

⁷ *Climate Change: Impacts on Dunedin*, prepared for the Dunedin City Council by Professor Blair Fitzharris, 2010.

⁸ For an example of a food environment atlas refer to: <http://www.ers.usda.gov/data-products/food-environment-atlas.aspx>.

⁹ *A Focus on Nutrition: Key Findings of the 2008/9 NZ Adult Nutrition Survey* (Ministry of Health).

- The primary processing sector in Otago contributes \$288 million in GDP. Within this, food and beverage processing contributes about \$240 million to the economy, although it has declined slightly over the last decade
- Around 30 to 40 medium to large producers serve the local and export markets, mainly in the primary industries: fruit, honey, meat, seafood, cheese, and eggs
- Four local meat producers and processing plants based in Dunedin serve the local market (Fishers, Otago Venison, Silver Fern Farms, REMZ Ltd)
- Foodstuffs (NZ) Ltd has a distribution centre in Dunedin and has sufficient food in storage to last for seven days. Progressive Enterprises does not have a distribution centre in Dunedin
- The nearest raw milk processing station is the Fonterra plant in Edendale, Southland (178 kms from Dunedin City)
- With a central distribution model, the number of fresh food markets in Dunedin has declined but there is still some capacity e.g. Kaans, Turners and Growers, and the Otago Farmers' Market
- The Otago Farmers' Market recorded visitor numbers over the summer of 2014-2015 of between 7,000 and 7,500 each Saturday.

Education sector

- University of Otago: There is strong food research capability in the Centre for Sustainability (CSAFE) and the Departments of Human Nutrition, Geography, Anthropology, and Food Science
- Otago Polytechnic's Living Campus, Food Design Institute and Centre for Sustainable Practice are involved in food innovation and food resilience practice and research. The Food Design Institute has offered to help organise and co-host a food forum for external stakeholders
- There are 33 Enviroschools in the Dunedin region: 25 primary and eight secondary schools.

The role of local government in building food resilience

Much of the literature reviewed for this report argues that local governments have a substantial role to play in food resilience planning and are best placed to deliver regionally appropriate food resilience solutions. Below are some overseas examples:

Food Councils

Overseas, Food Policy Councils are often initiated (but not controlled) by local government authorities through executive orders, and are typically represented by the five sectors operating in the food system: production, consumption, processing, distribution, and waste recycling. A Food Policy Council might include food justice advocates, educators, not-for-profit organisations, concerned citizens, government officials, farmers, growers, academics, chefs, food workers, grocers, and representatives from the food processing and distribution industries.

Food Policy Councils are not without their challenges. Experience in Portland USA, where the local food council was eventually dissolved, shows the importance of having clearly articulated terms of reference, a strategic planning process, and ongoing evaluation and development to maintain the council's relevance. During the food resilience project, establishing a Food Policy Council has been identified as a priority among some external stakeholders.

Another option is to establish a local food policy steering group or panel. The steering group would not be an elected body although it might include local government elected members. The group would comprise internal and external subject matter experts with a strong understanding of the policy environment. The advantage of a steering group is its ability to act more quickly and effectively than an elected council.

Food Charters

The goal of many Food Policy Councils is to develop a Food Charter, which typically describes the community's vision of how a healthy food system should function to contribute to a healthier population. The local authority, which is represented on the Food Council, is a signatory to any food charter.

In many cases overseas the local authority models good corporate citizenship by developing an internal food policy that might include using caterers and suppliers who source nutritious locally produced food for Council events and in Council-run premises, favouring caterers and suppliers who pay a living (rather than minimum) wage, and purchasing fair trade products. An internal Council food policy is outside the scope of this project but could be considered at a later stage depending on priority.

Europe – Urban Food Strategies

In response to climate change, the unsustainability of oil-dependent food production and distribution, public health concerns (obesity and diabetes in particular), and local food resilience challenges, some European city authorities (e.g. Malmö, Cardiff and Bristol) have started designing and implementing urban food strategies (UFS). The missing components identified in research on Food Policy Councils in the USA have been addressed in the Urban Food Strategies developed in Europe. The four key steps to developing and implementing a UFS are:

- **Organising participation processes and governance:** identify relevant stakeholders and communicate with a wider audience
- **Assessing the current local food system:** identify the local issues and challenges to be able to set policy goals and establish baseline data and indicators for monitoring
- **Formulating joint visions and goals:** identify specific actions and priorities, leadership, resources and tools
- **Monitoring and evaluation:** ensure participation, goals and action plans remain relevant, seize on new opportunities, and build on earlier actions and achievements.¹⁰

North America – food systems planning

Similarly, in North America local governments are engaging in food systems planning to identify and understand the various food production and food security challenges and opportunities in their community, and develop public policy tools to better connect residents with producers. Food system planning involves:

- identifying the opportunities and challenges within the local food system
- gathering input from stakeholders
- deliberating on the actions best suited to respond to challenges
- facilitating and implementing actions to strengthen food systems.

Case study – Kingston, Ontario

This report uses Kingston, Ontario as a case study for food resilience policy development. Kingston is a city similar to Dunedin in size and make-up, including a productive rural sector in the surrounding countryside. However, like Dunedin, most Kingston people shop at supermarkets for food, which has come from outside the region and has travelled long distances to get there.

The Kingston Food Policy Council (of which the City Council is a member) has developed a Food Charter to help create a more accessible and sustainable food system within its region, and to spur local economic development focussed on green technologies, advanced manufacturing, food processing and agri-business, research and development, logistics and warehousing, health care, and tourism.

¹⁰

http://www.foodlinkscommunity.net/fileadmin/documents_organicresearch/foodlinks/publications/Urban_food_strategies.pdf

To encourage the reduction of greenhouse gas emissions associated with food production and distribution, and to contribute to a sustainable local food system, the Kingston City Council also:

- supports increasing the number of community gardens on Council-owned land
- encourages employers and businesses to use local food at their workplaces
- promotes organisations that support local food production and consumption.¹¹

Australia

There is a significant body of food resilience research in Australia in response to climate change challenges. In 2012 the Australian Government commissioned a report prompted by the 2010 and 2011 Queensland floods that focussed on the failings in the food supply chain, and identified the need for communication networks, and alternative food sources and cooking methods.

Despite the amount of literature in Australia on food resilience, so far it has not been possible to locate any related strategic policy development at state or local government level. The priority at federal government level appears to be to ensure people do not go hungry in the event of natural disasters. However, there is action at a grass roots level, such as the Sustainable Table movement, which promotes the shift toward local, small-scale sustainable farming.

New Zealand

The Ministry of Health's guide, *Growing Healthy Communities; Food Security Toolkit for Local Government* outlines a specific role for local authorities in New Zealand which includes:

- Providing local leadership and coordinating work to address the determinants of food security across the district
- Monitoring and disseminating information on local trends
- Ensuring land use planning (such as District Plans) support local food production and supply
- Planning and advocating for transport that is user-friendly, safe, accessible and affordable to be able to access food
- Regulating and monitoring food safety standards
- Promoting a whole-of-local government response to food security, acknowledging the root causes and the need for integrated planning and action
- Establishing and fostering strong partnerships and collaboration with community, public and private sectors
- Advocating for, and building the capacity of, all levels of government and community sectors to respond to food security
- Providing access to information, and financial resources and/or physical resources to community members and other key stakeholders
- Facilitating informed public discussion and debate around food security
- Developing policy and plans that contribute to improving food security.

Prompted by a lack of clear direction from central government on food resilience, research has been undertaken at the University of Otago's Department of Human Nutrition to determine the barriers and enablers for territorial authorities (TAs) to develop regional food policies. The research found that city councils in New Zealand are able to develop food policy when food environment issues are a priority for three key groups: the community, elected members of the council, and council staff. This finding is consistent with research in the USA, which has shown that food policy development is hindered when the priorities of these groups are not aligned.

¹¹ For more information on the City of Kingston see: <https://www.cityofkingston.ca/residents/environment-sustainability/climate-change-energy/climate-action-plan/toolkit/food>

The University of Otago research also shows that a multi-pronged approach involving political support, partnerships, credible champions, and local research is needed for city councils to address food environment issues through their Annual and Long Term Plans.¹²

Dunedin City Council

Food resilience project

The work undertaken during the food resilience project includes:

- SWOT and current state analyses, and environmental scan
- Literature review, case studies, and best practice assessments
- Survey of current and planned Dunedin City Council activities that support food resilience
- Extensive stakeholder engagement
- Identifying information gaps
- Discussion document, recommendations and budget implications.

The project has been a good opportunity to bring together business groups to share ideas and identify opportunities. This was achieved through several meetings with internal stakeholders, an internal survey and across-Council workshop.

The survey, which was based on the food resilience activities listed in the Ministry of Health toolkit, ascertained the level of work being undertaken or planned that contributes to food resilience. It also identified gaps. The survey found that the Council is already implementing many of the recommendations in the toolkit and that there is no coordination of food resilience activities Council-wide. Appendix A provides the survey results. The follow-up workshop identified food resilience ideas and opportunities that informed the high level recommended plan of action.

In addition, the food resilience policy analyst has worked closely with Environmental Health on the proposed Food Act 2014 regulations, with Parks and Recreation Planning on developing guidelines for community groups applying to develop community gardens on Council reserve land, and with the Economic Development Unit on the Southern DHB food services proposal and the Port Chalmers community response to the downgrading of the New World supermarket. It is recommended that a 0.5 FTE food resilience coordinator is appointed for one year to continue to work closely with internal and external stakeholders, and to oversee the development and implementation of the recommended plan of action if approved.

The project has identified four areas where the Council is able to take further action, and to provide leadership and direction on food resilience:

1. **Facilitation:** supporting and enabling food resilience through local government mechanisms
2. **Collaboration:** working across sectors to maximise food resilience opportunities
3. **Advocacy:** influencing other leaders to consider food resilience issues in decision-making
4. **Education:** promoting food resilience and related activities through communications and education.

¹² Gower, J. "A Qualitative Exploration of the Barriers and Enablers to New Zealand City Councils' Developing and Implementing Food and Nutrition Policy", Master of Dietetics Thesis, University of Otago, November 2014

Facilitation: supporting and enabling food resilience through local government mechanisms

Strategic alignment

The Ministry of Health's food security toolkit for local government reports that "a few pioneering cities and towns around the world have realised that food can be one of the most powerful drivers of positive social, economic and environmental change. These cities are promoting healthy and sustainable food as a key part of their efforts to improve people's lives whilst also protecting the planet" (Ministry of Health, 2013).

Dunedin is already in a good position to join this group of forward-thinking cities. Building food resilience is consistent with, and will enhance, Dunedin's brand as one of the world's great small cities. It is also consistent with the Council's strategic objectives to be an environmentally sustainable and resilient city that enables a prosperous and diverse economy.

Food resilience is already implicit within most existing strategies, and there is scope to make it explicit within the Environment Strategy, which is currently in development. Alternatively, the Council could agree to a stand-alone food strategy. But as food resilience encompasses a range of social, environmental and economic outcomes, a whole-of-Council approach is preferable.

Spatial Plan: Dunedin Towards 2050

The Spatial Plan identifies the city's environmental sustainability and resilience as a key strategic direction. It has the overall objective of ensuring that Dunedin develops as a "compact city with resilient townships". It notes in particular the need to protect its rural land and states: "Having land available for food production in close proximity to an urban area reduces the length and cost of supply chains and creates local markets for produce" (p.17). It also envisages a Dunedin where "productive lands [...] are providing for local food markets, as well as contributing to the city's economy" (p.18).

The Plan's Policy ESR 4(b) is to "encourage local food processing, distribution and markets" and this is linked to three actions:

- DP 16 (City Development) "Investigate methods to encourage local food production, processing, distribution and markets";
- RM 10 (Corporate Policy) "Investigate the future infrastructure requirements necessary for a secure food supply for the city to ensure future-proofing of potential climate change effects; and
- FS 10 (Corporate Policy) "Investigate the feasibility of establishing rates relief for local growers producing for direct sale in local markets".

Economic Development Strategy

The Council has identified economic development as a priority within the food resilience project. The links between food resilience and the Economic Development Strategy relate to opportunities for business, employment and research, and include building scale in export-facing sectors where the region has growing capability and real advantages. These sectors include primary and food and beverage processing. Other economic opportunities with a food dimension include tourism, events and festivals.

The business focus of the food resilience project is to support and create opportunities in the local and tourist markets, and to promote Dunedin nationally and internationally as an attractive food destination for visitors, business people and migrants. Potential business opportunities have also been identified around organic waste management. The Council could help stimulate economic development by:

- assisting local growers and retailers by encouraging cluster activities to develop a local value chain;
- promoting local food and supporting a project to label local food at supermarkets and other food retailers.

Integrated Transport Strategy (ITS)

The trend towards large supermarkets and outlying commuter settlements has increased shopping travel distances on the whole (Peak Oil Vulnerability - Assessment for Dunedin, 2010). This trend is exacerbated by Dunedin's transport challenges, such as dependence on private motor vehicles, volatile fuel prices, limited public transport, road safety concerns, and social exclusion.

Dunedin City's Integrated Transport Strategy does not contain direct references to the connection between transport and food. This is despite the 2010 Peak Oil Vulnerability report flagging the unsustainability of the prevailing model in which the majority of Dunedin people shop for food by driving to a supermarket. This model also reduces the amenity value of areas surrounding supermarkets owing to traffic and the need for large parking lots, in turn discouraging cyclists and pedestrians.

However, at a high level the Strategy reflects the Council's commitment to sustainable development, and plans a transport system that supports the city's environmental, social, cultural and economic sustainability. A transport system that enables everyone living in rural and urban areas to reach food destinations with healthy choices should be a priority if Dunedin is to be a food-resilient city. It should also plan for a future where people will increasingly choose transport options that require low or no fuel consumption to source food.

Social Wellbeing Strategy

The Social Wellbeing Strategy states that "in Dunedin we have an expectation that the basic necessities of life such as adequate food, clothing, housing and transport should be available to everyone. Having a quality lifestyle goes even further, with people able to exercise real choices about the types of goods and services on offer". Food security and resilience are closely connected to the following priorities within the SWS:

- Dunedin communities are resilient and have good access to information and resources
- all people have good access to health services
- Dunedin people can afford to exercise genuine choices.

The 2009-2010 study of the food purchasing habits of Dunedin low income households (under \$35,000 per annum) with children estimated that 30% of household income was spent on food, indicating an economic burden for these families. The study also found that the low income families surveyed compromised on fruit, vegetables and milk, leading potentially to poorer nutritional and health outcomes.¹³

Arts and Culture Strategy

The Arts and Culture Strategy provides an opportunity to strengthen Dunedin's food culture and promote the city and surrounding countryside as desirable food destinations. The Council's role could be to continue supporting events and festivals that celebrate our food culture and attract visitors, and initiatives that will enhance Dunedin's arts and culture environment through food.

Environment Strategy

The Environment Strategy is in development so it is possible for a food resilience action plan to be incorporated into the Strategy where appropriate. Any climate change adaption strategies would ideally include a plan for addressing food resilience. The efficient use of resources generally is being looked at afresh as the Environment Strategy is being developed.

Parks and Reserves

The Parks and Reserves department is currently developing Community Gardens Guidelines to manage current interest in and applications for community gardens, which are worked through with applicants on a case by case basis. There are currently five to six community gardens on Council-owned land in various stages of development.

¹³ Smith, Parnell, Brown & Gray "Balancing the diet and the budget: food purchasing practices of food-insecure families in New Zealand", *Nutrition & Dietetics* 2013; 70

Each community gardens proposal needs to be assessed to determine whether resource consent is required. Should the Council progress with a wider food resilience policy and recommend that reserve land is available for community gardens, then section 53 of the Reserves Act 1977 could be utilised to give effect to the policy.

The Parks and Reserves department supports a food policy that addresses and endorses the use of Council land for edible gardens. There is no opportunity currently to “open up” land for community gardens until a wider Council policy is adopted. The Reserves Act only permits reserve land to be leased or licenced, and used in a way that is consistent with ‘reserving and preserving’, and not necessarily ‘utilising’.

The Council has significant amounts of reserve land that could be suitable for edible gardens. At present there have been no studies to identify areas suitable for gardens, and the recommendations in this document include compiling an inventory of suitable locations.

Waste Management and Minimisation Plan

Actions within the Waste Management and Minimisation Plan that relate to food resilience include investigating the provision of neighbourhood-based organic material collection, composting, and food rescue initiatives. The Council is also a participant in the National Household Food Waste Prevention Project, and received an update report in March 2015.

Three Waters Strategic Direction Statement

Adaption strategies to manage climate change uncertainties are a necessary part of asset planning decisions on the three waters service delivery. The Three Waters Strategy ensures that future capital investment is designed to respond to the impacts of climate change, including the infrastructure needed to manage hazards, such storm events and loss of pipelines.

The Three Waters Strategic Direction Statement 2010-2060 recognises that water is a scarce resource and that the effects of climate change, along with potential population increases, will increase its scarcity. It also states that the Council is committed to using water more efficiently and encouraging the community to also use water more efficiently (p 26).

Second Generation District Plan (2GP)

In June 2013, the Community Resilience Forum identified the following strategic priorities in relation to food resilience and the development of the 2GP:

- Identifying areas important for food production and protecting these areas from inappropriate use
- Enabling opportunities for urban food production and permitting community gardens and orchards within the urban environment
- Maintaining a clear urban-rural boundary and requiring development to be contained within the boundary while there is capacity
- Identifying future urban development areas based, among other things, on avoiding productive lands
- Limiting rural residential development and promoting rural residential as lifestyle farming rather than general residential living within the rural environment
- Discouraging subdivision of, and non-productive activities on, land containing high class soils
- A more enabling approach to the sale of rural produce by making it a permitted activity and not requiring resource consent for the sale of produce from the same property
- A less restrictive approach to rural processing activities
- Requiring newly developed residential properties to have ‘outdoor living space’ (currently called amenity open space) to encourage outdoor food planting
- Increasing performance standards for outdoor space in terms of accessibility, flatness and solar access
- Rules controlling the amount of impervious surfaces.

These priorities have informed the development of the 2GP under **Objective 2.2. Dunedin is environmentally sustainable and resilient**. The draft plan proposes to restrict residential development in areas with high class soils to avoid the fragmentation of rural land and loss of productive soils, but there are limitations to what

Council powers can achieve. For example, the Council is unable to control the economic environment that will drive specific agricultural land uses e.g. using rural land for dairy conversion rather than market gardening. Large-scale dairy-farming might contribute to high rural productivity but it does not directly contribute to local food resilience, especially since raw milk is no longer treated in Dunedin.

The 2GP is also expected to encourage edible community gardens as it likely to permit community gardens in most zones as part of Community and Leisure Activities.

Regulatory environment

Food bylaws

The Food Act 2014 comes in effect on 1 March 2016. All food bylaws that contravene the Act will be revoked on the date the new legislation takes effect. Any new bylaws involving food regulation will need to be consistent with the Act.

Fast food outlets

Long-term food resilience depends on easy access to healthy, affordable food. Unfortunately, cheap food tends to be the least healthy and good health outcomes require consumers to make better food choices. Under the Local Government Act, grounds for creating a bylaw are being able to prove negative effects on public health. The Act could therefore be used to restrict the number and location of fast food outlets (FFOs). However, this is a visionary and possibly controversial approach and it has not yet been tested in New Zealand.

The Ministry of Health's toolkit, *Growing Healthy Communities*, proposes that local authorities could restrict the number and location of fast food outlets (FFOs) by:

- regulating distance between FFOs and schools
- creating "healthy zones" around schools, childcare centres etc.
- limiting the number of FFO in any one neighbourhood
- restricting proximity of one FFO to another
- applying restrictions to location and opening hours
- restricting FFOs with drive-through service
- applying restrictions to street-side marketing of FFOs.

Rates regime

Instead of taking a restrictive approach to fast food outlets, the Council could investigate ways to encourage healthy food outlets through a favourable rates regime. This report recommends a review of the rating regime to encourage healthy food outlets and businesses that support local, sustainably-produced food.

Collaboration: working across sectors to maximise food resilience opportunities

Business

Supermarkets

Progressive Enterprises and Foodstuffs Ltd (the main supermarket chains operating across New Zealand) have reported that they are geared up for disasters. Foodstuffs Ltd has spread risk by having a distribution centre in Dunedin as well as in Christchurch.

Dunedin's food resilience might improve significantly if the city were to become a centre for processing, storing and distributing locally produced food for the lower South Island. This would also contribute to sustainability by reducing food miles.

In general, the prevailing supermarket model is an obstacle to building local food resilience. The recommendations include engagement with the two supermarket chains to strengthen local markets through local food sections and labelling locally grown and produced food and beverages. A labelling model could be based on location (e.g. Otago- and Southland-grown) or distance, such as the 100km limit the Otago Farmers' Market uses. In some other jurisdictions a 150km limit is applied.

Sustainable Business Network

The Sustainable Business Network's restorative food project includes finding ways to eliminate food waste, strengthen regional food systems, work on ways to boost small businesses starting out with good food products, and support established businesses to get a stronger market presence. The Network's publication *Business Opportunities for a Sustainable New Zealand* (2014) contains food-related business ideas that the Council could support.

Enterprise Dunedin

Enterprise Dunedin can take a proactive role to improve food resilience by:

- working with food entrepreneurs to facilitate start-ups, including the development of an on-line resource
- promoting Dunedin as a food-friendly city with opportunities for food innovators and entrepreneurs
- getting businesses on board to help make Dunedin an attractive food destination
- supporting local labelling initiatives
- publicising the new Food Act regulations to maximise innovation and small business opportunities.

Food Act 2014

The Food Act 2014 aims to make it easier and less costly for many food businesses by giving them the tools to manage food safety themselves. The new rules are also expected to encourage and enable innovation and food entrepreneurship.

The central feature of the new legislation is a sliding scale where businesses that are a higher risk from a food safety perspective will operate under more stringent food safety requirements and checks than lower risk food businesses. When the Act comes into force fully (proposed for 1 March 2016 for new businesses and up to 1 March 2019 for existing businesses) small operators will be able to use home kitchens to prepare food for sale as long as they meet all the relevant safety requirements that apply to their food sector.¹⁴

Food hubs

Across North America, food hubs are being developed to provide the infrastructure and services farmers need to get their products to consumers as directly as possible. The proposed food hub in Vancouver, for instance, is an indoor space that will house a year-round farmers' market, a chefs' market, and a commercial kitchen. Local farmers will bring their produce to sell wholesale to stores and restaurants in the morning, and directly to the public in the afternoon. The food hub concept is strongly supported by the Vancouver City Council, which provided the land on which the hub will be built.

While this report proposes a feasibility study for a purpose-built food hub for Dunedin as a long term option, limited local demand and capacity of local growers might mean that a food hub is not viable in the foreseeable future.

Funding partnerships

In addition to the community funding framework for food related initiatives, the Council could partner with external funders such as Dunedin Rural Development Incorporated who have already indicated they could provide some research funding assistance provided the research fulfils the organisation's objectives.

¹⁴ Details on the Food Act 2014 are available at <http://www.foodsafety.govt.nz/policy-law/food-act-2014/communities.htm>

Community

Many community stakeholders share the Council's aim to create a food resilient city that plans for climate change and peak oil adaption, economic development and employment creation, environmental and sustainability concerns such as reducing food miles, food security and community resilience.

In 2013 and 2014, the following food initiatives received community grants:

Date	Organisation	Initiative	Grant
September 2014	Ocean Grove Community Trust	Ocean Grove Community Garden	\$1400
March 2014	FoodShare Charitable Trust	Coordinator of volunteers	\$2900
March 2013	Brockville Community Development Project	Purchase freezer for food bank project	\$1200

The Council can also leverage off the skills and expertise of community stakeholders to support initiatives such as Our Food Network's local labelling project.

Our Food Network

Our Food Network is a Dunedin-based community group with around 200 members comprising growers, producers, retailers, researchers and consumers. It was established in late 2013 with the aim of stimulating "the production, distribution and consumption of local food and in that way contribute to the building of a resilient and prosperous community".

Our Food Network has identified issues with young small-scale farmers being unable to access land. The idea of a website to put aspiring farmers into contact with landowners willing to lease excess land and experienced small-scale farmers for mentorship has been discussed but not yet progressed.

Since 2013, the Network has convened three forums and, in addition to the project above, has identified a further four areas to work on over the next 12 months: food labelling and branding; seed saving; exploring a national local food network; and education and awareness.

These priorities have been considered as part of the recommended plan of action and Council staff will continue to work with the Network if an action is agreed and implemented.

Local government

The Dunedin City Council could engage with other local authorities in the region, Otago Regional Council and Otago TAs (Clutha, Waitaki, Queenstown Lakes, and Central Otago), to coordinate food resilience planning. Overseas experience has shown, however, that consensus can be difficult to achieve when there are conflicting priorities between city, regional and district councils.

Events and celebrations

Existing Council-supported events could be used to promote local food and to create new food traditions e.g. Mid-Winter Carnival, ID Fashion Week, Matariki, Orientation, graduation, UNESCO City of Literature status, Dunedin Music Month, and the International Students Food Festival. Sister city relationships can also be a way to celebrate Chinese, Japanese, Scottish and Otago cuisines, and promote local growers, retailers and chefs.

Advocacy: influencing other leaders to consider food resilience issues in decision-making

A lack of direction from central government on food resilience policy provides local authorities with the opportunity to take a proactive, innovative and localised approach. As emerging leaders in food resilience, Councils can engage with other local decision-makers to achieve good outcomes such as:

- promoting local food labelling
- using “the power of procurement” to support local food producers and businesses
- working with supermarkets to reduce food miles and support local producers
- encouraging tertiary institutions to use their power of procurement regarding food services
- engaging with other local bodies e.g. the Southern District Health Board on its proposal to centralise hospital food and Meals on Wheels services
- being a good corporate citizen and modelling effective internal food policies
- proactively participating in a national food network to share experiences and strategies for supporting local food resilience.

Southern District Health Board

The Southern District Health Board (SDHB) is considering a proposal to centralise hospital food services and Meals on Wheels for the Southern region. This would mean ready-made meals from Christchurch and Auckland are transported to Dunedin before being distributed to hospitals in Otago and Southland. On 10 April 2015, the Mayor wrote to the Southern DHB expressing his concerns about the impacts on hospital staff and local suppliers, and the long term sustainability of the proposal.

The issue was discussed at the Local Government New Zealand Zones 5 and 6 Mayors’ Meeting on Friday 27 March, with the Mayors of Gore, Clutha, Buller, Central Otago, Hurunui, Selwyn, Timaru, Kaikoura, Mackenzie and Tasman Councils, and the Chairman of the West Coast Regional Council lending their support to the Mayor’s submission. Health Benefits Limited (which prepared the business case) and the Compass Group (the proposed provider) presented to the Council on 14 April 2015.

Education: promoting food resilience through communications and education

Promoting food resilience can be relatively low cost by using existing Council resources, and can have an immediate impact. Resources, such as FYI Dunedin and the DCC website, can be used to prompt interest in buying, growing and eating local seasonal foods.

Sustainable Living courses

The Council-funded Sustainable Living courses attract 75 to 100 participants annually. The course focusses on Dunedin’s ecological footprint, 56% of which is taken up by food and drink consumption. Course participants are taught that their food and drink footprint could be reduced by 25% if they produce half of what they eat.¹⁵

Dunedin Public Libraries

The Library is developing a food information hub that would include resources on home gardening, organics/permaculture and sustainability. These resources would be in addition to those made available through the Council-funded Sustainable Living courses.

In 2014 Our Food Network gathered resources for a display at the Waikouaiti Library, and this year the Dunedin Public Libraries and Our Food Network are working together to create a larger, permanent display at the main library.

Botanic Garden

There is potential to utilise facilities at the Botanic Garden for food resilience education and events. Already there are educational initiatives underway, such as the monthly HortTalks, which include education on growing

¹⁵ “The New Zealand Footprint Project” (Ella Lawton)

food. This document recommends exploring the options and opportunities more widely. Additional resources may be required when suitable options and opportunities have been investigated and agreed.

City Property

The food security and resilience of Council social housing tenants could be improved by encouraging edible gardens at the Council's social housing complexes. Given the low socio-economic status of the tenants, some Council investment in basic infrastructure, such as raised vegetable gardens, might be required and, if agreed, could be funded from existing budgets.

Edible gardens could also be grown at Council facilities. Public Library staff have already created a herb and vegetable garden on the 6th floor of the main library building.

The Wall Street location is available to use for food resilience education and promotion.

Stand-alone one-stop food website

During engagement with external stakeholders there has been strong support for developing a stand-alone food website. The Council can learn from effective and popular local food websites set up in other jurisdictions, including Kai Auckland and The Sustainable Table in Australia. The Kai Auckland website was funded and coordinated by Auckland Council. Content was developed by a website steering committee that included community representatives.

The advantages of a stand-alone food website for the Dunedin region are:

- community groups would not be required to spend scarce resources on development and maintenance costs
- community awareness of food issues could be strengthened
- all the relevant information would be in the one place
- aspiring small-scale farmers could be linked to other farmers for mentorship and landowners with excess land to lease
- the website would provide links to other websites e.g. Dunedin City Council, businesses and organisations (including food banks), potentially delivering economic and social benefits.

Communications Strategy

A communications strategy based on growing food, buying local, eating seasonally and zero food waste could include amongst other things:

- Promoting local food initiatives and events
- Education on household emergency food plans
- Communicating the process for establishing edible gardens on Council reserve land using good customer service design
- Use existing communications channels to encourage domestic gardens, seasonal eating, zero food waste, and provide information on keeping animals
- Awards to local food champions
- Press releases about the farmers' market, regional food and local chefs to create interest and pride
- Mayoral media appearances to promote food initiatives.

Consultation

External consultation

To date, the following external stakeholders and agencies have been consulted during the preparation of this document:

- Ahika Consulting
- University of Otago (Centre for Sustainability and the Departments of Human Nutrition, Geography, Anthropology and Food Science)
- Our Food Network
- ReScape (urban market garden)
- Food Share
- Otago Polytechnic
- The Malcam Trust
- Auckland Council
- Sustainable Business Network
- WellSouth
- Ministry for Primary Industries
- Department of Internal Affairs
- Southern District Health Board
- Dunedin Rural Development Incorporated
- Otago Farmers' Market
- Sustainable Living Course Coordinator

It has not been possible to consult with all relevant stakeholders prior to the Long Term Plan deliberations commencing 18 May 2015. This report recommends further consultation with the following external stakeholders: Kai Tahu, Federated Farmers, the Chamber of Commerce, Beef and Lamb NZ, food retailers, and others as appropriate. There has been some preliminary discussion with supermarkets from elected member(s). Staff will engage with supermarkets when there is clear direction from the Council on next steps.

Internal consultation

The following internal stakeholders and business groups were consulted during the preparation of this discussion document:

- Members of the former Community Resilience Forum
- Sustainability Audit Committee
- Reserves and Recreation Planning
- City Development
- Events and Community Development
- Environmental Health and Animal Control
- Civil Defence and Rural Fire
- Communications and Marketing
- Water and Waste
- Economic Development Unit
- EnviroSchools
- Marketing Dunedin
- Botanic Garden
- City Property
- Transportation Planning
- Asset and Commercial
- Dunedin Public Libraries

Recommended plan of action

The food resilience project, in consultation with internal and external stakeholders, has identified the following strategic and operational actions that can be implemented over the short, medium and long terms to improve Dunedin's food resilience:

Strategic	Operational
Short term (2015-2016)	
Confirm research needs and explore co-funding opportunities Continue engagement with external stakeholders Establish an internal working group to develop and implement a food resilience road map to include: • a communications strategy • identifying branding and marketing opportunities • identifying partnership opportunities • an internal food policy for Council workplaces, including food procurement guidelines • encouraging the food dimension at events, festivals, and the creative industries • reviewing rates/regulatory regimes to encourage small central city and suburban food businesses • measuring public interest in food resilience via the Environment Strategy consultation process • planning a food assets inventory and gathering baseline data to monitor food resilience progress • developing a food resilience action plan for incorporating in the Environment Strategy. Consider establishing a local food policy steering group of internal and external subject matter experts, or a Food Policy Council, to develop a Dunedin food charter Continue to support not-for-profit organisations and community groups undertaking food resilience work e.g. Food Share Engage with supermarkets and other large food retailers to encourage local food initiatives, such as labelling and (semi) direct procurement from growers and producers Develop an action plan for building and maintaining food resilience within climate change adaption strategies Strengthen food resilience and efficient use of resources via the Environment Strategy Collaborate with external stakeholders to promote Dunedin food and cuisine locally, nationally and internationally	Appoint a food resilience coordinator Identify food deserts (areas without easy access to affordable fresh food) using GIS Publicise new food regulations (effective from 1 March 2016) Design an online start-up pack for new food businesses Develop a suite of incentives for food innovation and social/small food enterprises Revise the Dunedin City Council website to include food-related facilities and activities Promote emergency food preparedness through existing communications channels Encourage food security and resilience of Council housing tenants through edible gardens at social housing complexes Use the Wall Street location for food resilience outreach education Encourage edible gardens at Council facilities List registered kitchens available to community groups on website (note that under the proposed Food Act regulations community groups will not be required to use registered kitchens from 1 March 2016) Review Parks and Reserves operational policy regarding edible plants and trees on Council-owned land Explore options to use facilities at the Botanic Garden for food resilience education and events
Medium term (2016-2018)	
Consider co-hosting a local and/or national food conference Influence businesses to label locally made and produced products Support a "Buy Local" campaign	Launch a stand-alone food website Develop an inventory of Dunedin City food assets Develop an inventory of Council-owned reserve land suitable for edible gardens

Investigate actions the Council could take to restrict the number and location of fast food outlets (FFOs) Review policy on verge planting and street trees to promote edible varieties and encourage bees Consider engaging with other Otago TAs to undertake a multi-year food plan for central coordination and infrastructure planning – to advance the capacity of the local food system and collective planning activities Explore organic waste disposal options	Develop information hubs at Council sites e.g. Botanic Garden and Dunedin Public Library for food resilience resources and demonstrations Consider providing more public drinking fountains
Long term options (two years and over)	
Consider options for removing restrictions on access to reticulated water supply for community gardens (would require a change to the water bylaw) Ensure transportation planning takes into account non-vehicular access to food destinations Consider developing and managing edible gardens on Council-owned land, which are maintained by volunteers (as an alternative to licences to occupy reserve land for community gardens) Investigate re-classifying Council-owned reserve land to fee simple, for example, to remove legal barriers and enable more edible gardens and forests Ensure good public transport links to key food destinations PRA and Transportation work together to plan for public transport and safe walking and cycling links to edible gardens Consider undertaking a feasibility study of a purpose-built food hub	

Appendix A

Food Resilience – a survey of Dunedin City Council activities

Background

In December 2013 Dunedin City Council endorsed the recommendations of the former Community Resilience Forum to note food as a strategic opportunity for the city, and the need to improve Dunedin's food supply resilience with the aim of becoming a food-resilient city. A six-month food resilience project, which began in November 2014, has delivered recommendations, an action plan and options for Council consideration in May 2015.

Definition

In 1996, the World Food Summit defined food security as existing “when all people at all times have access to a sufficient, safe, nutritious food to maintain a healthy and active life”. Being a food-resilient city means that everyone in Dunedin has a reliable and affordable supply of good quality food – now and in the future – that is produced locally and sustainably.

Purpose

The purpose of this survey is to collate what the Council has done, is doing and not doing, or plans to do with regard to food resilience. The activities listed in the attached table were also a prompt for an internal food resilience workshop held on Monday, 23 February 2015.

Stocktaking food resilience activities

The Ministry of Health has compiled a list of activities for local authorities who are aiming to improve food security and resilience. Business groups with the Council were invited to look through the activities and indicate the activities their group has either completed, is doing, or is planning to do, and the mechanisms through which the activities were/are implemented (where relevant).

The following groups responded: City Planning, Environmental Health, Public Library, Parks, Recreation and Aquatics, Transportation, Enviroschools and Solid Waste.

Activity 1: Community gardens	Yes	No	Planned	Mechanism used
Develop a community gardens policy				Provide for community gardens as a permitted activity in 2GP (subset of Community and Leisure activity). PRA has guidelines and processes for dealing with Community Garden applications. These could inform Departmental /Organisational Policy
Advocate for new community gardens and promote existing community gardens in Council communications				Promote Youth Grow planned in line with Otago Farmers' Market organic waste collection Enviroschools
Work with the Regional Council to provide public transport links to community gardens				This can be done if P&R advises Transportation where community gardens are
Create safe walking and cycling tracks around community gardens				This can be done if P&R advises Transportation where community gardens are
Support community garden groups to find suitable sites, assist with funding and other applications				Enviroschools PRA Guidelines and processes for dealing with Community Garden applications to Parks and Reserves Provide compost from Green Island compost facility to community gardens (informal – case

				by case assessment) Support Youth Grow to scale up their composting operation to enable them to compost fibre packaging products and food waste collected from the Otago Farmers Market.
Provide a garden set-up guide and other relevant information				PRA Guidelines and processes do this to some degree Provide information about composting/Bokashi/worm farming (webpages, brochures)
Collaborate with health and social services providers with community gardens who wish to offer their space as a therapy tool.				

Activity 2: Green spaces	Yes	No	Planned	Mechanism used
Set a target for walkable access between living and green spaces within the relevant strategy or include guidelines in the District Plan				P&R Strategy, input into 2GP, Reserve Management Plans (may or may not be a prescriptive target)
Ensure accessible green space is a mandatory criterion of any apartment building application				Outdoor living space (OLS) a requirement of any new residential activity. 2GP will require that this is on sunny side of buildings.

Encourage rooftop gardens in multi-level developments				Can be considered an alternate to OLS for non-ground floor residential units. DCC Public Library staff – balcony herb and vegetable garden Gardens/patio gardens encouraged at DCC sites
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Activity 3: Farmers' markets	Yes	No	Planned	Mechanism used
Support farmers' markets coordinators to meet compliance requirements				Environmental Health
Offer Council-owned land or venues to host farmers' markets				Reserve land could be investigated for use if wider Council policies adopted
Promote farmers' markets through the Council's communications				Enviroschools Plan to promote composting via public places recycling – DCC collaboration with Otago Farmers' Market
Provide public transport links to farmers' markets				Bus service to most locations. Transportation can advocate for more public transport where there are gaps

Activity 4: Urban edible planting	Yes	No	Planned	Mechanism used
Develop an urban edible planting policy and process				Interim edible gardens policy in development
Fund and provide signage on or around edible plants and trees on Council-owned land				
Promote and advertise edible plant locations on Council-owned land				

Activity 5: Community kitchens	Yes	No	Planned	Mechanism used
Work with the regional council to provide public transport links to community kitchens				
Subsidise community kitchens to support people in need				If the group is not making a profit the Council will often register and inspect them for a zero fee.
Provide seed funding for a kitchen set-up, or improve an existing space to accommodate a community kitchen				Waste levy grant to FoodShare for building improvements and a cool store
Consider building community kitchens in areas of social disadvantage				
Promote existing community kitchens				EH has list of registered kitchens available to community groups Enviroschools

				DCC to proactively promote FoodShare food rescue services – a partnership approach
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Activity 6: Community skill building	Yes	No	Planned	Mechanism used
Host, financially support or promote community initiatives – growing food, community kitchens etc.				Environmental Health Enviroschools Initiatives planned and underway with: • Otago Farmers’ Market • Youth Grow • FoodShare • Other community initiatives on a case by case basis
Partner with learning institutions and community groups to develop and host workshops				Enviroschools Discussions underway to host a workshop on reducing food waste & options for diverting food waste

Activity 7: Research on the food environment	Yes	No	Planned	Mechanism used
Advocate for regional food environment research				National Household Food Waste Prevention

				Project
Use GIS to locate food deserts				

Activity 8: Healthy food outlets	Yes	No	Planned	Mechanism used
Use planning processes / internal policies to improve access to healthy food outlets				Healthy Food Policy and Guidelines for DCC facilities (about to be implemented)
Increase the number of fresh food outlets through land use permission and removing fees and charges				
Encourage health food stores and fresh food markets in low socio-economic areas				

Other:	Mechanism used
Protection of high class (versatile) soils	Current District Plan: A map shows areas of HCS. Activities must conform with a performance standard that prohibits the removal of soil from the site. 2GP will strengthen policies around protecting HCS with a requirement that development activities will not have adverse effects: • future urban development areas should avoid productive land (new policy) • different rural zones created with different density rules for subdivision and residential activity (new policy) • Stricter and more targeted assessment of activities that require resource consent, and their effects on high class soils (improved)

Protecting rural land (from fragmentation and residential /urban development)	2GP will strengthen current District Plan policies and rules protecting rural land from development, through: • strategic directions emphasising protection of land important for food production • different rural zones which recognise different scale and nature of rural land uses • strengthening policies that protect rural land for productive rural activities, and avoiding residential development not associated with rural activities • review of density rules for land subdivision and residential activity
Providing for rural retail sales	Changes to permitted activity in rural zones in 2GP, removing need for resource consent process (subject to standards)
Providing for rural industry (which includes primary processing and packaging of farm produce)	Changing from non-complying to discretionary activity status in rural zones in 2GP
Waste minimisation – composting	Composting Made Easy Workshops – community and school-based
Edible gardens in schools – seasonal planting, seed collection, composting, organic/spray free practices, garden-table-garden	Enviroschools – workshops, facilitator support, links with expert, local producers/community groups, tertiary institutions (e.g. Living Campus at Otago University)
Gardening and composting and conscious consumer initiatives	Sustainable Living courses
Community orchards/fruit tree planting	Enviroschools - workshops, facilitator support, links with expert, local producers/community groups, tertiary institutions (e.g. Living Campus at Otago Polytechnic)
Healthy foods, fresh foods	Enviroschools - workshops, facilitator support, links with expert, local producers/community groups, tertiary institutions (e.g. Otago University), Health Promoting Schools

Garden on the Library 6 th floor of edible grown herbs and vegetables – for staff to use and contribute to – also using own composting to support garden.	Library Green Team
Recently completed processes for volunteers working on Parks and Reserves administered land	Guidelines that could input into wider Council processes/policy
Preference for development in existing centres thus supporting local food shops / markets / gardens etc.	Spatial Plan and Integrated Transport Strategy
Improving non-car travel options to key goods and services, including supermarkets	Integrated Transport Strategy
Supporting community food resilience initiatives	Community grants