An Exploration of the Structure, Issue Framing and Priorities of Virginia's Food Policy Groups to Collaborate on a Healthy, Resilient and Sustainable Food System

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Abstract

Food policy groups (FPG) have emerged in the United States (U.S.) to create healthy, resilient and sustainable food systems. There is a lack of research about FPG in the Commonwealth of Virginia. This M.S. thesis describes a mixed-methods study that investigated the structure, issue framing, activities and priorities of diverse FPG in Virginia to develop a healthy, resilient and sustainable food system framed around three research objectives. Objective one used a scoping review to inventory and visually map the location of Virginia's FPG. Objective two administered a validated, online questionnaire to document activities related to organizational capacity, social capital, context, effectiveness, and community outcomes. Objective three used a semi-structured interview guide to explore stakeholders' views about opportunities and challenges to align diverse FPG priorities and interests. Quantitative data were analyzed using descriptive statistics and qualitative data were transcribed, hand-coded, and analyzed for emergent themes. Results found that 58% of FPG (n=32/55) are located cities around universities (i.e., Richmond, Blacksburg and Charlottesville), and fewer located in rural counties with higher health outcomes. A majority (75%, n=12/16) operated on annual budget less than $50,000. A third (37.5%, n=6/16) reported food system resilience work and 50% (n=8/16) reported sustainability work. Stakeholders (n=11) reported collaboration as a mutual interest and necessary to address systemic challenges and all interviewed FPG (n=11) reported sustainable funding as a major challenge. The results of this study may inform future policies for Virginia's FPG to support a healthy, resilient and sustainable food system at local, state and national levels.

General Abstract

Since the 1980s, food policy groups (FPG) including councils, networks and coalitions in the United States (U.S.) and other countries have emerged to address food system issues such as food insecurity, food access, diet-related chronic diseases, the environmental impacts agricultural systems, poverty and economic development in communities. In 2016, 411 FPG were active in the U.S. and Canada to create healthy, resilient and sustainable food systems. There is a lack of research about FPG in the Commonwealth of Virginia. This M.S. thesis describes a study design to investigate how the structure, issue framing, activities and priorities of diverse FPG in Virginia can develop a healthy, resilient and sustainable food system. Results found that 58% of FPG (n=32/55) are located cities around universities (i.e., Richmond, Blacksburg and Charlottesville), and fewer located in rural counties with higher health outcomes. A majority (75%, n=12/16) operated on annual budget less than $50,000. A third (37.5%, n=6/16) reported food system resilience work and 50% (n=8/16) reported sustainability work. Stakeholders (n=11) reported collaboration as a mutual interest and necessary to address systemic challenge and all interviewed FPG (n=11) reported sustainable funding as a major challenge. The results of this study may inform future policies for Virginia's FPG to support a healthy, resilient and sustainable food system at local, state and national levels.

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Acronyms and Abbreviations

CFSC	Community Food Security Coalition
DC	District of Columbia
EPA	Environmental Protection Agency
FPC	Food Policy Council
FPC-SAT	Food Policy Council Self-Assessment Tool
FPG	Food Policy Group
FECFF	Food Ethics Council on Food and Fairness
HEAL	Healthy Eating Active Living
IRB	Institutional Review Board
LEAD	Locate, Evaluate, and Assemble evidence to inform Decisions
MUFPP	Milan Urban Food Policy Pact
NHANES	National Health and Nutrition Examination Survey
NCD	Non-Communicable Diseases
OFPC	Oakland Food Policy Council
RO	Research Objective
RQ	Research Question
SDG	United Nation's Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
SNAP	Supplemental Nutrition Assistance Program
TFPC	Toronto Food Policy Council
UN	United Nations
U.S.	United States
USDA	United States Department of Agriculture
VIC Health	Victoria Health Promotion Foundation

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Chapter 1 Introduction

1.1. Background and rationale for the research

Americans spend about 10-12% of their disposable household income on foods.[1] However, the economical prices paid do not reflect the external planetary health costs—including economic, social, and environmental—of the food that impact the sustainability of food systems.[2] A food system encompasses many food activities including production, processing, distribution, consumption, and management of food and packaging waste.[3] Food systems exist and intersect at local, state, regional, national and global levels. Sustainable food and water systems support food and nutrition security, and the health and well-being of the present and future populations.[4] Resilience is another important feature that refers to the capacity of food systems, and the actors working with them, to adapt to changing circumstances and conditions in a sustainable way.[5]

Since the 1980s, food policy groups (FPG) including councils, networks and coalitions have emerged in the United States (U.S.) and other countries to address diverse food system. These issues range from hunger and food insecurity to food availability and access challenges, obesity and diet-related chronic diseases, the adverse environmental impacts of large-scale industrial food and agricultural systems, how food systems accelerate climate change, poverty and economic development in communities.[6]

Over the past three decades, the food policy council (FPC) approach was adapted to address inadequate food policies to support food justice, food democracy and community food security.[7,8] Boden and Hoover (2018) suggest that FPC embody food justice through democratic participation, and multisectoral composition to inform policy change.[7] The rates of chronic diseases associated

within the U.S. national food system, and the rise of well-documented public health and environmental concerns, has led to the growth of coalitions and other collaborations that advocate for food and nutrition policies to promote a healthy, resilient and sustainable food system (or referred to as a sustainable food system).[9] Similarly, health disparities are being pursued by interdisciplinary FPG through legislation to address health, local food, and economies with the same goal.[9] Therefore, exploring FPG in different regions of the U.S. is important to understand how localities and states are collaborating to develop a sustainable food system.

In 2016, 411 FPG were active in the U.S. and Canada to create healthy, green, fair, affordable and profitable food environments and systems at local, state and national levels. However, there is a lack of valid information on the number of FPG and limited understanding about FPG activities in the Commonwealth of Virginia.[10,11] In 2016, the Johns Hopkins' Center for a Livable Future's database listed 11 self-reported FPG active in Virginia in their database, which may not reflect the diversity of groups and their activities.[10,11]

1.2. Research goal, questions and objectives

This M.S. thesis describes a mixed-methods study guided by three research questions. The major goal is to identify and analyze the existing characteristics, structure, issue framing and priorities of diverse FPG in Virginia to inform collaborative actions to develop a sustainable food system across the Commonwealth of Virginia.

The research questions (RQ) are described below:

1. **RQ1:** *What are the characteristics and structure of diverse FPGs working on food system issues across the 95 counties and 10 regions of the Commonwealth of Virginia?*
2. **RQ2:** *How are Virginia's FPG framing food systems issues, and what are their priorities and activities to support a healthy, resilient and sustainable food system?*
3. **RQ3:** *What are the opportunities and challenges for Virginia's FPG to align their interests and priorities with other stakeholders or actors to support a healthy, resilient, and sustainable food system at local, state and national levels?*

1.3. Contribution of this research

This M.S. research addresses knowledge gaps surrounding the Commonwealth of Virginia's priorities, activities, issue framing and structure of FPG to inform future actions and policies to support a healthy, resilient and sustainable food system. These knowledge gaps span 95 counties and 10 geographic regions of Virginia. My research applied the principal-agent theory, the FPC framework, and the VicHealth partnership analysis tool to design a mixed-methods study to collect and analyze quantitative and qualitative data through an online survey and stakeholder interviews. My research may influence policy at the local, state, or regional level. The results were disseminated to influential groups in Virginia state level influential groups, including those involved in this research, local planners or legislators, food system networks and larger national databases such as the Johns Hopkins' University's Center for a Livable Future's FPC Directory. This information can provide organizational structure and guidance to FPG activities that could help communities create a sustainable food system.

1.4. Timeline for implementing the research

By the end of July 2018, I completed my M.S. thesis proposal and presented to advisory committee for approval in September 2018. A low-risk Institutional Review Board (IRB) protocol was submitted to the Virginia Tech IRB and approved in October 2018. Data collection began in late October after receiving feedback from my committee and continued through February 2019. Between February and March 2019, data was analyzed, findings synthesized, and the discussion and conclusion written for this M.S. thesis. I submitted and defended my M.S. thesis on May 7, 2019 and will attend the Virginia Tech graduate commencement ceremony on May 16, 2019.

1.5 Structure of this document

This MS thesis document is comprised of an introductory chapter, a literature review, methodologies, results, discussion, conclusion and appendix documents that were used in data collection and submitted to the Virginia Tech Intuitional Review Board. The introductory chapter outlines and provides the background for the literature review's context. More so, this chapter summarizes the research questions, contribution of the research to knowledge and policy, and the implementation timeline. Chapter two is a comprehensive literature review of concepts related to public health, sustainability and FPG in the Commonwealth of Virginia. The beginning of chapter two outlines the 10 key topics discussed. My research objectives and methods are explained in chapter three along with the principal-agent theory, VicHealth partnership analysis tool, and FPC Framework. Chapter four provides the data collected from the three research objectives outlined in chapter three. Chapter five contextualizes the quantitative and qualitative data. Chapter five describes the themes and pertinent data of this thesis research and chapter six draws conclusions

from this research thesis. The conclusion chapter discusses major findings, contribution to the existing literature and implication for policy and research. Lastly, the appendices reference the study materials submitted to Virginia Tech IRB.

Chapter 1 References

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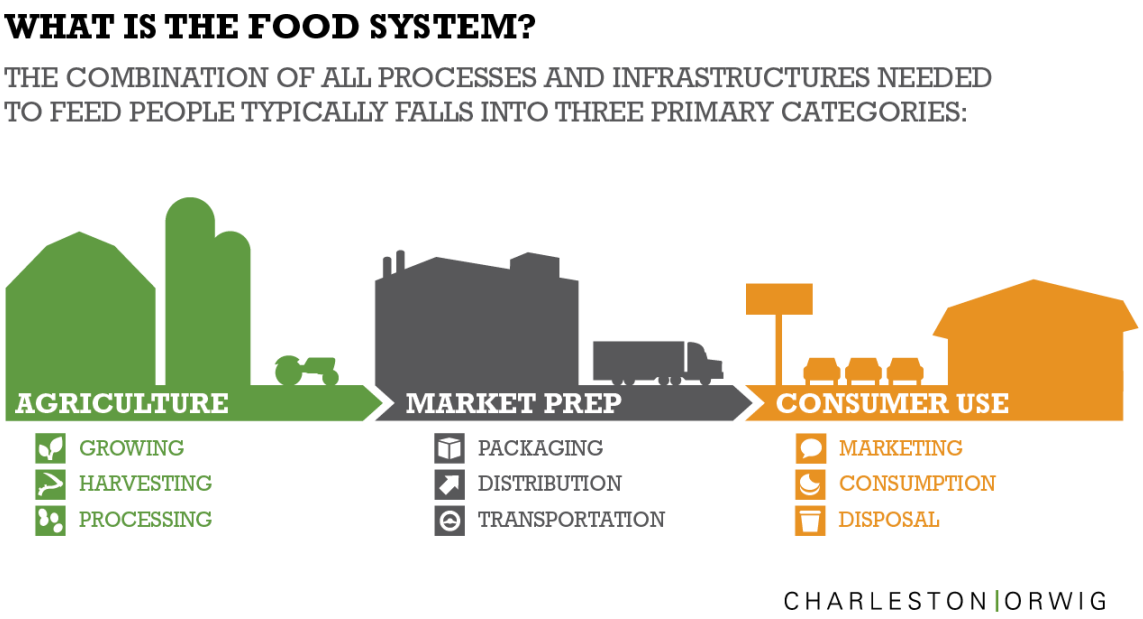
Chapter 2 Literature Review

This literature review summarizes research that addresses the following topics: (1) defining key terms related to food systems; (2) demographic trends for U.S. food security, obesity and diet-related chronic diseases; (3) challenges related to the environmental sustainability of the U.S. food system; (4) history and evolution of food movements; (5) structure and characteristics of model FPC in the U.S. and Canada; (6) defining relevant terms and successful FPG conditions; (7) frameworks and tools used to evaluate FPC or FPG; (8) FPG or FPC in the Commonwealth of Virginia; (9) current food policy legislation in Virginia; and (10) conclusions and knowledge gaps to inform the research questions. These 10 topics connect to my research objectives articulated in Chapter three and provide a compelling case for studying FPG in Virginia.

2.1 Defining key terms related to food systems

Several important terms are defined in this section that are used throughout this thesis that are summarized in Table 2.1. According to the 2017 High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, a ***food system*** is comprised of many elements including the environment, people, inputs, processes, infrastructure, institutions, markets, trade, and activities related to the production, processing, distribution, marketing, preparation and consumption of food, and the outputs of these activities, such as socio-economic and environmental outcomes.[1] Figure 2.1 provides a simple visualization of the components of a food system.

Figure 2.1 Components of a Food System



Source: What is the Food System? https://charlestonorwig.com/. 2018.

Furthermore, terms such as sustainable, resiliency, and health equity are associated with food systems and need to be defined. A ***sustainable food system*** delivers food and nutrition security for all to ensure that the economic, social, and environmental components adequately produce food and nutrition for future generations.[2] ***Resiliency*** represents the capacity of a system to respond to disturbances or changing conditions and retain its basic function and structure.[3] ***Health equity*** is achieved when all people have the opportunity to obtain their health potential without the influence of social position or other social determinants.[3] Therefore, a sustainable food system can be supported by a network of organizations and people concerned about the broad impact of the food system on the health of an individual, organization, and community.[3] A FPC is an approach to improve the human health, resiliency and sustainability of a food system.[4]

Food Policy Councils (FPC) arose during the 1980s in response to the decrease in U.S. federal and state funding for safety-net programs, such as the Supplemental Nutrition Assistance Program (SNAP).[5,6] The first FPC started in Knoxville, Tennessee in 1982 to address local hunger initiatives in the community.[5,7] Due to the increased eligibility requirements for SNAP and public assistance programs, combined with the increased program demand by American citizens, numerous cities, including Knoxville Tennessee, Hartford Connecticut, and Baltimore Maryland, identified alternative ways to feed their populations.[5,7] In Knoxville, a FPC approach was used where various stakeholders were mobilized to influence systemic food system changes.[4] FPC are a specific way to embrace democratic participation to engage and involve diverse stakeholders and amplify unheard or marginalized vocies.[6] The practice of democratic participation is a part of a larger movement called ***food democracy***, which is a way for communities to fulfill the human right to access safe, fair, just, and nutritious foods by organizing and establishing rules that safeguard their community food system.[6,8] Another organizational structure that mobilizes various stakeholders is a food policy group. A ***food policy group*** (FPG) is an broad, all-encompassing term that includes councils, networks and coalitions that address food system issues such as hunger and food insecurity, food availability and access, diet-related chronic diseases, the environmental impacts of large-scale industrial food and agricultural systems, poverty and economic development in communities.[9]

Due to the lack of a comprehensive food regulatory system in the U.S., the cross-regional linkages that connect food production, distribution, processing, consumption, and food recovery management present challenges to create sustainable food systems.[10] Many FPG enable

communities to work across diverse sectors and encourage stakeholders to influence policy and engage in food democracy to build capacity for creating a sustainable food system.

Complementarily to FPG, a ***food policy*** represents the actions, laws, guiding statements, rules or practices that influence the supply, quality, price, production, distribution, and consumption of food.[5] A lack of comprehensive and harmonized U.S. food and nutrition policies led to the emergence of food justice and food security movements.[4] Specifically, ***food justice*** arose as a way to address racial, and income inequalities in the food systems.[11] The food justice movement identified these inequities and attempts to ensure a fair and equitable food system exists for all people.[11]

Food security is defined by the Food and Agriculture Organization of the United Nations as "the condition in which all people, at all times, have physical, social, and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."[12] Numerous organizations recognize the interconnectivity between poverty, food security and farmland, and utilize a food hub model to develop a place for food aggregation, exchange, and distribution to mitigate interconnectivity of food insecurity and agriculture. The United States Department of Agriculture (USDA) describes a ***food hub*** as an organization that manages the collection, and distribution of locally and regionally grown food products to strengthen their ability to reach wholesale, retail, and institutional markets.[13] This model helps to bridge the gap between producers, market sale and consumers. Food hubs are an example used to create a sustainable food system.

A ***policy*** is a written statement that is binding and enforceable used to create operative change in environments, communities, organizations, and systems.[14] More so, policies can also serve as a strategy to create change in the food system, for example, a school wellness policy or a healthy food policy.[2]

Table 2.1 Key Terms Defined

Term	Definition
Food democracy	Defines a way for communities to fulfill the human right to creating a safe, fair, just, and nutritious food by organizing and establishing rules that safeguard their community food system.
Food justice	A movement to address racial, and income inequalities in the community food system.
Food hub	A business or organization that actively manages the aggregation, distribution and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.
Food policy	The actions, laws, guiding statements, rules or practices that influence the supplies, quality, price, production, distribution, and consumption of food.
Food policy council (specific)	An organizational structure that influences the improvement of the health, resiliency and sustainability of a food system through a democratic participation model to encourage stakeholder involvement and amplify unheard voices.
Food policy group (broad)	Includes councils, networks and coalitions that address food system issues such as hunger and food insecurity, food availability and access, diet-related chronic diseases, The environmental impacts of large-scale industrial food and agricultural systems, poverty and economic development in communities.

Food security	The condition in which all people, at all times, have physical, social, and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
Food system	A system that embraces all elements including the environment, people, inputs, processes, infrastructure, institutions, markets, trade, and activities that relate to production, processing, distribution, marketing, preparation, and consumption of food, and the outputs of these activities, such as socioeconomic and environmental outcomes.
Policy	A tool or strategy used to create operative change in environments, communities, organizations, and system. It can be a written statement, binding and enforceable, and applicable to an area, space, organizations, businesses and citizens.
Resilience	The capacity of food systems, and the actors working with them, to adapt to changing circumstances, conditions and disturbances in a sustainable way.
Sustainable food system	A system that delivers food and nutrition security for all to ensure that the economic, social, and environmental components produce food and nutrition for future generations that are not compromised.
Healthy, resilient and sustainable food system	A network of organizations concerned about the broad impact of the food system on an individual, organizational, and community health.

2.2 Demographic trends for U.S. food security, obesity and diet-related chronic diseases

The American national food system provides an abundant and safe supply of food and contributes more than one trillion U.S. dollars to the national economy.[15] The U.S. food system employed about 17% of the labor force in the early 2000s.[15] Food-sector jobs comprise 15% of the workforce of most communities, grocery stores and restaurants contribute about one fifth of the retail sales for a local economy.[15] However, large-scale industrialized food and agricultural systems that include supermarket and restaurant chains have created a loss of local businesses and contributed

to people's reduced access to healthy and sustainable employment and local foods in communities.[15] The USDA Economic Research Service estimated that 12.3% of American households were food insecure in 2016, which represented 15.6 million individuals who lacked access to enough healthy and affordable food for all members due to inadequate money or resources.[16] Socioeconomic status and obesity are complex and correlated across the states.[17]

In 2009, the U.S. spent an average of $147 billion dollars on obesity related medical expenses.[18] Researchers estimated in 2012 obesity related cost were $210 billion dollars.[18–20] Obesity is a risk factor for lifestyle-related chronic or non-communicable diseases (NCD) such as heart disease, stroke, type 2 diabetes, and certain cancers.[18] In 2014, National Health and Nutrition Examination Survey (NHANES) data concluded that 70.7% of American adults were overweight or obese, and about 32.4% of American children and adolescents, ages 2-19, were overweight or obese.[21] NHANES data from 2015-2016 indicated that 39.8% adults were obese and 18.5% of American children and adolescents were obese.[22] According to the Trust for America's Health and the Robert Wood Johnson Foundation State of Obesity Report, in 2017 seven states had over a 35% adult obesity prevalence.[23]

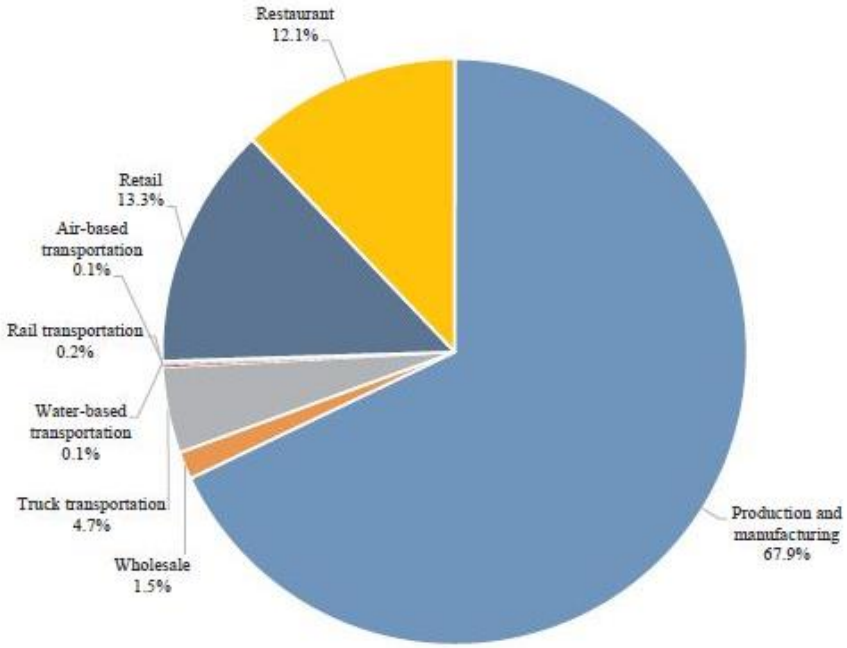
Some states receive funding to create health-related programs and policies such as the Montgomery Area Wellness Coalition in Alabama.[24] However, public health institutions have often received limited funding to affect the health, resiliency and sustainability of food systems. For instance, the Virginia Department of Health received less than $500,000 in state funding to create health-related programming in 2016.[24] While the industrialized and globalized food system will remain dominant, communities and states are developing alternative food system approaches supported by FPG, to address the health, resiliency and sustainability of a food system at the local,

regional and national levels.[1] Furthermore, FPG provide a platform and an organizational structure to focus initiatives in collaboration with public health representatives to address food security, obesity and diet-related NCDs.

2.3 Challenges related to the environmental sustainability of the U.S. food system

Since 1992, greenhouse gas emissions have nearly doubled, which are a driver of global warming and climate change.[25] The increased production of greenhouse gas emissions by human activities is a major driver of climate change, which affects the well-being of human ecosystems and planetary health.[26] Greenhouse gas emissions, such as carbon dioxide and methane, are by-products of food production and degradation that account for about 30% of total greenhouse gas emissions in the U.S.[26] Figure 2.2 illustrates the average American weekly household greenhouse gas emission by food system sector.

Figure 2.2 Average Greenhouse Gas Emissions per American Household



Source: Boehm et al. A comprehensive life cycle assessment of greenhouse gas emissions from U.S. household food choices. *Food Policy*. 2018.

The current food system supplies enormous amount of greenhouse gas emissions causing a negative effect on human health, agricultural and environmental sustainability. During 1970s, the U.S. Environmental Protection Agency (EPA) was founded to reduce the levels and harmful effects of pollution in the natural environment for Americans.[27] The EPA has progressed over 50 years to develop a strategic plan with sustainable practices to address environmental health risks in minority communities, biodiversity and land misuse.[27] Figure 2.3 outlines the EPA's progression, approaches, actions and major environmental events driving change toward environmental sustainability between the 1970s and 2015.

Figure 2.3 Evolution of the Environmental Protection Agency's Approach to Promote Sustainability

EPA Approach	Legislative and Policy Actions	Major Events and Drivers of Change
1970s Control "end of pipe" point sources of pollution.	• National Environmental Policy Act, Ash Council • Clean Water Act and Clean Air Act • Resource Conservation and Recovery Act and Superfund	• Time of "Poisoned Fish and Troubled Waters" • 1972: Stockholm Conference (Only One Earth) • 1973: OPEC Oil Embargo • Love Canal
1980s Assess risks to human health and the environment.	• Acid Rain Deposition Act • Environmental regulations • "Science-based" risk management • Energy conservation	• 1981: CEQ Report on Global Futures • 1983: NRC Risk Management "Red Book" • 1987: World Commission on Environment and Development Report, *Our Common Future*
1990s Prevent pollution and foster safe product development.	• Environmental Justice • Design for the Environment • Pollution Prevention • Common Sense Initiative • Project XL • Toxic Release Inventory • Reinventing Environmental Regulations • Setting Environmental Goals for America	• 1992: United Nations Conference on Environment and Development (Rio) • 1992: Creation of the World Business Council on Sustainable Development • President's Council on Sustainable Development • United Nations Framework Convention on Climate Change
2000s Enhance stewardship of the environment by voluntary programs, market incentives, and collaborative problem solving.	• Environmental Indicators • Collaborative Problem Solving • Environmental Stewardship • State and Local Leadership • Sustainable Materials Management • EPA Report on the Environment (USEPA, 2008)	• 2002: World Summit on Sustainable Development (Johannesburg) • 2005: Kyoto Protocol enters into force • 2005: Hurricane Katrina
2010s Align environmental, social, and economic outcomes, and work toward a sustainable future.	• Application of Decision-Support Tools • Green Infrastructure • Legislative Flexibility • Systems Thinking • New Era of Business-Government Collaboration • Action on Climate Change	• 2011: NRC Green Book • Superstorm Sandy signals increased natural disasters • 2012: Rio+20 Earth Summit • United Nations Sustainable Development Goals • Climate Negotiation 2015

Source: Hecht AD, Fiksel J. Solving the problems we face: The United States Environmental Protection Agency, sustainability, and the challenges of the twenty-first century. 2015.

The EPA's approach to promote sustainability represented a systems thinking approach to align environmental, economic, and social work toward a sustainable future.[27] In 2015, many countries adopted the 2030 Agenda for Sustainable Development and 195 United Nations (UN) Member States also approved the legally binding Global Treaty on Climate Change 2015 (i.e., Paris Agreement), that updated the 1992 UN Framework Convention on Climate Change.[27,28] The Member States who signed the Paris Agreement agreed to limit the global temperature to below two degrees Celsius and in order to reduce the detrimental impacts of human-induced climate change on planetary health.[27,28] The UN released the Sustainable Development Goals (SDG) which are a holistic approach to eliminate challenging issues such as global hunger, poverty, and climate change by 2030.[29,30]

SDG 17 calls for partnerships and collaboration to help achieve the entire SDG agenda by 2030.[30] Research on collaborative efforts to promote a sustainable food system is recommended to address the world's sustainability. Environmental injustices are prominent in the U.S. and worldwide. Governments, businesses, partnerships, and agencies are mobilizing efforts to evolve and implement all 17 SDGs that will contribute to creating and maintaining a sustainable food system.[30] FPG create space for collaboration and can play a role towards accomplishing goals for a sustainable food system.

2.4 History and evolution of food movements

FPC arose during the 1980s in Knoxville, Tennessee to address local anti-hunger initiatives.[5,7] More FPC emerged around the same time in Hartford, Connecticut and Toronto, Canada to address food insecurity for populations.[5] The Maryland Food System Group originated in the early 1990s as a response to the increased demand for emergency food services in Baltimore.[5] These cities devised the FPC solution to organize various food system stakeholders to address the food system in its entirety and improve the health and resiliency of communities.[4]

Scherb et al. (2012) has defined a FPC as a way to organize various food system stakeholders at the local, regional, and national levels.[7] A FPG can be councils, coalitions or networks that assemble stakeholders from across the food system to reform food policies and programs to be healthy and more socially, environmentally, and economically sustainable.[9] FPG are utilized to encourage collaboration across diverse food sectors to build capacity for a sustainable food system.

Since the 1980s, the FPC approach was adapted to address inadequate food policy, food security and the health of a food system.[6,10] More so, The Community Food Security Coalition (founded by Mark Winne, Anne Bellows and others), was instrumental in the evolution of the Food Policy Network. This group catalyzed change within the food system and raised awareness of challenging issues inherent in the food system such as social and economic justice, anti-hunger, environmental, community development, sustainable agriculture, and community gardening.[31] Coalitions, networks and councils are springboards for food system action. In 2016, the Johns Hopkins' Food Policy Network Directory and Food Policy Council Report cites 411 active FPC in America.[32,33] Each of these FPC address complex issues in the food system.[33] Harper et al. (2009) described the central aims of FPC are to identify and propose innovative solutions to improve local or state food systems, stimulate local economic development, and to make food systems environmentally sustainable and socially just.[5,6] The FPC approach creates space for stakeholders to engage and formulate action plans for healthy food access, economic development, food procurement, urban agriculture and education.[6,33]

The Johns Hopkins' University FPC Overview Report (2016) identified the organizational priorities of FPG as community engagement, inclusion and strategic planning to address the health, sustainability, and resiliency of a food system.[33] The Johns Hopkins' Center for a Livable Future's Food Policy Network Report (2016) indicated that 44% of FPC reported community engagement and involvement central in their organization.[33] Boden and Hoover (2018) concluded that in the age of localizing food systems, FPCs play an important role, too.[6] In a growing age of social and environmental injustice, engaging the community in food democracy using FPC approach will help to address the social, economic, and environmental well-being of a food system through

systems thinking methodology.[6,34] Summarily, the FPC approach is used to organize and engage multi-sectoral stakeholders under a common food systems vision that can catalyze innovative policy and community change toward a sustainable food system.[4]

2.5 Structure and characteristics of model Food Policy Councils in the U.S. and Canada

Common themes for successful FPC at local, state or national level are described in numerous research studies and include: diversity of members, continuous communication and transparency among backbone organizations and stakeholders, community engagement, leadership, space for capacity building, structure that resonates with needs of community, funding, and synergy throughout the council.[5,35–37] Harper et al (2009) identified the importance of conducting a community needs assessment as a beginning step.[5,6] Furthermore, FPCs that have a relationship or are embedded within a government agency can enact positive food policy change.[5,6] Without this relationship with food policymakers or stakeholders, food democracy does not succeed and falls short of the FPCs' goals to create a sustainable food system.[5,6,38] Conducting research on FPCs' capacity, structure, leadership and synergy is important in understanding how collaborations can create a sustainable food system change.

The structure of FPG alludes to how they can advance sustainable food systems for communities and people. In a mixed-methods analysis of FPC in the mid-Atlantic, Boden and Hoover (2018) commonly found five different ways to structure a FPC including: a 501c3 nonprofit organization, housed in a larger nonprofit, independent coalitions, councils within the government, and councils embedded within a university.[6] FPC can also function as a hybrid of an independent organization

that has a formal relationship with the local government; which includes receiving funding and resources.[6,38]

Moreover, formation of subcommittees such as working groups, allows for more inclusivity within the community, intersectionality of the FPC, accessibility, flexibility, community input, stakeholder involvement, diversity, open communication, and leadership.[6] FPC are a unique organizational approach that can promote food security through food democracy and food justice.[39] Structural differences and similarities of the FPG model informs researchers on ways to strengthen food justice, food security, and food democracy.[6]

2.6 Defining relevant terms and successful Food Policy Groups conditions

It is important to understand community based participatory research definitions as they relate to FPG study tools and how different FPG will describe these terms. **C*ommunity-based participatory research*** is a research method that focuses on relationships between academic and community partners, that utilizes principles of mutual benefit, trust, and diverse community participation.[40] The FPG approach work across sectors to address the food system in its entirety.[4] This cross-sector FPG organizational structure provides a space for community based participatory research by uniting stakeholders under a common vision to advance food policy change and activities. According to Sussman and Bassarab (2016) and Harper et al. (2009) there are some key components to creating a successful FPG that are described in this section.[5,33]

The Organization for Economic Co-operation and Development Stakeholder Engagement Regulatory Policy (2012) defines ***inclusion of members*** as including a variety of community citizens' voices and sectors in decision-making.[41] The inclusion of members helps to amplify marginalized, disadvantaged or less powerful groups which creates ***diverse*** inputs .[41] According to Sussman and Bassarab (2016) almost 120 of the 411 active FPG in North America concluded that inclusion and diversity of members as an organizational priority to engage and formulate strategic or policy plans.[33] A ***stakeholder*** can include citizens, businesses, unions, social organizations, private or public sector.[41] Engagement and including stakeholders in decision-making is a structural governance that builds upon inclusion and diversity for policy and program planning.[41,42] Harper et al. (2009) discussed the need to engage stakeholders across the diverse sectors of the food systems to build a successful FPG structure.[5]

According to Harper et al. (2009) and Clayton (2015), establishing a clear leadership, communication and decision-making structure is necessary for credibility, community engagement and to partner with other organizations.[4,5] This organizational and functional structure helps in strategic planning and understanding the actions, priorities and goal of FPG in addressing sustainable food systems.[38] The literature suggest the significance of partnerships and synergy for FPG.[4] A ***partnership*** is defined as two or more organizations wanting to improve or enhance a service by aligning common aims, visions, interests and shared resources.[43] ***Synergy*** describes two or more organizations or stakeholders that interact to create a combined effect that provides mutual benefit.[44] According to Clayton et al. (2015) FPG that engaged in partnerships benefited in advancing food policy goals.[4] FPG engagement with partnerships provide synergy within the community and stakeholders.[4] Sussman and Bassarab (2016) suggested that partnerships assisted

a Canadian FPG to identify common goals and develop a strategic plan.[33] Sharing a common visions, goals, and missions within partnerships can influence success and sustainability of the collaboration. [45] To understand FPG, researchers' need to address community based participatory research and terms to define a common language, structure and function.

2.7 Frameworks and tools used to evaluate Food Policy Councils or Food Policy Groups

The distinctive FPC approach may use various frameworks to outline the council's priorities and actions as discussed below. The inclusion framework utilized by McCullagh (2012) structures how the community participates in a FPC and solicits their opinions on pre-defined topics, and allocates them authority to define issues themselves.[39] This inclusion framework prioritizes how FPC decide to interact with equity and empowerment of the community.[39] McCullagh (2012) used this framework to address the social inequities and power imbalance of the low-power groups around food democracy.[39] The inclusion framework provides FPC a way to empower and include the community residents who are most affected by food injustice in the policy and program development.[39] To improve the health and value of low-power or marginalized groups collaborators need to communicate, include and understand the background to create effective policy and program change.[39] The inclusion framework is a useful method in researching diversity inclusion of collaborations, specifically the community members most impacted by the inequities in the food system.

Another analytical framework often utilized for food systems evaluation and planning is the Whole Measures for Community Food Systems.[46] This framework is a community-oriented and values-based tool with six fields of practice that consider a vision for a whole community including:

justice and fairness, strong communities, vibrant farms, healthy people, sustainable ecosystems, and thriving local economies.[46] The Oakland Food Policy Council (OFPC) utilized Whole Measures for Community Food Systems to establish and implement policy priorities in California.[47] This values-based and community centric analytical framework reflects food system values that are important to research in relation to how FPC are outlining their priorities and actions for food system change.

Fox (2010) studied the Toronto Food Policy Council (TFPC) and its work to promote food democracy and community food security.[10] One of TFPC's most important recommendation is the endorsement of the Milan Urban Food Policy Pact (MUFPP).[48] TFPC adapted the MUFPP into practice by establishing a Framework for Action to achieve a more sustainable food system.[48] The themes in the MUFPP Framework for Action include: (1) ensuring an enabling environment for effective action, (2) promoting sustainable diets and nutrition, (3) social and economic equity, (4) food production, (5) food supply and distribution, and (6) food waste.[48]

In contrast, the TFPC undertook numerous activities and shaped their priorities to fit with the framework; such as an Urban Agriculture initiative and promotion of the Toronto Food Strategy.[10,48]

This food strategy indorsed community food security through five goals: mobile good food market, wholesale procurement for the community, community access, Healthy Corner Stores, and urban agriculture.[10,48] The TFPC has adapted and created actionable priorities to continue leadership and

community engagement in the food system by the Framework for Action.[10,48] The Framework for Action outlines how FPC can align their priorities to create a sustainable food system through local food policies.

The ethical framework and inquiry were designed by the United Kingdom Food Ethics Council on Food and Fairness (FECFF). This council sought to ensure that food is produced fairly in different public and private institutions.[49] FECFF authorized the ethical framework and inquiry to address the neglect of social justice issues in food policy.[49] The FECFF released a 2010 Food Justice Report that examined how councils and organizations interact with issues, rules, and the terms of the debate to enlighten the three main points of the ethical framework: equality of outcomes ('fair share'), equality of opportunity ('fair play'), and autonomy and voice ('fair say').[49] The FECFF framework provides a way for councils to interact with food justice and its implications for policy change while establishing how FPC can advocate for change through collaborative action.[49] This framework informs how organizations are framing issues related to capacity building for a sustainable food system and identify areas for alignment with other FPG.

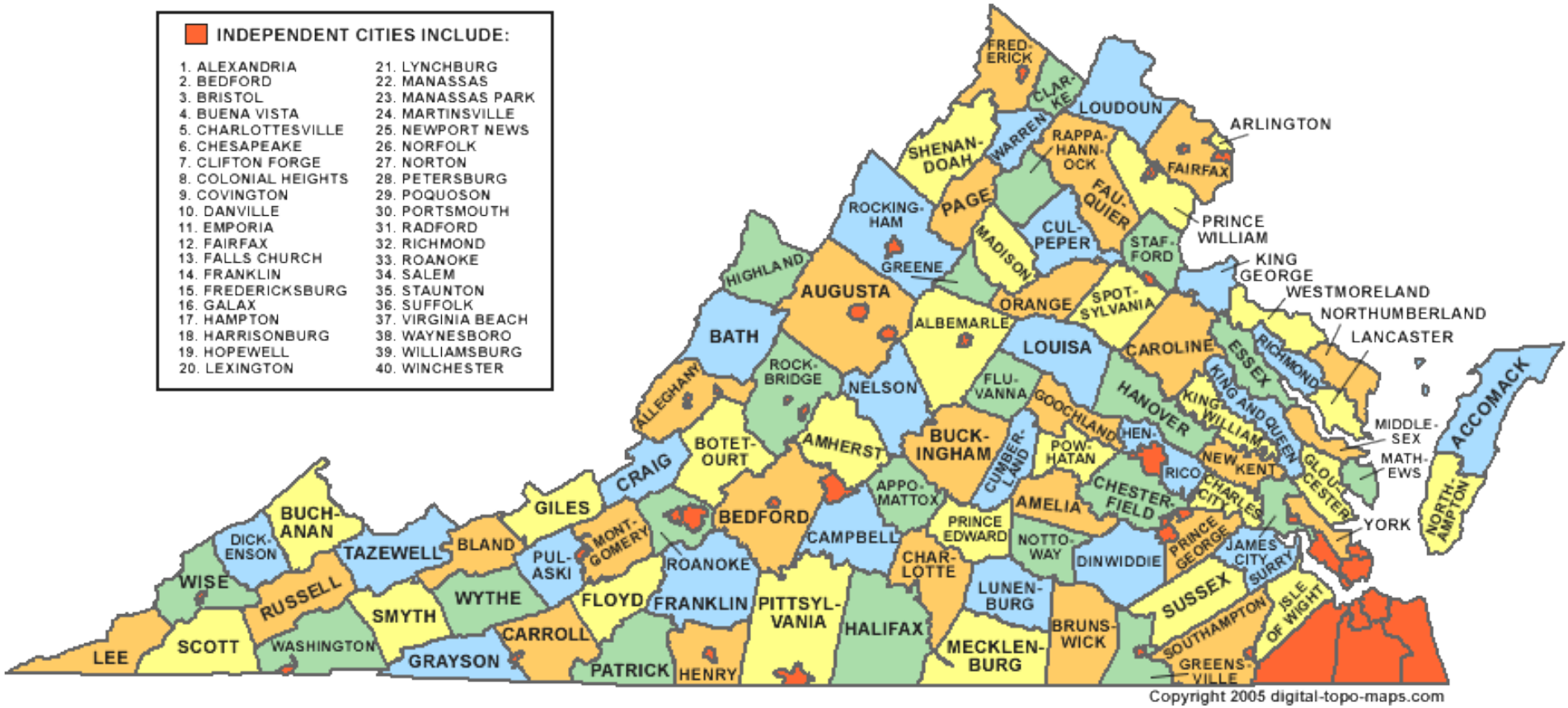
The shortage of data on FPC policy activities and priorities provide a place for successful framework and research methodology.[4] Scherb et al. (2012) used the Community Food Security Coalition (CFSC) evaluation toolkit to develop a 12-question survey to assess the background, policy engagement, barriers, and policy priorities of FPC.[7,50] The survey was administered online to 92 FPC in a FPC database.[4,32] Other researchers used the survey methodology to uncover councils structure, activities, functions and priorities.[6,34] More so, the mixed-method analysis utilized was found to be a successful way to study FPC structures and their food justice priorities.[7]

Boden and Hoover (2018) utilized a mixed-method analysis to code for food justice by engaging participants in interviews, focus groups, meetings as well as a content analysis of FPC's websites; coding for concepts of food justice.[6] Similarly, Schiff (2008) used interviews and document analysis to conduct 13 interviews with FPC in the United States and Canada to develop an understanding of the emerging roles of FPC in community food security and a health food system.[38] The nuance of FPC creates space for researchers to use conceptual frameworks and tools to effectively measure how FPC evaluate their policy work and prioritize developing a sustainable food system.

2.8 Food Policy Councils or Food Policy Groups in the Commonwealth of Virginia

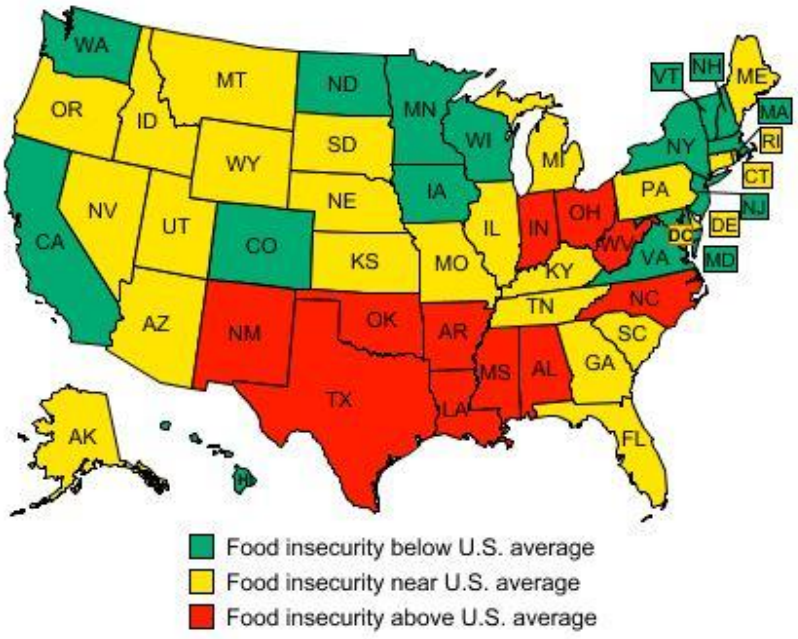
A Commonwealth is a designation used by four of the 50 states of the United States in their full official state names: Kentucky, Massachusetts, Pennsylvania, and Virginia.[51] All four states share a strong influence of English common law expressed in some aspect of their state laws and institutions.[51] The Commonwealth of Virginia contains 95 counties housing about 8.4 million people in 2017.[52,53] Figure 2.4 illustrates the 95 counties of Virginia.

Figure 2.4 Map of Virginia's 95 Counties



The prevalence of food security varies from across the nation. Abi-Nader et al. (2009) described food security as all community residents can obtain a safe, culturally appropriate, nutritionally sound diet through an economically and environmentally sustainable food system that promotes community self-reliance and social justice.[46,54] According to the 2017 USDA Economic Research Service report, 40 million people lived in food-insecure households.[55] The 2017 Robert Wood John Foundation's State of Obesity report, which analyzes self-reported survey data from the Behavioral Risk Factor Surveillance System, reported the overall food insecurity rate of Virginia was 11.2% and the adult obesity rate of 30.1%.[20] Figure 2.5 illustrates the food insecurity prevalence across the U.S. More so, research suggests there is a strong correlation between overweight and obesity, community food insecurity and poverty.[56] In 2014, a Virginia Food Desert Report concluded that food deserts and poverty were highly correlated, and people who are of a low socio-economic statues tend to have higher access to fast food instead of local fruits and vegatables.[56] Virginia has an economic opportunity for production of local fruits and vegetables that could positivity influence food security and health related risks of the state and its communities.[57] The ability to bridge the gap between agriculture, food, and the community is a prominent priority to create a sustainable food system.[57] However, research lacks on current systemic collaborative efforts in Virginia. Therefore, research on FPG in Virginia is important to study collaborative food system efforts, and how these may influence holistic change to create a healthy, resilient and sustainable food system.[46]

Figure 2.5 Prevalence State of Food Insecurity in the United States 2015-17



Source: USDA, Economic Research Service, using data from the December 2015, 2016, and 2017 Current Population Survey Food Security Supplements.

A 2010 Local Food System Assessment found the need for interdisciplinary work and collaborating with all players of the food system to develop a localized and healthy food system.[57] According to a Virginia Cooperative Extension report on Community, Local and Regional Food Systems (2016), a community-focused food system is cultivated through strong leadership that involves a diverse expanse of community voices.[58] This partnership approach involves establishing collaborations to create a more resilient community food system.[58] This report outlined the possibilities for Virginia's regional food system; like mapping Virginia's food activities, programs on food security, education approaches for facilitators, and inclusive communication with the community.[58] The Community, Local and Regional Food System report (2016) outlined ongoing project addressing food security in Virginia.[58] These projects include: Southwest Virginia's Community Food Security Assessment: an Appalachian Foodshed Project Initiative, The Food Innovations Program Network, Advancing the

Success of Virginia's Food Entrepreneurs, Evaluation of the Family Nutrition Program, and Transforming Food Insecure Neighborhoods through Urban Agriculture.[58] Furthermore, food initiatives and projects are under researched to understand their efforts to create a sustainable, local food system. [59]

In addition to, there is a lack of research on collaboration among local government, agricultural, and other food system stakeholders to create a sustainable food system. Several reports about Virginia concluded that there was a need to research more collaborative efforts to study how FPG direct food systems change.[56] The Johns Hopkins' Center for a Livable Future FPC directory (2016) identified 11 formal FPG in Virginia.[32] Clayton et al. (2015) described the importance of examining FPG partnerships and collaborative efforts in advancing policy goals, issue framing, and activities of related networks.[4] However, there is a lack of research on established collaborative efforts to align the activities and priorities of FPG in Virginia to support a sustainable food system.

2.9 Current food policy legislation in Virginia

The USDA administers 15 federally funded food and nutrition assistance programs that are allocated funds from the Farm Bill and the Child Nutrition Reauthorization Act.[60,61] The programs funded by the Farm Bill include SNAP, The Emergency Food Assistance Programs, and the Fresh Fruit and Vegetable Program.[60,61] The National School Lunch Program, The National School Breakfast Program and Special Supplemental Program for Woman, Infants and Children are funded through the Child Nutrition Reauthorization Act.[60,61] Table 2.2 outlines the 15 USDA programs allocated funds from the Farm Bill or the Child Nutrition Reauthorization Act. The U.S. government does not have a designated department or agency that works on food policy, which prevents the federal government's ability to address the food system holistically, and creates a fragmented funding stream for nutrition and health-related policies and programs.[5]

Table 2.2 United States Department of Agriculture Administered Federal Food and Nutrition Programs

U.S. Farm Bill Funded Programs	**Child Nutrition Reauthorization Act (Healthy Hunger Free Kids Act of 2010) Funded Programs**
Commodity Supplemental Food Program	Child and Adult Care Food Program
Food Distribution Program on Indian Reservations	National School Lunch Program
National Processing Agreement	School Breakfast Program
Nutrition Services Incentive Program	Special Milk Program
The Emergency Food Assistance Program	Summer Food Service Program
Supplemental Nutrition Assistance Program	Special Supplemental Nutrition Program for Women, Infants, and Children
Fresh Fruit and Vegetable Program	Farmers' Marker Nutrition Program
	Senior Farmers' Market Nutrition Program

A 2010 Northern Virginia Local Food System Assessment, which is close to the center of political influence, concluded strong federal, state, and local policy support for developing local food infrastructure.[57] The political climate supports the development of local food systems' programs, such as farm-to-table procurement programs, local food markets, incentives at farmers' markets, and the creation of FPG to discuss local, state, and federal government policy recommendations.[57] In 2010, Virginia's former Governor Bob McDonnell launched "Choose the Commonwealth."[57] This program encouraged the consumption of Virginia-grown food and beverage products.[57] Choose the Commonwealth could expand Virginia's agriculture and will help leverage food system job opportunities in the state's workforce.[57] This strategy helps increase exports, providing more food-sector jobs, and increases the state capacity for a sustainable food system.[57] More recently, the Virginia State Legislature in 2016 approved an income tax credit for food crops that are grown by a person who engages in farming and donates excess food to a nonprofit food bank.[62] These food crops include grains, fruits, nuts, or vegetables.[62] Another state and regional level food policy is SNAP and

the electronic benefit transfer system at farmers' markets to increase fruit and vegetable sales and consumption among safety-net program recipents.[62]

At the local level, several counties and cities have adopted Healthy Eating and Active Living (HEAL) policies.[63] HEAL is an initiative that supports local policymakers to ensure that as many Virginians as possible live a high-quality and healthy life.[63] Other policies pertaining to community food security at the local level are the sale of fresh farm foods by a health officer, regulations on chicken products, bee keeping regulations, and zoning codes for farmers' markets.[64] Numerous Virginia FPG or networks, such as the Chesapeake Foodshed Network, have created webinars or educational series on overcoming barriers to implementing food policy or food procurement programs.[62] However, research is lacking to align the priorities and activities of place-based FPG toward collaborative action to create a sustainable food system.

2.10 Conclusions and knowledge gaps to inform the research questions

Current evaluation tools used for assessing FPC structure, priorities, issue framing and activities have been limited to surveys, interviews, and case study analysis. In 2016, 411 active FPC existed in the U.S., tribal nations and Canada. This comprehensive literature review identified several knowledge gaps.

First, data or evidence are lacking for how Virginia's FPG interact with other food system actors related to their issue framing, priorities, and activities. The structure, activities, priorities, and issue framing of the FPG tends to direct how sustainable change is created in a food system. The first research objective will conduct a scoping review to inventory the number, location and describe the characteristics of Virginia's FPG. The results will be used to inform the design and facilitate and recruitment of FPG representatives to participate in a mixed-methods study.

FPG have been shown to influence numerous aspects in creating a sustainable food system. However, research is lacking for how the Commonwealth of Virginia is addressing the health of the food system through FPG. The second research objective used the FPC-SAT Qualtrics survey to collect quantitative data related to the issue framing, priorities and activities of Virginia's FPG that align with a sustainable food system. The data will be analyzed using the FPC framework to identify areas for organizational capacity, social capital, context, council effectiveness and community outcomes.

Research suggests that collaborative efforts help to align and affect change in the local food system. Nevertheless, there is no research on the collaboration of FPG in the Commonwealth of Virginia. The third research objective identified the opportunities and challenges to align diverse FPG priorities and interests related to developing a sustainable food system. Stakeholder interviews were conducted based on the VicHealth partnership analysis tool and guided by the principal-agent theory. Selected FPG representatives will be recruited to participate in the interviews to understand how to increase engagement to promote capacity building across the Commonwealth of Virginia.

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Chapter 3 Methodology

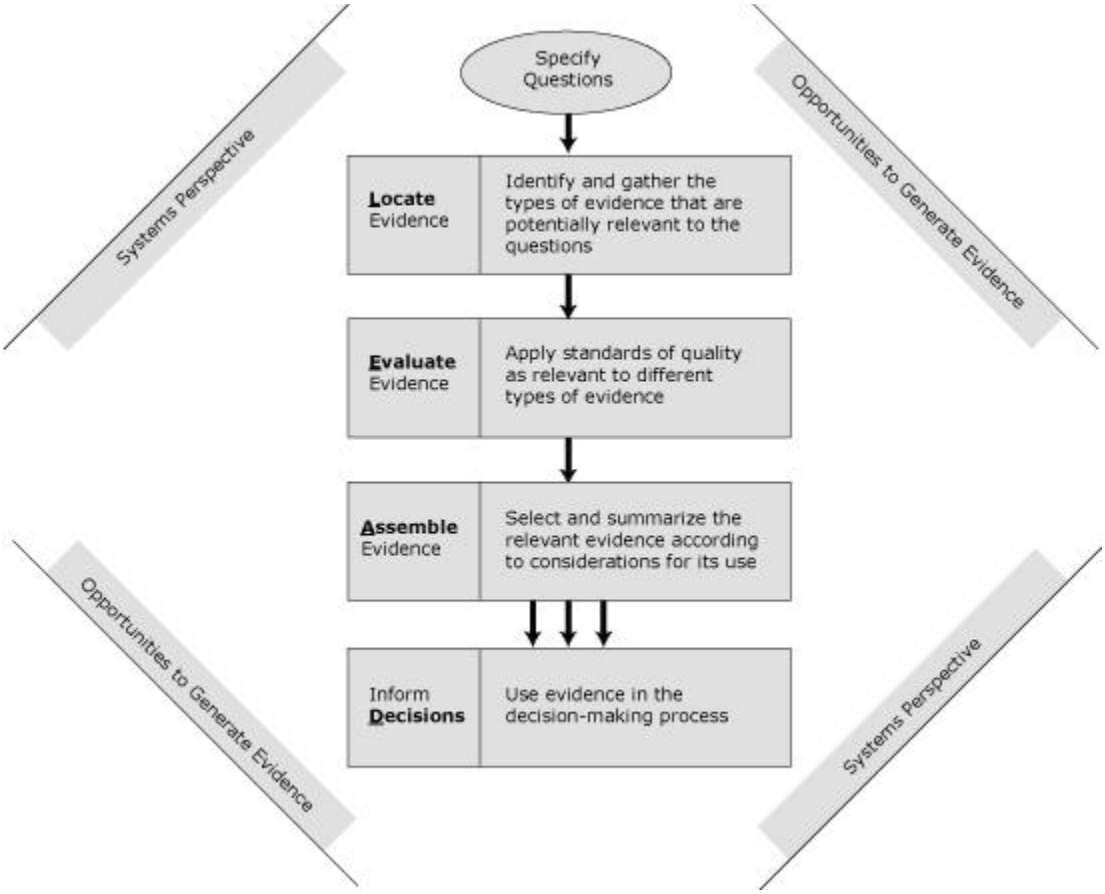
Background

For this research study, the principal-agent theory, FPC framework, and the VicHealth partnership analysis tool were used to guide data collection and analysis.[1–3] Outlined below are the theories and frameworks as they relate to my three research objectives.

The LEAD Framework

The chapter 2 literature review was conducted using the LEAD framework (e.g., *locate, evaluate, and assemble evidence* to inform *decisions*) to identify relevant documents on FPG in Virginia, the U.S. and Canada.[4] The LEAD framework outlines the linkages, relationships, interactions, and behaviors of given elements to inform a deeper understanding of a given system.[5] This framework encourages researchers to combine all evidence; including, theory, experience, gray literature, and scientific evidence to inform policy-relevant decision-making (Figure 3.1). The LEAD framework was selected to outline the comprehensive literature review because FPG research only has three decades of documentation, it is comprised of numerous stakeholders, and is multi-dimensional. Additionally, this framework is appropriate to use all available evidence to inform further study actions.

Figure 3.1 LEAD Framework



Obtained from Kumanyika et al. The LEAD Framework: Using tools from evidence-based public health to address evidence needs for obesity prevention. *Prev Chronic Dis.*2012;9:E125.

Between August 2017 and September 2018, a review of three electronic databases (i.e., Google Scholar, PubMed and ScienceDirect) was conducted in tandem with a website analysis to identify peer-review literature relevant to FPG actions in creating a sustainable food system. Additionally, annotated bibliographies were searched to identify studies that include FPG-related evidence. Lastly, several Internet browsers (i.e., Google, Firefox and Explorer) were researched to identify relevant gray-literature reports, case studies, websites of Virginia, U.S. and Canada FPG, governmental and non-governmental organizations and press releases related to FPG contribution to develop a sustainable food system.

The qualitative-research criteria included data relevance, professional judgement, and contextual analysis was used to inform and align other research objectives.[6] Furthermore, the 148 references were categorized into published articles, gray-literature reports, and website analysis resources using Mendeley reference management system. Table 3.1 below describes the methodologic approach used to acquire, organize, and analyze the evidence for FPG in the U.S. and Canada.

Table 3.1 LEAD Methodology Used to Acquire, Organize, and Analyze the Evidence for Food Policy Councils in the U.S. and Canada

Published literature for FPG or food groups structure, activities, priorities and issuing framing healthy, resilient and sustainable food systems between 2008 and 2018. The search strategy used the LEAD approach (i.e., locate, evaluate, and assemble evidence to inform decisions) as described below.

Search terms and syntax

- The search used free terms and subject headings (i.e., food or food policy or food policy councils or coalitions or groups AND food justice or food democracy or food movement or food security or food systems or community food security or community food systems AND United States, Canada or Virginia

Inclusion criteria

- Published journals and reviews, gray-literature reports about FPC that promoted alternative food movements between 2008-2018 OR FPC involvement in community food security OR Virginia FPC OR FPC and food justice OR food democracy OR healthy food system OR sustainable food system.
- Focused on United States FPC: Canada, U.S., and Virginia, FPC or FPG or food groups
- Targeted groups: Virginia and Washington D.C. population, adults, community members and stakeholders

Exclusion criteria

- Non-U.S. related alternative food movements and FPC excluding Canada
- Proprietary documents from businesses or organizations not available in the public domain

Evidence selection criteria

- Qualitative research criteria (i.e., data relevance, research-design relevance and quality, contextual relevance, and credibility)

LOCATE Evidence	A literature review was conducted between August 15, 2017 and May 1, 2018 using these sources: • Eight electronic databases (i.e., Google Scholar, PubMed, ScienceDirect, and website analysis) • Gray-literature studies, reports, government, academic institutions, private foundations, non-governmental organizations, website analysis, and business websites
EVALUATE evidence	Evidence sources (n=148) were selected and organized into a Mendeley reference management system and a reference data sheet
ASSEMBLE evidence	Data was compiled from the evidence sources into a Mendeley reference library and then formatted into a comprehensive literature review
Inform **DECISIONS**	Findings will used to expand the knowledge and identify knowledge gaps related to the evaluation of FPC in the United States and FPG in the Commonwealth of Virginia and to uncover Virginia FPG' structure, priorities', activities, and issue framing

Research Approach

As discussed in Chapter 2, there is an abundance of conceptual frameworks utilized to investigate the health, sustainability, and resiliency of a food system. Nonetheless, there is a lack of research on conceptual frameworks and theories to address collaborative action in the form of FPG in the Commonwealth of Virginia to develop a sustainable food system. The primary purpose of this study was to identify and analyze the characteristics, structure, issue framing and priorities of diverse FPG across the Commonwealth of Virginia to validate and inform collaborative actions or strategies towards developing a sustainable food system. This M.S. thesis is comprised of one study with three research questions that used the principle-agent theory and a mixed-methods approach to implement three objectives described below:

RO1: *To inventory the number, location and describe the characteristics of Virginia's FPG to invite relevant staff to participate in a mixed-methods study.*

Method: *Conduct a scoping review to examine a sample of Virginia's FPG (n=55) are structured.*

RO2: *Describe the issue framing, priorities and activities of the selected Virginia's FPG that align with a healthy, resilient and sustainable food system.*

Method: *Administer a 31-item online Qualtrics survey guided by the FPC Framework key areas (i.e., leadership, active membership, council climate, council structure, social capital, synergy, impact, challenges, and technical assistance needs).*

RO3: *Identify the opportunities and challenges to align diverse FPG priorities and interests to develop a healthy, resilient and sustainable food system.*

Method: *Conduct stakeholder interviews with a convenience sample from RO1 inventory through a 16-item interview guided by the principal-agent theory and the VicHealth partnership analysis tool.*

RO1 conducted a scoping review to examine how current Virginia FPG (n=55) are structured. RO2 identified the priorities, activities, and issue framing of Virginia's FPG and how their actions align to develop a healthy, resilient and sustainable food system by utilizing the FPC-SAT Qualtrics survey. The data from RO2 was summarized using descriptive statistics. Lastly, RO3 identified areas for FPG to collaborate and align to promote a healthy, resilient, and sustainable food system by conducting semi-structured qualitative stakeholder interviews that were hand coded by qualitative coding dictionaries to develop a thematic narrative summary. Below, each of the three research objectives are described in relation to the framework and guiding theory applied in this M.S. thesis study.

Research Objective (RO1)

To achieve RO1, a scoping review was conducted to explore the characteristics and structure of FPG in the Commonwealth of Virginia. A scoping review is a methodological approach that connects research concepts and main sources of evidence when a topic has not been previously comprehensively studied.[7] Scoping reviews have a six-step methodological process including to (1) identify the research question; (2) identify relevant studies or evidence; (3) select the evidence; (4) compile the evidence; (5) collate, summarize and report the results; and (6) consult with stakeholders to identify literature gaps and connect the issue to the research goal and outcomes.[7] The scoping review process for RO1 is outlined in Table 3.2.

Between March 2018 and July 2018, the lead reviewer (Walker) examined Virginia's FPG websites, FPG databases and relevant gray literature to identify the number, location, structure, and the characteristics of FPG in Virginia. The website analysis and other pertinent resources were compiled into an FPG inventory table (Appendix B) to inform the RO2 and RO3. RO2 and RO3 included an examination of the structure, activities, priorities, and issue framing of Virginia FPG. Table 3.2

describes the scoping review process used to collect information on Virginia's FPG. In the final transcript, a map of the location by city and county of the FPG in the Commonwealth of Virginia was created. The visual map was developed using the Tableau Software.[8] Colleagues in Data Visualization Studio at Virginia Tech collaborated design and create the visualization.

Table 3.2 Scoping Review of Virginia's Food Policy Groups

Scoping Review Methodological Steps	Research Outcome
Research Question	What are the characteristics and structure of diverse FPG working on food system issues across the 95 counties of the Commonwealth of Virginia?
Research Objective	To inventory the number, location and describe the characteristics of Virginia's FPG to invite relevant staff to participate in a mixed-methods study.
Relevant Studies, Literature and Evidence	A website and gray literature report analysis of Virginia's FPG groups was conducted in March 2018 to gather pertinent information such as primary contact, structure, and characteristics.
Evidence Selection	Evidence selection of RO1 included reports, the Johns Hopkins' Food Policy Council Directory, USDA Food Hub Directory, Virginia Food System Council Directory, the Chesapeake Foodshed Network Database, and website analysis (i.e., Firefox, Google, and Explorer) of FPG in the Commonwealth of Virginia including food hubs, coalitions, networks, councils, FPC, food banks, teams, and collaborative organizations. Food and beverage organizations and industries were excluded from the evidence selection.
Compiled Evidence	Evidence was compiled into a FPG Inventory Excel spreadsheet (see Appendix B)
Results	The FPG Inventory will be utilized to inform RO2 and RO3 in stakeholder identification and selection.

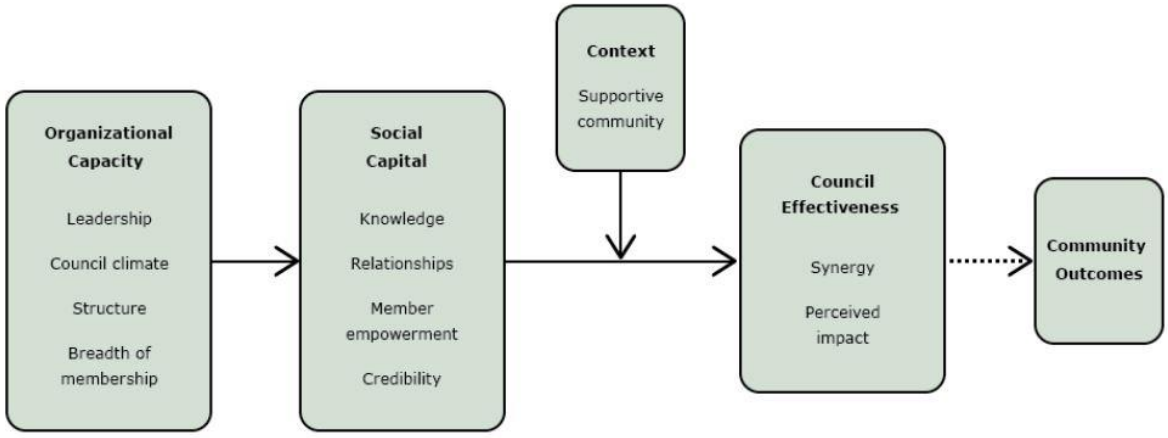
Conducted between March- July 2018

Research Objective (RO2)

For RO2, the FPC Framework was adapted to assess five domains: organizational capacity, social capital, context, council effectiveness and community outcomes.[2] Figure 3.2 provides a visual representation of the FPC Framework.[2] The Food Policy Council Self-Assessment Tool (FPC-SAT)

has been validated and found to be a highly reliable tool in testing FPC organizational capacity, social capital, context, council effectiveness and community outcomes.[2] The FPC-SAT was adapted to a 31-item Virginia Tech Qualtrics survey that assessed key areas of the five domains such as leadership, active membership, council climate, council structure, social capital, synergy, impact, challenges, and technical assistance needs of FPC.[2]

Figure 3.2 Food Policy Council Framework



Source: Calancie L, Allen NE, Weiner BJ, Ng SW, Ward DS, Ammerman A. Food policy council self-assessment tool: Development, testing, and results. Prev Chronic Dis. 2017;14:160281. doi:10.5888/pcd14.160281.

RO2 is a low-risk study that was proposed to the Virginia Tech Institutional Review Board (IRB) in August 2018 and approved in October 2018. The FPC-SAT survey was formatted to a 31-item Virginia Tech online Qualtrics and submitted with the IRB protocol (Appendix A).[9] Between March 2018 and July 2018, a FPG inventory (Appendix B) was developed to identify potential informants and collect information about the number, location, and characteristics on FPG in Virginia. Data collection for this study with human subjects began after the Virginia Tech IRB approval in October 2018. Before the survey was sent, the study coordinator pilot tested the survey structure, questions, and vocabulary with stakeholder groups (n=2). Then the FPG representatives in Virginia were contacted via email between October 2018 and February 2019. The primary contact was sent the

survey, and up to two reminder emails during the recruitment phase. There was no financial incentive for completing this survey. The respondents who participated were a part of an innovative research study of Virginia FPG. The data sample included 55 FPG inventoried from RO1 in the Commonwealth of Virginia.

RO2 data were analyzed using descriptive statistics, and summarized as quantitative tables, and conceptual average graph of responses by Statistical Package for the Social Sciences (SPSS) statistical software (Armonk, NY: IBM Corp). The descriptive statistics provided quantitative data on the survey responses in the key areas (i.e., leadership, active membership, council climate, council structure, social capital, synergy, impact, challenges, and technical assistance needs of FPC), and the effectiveness of each FPG in the five values of the FPC Framework (Figure 3.2). The results from RO2 informed researchers on the priorities and activities of FPG in Virginia to develop a sustainable food system.

Research Objective (RO3)

A theory of partnerships is useful to understand the interconnectivity and interactions among FPG. Strategic alliances, collaborations, and voluntary public-private partnerships are recommended by numerous authoritative bodies.[10] FPG and partnerships have emerged in response to food, nutrition, and health-related issues.[3] Currently, the research to support how effective collaborations and partnerships in Virginia are to address food system issues is lacking.

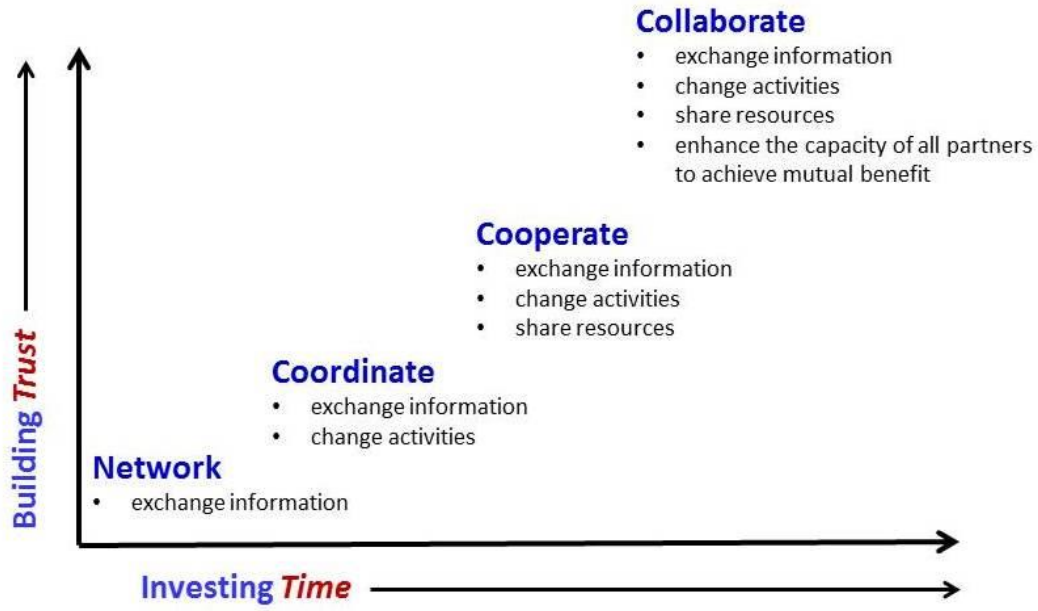
Kraak et al. (2014) examined the underlying theories to explain how accountability was framed by different disciplines in order to develop an accountability framework for healthy food environments.[3] The principal-agent theory is often used by political scientists to explain how stakeholders interact. This theory is defined as "each actor having his/her own set of goals and objectives, and these actors take action based on an analysis of the costs and benefits of various available options to maximize their self-interest."[3] The principal-agent theory is applicable to guide the use of the VicHealth partnership analysis tool to identify the priorities, challenges, and opportunities for FPG partnerships.[1] RO3 applied the principal-agent theory to analyze data FPG collaborations in the Commonwealth of Virginia.

VicHealth partnership analysis tool as a basis to develop the stakeholder interview guide

The VicHealth partnership analysis tool measures the purpose of existing partnerships and the capacity to collaborate to align goals and values of different public health organizations.[1] Therefore, the VicHealth partnership analysis tool provided an outline for an interview questions and established an understanding for the opportunities and challenges for aligning diverse FPG to support a sustainable food system. This was guided by the principal-agent theory to identify accountable partnerships, opportunities and challenges.

For RO3 the VicHealth partnership analysis tool was incorporated into the interview guide to study stakeholders' views on the opportunities and challenges to align diverse FPG to create a sustainable food system. The Victorian Health Promotion Foundation in Melbourne, Victoria, Australia, developed the VicHealth partnership analysis tool to describe partnership capacity and to monitor the efficiency and effectiveness of established partnerships.[1] The Victorian Health Promotion Foundation developed a continuum for public health representatives to distinguish between the purpose and the nature of partnership interactions.[1] This continuum has four progressive categories of interaction and engagement (i.e., networking, coordinating, cooperating and collaborating) that are influenced by time invested in the engagement and building trust (Figure 3.3).[1]

Figure 3.3 Types of Interactions and Engagement



Adapted from VicHealth. *The partnership analysis tool. A resource for establishing, developing and maintaining partnerships for health promotion*. Australia: Victoria Health Promotion Foundation, May 2011.

This framework promotes collaborative action by capacity building, and community engagement to create public health change.[1] The partnership analysis tool helped researchers explore how to make FPG more successful within a community through collaborative action and capacity building when paired with other assessment tools through mapping the differences between networks, coordination, cooperation, and collaboration.

The VicHealth partnership tool defines a network as an exchange of information with low trust and time invested.[1] To coordinate, partnerships must exchange information, change activities, invest more time and develop trust.[1] Cooperation requires the second most amount of trust, and time as well as information exchange, activity development, and shared resources.[1] Collaboration requires building capacity to foster the most trust over time to mutually benefit all partners.[1] Current assessments of Virginia, found the need for conducting research on the food system interdisciplinary partnerships to promote changes that support a healthy food system.[11] The research coordinator (Walker) utilized the partnership analysis tool to study FPG collaboration to address a knowledge gap to inform FPG activities and space for alignment with other actors to create a sustainable food system in the Commonwealth of Virginia.

Along with the RO2, the RO3 was approved by the Virginia Tech IRB in October 2018 because it involved conducting semi-structured interviews with recruited participants from RO2. A convenience sample of stakeholders from the RO1 inventory received a phone call, or email to gauge interest in an in-depth interview on their FPG over the phone, via Zoom web video or in-person. The recruited participants were interviewed by research coordinator (Walker) by phone, Zoom video call or in-person between October 2018 and February 2019. An interview guide was developed and was submitted to the Virginia Tech IRB with the study protocol. This 16-item interview guide was used

to conduct the stakeholder interviews (Appendix F) that were audio recorded using an iPad voice memo application. The average length of the interview was no more than 60 minutes.

Between September 2018 and December 2018, the research coordinator (Walker) pilot tested the interview guide with selected stakeholders (n=2) to assess the vocabulary, the structure, and the length of the interview. After revisions were made, the interviews with key informants were conducted using participants from the Virginia FPG inventory who responded to the email or phone call. The semi-structured interview questions were adapted from the VicHealth partnership analysis tool (Appendix F). The qualitative interview data provided an understanding on key FPG informants for the perceptions and phenomena of participating members.[12] Each interview was transcribed and the written transcript was refined with taped interview and edited for accuracy. The taped interviews were transcribed and analyzed using qualitative coding dictionaries to identify themes and develop narrative summary about Virginia's FPG.[1]

The research coordinator (Walker) followed five steps to complete the qualitative analysis which included:

1. Immersion in the written-data transcripts;
2. Coding the text;
3. Creating a codebook to categorize the text;
4. Generating and organizing the text; and
5. Analyzing emergent themes from the text.

Data triangulation is a form of cross-comparison of evidence across different research methods that is used to enhance the credibility and validity of the results and conclusions.[13,15] The research coordinator (Walker) triangulated evidence by reviewing the RO1 inventory, the FPC-SAT Qualtrics survey (RO2), and stakeholder interviews (RO3) independently to resolve any coding discrepancies.

The final step involved organizing and analyzing the compiled text from the interviews into emergent themes according to perceived opportunities and challenges for FPG to collaborate, and map established partnerships of FPG (i.e., networking, coordinating, cooperating, or collaborating) in Virginia.

Dissemination Strategy

A dissemination strategy is an intentional approach to distribute information and research from a particular project to target population.[13] In this section, the dissemination strategy for the FPG study is outlined. Once the finalized deliverables were created (i.e., visual digital map, FPG inventory, RO2 data and RO3 data), the researcher (Walker) described the results in the M.S thesis document. Future dissemination strategies include presenting the M.S. thesis findings at conferences, sharing data with key informants such as colleagues at the University of North Carolina at Chapel Hill, that has an informative database on FPC, and with contacts at the Johns' Hopkins Center for a Livable Future, which holds a national database for FPC. The research coordinator plans to collaborate with researchers at the University of South Florida who are interested in FPG, share data with The Virginia Food Systems Council, and the Chesapeake Foodshed Network that both contain FPG directories and a resource database. The research coordinator (Walker) will directly contact primary informants or network connections to discuss ways to disseminate final research documents and findings. Future dissemination plans include manuscript publication and an online repository of FPG contact information, location, and characteristics. The online repository will contain an interactive link to the FPG Map that is a visual representation of the RO1 database. The interactive link was designed using Tableau Software; which is a mapping tool for qualitative and quantitative data. The FPG Map will be disseminated to the public to be used in further FPG research. Furthermore, the researcher (Walker) plans to attend conferences such as the Agriculture and Human Values Conference, to

report findings, disseminate the research protocol abstract to the Center for a Livable Future's annotated bibliography on future, current and published work on FPC, and to participate in and present at upcoming webinars hosted by the Chesapeake Foodshed Network and the Center for a Livable Future.

Chapter 3 Researcher Reflexivity Statement

The Robert Wood Johnson Foundation defines reflexivity as the process to identify the researcher's knowledge development and background of the research project.[14] According to Malterud (2001), "A researcher's background and position will affect what he/she chooses to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of findings and conclusions."[15]

I am currently a 24-year old female graduate student in the Department of Human Nutrition, Foods, and Exercise at Virginia Tech with a concentration in Community and Behavioral Sciences. Raised in Southwest Virginia, I remained in the Appalachian Mountains by enrolling at Appalachian State University in Boone, North Carolina in the Department of Human Nutrition. Being deeply rooted in community gardens in Boone and volunteering with organizations that helped the impoverished and food insecure, I became passionate about rural local food systems. During my undergraduate career, I took two family and consumer science internships with Cooperative Extension. I was able to manage a community garden that provided fresh fruits and vegetables to low-income, rural residents in Southwest Virginia. During my time at the North Carolina Cooperative Extension office, I attended and participated in a local food policy council which catalyzed to my current interest in how collaborations among stakeholders and the community can influence a local food system.

After moving to Blacksburg, I became involved with the Civic Agriculture and Food Systems minor at Virginia Tech. This minor is an interdisciplinary collaborative that helps inform students about the interconnectedness of the community food system through experiential learning techniques. An opportunity arose to do research for a community kitchen in Blacksburg which created a connection to work through a regional network: The Chesapeake Foodshed Network. Through this network, I developed an understanding for planning and organizing the food system through backbone support and connecting stakeholders across the Chesapeake Watershed region.

I continue to find opportunities and challenges in creating collaborations across a locality, a state and regionally. As an North Carolina Cooperative Extension intern and a network management assistant the Chesapeake Foodshed Network, I witnessed the creation of democratic organizational strategies to amplify unheard voices surrounding a local food system. The power and ability of collaboratives, networks, and councils to provide systemic change struck me and I wanted to research the opportunities and challenges in Virginia. My passion for collaboration comes from seeing people organize themselves, consent to the idea of horizontal integration and decision making; and understanding the inequities, injustices, and unsustainable ways that are present in the current food system. These wicked problems are complex and are inherent in our current food system. I value sustainable food systems to build and develop economic capacity for local farmers, environments, and healthy food access for all. Furthermore, my excitement for my research comes from the possibility to be a part of creating a sustainable food system using the collaborative organizational model.

Moreover, my Master's thesis work was my first experience conducting an independent, explanatory, mixed-methods research study. In the Fall semester of 2017, I obtained my IRB and Institutional Animal Care and Use Committee certification. These certifications provided the credentials for me

to conduct ethical research. My passion for mixed-methods research stems from my diverse experiences and coursework at Virginia Tech that included Qualitative Research One and Quantitative Research One. More so, I had the opportunity to assist in community research projects such as data collection for the Prices Fork Community Kitchen and data analysis for a local food access network. These experiences and introductory coursework influenced my methodologies for my Master's research.

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Chapter 4 Results

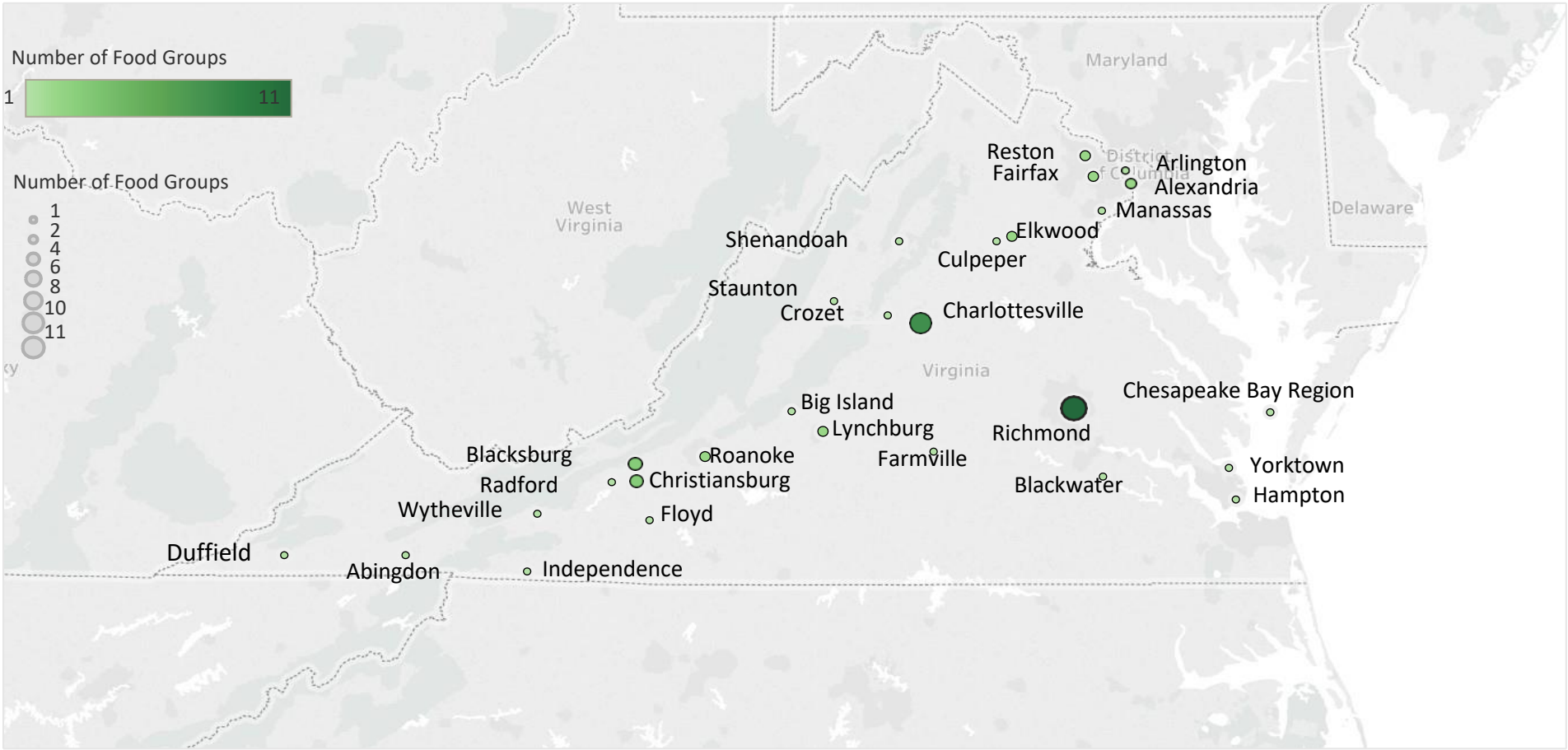
The results of this exploratory study are described in this chapter in order of each study objective, which include the results for the: 4.1) RO1 visual map of FPG located in Virginia, 4.2) RO2 quantitative survey, and 4.3) RO3 stakeholder interviews.

4.1 RO1 Results for FPG Inventory and Location

Figure 4.1 offers a visual representation of FPG across Virginia and was developed using Tableau software with technical assistance provided by the Data Visualization Studio at Virginia Tech. The figure shows the location of the 55 FPG in the 95 counties and corresponding cities in the Commonwealth of Virginia identified in the RO1 inventory (Appendix B). Results found that 23 of the 95 counties had identified FPG. About 20% of the FPG (n=11) are located in Richmond, the capitol of Virginia. About one third of the FPG (34.5%, n=19) are located in Charlottesville (n=8) and Richmond (n=11). About 15% (n=8) of the FPG are located near Washington, D.C; 24% (n=13) are located in Southwest Virginia region (i.e., Blacksburg, Roanoke, Independence, Abingdon, Wytheville, Christiansburg, Radford, Duffield and Floyd); 18% (n=10) located in Central Virginia region (i.e., Lynchburg, Big Island, Farmville, Crozet, Staunton and Culpepper); and less than 1% (n=4) are located in Coastal Virginia region (i.e., Blackwater, Yorktown, Hampton and Chesapeake Bay). Only one FPG, The Chesapeake Foodshed Network identified as working across a multi-state region. The data for Figure 4.1 were compiled in an FPG inventory (Appendix B) that summarizes the number, location, characteristics and contact information for FPG across the Commonwealth of Virginia.

Figure 4.1 Distribution and Location of Food Policy Groups across the Commonwealth of Virginia

Food Policy Groups Across Virginia



Notes: Created December 2018. This graphic displays FPG names across Virginia. The size and color represent the density of the FPG, with larger dots and darker coloration representing a higher density.

4.2 RO2 Results for FPC-SAT Survey

Table 4.1 summarizes the demographic profile of the RO2 FPC-SAT survey participants. About a half of the participants (50%, n=8) were female, a quarter (25%, n=4) of the respondents were 34-44 years old, and almost two-thirds (62.5%, n=10) reported their race as white or Caucasian.

Table 4.1 FPC-SAT Participant Demographic Profile

Characteristics	**FPC-SAT Participants (n=16)***
Age (years)	
18-24 years old	1 (6.3%)
24-34 years old	3 (18.8%)
34-44 years old	4 (25.0%)
45-54 years old	3 (18.8%)
Unanswered**	5 (31.3%)
Gender	
Male	3 (18.8%)
Female	8 (50%)
Other	
Unanswered	5 (31.3%)
Race/ethnicity	
Black	1 (6.3%)
White	10 (62.5%)
Unanswered	5 (31.3%)

* The Research Coordinator conducted the online survey between October 19, 2018 and February 6, 2019.

** The demographic questions were optional and about one third (31.3 %, n=5) of survey participants did not answer the question on gender and race.

Table 4.2 describes the demographic profile of the participating FPG (n=16) which includes the annual budget and location at the county, city, state, regional, and national levels. These structural features are important to understand the organizational capacity of FPG. Almost half of the FPG

(43.8%, n=7) conduct their work at the city and county level, and 75% (n=12) of surveyed FPG have a budget below $50,000.

Table 4.2 Food Policy Demographics

Characteristics	**FPG Demographic Profile (n=16)**
Location*	
City	7 (43.8%)
County	7 (43.8%)
Region	5 (31.3%)
National	
State	6 (37.5%)
Annual Budget (U.S. dollars)	
< $50,000	12 (75.0%)
$50,000-$100,00	1 (6.3%)
$100,000-$300,000	1 (6.3%)
$300,000-$500,000	1 (6.3%)
>$500,000	1 (6.3%)

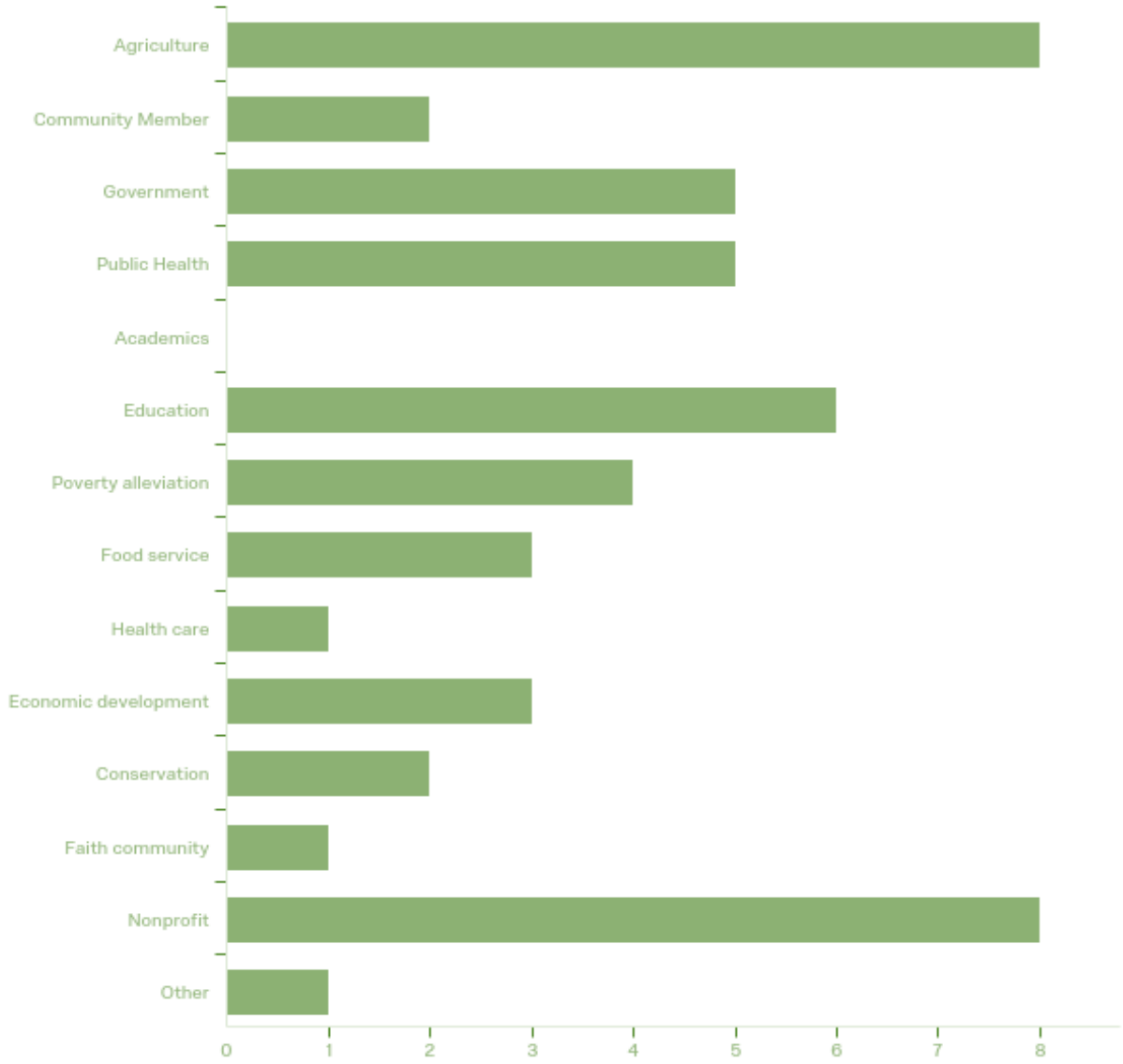
*Respondents could pick all applicable localities.

The tables and figures below (4.3-4.12) represent the data that relate to the five key domains of FPC Framework that served as an outline for the adapted FPC-SAT survey. The survey data were coded and analyzed using IBM SPSS Statistics for Windows version 25 (Armonk, NY: IBM Corp), and the tables provide descriptive statistics for the 31-item survey responses. A brief description of each domain is provided in Chapter 3 Methods Figure 3.2 FPC Framework. Figure 4.2 below describes the food system sectors with which the survey participants identified. Less than half (43.8%, n=7) of the survey participants characterized their affiliation as a nonprofit with an agricultural focus, over one-third (37.5%, n=6) worked in education; and one-third (31.3%, n=5) reported as working in public health or the government. Finally, none of the respondents

represented the academic sector. Only one-fifth (12.5%, n=2) of respondents identified as economic development, a member of the community, or a part of the conversation; 18.8% worked on the issues of poverty and food service (n=3); and 6.3% (n=1) identified as health care provider, faith community or a consultant.

Organizational Capacity (Leadership, Council Climate, Structure, and Membership)

Figure 4.2 Food Policy Group Structural Sectors



*Participants (n=16) chose all sectors that applied.

Table 4.3 below summarizes the reported FPG interactions with government agencies. About one-fifth (18.8%, n=3) labelled their FPG as a government-driven food policy initiative, almost half (40%, n= 6) claim to use a hybrid model with direct or indirect government participation, one-

fourth (25%, n=4) identified as community-based groups that have capacity for government involvement.

Table 4.3 Food Policy Group Relationship with Local Government

Government Involvement	**FPG Responses (n=15)***
Government-driven food policy initiative (i.e., directed and funded by government and/or may get advice from groups outside of government)	3 (18.8%)
Hybrid model with direct links to government (i.e., endorsed by government and includes dedicated government staff (particularly elected officials) and/or may also receive government funding)	3 (18.8%)
Hybrid model with indirect links to government (i.e., has informal links with government through department employees and/or may receive in-kind support)	3 (18.8%)
Food policy organization linked to government through a secondary agency (i.e., the group itself is not formally connected to government, but may have indirect links through government committees or departments	1 (6.3%)
Civil society organization with limited government involvement (i.e., community-based group that may include government employees as volunteer members and/or may receive government grants)	4 (25.0%)
Civil society organization with no government involvement (i.e., community-based group that does not partner with government officials or departments and/or does not seek government funding	1 (6.3%)

*One respondent did not select a response

Table 4.4 describes the structural function (i.e., working groups), leadership, membership and council capacity. Over half (62.5%, n=10) utilize functional working groups. FPG reported high percentages for leadership which includes the following activities: 56.3% (n=9) conduct effective

meetings, 43.8% (n=7) are receptive to new ideas, 31.3% (n=5) manage conflicts fairly, and 37.5% (n=6) value diversity and use consensus decision-making. Respondents claimed to include a diverse array of food sectors within their FPG group (50.0%, n=8), 61.8% (n=8) strongly agreed or agreed that their FPG was well structured. More than two-thirds (68.8%, n=11) described the council climate was welcoming to new and all members.

Table 4.4 Food Policy Group Organizational Capacity

Structural Function and Organizational Capacity		**FPG Response (n=15)***			
Working Groups					
Working Groups Present		10 (62.5%)			
No Working Groups Present		4 (25.0%)			
Unsure		1 (6.3%)			
Leadership (n=12-13)*	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Run effective meetings	2 (12.5%)	9 (56.3%)		1 (6.3%)	1 (6.3%)
Appear to devote adequate time to their position	5 (31.3%)	3 (18.8%)	3 (18.8%)	2 (12.5%)	
Are receptive to new ideas	4 (25.0%)	7 (43.8%)	1 (6.3%)	1 (6.3%)	
Encourage all members to participate, not just loud or popular voices	4 (25.0%)	5 (31.3%)	3 (18.8%)	1 (6.3%)	
Manage conflicts fairly	5 (31.3%)	4 (25.0%)		4 (25.0%)	
Encourage the food policy group to move toward consensus on decisions	6 (37.5%)	4 (25.0%)	1 (6.3%)	1 (6.3%)	
Value diversity	6 (37.5%)	5 (31.3%)	1 (6.3%)	1 (6.3%)	

Membership (n=13)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Your food policy group includes representatives from diverse sectors of the food system	3 (18.8%)	8 (50.0%)	1 (6.3%)	1 (6.3%)	
Your food policy group has representation from the populations that group's activities target	1 (6.3%)	2 (12.5%)	5 (31.3%)	2 (12.5%)	3 (18.8%)
Your food policy group includes a broad set of perspectives	4 (25.0%)	2 (12.5%)	5 (31.3%)	2 (12.5%)	
Work shared fairly within the food policy group	2 (12.5%)	3 (18.8%)	5 (31.3%)	3 (18.8%)	
Members actively get involved in the food policy group	2 (12.5%)	3 (18.8%)	5 (31.3%)	3 (18.8%)	
Structure (n=13)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Seems well organized	4 (25.0%)	3 (18.8%)	4 (25.0%)	1 (6.3%)	1 (6.3%)
Uses written by-laws or guiding principles	5 (31.3%)	3 (18.8%)	1 (6.3%)	2 (12.5%)	2 (12.5%)
Maintains records (e.g., meeting minutes, time, line of important events)	6 (37.5%)	4 (25.0%)	1 (6.3%)	1 (6.3%)	1(6.3%)
Council Capacity and Climate (n=13)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
There is a shared vision for the food policy group among your members	2 (12.5%)	6 (37.5%)	3 (18.8%)	1 (6.3%)	1 (6.3%)
Members in your food policy group share power in decision- making	2 (12.5%)	7 (43.8%)	2 (12.5%)	1 (6.3%)	1 (6.3%)
Disagreement within your food policy group resolved fairly	3 (18.8%)	5 (31.3%)	1 (6.3%)	4 (25.0%)	
New members in your food policy group feel welcome	1(6.3%)	11(68.8%)		1 (6.3%)	

You are satisfied with the way your food policy group functions	2 (12.5%)	6 (37.5%)	2 (12.5%)	3 (18.8%)	

∗The skewed participation and results are due to the format of the survey (i.e., Qualtrics formatting, ability to skip questions or leave unanswered)

Social Capital (knowledge, relationships, member empowerment and credibility)

Table 4.5 describes the FPC-SAT results for social capital (i.e., knowledge, relationships, member empowerment, credibility). Almost half (43.8%, n=7) of the respondents reported that their FPG participates in various aspects of the food system, 31.3% (n=5) acknowledged their FPG for expanding communication among the food system, 37.5% (n=6) received call to actions from various forms of governing bodies, one-fourth (25.0%, n=4) of the stakeholders recognized their FPG as credible community organization, and one-third (31.3%, n=5) felt the FPG helped to relate food systems issue to decision-makers.

Table 4.5 Food Policy Group Social Capital

FPG Social Capital	**FPG Responses**				
Social Capital: Participation (n=13)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Policies that govern various aspects of the food system	2 (12.5%)	7 (43.8%)	2 (12.5%)	2 (12.5%)	
Strategies to affect food system-related policies	2 (12.5%)	5 (31.3%)	4 (25.0%)	2 (12.5%)	
The roles that other members play in the food system	4 (25.0%)	6 (37.5%)	1 (6.3%)	1 (6.3%)	
Food system-related needs or problems (n=12)	5 (31.3%)	5 (31.3%)		2 (12.5%)	
The complexity of the food system (n=12)	5 (31.3%)	4 (25.0%)		3 (18.8%)	
The work of other food policy groups in your state or elsewhere (n=12)	3 (18.8%)	6 (37.5%)	2 (12.5%)	1 (6.3%)	

Social Capital: Communication (n=12)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Improved your communication with other members, partners, or organizations	5 (31.3%)	3 (18.8%)	2 (12.5%)	2 (12.5%)	
Improved your communication with the organizations that other members, partners, or organizations belong to or represent	4 (25.0%)	4 (25.0%)	1 (6.3%)	2 (12.5%)	1 (6.3%)
Helped you build trust with between members, partners, or organizations	5 (31.3%)	3 (18.8%)	1 (6.3%)	3 (18.8%)	
Helped you build trust with the organizations that other members belong to or represent	5 (31.3%)	3 (18.8%)	1 (6.3%)	3 (18.8%)	
Helped you coordinate efforts between your home organization and the organizations that other members belong to or representment	5 (31.3%)	4 (25.0%)		3 (18.8%)	
Social Capital: Credibility (n=12)	**Yes**	**No**	**Unsure**	**Not Applicable**	
Been publicly recognized for its efforts (e.g. in the media, at events)	4 (25.0%)	4 (25.0%)	2 (18.8%)	1 (6.3%)	
Been consulted by the media to share their perspective on an issue	2 (12.5%)	5 (31.3%)	4 (25.0%)	1 (6.3%)	
Received requests from local or tribal government or other institutions to provide guidance on food system issues	6 (37.5%)	2 (12.5%)	3 (18.8%)	1 (6.3%)	
Social Capital: Credibility (n=12)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Is viewed as a credible group within your community	4 (25.0%)	3 (18.8%)	2 (12.5%)	3 (18.8%)	

Has established a positive reputation within your community	4 (25.0%)	2 (12.5%)	2 (12.5%)	4 (25.0%)	
Is a group that the public views as a trustworthy source of information	4 (25.0%)	1 (6.3%)	3 (18.8%)	4 (25.0%)	
Social Capital: Member Empowerment	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Helped you feel empowered to make food-related changes in your community or your home organization	3 (18.8%)	5 (31.3%)	2 (12.5%)	2 (12.5%)	
Led to opportunities to influence food system-related policies	3 (18.8%)	4 (25.0%)	3 (18.8%)	2 (12.5%)	
Led to opportunities to influence food system-related issues through programs or other non-policy efforts	5 (31.3%)	5 (31.3%)		2 (12.5%)	
Helped you become a "champion" for food-related issues in your community	5 (31.3%)	3 (18.8%)	1 (6.3%)	3 (18.8%)	
Improved your ability to make food-related suggestions to decision-makers	5 (31.3%)	4 (25.0%)	2 (12.5%)	1 (6.3%)	

Context (community)

Table 4.6 summarizes respondent's views on their FPG context within the community. Over half the participants (56.3%, n=9) felt their FPG provided opportunities to influence the food system, and 37.5% (n=6) emphasized that their FPG regularly faced barriers with food policy.

Table 4.6 Food Policy Group Context

FPG Community Context	**FPG Responses**		
Context (n=11)	**Yes**	**No**	**Unsure**
There are opportunities to influence food system related policies in your community	9 (56.3%)	1 (6.3%)	1 (6.3%)
Your food policy group has identified food system-related policy "easy wins" or "low hanging fruit"	6 (37.5%)	4 (25.0%)	1 (6.3%)
Your food policy group regularly experiences barriers when trying to influence food policy (n=10)*	6 (37.5%)	2 (12.5%)	2 (12.5%)

∗The skewed participation and results are due to the format of the survey (i.e., Qualtrics formatting, ability to skip questions or leave unanswered)

Effectiveness (synergy, perceived impact)

Table 4.7 identifies stakeholder views on the impacts of the FPG within the community. Only 18.8% (n=3) had synergy defined as the power to combine the perspectives, resources, and skills of groups of people and organizations, 25.0% (n=4) stated that their prospective FPG developed creative solutions, 31.3% (n=5) felt their FPG encourages creative solutions, 37.5% (n=6) found their FPG supporting resilient food system work, and 37.5%(n=6) responded that their FPG provided space to build community relationships. However, most stakeholders felt uncertain about

how their FPG contributed to equity (18.8%, n=3) or sustainability (25.0%, n=4) within their community.

Table 4.7 FPG Effectiveness

FPG Effectiveness	**FPG Responses**				
FPG Effectiveness: Perceived Impact (n=12)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Has synergy defined (n=11)*	3 (18.8%)	2 (12.5%)	3 (18.8%)	1 (6.3%)	2 (12.5%)
Develops creative solutions to food system-related issues	3 (18.8%)	4 (25.0%)	2 (12.5%)	2(12.5%)	1 (6.3%)
Fosters holistic thinking related to the food system	2 (12.5%)	4 (25.0%)	2 (12.5%)	3 (18.8%)	1 (6.3%)
Accomplishes goals that couldn't be achieved by a single organization	7 (43.8%)	2 (12.5%)		2 (12.5%)	1 (6.3%)
Encourages practical solutions to food systems related issues	2 (12.5%)	5 (31.3%)	3 (18.8%)	2 (12.5%)	
Encourages comprehensive approaches to solving food system-related issues	4 (25.0%)	4 (25.0%)	3 (18.8%)	1 (6.3%)	
Connects multiple food-related systems	4 (25.0%)	5 (31.3%)	1 (6.3%)	1 (6.3%)	1 (6.3%)
FPG Effectiveness: Sustainable Impact (n=12)	**Strongly Agree**	**Agree**	**Somewhat Agree**	**Neither agree or disagree**	**Disagree**
Increased access to healthy foods in your community	1 (6.3%)	4 (25.0%)	3 (18.8%)	2 (12.5%)	2 (12.5%)
Increased knowledge of and/or demand for healthy foods among community members	3 (18.8%)	3 (18.8%)	2 (12.5%)	4 (25.0%)	
Promoted equity within the food system	3 (18.8%)	2 (12.5%)	2 (12.5%)	3 (18.8%)	2 (12.5%)

Supported economic development	2 (12.5%)	3 (18.8%)	1 (6.3%)	3 (18.8%)	2 (12.5%)
Promoted environmental sustainability	1 (6.3%)	3 (18.8%)	2 (12.5%)	4 (25.0%)	1 (6.3%)
Supported resilient food systems	1 (6.3%)	6 (37.5%)	2 (12.5%)	3 (18.8%)	
Help to build relationships between food-related groups or organizations within your community	6 (37.5%)	2 (12.5%)	2 (12.5%)	2 (12.5%)	

∗The skewed participation and results are due to the format of the survey (i.e., Qualtrics formatting, ability to skip questions or leave unanswered)

Community Outcomes

Table 4.8 describes the respondents' views on how the FPG influences community outcomes. Figure 4.3 depicts the type of resources used by FPG in the Commonwealth of Virginia. Almost half of the respondents (43.8%, n=7) stated that their FPG worked toward increasing healthy food access, over half (56.6%, n=9) acknowledged their FPG for increasing healthy food knowledge, 43.8% (n=7) participants recognized their FPG working towards an equitable food system, 50.0% (n=8) of FPG are working to promote environmental sustainability, and over half (56.6%, n=9) accredited their FPG with community relationship building. According to Figure 4.3, almost a quarter of FPG (20.83%) identified funding is their primary utilized resource.

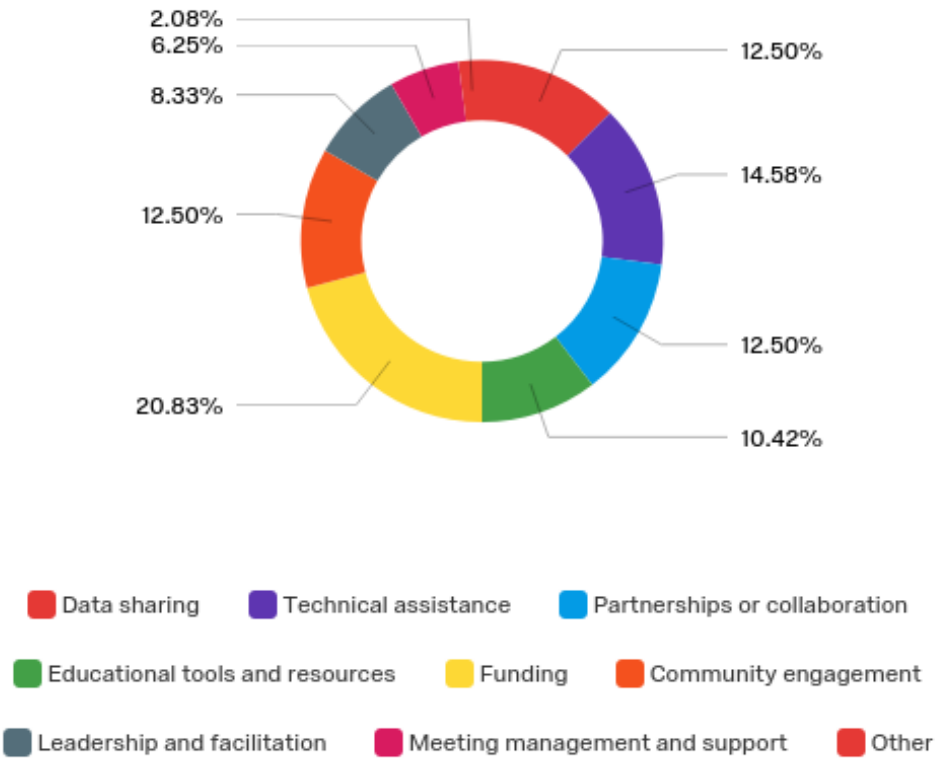
Table 4.8 Community Outcomes

Community Outcomes (n=11)	**Yes**	**No**	**Unsure**	**Not Applicable**
In the past 12 months, has your food policy group worked toward increasing access to healthy foods?	7 (43.8%)		4 (25.0%)	
In the past 12 months, has your food policy group worked toward increasing knowledge of and/or demand for healthy foods?	9 (56.6%)	2 (12.5%)		
In the past 12 months, has your food policy groups work toward promoting equity within the food system?	7 (43.8%)	3 (18.8%)	1 (6.3%)	
In the past 12 months, has your food policy group worked toward supporting economic development?	6 (37.5%)	4 (25.0%)	1 (6.3%)	
In the past 12 months, has your food policy group worked toward promoting environmental sustainability?	8 (50.0%)	2 (12.5%)	1 (6.3%)	
In the past 12 months, has your food policy group worked toward supporting resilient food systems?	6 (37.5%)	3 (18.8%)	2 (12.5%)	
Has your food policy group helped build relationships between food-related groups or organizations within your community?	9 (56.3%)	2 (12.5%)		
Has your food policy group received technical assistance in the past 12 months? (n=12)*	5 (31.3%)	6 (37.5%)	1 (6.3%)	

*The skewed participation and results are due to the format of the survey (i.e., Qualtrics formatting, ability to skip questions or leave unanswered)

Figure 4.3 FPG Resources

Resources, skills, information, or other types of support that helps FPG function: (n=12)



4.3 RO3 Results

The table and figures below summarize the themes from the qualitative stakeholder interviews (n=11) that lasted between 30-60 minutes. The interview questions were organized by the VicHealth partnership analysis tool (Chapter 3; Figure 3.3 and 3.4). The research coordinator (Walker) provides a brief description of each established theme that were prominent results from the interviews (i.e., engagement, purpose and function of the collaboration, alignment, building and mapping partnerships) which are explored further in the Discussion section.

1. **Engagement**

Engagement included why stakeholders expressed that their current partnerships were necessary or important; the diversity of work and partners; and multisectoral collaborations.

2. **Purpose and function of the collaboration**

The purpose and function of the collaboration included organizational capacity (i.e., organizing and achieving programs and policies within a collaborative environment) and factors or activities that influenced the sustainability of current partnerships.

3. **Alignment**

Alignment included the priorities and activities FPG take to create a collaborative environment (i.e., communication streams, decision making, governance structure, planning, policy or programs, funding, services or reporting mechanisms).

4. **Building partnerships**

Establishing and building partnerships included the opportunities and challenges Virginia FPG have to create functional partnerships (i.e., difference in goals, priorities, missions, values, time, governance structures or strategies, goal alignment, funding, or participation).

5. **Mapping partnerships**

Mapping partnerships helps to create and understand the distinction between networking, coordinating, cooperating, and collaborating. The nature of these partnerships are defined as networking is the exchange of information, coordinating is the exchange of information and altering activities, cooperating is the exchange of information, altering activities and sharing resources and collaborating is the exchange of information, altering activities, sharing resources and enhancing capacity for mutual benefit. The visual representation of the current partnerships is mapped according to the VicHealth partnership analysis tool (Chapter 3, Figure 3.3).

The tables and figures (tables 4.9-4.12 and figure 4.4) below represent stakeholders' views on challenges and opportunities for aligning their interests and priorities to create a healthy, resilient and sustainable food system. The tables are organized by relevant themes that were developed by a qualitative coding dictionaries for each interview (n=11). Each 16-item interview transcription was coded based on their community context (i.e., local, state, regional) for privacy. There were five major, salient themes (i.e., engagement, purpose and function of collaboration, alignment, building partnerships and mapping partnerships). The five themes have stakeholder quotes that are organized into nine subthemes (i.e., importance of collaboration, diversity of work, multisectoral collaboration and engagement, organizational capacity, partnership sustainability, priorities,

activities, opportunities and challenges) which are incorporated into the definitions of the major themes described at the beginning of section 4.3.

Table 4.9 Stakeholders' Views on: Engagement

Engagement	**Stakeholder Quotes**
Importance of Collaboration	*"Food system work is extremely complex, it is not possible for a single organization to affect the system change that is required…to improve it is going to require us all to work together which means partnerships are integral to the effort."* RO3-Interview 3 (Regional FPG)
	"So we try to get elements of all of them (the partners) together in one place so then having each of those organizations at the table is what brings knowledge of what is going on and what needs to be addressed." RO3-Interview 2 (State FPG)
	"So (Our FPG) does not have the funds to provide those matches year in and year out so we need those collaborative partnerships whether it be grant writing, (or) fundraising to provide those funds." RO3-Interview 11 (Local FPG)
Diversity of Work	"*We have found that it is not just important to work with organizations but to work with businesses and individuals."* RO3-Interview 3 (Regional FPG)

	"We need planning partners and we need local government officials… to be in a collaborative space so that we can help put greater priority and emphasis on the word community." RO3-Interview 1 (Local FPG)
	"Whether (it is) a church or a food bank or what have you, if that person (organization) is going around collecting food and distributing it to programs…So there is a lot of variety in the ways people are trying to help people." RO3-Interview 4 (Local FPG)
Multisectoral Collaboration and Engagement	*"We coordinate a lot with existing programs that are happening in the county, so there are opportunities. We use existing platforms for helping us connect with organizations because our county has a huge jurisdiction."* RO3-Interview 5 (Local FPG)
	"(Our) mission or (our) reason for being, is to collaborate and bring together all of the various community aspects of a system." RO3- Interview 7 (Local FPG)
	"There are over 100 agencies and organizations and when I say that, that could be as simple as a single person in a community associated with some type of service organization." RO3-Interview 4 (Local FPG)

Table 4.10 Stakeholders' Views on: Purpose and Function of Collaboration

Purpose and Function of Collaboration	**Stakeholder Quotes**
Organizational Capacity	*"So we do use collaborative grant making as a strategy. So we continue not only value our partnerships and hold each other accountable…Collaborative grant making is a core strategy for the network."* RO3-Interview 9 (Local FPG)
	"I mean just the fact that we have been able to develop this food policy council is a big deal for us in our small rural communities… I think it has been very effective in (moving) the needle within the food system because they have outreach capabilities that the government doesn't necessarily have." RO3-Interview 6 (Local FPG)
	"We are really able to use the connections that we have within the county…it is a great relationship and the reason we have that is because of networking and connections that have been established within the food council." RO3-Interview 5 (Local FPG)

Partnership Sustainability	*"Being really intentional in and around the emotion of adding value helps to sustain collaboration."* RO3-Interview 3 (Regional FPG)
	"Meeting communication is huge…I meet very frequently with every partner organization to keep people engaged and make people continue to feel like they are important, and their voice is valued especially with large organizations people will fall off if they don't feel as though they are playing a central role." RO3-Interview 9 (Local FPG)
	"Keeping those people in those organizations actively involved and continuing to look at other things where other states are, how we can support and act as a means of facilitating meetings to together… also we have grants and using that for various regional food system councils (needs)." RO3-Interview 2 (State FPG)

Table 4.11 Stakeholders' Views on: Alignment

Alignment	**Stakeholder Quotes**
Priorities	*"Diversifying our membership both geographically and racial diversification as well as just the different…aspects of the food system and where the food can end."* RO3-Interview 2 (State FPG)
	"Our steering team is kind of our main decision makers within our council. But then we also have three issue areas that have working groups associated with them (food access, food literacy education, and an urban agriculture). Those work groups are kind of the crux of getting things done and also looking at new areas to focus on, developing objectives and (to) follow through." RO3-Interview 5 (Local FPG)
	"The positive and negative in some way of our organization is that we don't really do anything by ourselves. We work with other people because we don't, we can't. Our funding doesn't do things like build stuff…like we can plan how to build stuff, we can tell you about the best practices in other places, we can coordinate meetings and put the right people in the room, and that's what we do."

	RO3-Interview 8 (Local FPG)
	"We have intentionally focused this year on adapting our governance to include consent based decision making…We use a model of shared leadership to manage the network, we have been exploring the use of a more democratized way of distributing funding through participatory grantmaking, we cross-promote events and broadcast the work that is happening across the region by other organizations through a monthly digest, webinars, and our video calls." RO3- Interview 3 (Regional FPG)
Activities	*"Well I mean after doing the food system plan we came up with 9 priority projects. What we are trying to work with folks to get off the ground is a food enterprise center, a food processing commercial kitchen, food business incubator, job skills training, those types of things to be held in the Center. So we are working with them on getting collaboration from various partners on that."* RO3- Interview 6 (Local FPG)
	"Being able to engage communities that are actually impacted and affected by food access or if they are farmers, urban farmers or role farmers to

	the local food hub and how they link into the food system to create equitable pathways; what are being valued in the market so their own businesses or family farms or urban farms are actually sustainable." RO3- Interview 9 (Local FPG)
	"It (has been) network development and finding those small tangible activities than can catalyze the community that we are trying to serve." RO3- Interview 4 (Local FPG)
	"We have very intentionally been implementing shared leadership within our Steering Team…We have agreed to use a unified reporting system (to) report out the activities of the action team. That really streamlines the amount of reports required." RO3-Interview 3 (Regional FPG)

Table 4.12 Stakeholders' Views on: Building Partnerships

Building Partnerships	
Challenges	**Opportunities**
"I think the capacity is a huge barrier…People are tapped for time…I think that sometimes funding can be an issue, resources can be an issue. I think that we try to be really mindful that our funding can cannibalize funding from the organizations which means we are in competition with organizations we (are) trying to support. I think distance can be a challenger in our case too." RO3-Interview 3 (Regional FPG)	*"Well I think one of the best opportunities for (our FPG) and establishing partnerships is the breadth of our vision is extremely wide so it allows for alignment for many different organizations."* RO3- Interview 3 (Regional FPG)
"It is a struggle in trying to find funding and trying to find leadership and try to keep it all kind of moving in a forward direction…keeping the balance." RO3- Interview 2 (State FPG)	*"Building a strong foundation of active parties in this group. Starting to build structures in governance will really, I think, vault us towards doing some collaborative work. It would look like strong leadership, committed funding, and frequent and active participation."* RO3- Interview 1 (Local FPG)
"We all have different missions and visions, and we are all really busy people. So just that time management and making sure we are assessing need and that we are including those people that we are trying to serve and taking time to build those	*"Goal setting is a constant. We are always finding goals and coming up with a strategy to reach that goal constantly. So I would say that is an opportunity within itself to have a collection of*

relationships…Funders do not always give you "let's get to know each other" time." RO3- Interview 4 (Local FPG)	*organizations collaboratively that come to the same goal is really (what) can get hard."* RO3- Interview 9 (Local FPG)
"My experience has been competition…There is a lot of very deserving nonprofits and endeavors out there…it is very rare that you see that immediate return on your investment money and time and each are important as the other." RO3- Interview 11 (Local FPG)	*"Whether it is federal or state or local, I think a lot of government bodies are coming around to the idea that it is (FPG) (are) important and putting money towards it…at least a little bit."* RO3- Interview 6 (Local FPG)
"*How complex this (food system) that we're talking about. It (has) so many aspects and players to this. So we kind of have that thing spinning in our head all the time…and understanding that people may have their particular passions or areas of expertise, but it is all part of a larger system. That is kind of how we got ourselves going forward."* RO3- Interview 7 (Local FPG)	*"We have found that it is really important that goals align and that there is some kind of (organizational benefit) …We are tying in with organizations in that area and building a relationship with the food council among the organizations."* RO3- Interview 5 (Local FPG)
"*The issue really has been getting anybody to the table…The number one barrier is participation and time commitment at this point."* RO3- Interview 1 (Local FPG)	*"We are so embedded with local governments, I think that is a strength for us is that we can speak the language and we understand the processes to something on the books."* RO3- Interview 8 (Local FPG)

Figure 4.4 Stakeholders' Views on: Mapping Partnerships

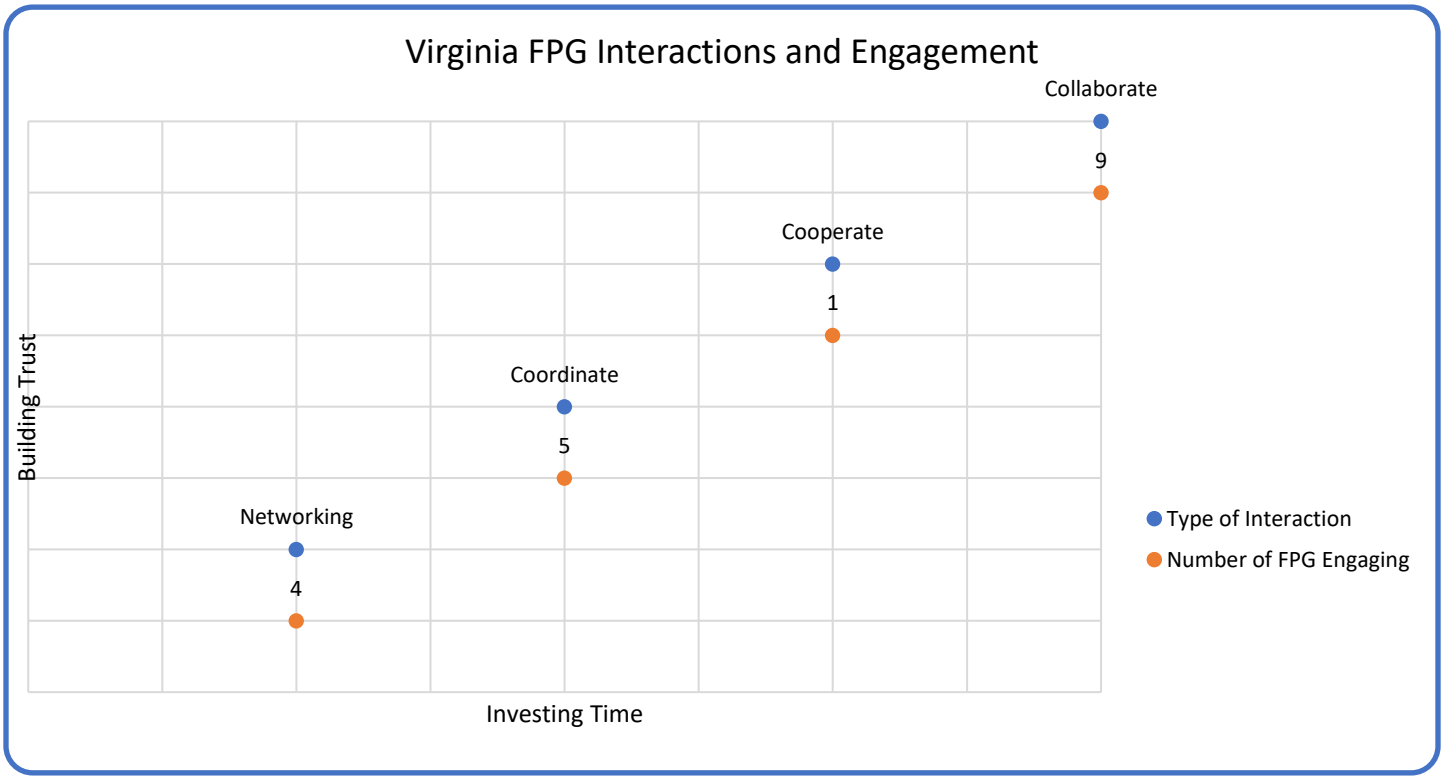


Figure 4.4 1 represents stakeholders' (n=11) views about their FPG interactions and engagement with other partners. Stakeholders could select more than one interaction.

Chapter 5 Discussion

The researcher (Walker) triangulated the results by thoroughly reviewing the RO1 inventory, the results from the quantitative survey (RO2) and qualitative interviews (RO3) to enhance credibility of this research. In this chapter, the three research objectives and related findings are described.

Figure 4.1 from the RO1 work represents the location of FPG (n=55) throughout Virginia. The 55 identified FPG were located in 23 out of the 95 counties of the Commonwealth of Virginia. These counties and their related cities are cited in Appendix B. The RO1 scoping review found that 20% (n=11) of FPG are located in Richmond, which is the capitol of Virginia. According to the U.S. Census Bureau, Richmond's population was 227,032 and ranked among the top ten largest cities in Virginia in 2018.[1] More so, Richmond City's food insecurity rate was 21.1% in 2019, which is substantially higher than state's food security rate of 11.9%.[2] Research shows that many FPG were developed to help alleviate or address food insecurity among at-risk populations in their region.[3–6] According to 2018 Feeding America report Southwest Virginia and the cities of Charlottesville and Richmond are areas with higher food security rates than the state average.[2] In 2016, Southwest Virginia food security rates ranged from 9% to 17% with Roanoke City having the highest rate (17%).[2] This is important to note because the majority of FPG are located in higher food-insecure areas of the state.

However, counties in South Central Virginia (i.e., Halifax, Charlotte, Prince Edward, Nottoway, Lunenburg, Mecklenburg, Brunswick, Greensville and Sussex) are ranked between 101-133 percentile for overall poor health outcomes.[7] According to the RO1 scoping review, these counties had the fewest FPG. About one-third of the FPG (34.5%, n=19) are located in Charlottesville (n=8)

and Richmond (n=11). About 15% (n=8) are located near the nation's capital, Washington D.C.; and a quarter (24%, n=13) are located in Southwest Virginia region (i.e., Blacksburg, Roanoke, Independence, Abingdon, Wytheville, Christiansburg, Radford, Duffield and Floyd). It is important to note that areas with a larger density of FPG tend to be located near or around colleges and universities; including the University of Richmond (Richmond), Virginia Commonwealth University (Richmond), University of Virginia (Charlottesville), Virginia Polytechnic Institute (Blacksburg), Roanoke College (Roanoke) and Radford University (Radford). The Johns Hopkins' Center for a Livable Future 2018 FPC Report identified that at least one FPG in all but three states (i.e., Arkansas, South Dakota, and Wyoming).[6] California, North Carolina and Michigan reported having the largest amount of active FPG.[6] In 2018, 71% of FPG in the United States and Canada operated at the local level (i.e., county or city), 20% functioned at a regional level, and only 8% worked across the state.[6] The RO1 data reported similar findings to the Johns Hopkins' Center for a Livable Future FPC 2018 Report and furthers the literature that geographic location could relate to localized food movements, agriculture production, local policies, structure, partnerships, funding and resources. However, the self-reported data from Johns Hopkins' Center for a Livable Future contrasts and is difficult to compare with RO1 scoping review because of the data collection methods and the scale of the research. Moreover, the RO1 data has potential to impact future research and expands the current literature on Virginia FPG location and characteristics, which currently has limited understanding or knowledge.

The demographic findings from this study show that half of the FPC-SAT participants (50%, n=8) were female, and almost two-thirds (62.5%, n=10) reported their race as white or Caucasian. About one-third (31.3%, n=5) did not answer the survey question regarding gender or race, because the

demographic questions were optional. Another point to be noted is the demographic profile of the survey respondents could to relate to the diversity of the race, gender and age of their FPG. Many FPG have been cited for their work on social justice, however, some have found it challenging to address different missions and visions.[8] More than one-third (37.5%, n=6) of survey respondents reported that their FPG valued diversity and consensus decision-making. Yet, the diversity of sectors (n=8/16) reported being agricultural nonprofits and majority of survey participants were female and white. This is consistent with the current literature on the challenges in addressing diversity within FPG and needs be studied further to understand how Virginia FPG create diversity in membership and food system sectors.

A majority (75%) of survey participants (n=12) reported that their FPG have an annual budget of below $50,000 and that most of their work was conducted at the city or county level (43.8%, n=7) rather than the state level. However, the adapted FPC-SAT did not report on the budgets of FPG between $0-49,999. The annual budget provides insight to understand the resources available for FPG to conduct food systems work. The context (i.e., county, city, state, regional, and national) concurs with the data results from the RO1 scoping review and visual map. The context demonstrates what level FPG can function to address food systems work. About half (43.8%, n=7) of the survey participants characterized their FPG structure as a nonprofit organization this data contrasts substantially with the 2018 John Hopkins' University Center For a Livable Future FPC Report, which cited 13% of active nonprofit FPG.[9] Many FPG (40%, n=6) reported that they used a hybrid structure (i.e., endorsed by government and includes dedicated government staff and/or may also receive government funding). However, due to the nature and terminology of the RO2 survey versus the RO1 scoping review, the FPG that reported working at the regional level (31.3%,

n=5) were greater than the two identified regional group on the RO1 scoping review and visual map. This demonstrates the inconsistencies in comparing the scoping review and FPC-SAT survey results because the RO1 scoping review search criteria was operationalized by the research coordinator (Walker) whereas FPC-SAT did not provide definitions for community context and was self-assessed by the survey participant.

All survey participants (n=16) reported their FPG working towards healthy food access or knowledge. It is unsurprising that all participants identified working towards healthy food access or knowledge, which is the most commonly reported mission of FPG.[10] The survey participants 43.9% (n=7) reported that their FPG contributed to various aspects of the food systems; 37.5% (n=6) described that their FPG supported resilient food system work; and 56.6% (n=9) reported that their FPG built relationships with the community. However, only 18.8% (n=3) reported that synergy was a key principle within their FPG structure. Most stakeholders were uncertain about how their FPG contributed to equity (18.8 %, n=3) or sustainability (25.0 %, n=4). Yet, participants reported their FPG working toward an equitable food system (43.8%, n=7) and 50% (n=8) promoted environmental sustainability. Most of the participants (56.3%, n=9) reported that their FPG provided opportunities to influence the food system. However, 37.5% (n=6) reported barriers to influencing policy. The data discrepancies align with current literature that stakeholder's are uncertain about their FPG influences on food system change.[11] More so, the complexity and intersections of the food system could attribute to the inconsistencies of survey results. This data is a comprehensive overview that provides details on how FPG interact with different aspects of a healthy, resilient, and sustainable food system. Research supports providing stakeholder's views on FPG as an important first step in creating a sustainable food system.[11]

The collective results of the RO3 stakeholder interviews (n=11) support many positive actions, opportunities and current challenges for Virginia FPG to create a sustainable food system. After coding analysis of the stakeholder interviews five themes emerged (i.e., engagement, purpose and function of the collaboration, alignment, building partnerships and mapping partnerships) that were guided by the VicHealth partnership analysis tool [12]

Stakeholders identified the importance of collaboration, which is the highest level of engagement to *"affect the system change that is required"* and why *"collaborative partnerships"* were necessary. More so, the diversity of work helps to engage current and potential partners within FPG and the community. Stakeholders reported that, "*coordinating with existing programs"* or *"bring(ing) together all of the various community aspects of a system"* were necessary for engagement. This qualitative data concurs with current literature, which supports the importance of collaboration to engage various stakeholders and addressed the lack of research on FPG collaboration in Virginia.[13–20]

The purpose and function of existing collaborations and partnerships of FPG in Virginia was explored to understand the opportunities and challenges they face in creating a sustainable food system. Most interview participants identified their FPG organizational capacity as a primary function of their current partnerships. Organizational capacity could include but are not limited to: *"collaborative grant making"; "outreach capabilities";* and *"relationship building."* Furthermore, sustaining partnerships was a key component. Stakeholders reported that *"being intentional"*; effective meetings and communication; and active participation were key functions

to maintain sustainable collaboration. Virginia stakeholders (n=11) identified many key successful FPG features currently cited in the literature including engagement, funding, relationships, and communication. [6,10,21]

Interview participants identified common areas of alignment (i.e., communication streams, decision making, governance structure, planning, policy or programs, funding, services or reporting mechanisms), which include their current future priorities and activities. Stakeholders reported that membership, working group structure and activities, coordinating meetings and funding streams as main priorities of their FPG. One group identified racial diversification as a major priority for how they engage in food system change. Stakeholders identified "*food system plans"* or *"strategic planning"* as a primary activity of their FPG. Other activities to promote FPG alignment include community engagement, network development, leadership and reporting. This research expands the current literature and is consistent with cited FPG roles in organizing multisectoral collaboration to create sustainable food system. [6,10,13]

Stakeholders were asked to report on the opportunities and challenges related to collaboration. All interviewed stakeholders reported funding as a major challenge to collaboration and building sustainable partnerships. Interview participants also reported that competition for funding was a major challenge. FPG respondents reported that geographic location and distance as a barrier to participation; sustainable and committed leadership; differences in goals, missions, and visions as challenges to create food system change. Finally, stakeholders identified how the complexity of the food system is a challenge as well as *"getting everyone to the table."* However, stakeholders

found numerous opportunities for collaboration. Stakeholders acknowledged goal alignment, active membership, strong structure, strategic planning and building relationships as opportunities to build sustainable partnerships and collaborations. Stakeholders identified that relationships with the local governments as an opportunity as well. These findings demonstrate the diversity opportunities and challenges for issue framing, activities and priorities, which concurs with research on FPC in America.[3]

Lastly, stakeholders reported their interactions and engagement in partnerships (i.e., networking, coordinating, cooperating and collaborating). Most FPG (n=9) reported collaborating with other partners. However, the nature of the questionnaire was that definitions for the terms were not provided prior to the interview, which could have influenced participants' responses. Based on the collected qualitative data, FPG seem to engage with relationship building, investing time, and building trust between partner organizations, which is cited as a successful FPG feature. [6,10,21]

Study Strengths and Limitations

This study has several strengths and limitations. A strength is the reliability and validity of the FPC-SAT that the Research Coordinator adapted to Virginia Tech Qualtrics format. By adapting a valid and reliable tool creates more evidence-based practices in the FPG literature for other researchers to apply to their own work. Currently, the FPC-SAT is the only validated survey tool to study FPG. However, it is a self-assessment tool, which can affect survey rates and response. More so, the format, the length, and terminology of the survey could affect participation and cause data discrepancies. Therefore, more research needs to be conducted to identify future data

collection tools. The frameworks and theory applied to this research allows for guided data analysis and conclusion. The brevity of research for FPG in VA limits the access to frameworks and theories; therefore, by using the VicHealth partnership analysis tool, FPC Framework, and principal agent theory, the data will provide more breadth and depth to the literature. One limitation of the FPG study is the lack of an all-inclusive database for FPG in Virginia. Therefore, this study is not an exhaustive study on all formal and informal FPG in Virginia. The scoping review identified 55 FPG through gray-literature reports and an analysis of websites. However, if the FPG was not reported on, did not have a developed website or was not listed in the USDA Food Hub Database, the Virginia Food Systems Council Database or the Johns Hopkins FPC Directory than it was not cited within the 55 FPG in Virginia.

Utilizing technology to disseminate a survey tool had benefits and challenges. Virginia Tech Qualtrics is a user-friendly format with distribution limitations. The computer code such as format, version, and survey development settings of Qualtrics can cause data irregularities. Virtually distributing the FPC-SAT via email was time effective, however did cause some data discrepancies and technical issues with survey availability to some but not all recruitments. Moreover, some of the survey responses were contradictory, which could be attributed to the terminology and survey flow. Also, the adapted FPC-SAT did not measure the level of leadership or membership of the survey participants, which could affect how they responded. Most of the questions regarding food access, food system sustainability, and resiliency were toward the end of the survey and participants could have misinterpreted the language due to survey fatigue. A major limitation of this study was the low number of survey participants, which impacted the type of statistical

analysis that the research coordinator conducted. Lastly, terminology of the survey and interview questions could have caused some of the stakeholders to misinterpret and respond differently.

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Chapter 6 Conclusion

This study provides exploratory results on the location, priorities and activities of Virginia FPG. Three major themes were identified from this mixed-methods study that applied two conceptual frameworks and the principal-agent theory to address knowledge gaps in the literature, inform future research, and local, state and federal policies. (1) The location of Virginia FPG are in areas with a higher population density and are found less in rural areas that have increased needs; (2) stakeholders' viewed partnerships and collaboration as a mutual interest but also a necessity to address systemic challenges and to create a healthy, resilient and sustainable food system and; (3) FPG are challenged to obtain sustainable funding, which is key to membership engagement and achieving their vision and goals.

Contribution of this research

This research found that 58% of FPG (n=32/55) in Virginia are located in areas around universities and with higher rates of food insecurity compared to the state or national average, which include cities and counties of Richmond, Charlottesville and the nine cities and counties of Southwest Virginia including Blacksburg, Roanoke, Independence, Abingdon, Wytheville, Christiansburg, Radford, Duffield and Floyd.[1,2] Numerous researchers have cited FPG as a positive approach to include marginalized community members who are affected by health disparities such as food insecurity and obesity.[3–6] However, counties such as Halifax, Charlotte, Nottoway, Lunenburg, Mecklenburg, Brunswick, Greensville and Sussex counties did not have any FPG identified yet, had high health outcome rates (i.e., ranked in the 101-133 percentile), which measures community health, access to healthy foods, and obesity.[1] This research study found that the location of Virginia

FPG tends to be in areas with a higher population density, near universities, and are found less in rural areas that have increased needs.

Key findings found that all survey participants reported working towards healthy food access or knowledge; only 37.5% (n=6) of survey participants responded that their FPG supported resilient food system work; 50% (n=8) reported their FPG working towards environmental sustainability; and 56.3% described their FPG as a key player in opportunities to influence the food system. The major themes from the qualitative stakeholder interviews support that collaboration provides opportunities for partnership engagement; goal alignment; and strategic planning. The qualitative findings suggest that many of these FPG are engaging in activities to support individual organizations missions and visions through alignment and consensus-based structure. By interacting with other FPG, stakeholders' viewed partnerships and collaboration as an organizational self-interest but also a necessity to achieve their mission and vision to create a healthy, resilient and sustainable food system.

The majority of survey participants (n=12/16) responded that their FPG functioned with an annual budget of less than $50,000 and only one FPG responded that their budget was greater than $500,000. According to Johns Hopkin's University 2018 FPC Report, 36% of U.S. FPC reported having no funding and that obtaining sustainable resources was a persistent challenge.[7] More so, all interviewed stakeholders (n=11) identified that sustainable and consistent funding was a major challenge in membership engagement, participating in food system collaboration and achieving their vision and goals. As cited in the literature review in Chapter 2.6 of this Master's thesis,

funding is key to engaging in the structure, function and planning for FPG to create a healthy, resilient and sustainable food system.

The nuance of FPC creates space for researchers to use conceptual frameworks and tools to effectively measure how FPC evaluate their policy work and prioritize developing a sustainable food system. This exploratory research applied two conceptual frameworks, the FPC Framework, which guided the adapted FPC-SAT, and the VicHealth partnership analysis tool, which outlined the semi-structured qualitative interviews and guided by the principal-agent theory, which examines how individuals set their own goals and take action based off of the benefit of available options.[8–10]

This is the first known empirical study that applied the principal-agent theory to examine Virginia FPG partnerships and their opportunities and challenges to collaborate to create a healthy, resilient and sustainable food system. The qualitative findings concur with the principal-agent theory and suggest that organizations are involved in or partnered with FPG decision-making, leadership or membership participate in goal alignment for the mutual benefit of FPG, and individual organization mission and vision. This study also explored how Virginia FPG partnered, interacted and engaged in collaboration adapted from the VicHealth partnership analysis tool, which defines four key areas for partnership engagement by building trust and investing time (i.e., networking, coordinating, cooperating and collaborating).[9] The findings provide qualitative data on the importance of relationship building (i.e., building trust and investing time) and collaboration for Virginia FPG to work towards a healthy, resilient and sustainable food system. Lastly, the FPC Framework[10] evaluated the adapted and validated FPC-SAT[10] to understand the five key domains

(i.e., organizational capacity, social capital, context, council effectiveness and community outcomes) of Virginia's FPG, which will further the literature on FPG at a local, state, and national level. This contextual data will also help to inform future policy to provide appropriate resources for Virginia FPG.

Implications to Inform Policy

The majority of participants reported that collaboration was an opportunity to sustain partnerships and create a healthy, resilient and sustainable food system. Yet, stakeholders reported resources (i.e., funding, technical assistance, and leadership) as major barriers. These data demonstrate that improvement still needs to be made in encouraging local, regional, state, and national policies and resources for FPG. By increasing funding and other resources, FPG could engage in other activities such as advocacy, policy and programs, education and diversity.

Partnership and relationship building with FPG members, community and government has been cited as an opportunity to address and create policy change that positively affects the community at large.[7] Stakeholders who participated in this study explained their partnerships with local universities and Cooperative Extension. Future research could include exploring how partnerships with universities and Cooperative Extension helps to provide priorities, issue framing and resources to FPG. However, many FPG reported that interacting with policy at the local, state or national level was a major challenge especially if they did not have a positive relationship with government officials. Future research and advocacy could explore what barriers Virginia FPG face in interacting with local, state, and national food policy. This could further how FPG are used to create a healthy, resilient and sustainable food system.

Future Research

Many Virginia FPG were located in the counties or cities of Richmond, Charlottesville, Blacksburg, Christiansburg and Roanoke. While these areas struggle with food access, food insecurity and other health disparities many rural areas of Virginia lack FPG to address food system issues. According to the data collected for this study, the areas that have the highest rankings for poor health outcomes did not have any cited FPG in the area. Therefore, it is important for future research to study why rural areas with high poor health outcomes lack access to active FPG.

The demographic findings from this study support the literature that FPG have the opportunity to engage in multisectoral food system work however report that diverse membership and synergy is a challenge or is not defined. [5–7,11,12] The data from this study found that half of RO2 participants were female (n=8) and 62.5% (n=10) reported their race as white or Caucasian. More so, 37.5% (n=6) of survey respondents reported that their FPG valued diversity and consensus decision making, which aligns with the Johns Hopkin's University 2018 FPC Report results where FPG were least likely to reflect on racial, gender and diversity.[7] In the Johns Hopkin's University 2018 FPC Report, diversity and inclusion was ranked fourth in FPG organizational priorities.[7] Therefore, FPG are attempting to prioritize equity. However, only a select Virginia FPG included equity, diversity and inclusion as priorities to create a healthy, resilient and sustainable food system. Future actions for Virginia could include addressing membership and decision-making with their FPG. More so, research needs to address how collaborations create diversity, synergy and equity within organizational membership and how this provides opportunities to engage with different stakeholders to address complex food system issues.

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Appendixes

Appendix A IRB Approval Letter

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MEMORANDUM

DATE: October 19, 2018

TO: Vivica I Kraak, Ayron Walker, Susan Clark

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires January 29, 2021)

PROTOCOL TITLE: An Exploration of the Structure, Issue Framing and Priorities of Virginia’s Food Policy Groups to Collaborate on a Healthy, Resilient and Sustainable Food System

IRB NUMBER: **18-684**

Effective October 19, 2018, the Virginia Tech Institution Review Board (IRB) approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at: http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As:	**Expedited, under 45 CFR 46.110 category(ies) 5,6,7**
Protocol Approval Date:	**October 19, 2018**
Protocol Expiration Date:	**October 18, 2019**
Continuing Review Due Date*:	**October 4, 2019**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant thesiss/work statements to the IRB protocol(s) which cover the human research activities included in the thesis / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant thesiss are related to this IRB protocol, and which of the listed thesiss, if any, have been compared to this IRB protocol, if required.

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

* Date this thesis number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant thesiss, please contact the IRB office (irbadmin@vt. edu) immediately.

Appendix B Inventory of FPG in the Commonwealth of Virginia

See separate Excel document for detailed version

	Food Policy Group Name (n=55)	Location (City or Town), Virginia (County)	Scope (*i.e. local, county, regional, cross-state, national)*
1.	4P Foods	Elkwood, Virginia County: Culpeper	Regional
2.	Appalachian Harvest	Duffield, Virginia County: Scott	Local, County
3.	Appalachian Virginia Food System Network	Christiansburg, Virginia County: Montgomery	Regional, cross-state
4.	Appalachia Food Shed Project	Blacksburg, Virginia County: Montgomery	Regional, cross-state
5.	Appalachian Sustainable Development	Alexandria, Virginia County: Alexandria	Regional
6.	Arcadia- Center for Sustainable Food and Agriculture	Alexandria, Virginia County: Alexandria	Regional
7.	Arlington Friends of Urban Agriculture	Arlington, Virginia County: Arlington	Local, County
8.	Beans and Rice, Inc.	Radford, Virginia County: Montgomery	Local, County
9.	Blue Ridge Local	Elkwood, Virginia County: Culpeper	Local, County
10.	Central Virginia Food Bank	Richmond, Virginia County: Henrico	Regional
11.	Chesapeake Foodshed Network	Chesapeake Bay County: (main office) Montgomery	Regional
12.	Community Foundation of the New River Valley- THRIVE	Christiansburg, Virginia County: Montgomery	Regional
13.	Coastal Farms	Coastal Farms, Virginia County: York	Regional
14.	Fairfax Food Council	Fairfax, Virginia County: Fairfax	Local, County

15.	Federation of Virginia Food Banks	Richmond, Virginia County: Henrico	State
16.	FeedRVA	Richmond, Virginia County: Henrico	Regional
17.	Feeding America- Southwest VA	Abingdon, Virginia County: Washington	Regional and national
18.	Food and Community of Virginia	Charlottesville, Virginia County: Albemarle	State
19.	Food Desert Task Force	Blacksburg, Virginia County: Montgomery	Regional
20.	Food Justice Network	Charlottesville, Virginia County: Albemarle	Regional
21.	Food Security Project	Blacksburg, Virginia County: Montgomery	Regional
22.	Grayson Landcare	Independence, Virginia County: Grayson	Regional
23.	Greater Prince William Food Council	Woodbridge, Virginia County: Prince William	Local, County
24.	Greater Richmond Partnership	Richmond, Virginia County: Henrico	Regional
25.	Grow RVA	Richmond, Virginia County: Henrico	Regional
26.	Health Care Without Harm- Farm to Institution	Reston, Virginia County: Fairfax	Regional/ cross-state/ national
27.	Healthy Food Coalition	Charlottesville, Virginia County: Albemarle	Local/County
28.	Hunter for the Hungry	Big Island, Virginia County: Bedford	State
29.	Local Environmental Agriculture Project (LEAP)	Roanoke, Virginia County: Roanoke	Local, County, Regional, cross-state
30.	Local Food Hub	Charlottesville, Virginia County: Albemarle	Local, County, Regional
31.	Lynchburg Area Food Council/ Lynchburg Live Healthy	Lynchburg, Virginia County: Campbell	Local, County
32.	NOVA Food Coalition	Northern Virginia County: Fairfax, Arlington	Regional

33.	Piedmont Environmental Council	Shenandoah, Virginia County: Shenandoah	Regional
34.	Rappahannock-Rapidan Regional Food Policy Council	Rappahannock-Rapidan, Virginia County: Rapidan	Local, County
35.	Richmond Food Access and Equity Task Force	Richmond, Virginia County: Henrico	Local, County
36.	Roanoke Valley Local Foods Planning Committee	Roanoke, Virginia County: Roanoke	Local, County
37.	RVA Food Collaborative	Richmond, Virginia County: Henrico	Regional
38.	Slow Food RVA	Richmond, Virginia County: Henrico	Regional
39.	So Fresh!	Southwest, Virginia County: Wythe	Regional
40.	Sustain Floyd	Floyd, Virginia County: Floyd	Regional
41.	Staunton Food Policy Task Force	Staunton, Virginia County: Augusta	County/District
42.	Sustainable Food Strategy Task Force	Charlottesville, Virginia County: Albemarle	Regional
43.	U.S. Composting Council	Crozet, Virginia County: Albemarle	National
44.	Virginia Food System Council	Charlottesville, Virginia County: Albemarle	State
45.	Virginia Food Access Network	Christiansburg, Virginia County: Montgomery	Local, County
46.	Virginia Sustainable Food Coalition	Prince George, VA County: Prince George	Cross-state
47.	Virginia Food Heritage Project	Charlottesville, Virginia County: Albemarle	State
48.	Virginia Foundation for Agriculture, Innovation and Rural Sustainability	Richmond, Virginia County: Henrico	State
49.	Virginia Peninsula Food Bank	Hampton, Virginia County: Hampton	State

50.	Virginia Community Action Partnership	Richmond, Virginia County: Henrico	State
51.	Virginia Food Works	Charlottesville, Virginia County: Albemarle	State
52.	Virginia Food Freedom	Richmond, Virginia County: Henrico	State/ National
53.	Virginia Independent Consumers and Farmers Association	Farmville, Virginia County: Prince Edward and Cumberland	State
54.	Virginia Cooperative Extension, Healthy Food Retail	Lynchburg, Virginia County: Campbell	Local, County
55.	Virginia Composting Council	Reston, Virginia County: Albemarle	State

Appendix C Study Recruitment Fliers

Subject Line: Invitation to Participate in a Survey on Food Policy Groups in Virginia

RO2 Email Recruitment

Study of Food Policy Groups in the Commonwealth of Virginia

October 19, 2018

Invitation to participate in a study to gain your expertise and insights about Virginia's food policy groups priorities and activities to support a healthy, resilient and sustainable food system.

I would like to invite you to be surveyed for a study to gain your expertise and insights related to the issue framing, priorities and activities of Virginia's food policy groups that align with a healthy, resilient and sustainable food system. The principal investigator for this study is Professor Vivica Kraak in the Department of Human Nutrition, Foods, and Exercise at Virginia Tech, in Blacksburg, VA.

Why is this research being done?

This study will explore your experience and knowledge about food policy groups in Virginia and what your food policy groups' priorities, activities and issue framing that aligns with a healthy, resilient and sustainable food system. The research findings will be used to better understand Virginia's food policy groups efforts in developing a healthy, resilient and sustainable food system.

Who can participate in this research?

We are seeking selected individuals who have experience or are currently a member of a Virginia food policy group and are willing to give insight on the priorities and activities about their food policy group organization.

What are you asked to do?

Your participation in this study is completely voluntary and involves minimal risk. If you agree to participate, your informed consent will be obtained once and only when you submit the survey. The survey will be administered online and can be found at the link below. The survey will last between 20 and 25 minutes. The survey will cover topics related to leadership, membership, inclusivity, knowledge, relationships, empowerment, credibility, synergy, and perceived impact for which you have an understanding on that can influence organization capacity, social capital, council effectiveness, council context and council outcomes of your food policy group.

To participate in the study

If you are interested in participating in this study, please complete the survey link provided below and contact Ayron Walker, Study Coordinator, at ayron95@vt.edu with any further questions.

If you agree to this study, Please complete the link provided below. I look forward to hearing from you. Thank you.

Link: https://virginiatech.qualtrics.com/jfe/form/SV_1XhVw0BKaOkLSfP

Ayron Walker
Study Coordinator and M.S Candidate
Department of Human Nutrition, Foods, and Exercise
338 Wallace Hall, 295 West Campus Drive
Virginia Tech
Blacksburg, VA 24061
email: ayron95@vt.edu

Phone: (540)-420-9538

Subject Line: Invitation to Participate in an Interview on Food Policy Groups in Virginia

RO3 Email Recruitment Flier

Study of Food Policy Groups in the Commonwealth of Virginia

October 19, 2018

Invitation to participate in a study to gain your expertise and insights on the opportunities and challenges for Virginia's food policy groups to align their interests and priorities with other actors to support a healthy, resilient and sustainable food system at local, state and national levels.

I would like to invite you to be interviewed for a study to gain your expertise and insights related to the opportunities and challenges in aligning diverse food policy groups priorities and interests in developing a healthy, resilient sustainable food system. The principal investigator for this study is Professor Vivica Kraak in the Department of Human Nutrition, Foods, and Exercise at Virginia Tech, in Blacksburg, VA.

Why is this research being done?

This study will explore your experience with Virginia FPG and the possibilities and challenges in aligning other food groups with actions and priorities to develop a healthy, resilient, sustainable food system. The research findings will inform food policy groups stakeholders on areas to network, coordinate, cooperate, and collaborate with other actors.

Who can participate in this research?

We are seeking selected individuals or groups who have experience or are currently a member of a Virginia food policy group and are willing to identify the opportunities and challenges in aligning

diverse food policy groups' priorities and interests in developing a healthy, resilient sustainable food system.

What are you asked to do?

Your participation in this study is completely voluntary and involves minimal risk. If you agree to participate, you will be asked to sign or give verbal informed consent. The interview may be conducted either by phone, video call or in-person and last no more than 60 minutes. The interview will cover topics related to opportunities and challenges in collaborating food policy groups with other food system actors and current partnerships.

To participate in the study

If you are interested in participating in this study, please reply to Ayron Walker, Study Coordinator, ayron95@vt.edu

I will schedule a call, video call or in-person interview with you at a mutually agreed upon date, time and location. I look forward to hearing from you. Thank you.

Ayron Walker
Study Coordinator and PhD Candidate
Department of Human Nutrition, Foods, and Exercise
338 Wallace Hall, 295 West Campus Drive
Virginia Tech
Blacksburg, VA 24061
email: ayron95@vt.edu
Phone: 540-420-9538

Appendix D
Consent Form and FPC-SAT Survey

Food Policy Group Survey Tool

Start of Block: Default Question Block

Q1 Virginia Tech Food Policy Group Survey Tool

The purpose of this survey is to help us understand the priorities and activities of your food policy group (i.e., council, coalition, network, collaboration, food hub, food banks, alliance or partnership). The Food Policy Council Self-Assessment Survey was developed and revised in 2017 by Larissa Calanice who conducts research at University of North Carolina at Chapel Hill. This survey was translated into Virginia Tech's Qualtrics software for research on Virginia's food policy groups. This survey is being conducted by faculty and staff in the Department of Human Nutrition, Foods, and Exercise at Virginia Tech located in Blacksburg, Virginia. The survey was approved by Virginia Tech's Institutional Research Board for approval prior to implementation. The survey will take about 20-25 minutes to complete. Please answer all the questions.

Your personal ***information will*** be coded and kept private and confidential.

If you have any questions or concerns about this research, please contact:

Ayron Walker
Study Coordinator and M.S. Student
Department of Human Nutrition, Foods, and Exercise
338 Wallace Hall
Virginia Tech, Blacksburg, VA 24061
Phone: (540)-420-9538
Email: ayron95@vt.edu

Vivica Kraak, PhD, RDN
Principal Investigator and Assistant Professor
Department of Human Nutrition, Foods, and Exercise
223 Wallace Hall
Virginia Tech, Blacksburg, VA 24061
Phone: (540) 231-9638
Email: vivica51@vt.edu

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Q2 **Adult Consent Form**

I. Study Purpose

This study will explore the characteristics, priorities, activities and issue framing of food policy groups in Virginia. This information will help us better understand food policy groups role in supporting a healthy, resilient and sustainable food system.

II. Procedures

We are seeking food policy groups, including networks, partnerships, coalitions, collaborations, councils, food hubs and food banks in the Commonwealth of Virginia to complete this t survey. The food policy group participant must have access to the Internet to complete this survey that can be taken in English. If you agree to be in this study, the food policy group participant will be asked to complete an online Qualtrics survey that will ask questions about your food policy groups leadership, membership. Inclusivity, knowledge, relationships, empowerment, credibility, synergy, and perceived impact. The survey will take about 20-25 minutes to complete.

III. Risks

There are small risks related to your participation in this study. Your responses to the online survey will ask you basic information about you that will be kept private and confidential. Your participation in this study is not required. You may end the survey at any time. A summary of your information with everyone else who completes the survey may be reported in publications and at academic conferences.

IV. Benefits and Compensation

The benefits of this study is the opportunity to participate in a nuance study that will expand knowledge and understanding surrounding Virginia's food policy groups support in developing a healthy, resilient, and sustainable food system. This information may be presented at conferences or shared with other institutions interested in food policy group research.

V. Confidentiality

Your answers and personal information that share with us will be kept confidential at all times and will be known only to the research team. Your personal contact information will be coded and stored separately from your interview responses. Only trained researchers involved in this study will have access to information about you. At no time will the research team release information from the study or survey to anyone other than people working on the project. It is possible that the Virginia Tech IRB may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research.

VI. Freedom to Withdraw

Your participation in this study is voluntary. You are free to withdraw from this study at any time without penalty. You are not obligated to answer all of the questions. If you choose not to answer a question, you will not be penalized. Should you choose to withdraw or otherwise discontinue your participation, your information will not be presented or disseminated to inform

other food policy group research.

VII. Subject's Consent

I have read the consent form and conditions related to this study. My consent for myself to participate in this study will be implied by completing the survey and returning it to the researchers through email.

Should I have any questions about this study, I understand that I may contact the individuals listed below:

Ayron Walker
Study Coordinator and M.S. Student
Department of Human Nutrition, Foods, and Exercise
338 Wallace Hall,
Virginia Tech, Blacksburg, VA 24061
Phone: (540)-420-9538
Email: ayron95@vt.edu

Vivica Kraak, PhD, RDN
Principal Investigator and Assistant Professor
Department of Human Nutrition, Foods, and Exercise
223 Wallace Hall,
Virginia Tech, Blacksburg, VA 24061
Phone: (540) 231-9638
Email: vivica51@vt.edu

Should I have any questions or concerns about the study's conduct or my rights as a research subject, or need to report a research-related injury or event, I may contact:

The Virginia Tech Institutional Review Board at:
irb@vt.edu
540-231-3732

By completing and submitting the survey to the Research Coordinator they indicate their consent to participate. If you discontinue the survey or any point before submitting the survey you do not consent to taking this survey.

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Q3 Welcome to the Food Policy Group Survey Tool!
This tool is designed to measure the leadership, active membership, council climate, council

structure, social capital, synergy, impact, challengers, and technical needs or food policy groups (i.e., council, coalition, network, collaboration, food hub, alliance or partnership)

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Q4 *Food policy groups are councils, partnerships, collaborations, food banks, food hubs, networks and coalitions that address food system issues such as hunger and food insecurity, food availability and access, diet-related chronic diseases, The environmental impacts of large-scale industrial food and agricultural systems, poverty and economic development in communities.*

Please state the name of your food policy group below.

_____

Q5 What is your food policy group's annual budget?

- ○ >$50,000 (1)
- ○ $50,000-$100,000 (2)
- ○ $100,00-300,000 (3)
- ○ $300,000-$500,000 (4)
- ○ (5)

Q6 Geographic area that the food policy group serves (pick all that apply).

- ☐ City (1) _____
- ☐ County (2) _____
- ☐ Region (3) _____
- ☐ National (4) _____
- ☐ State or province (5) _____

Q7 What sector do you work in?
please choose your primary sector below. You can select more than one sector.

- ☐ Agriculture (1)
- ☐ Community Member (2)
- ☐ Government (3)
- ☐ Public Health (4)
- ☐ Academics (5)
- ☐ Education (6)
- ☐ Poverty alleviation (7)
- ☐ Food service (8)
- ☐ Health care (9)
- ☐ Economic development (10)
- ☐ Conservation (11)
- ☐ Faith community (12)
- ☐ Nonprofit (13)
- ☐ Other (14) _____

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Q8 What best describes your food policy groups' connection to government?

- ○ Government-driven food policy initiative (i.e. directed and funded by government and/or may get advice from groups outside of government) (1)
- ○ Hybrid model with direct links to government (i.e. endorsed by government and includes dedicated government staff (particularly elected officials) and/or may also receive government funding) (2)
- ○ Hybrid model with indirect links to government (i.e.has informal links with government through department employees and/or may receive in-kind support) (3)
- ○ Food policy organization linked to government through a secondary agency (i.e. the group itself is not formally connected to government, but may have indirect links through government committees or departments (4)
- ○ Civil society organization with limited government involvement (i.e. community-based group that may include government employees as volunteer members and/or may receive government grants) (5)
- ○ Civil society organization with no government involvement (i.e. community-based group that does not partner with government officials or departments and/or does not seek government funding (6)
- ○ Other (7) _____

Q9 Does your food policy group have working groups (sub groups or committees of people that are a part of the food policy group that work on different interest areas)?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)
- ○ Not applicable (4)

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Q10 **Leadership**
the formal/informal leader(s) of your food policy group

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Run effective meetings (1)	○	○	○	○	○	○	○
Appear to devote adequate time to their position (2)	○	○	○	○	○	○	○
Are receptive to new ideas (3)	○	○	○	○	○	○	○
Encourage all members to participate, not just loud or popular voices (4)	○	○	○	○	○	○	○
Manage conflicts fairly (5)	○	○	○	○	○	○	○
Encourage the food policy group to move toward consensus on decisions (6)	○	○	○	○	○	○	○
Value diversity (7)	○	○	○	○	○	○	○

Q11 **Membership**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Your food policy group includes representatives from diverse sectors of the food system	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
Your food policy group has representation from the populations that group's activities target	○	○	○	○	○	○	○
Your food policy group includes a broad set of perspectives	○	○	○	○	○	○	○
Work shared fairly within the food policy group	○	○	○	○	○	○	○
Members actively get involved in the food policy group	○	○	○	○	○	○	○

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Q12 **Food policy group structure**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Seems well organized (1)	○	○	○	○	○	○	○
Uses written by-laws or guiding principles (2)	○	○	○	○	○	○	○
Maintains records (e.g., meeting minutes, time, line of important events) (3)	○	○	○	○	○	○	○

Q13 **Food policy group climate**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
There is a shared vision for the food policy group among your members (1)	○	○	○	○	○	○	○
Members in your food policy group share power in decision-making (2)	○	○	○	○	○	○	○
Disagreement within your food policy group resolved fairly (3)	○	○	○	○	○	○	○
New members in your food policy group feel welcome (4)	○	○	○	○	○	○	○
You are satisfied with the way your food policy group functions (5)	○	○	○	○	○	○	○

Q14 **Social capital**

participating in your food policy group has helped you learn about:

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Policies that govern various aspects of the food system (1)	○	○	○	○	○	○	○
Strategies to affect food system-related policies (2)	○	○	○	○	○	○	○
The roles that other members play in the food system (3)	○	○	○	○	○	○	○
Food system-related needs or problems (4)	○	○	○	○	○	○	○
The complexity of the food system (5)	○	○	○	○	○	○	○
The work of other food policy groups in your state or elsewhere (6)	○	○	○	○	○	○	○

Q15 ***Social capital***
participating in your food policy group has

	strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Improved your communication with other members, partners, or organizations (1)	○	○	○	○	○	○	○
Improved your communication with the organizations that other members, partners, or organizations belong to or represent (2)	○	○	○	○	○	○	○
Helped you build trust with between members, partners, or organizations (3)	○	○	○	○	○	○	○
Helped you build trust with the organizations that other members belong to or represent (4)	○	○	○	○	○	○	○
Helped you coordinate efforts between your home organization and the organizations that other members belong to or representment (5)	○	○	○	○	○	○	○

Q16 **Credibility**

In the past 12 months, your food policy group has:

	Yes (1)	No (2)	Unsure (3)	Not applicable (4)	Disagree (5)
Been publicly recognized for its efforts (e.g. in the media, at events) (1)	○	○	○	○	○
Been consulted by the media to share their perspective on an issue (2)	○	○	○	○	○
Received requests from local or tribal government or other institutions to provide guidance on food system issues (3)	○	○	○	○	○

Q17 **Credibility**

Your food policy group

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Is viewed as a credible group within your community (1)	○	○	○	○	○	○	○
Has established a positive reputation within your community (2)	○	○	○	○	○	○	○
Is a group that the public views as a trustworthy source of information (3)	○	○	○	○	○	○	○

Q18 **Member empowerment**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Helped you feel empowered to make food-related changes in your community or your home organization (1)	○	○	○	○	○	○	○
Led to opportunities to influence food system-related policies (2)	○	○	○	○	○	○	○
Led to opportunities to influence food system-related issues through programs or other non-policy efforts (3)	○	○	○	○	○	○	○
Helped you become a "champion" for food-related issues in your community (4)	○	○	○	○	○	○	○
Improved your ability to make food-related suggestions to decision-makers (5)	○	○	○	○	○	○	○

Q19 **Community context**

	Yes (1)	No (2)	Unsure (3)	Not applicable (4)
There are opportunities to influence food system related policies in your community (1)	○	○	○	○
Your food policy group has identified food system-related policy "easy wins" or "low hanging fruit" (2)	○	○	○	○
Your food policy group regularly experiences barriers when trying to influence food policy (3)	○	○	○	○

Q20 **Perceived impact and synergy**

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Has synergy defined (1)	○	○	○	○	○	○	○
Develops creative solutions to food system-related issues (2)	○	○	○	○	○	○	○
Fosters holistic thinking related to the food system (3)	○	○	○	○	○	○	○
Accomplishes goals that couldn't be achieved by a single organization (4)	○	○	○	○	○	○	○
Encourages practical solutions to food systems related issues (5)	○	○	○	○	○	○	○
Encourages comprehensive approaches to solving food system-related issues (6)	○	○	○	○	○	○	○
Connects multiple food-related systems (7)	○	○	○	○	○	○	○

Q21 **Impact:** *over the past 12 months, your food policy group has:*

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Increased access to healthy foods in your community (1)	○	○	○	○	○	○	○
Increased knowledge of and/or demand for healthy foods among community members (2)	○	○	○	○	○	○	○
Promoted equity within the food system (3)	○	○	○	○	○	○	○
Supported economic development (4)	○	○	○	○	○	○	○
Promoted environmental sustainability (5)	○	○	○	○	○	○	○
Supported resilient food systems (6)	○	○	○	○	○	○	○

Q22
Impact
In the past 12 months, has your food policy group worked toward increasing access to healthy foods?

Note: "Access" encompasses availability, supply, affordability, cost, safety, and cultural appropriateness of healthy food,
as well as the location of and transportation options to healthy food outlets.
"Healthy foods" include fruits, vegetables, beans, legumes, whole grains, dairy, seafood, plant-based protein, minimally
processed meats and poultry, eggs, nuts, seeds, non-hydrogenated plant-based oils (such as canola and oil oil), etc.

- ○ Yes (1)
- ○ Unsure (2)
- ○ No (3)
- ○ Not applicable (4)

Q23 In the past 12 months, has your food policy group worked toward increasing knowledge of and/or demand for healthy foods?

- ○ Yes (1)
- ○ Unsure (2)
- ○ No (3)
- ○ Not applicable (4)

Page Break

Q24 In the past 12 months, has your food policy group worked toward promoting equity within the food system?

Note: "Equity" includes fair wages, safe working conditions, diversity, fair hiring practices, supporting low-income groups within the food system, expanding access to healthy food in low-income settings, etc.

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)
- ○ Not applicable (4)

Q25 In the past 12 months, has your food policy group worked toward supporting economic development?

Note: "Supporting economic development" refers to actions that increase or promote opportunities to generate income.

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)
- ○ Not applicable (4)

Page Break

Q26 In the past 12 months, has your food policy group worked toward promoting environmental sustainability?

Note: "Promoting environmental sustainability" refers to approaches that increase the likelihood that natural resources such as clean water and air, biodiversity, and productive soil will exist for future generations.

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)
- ○ Not applicable (4)

Q27 In the past 12 months, has your food policy group worked toward supporting resilient food systems?

Note: "Supporting resilient food systems" refers to practices that allow food systems (including food production, distribution, consumption, and disposal) to withstand shocks and disturbances, both man-made and natural, over time.

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)
- ○ Not applicable (4)

Q28 Has your food policy group helped build relationships between food-related groups or organizations within your community?

- ○ Yes (4)
- ○ No (5)
- ○ Unsure (6)
- ○ Not applicable (7)

Page Break

Q29 Has your food policy group received technical assistance in the past 12 months?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)
- ○ Not applicable (4)

Q30 What kind of resources, skills, information, or other types of support would help your food policy group? Please select all that apply.

- ☐ Data sharing (4)
- ☐ Technical assistance (5)
- ☐ Partnerships or collaboration (6)
- ☐ Educational tools and resources (7)
- ☐ Funding (8)
- ☐ Community engagement (9)
- ☐ Leadership and facilitation (10)
- ☐ Meeting management and support (12)
- ☐ Other (13) _____

Page Break

Q31 **Demographics**
Age

- ○ 18-24 years old (1)
- ○ 25-34 years old (2)
- ○ 35-44 years old (3)
- ○ 45-54 years old (4)
- ○ 55-64 years old (5)
- ○ 65-74 years old (6)
- ○ 75+ years old (7)

Q32 *Gender*

- ○ Male (1)
- ○ Female (2)
- ○ Other (3) _____

Q33 *Race/Ethnicity*

- ○ Aboriginal/First Nations of Canada (1)
- ○ American Indian (2)
- ○ Asian (3)
- ○ Black (4)
- ○ Hispanic or Latino/a (5)
- ○ Multi-racial (6)
- ○ White (7)
- ○ Other (8) _____

Q34 Do you have any suggestions for how to improve the Food Policy Council Tool? We value your input!

_____

_____

_____

_____

Q35 **Thank you for completing the Food Policy Group Survey!**
This survey was adapted from the Food Policy Council Self-Assessment Tool developed by Larissa Calancie from University of North Carolina at Chapel Hill.

Sources:
Allen NE, Javdani S, Lehrner AL, Walden AL. "Changing the text": modeling council capacity to produce institutionalized change. Am J Community Psychol 2012;49(3-4):317–31.

Calancie L, Allen NE, Weiner BJ, Ng SW, Ward DS, Ammerman A. Food policy council self-assessment tool: Development, testing, and results. *Prev Chronic Dis.* 2017;14:160281. doi:10.5888/pcd14.160281.

Appendix E Stakeholder Interview Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Informed Consent for Participants
in Research Projects Involving Human Subjects

October 19, 2018

Title of Project: ***An Exploration of the Structure, Issue Framing, and Priorities of Virginia's Food Policy Groups to Develop a Healthy, Resilient and Sustainable Food System***

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I. Purpose of this Research Project

The purpose of this study is to understand the views and insights from diverse stakeholders who have worked with food policy groups in the Commonwealth of Virginia. We plan to use this information to inform will be used to better understand Virginia food policy groups' efforts in developing a healthy, resilient and sustainable food system. We are seeking diverse stakeholders who have worked with, are involved in food policy groups in Virginia. The

research findings will be used to inform the opportunities and challenges for food policy groups in collaborating with other food system actors. The results may be summarized in one or more publications and MS theses.

II. Procedures

Should you agree to participate, recruited informants will be asked to:

(1) Sign and return the informed consent form;

(2) obtain basic information about you including your name, affiliation and contact information and relationship to the food policy group; Consent to participate in a confidential audio-recorded interview that will be conducted either by phone or in-person by a researcher that will last no longer than 60 minutes.

The interview is intended to capture your views on the opportunities and challenges Virginia food policy groups encounter in collaborating with other food system actors. The telephone interview, video call or in-person interview will be scheduled on a mutually agreed upon date, time and location. The researchers may contact the participant after completing the other interviews and analyzing the results if there are further questions or a need to clarify what has been discussed.

III. Risks

There are minimal risks associated with your participation in this project. Your responses to the brief questionnaire will obtain basic information about you including your name, affiliation and contact information, and relationship to the food policy group knowledge and expertise. We will have time to answer any questions you may have before the interview. Then a researcher will request your verbal consent if you decide to continue with this interview. The study has been reviewed and approved by the Virginia Tech Institutional Review Board. Your participation in this study is not required, and you may end the interview at any time. You have the right to remain anonymous in the reporting of the results in scholarly publications and conferences.

IV. Benefits and Compensation

There are no direct benefits to participate in this study other than to share your knowledge and expertise to promote the public good by informing future food policy group collaboration.
No promise or guarantee of benefits has been made to encourage you to participate.
No compensation will be provided for participating in this study.

V. Extent of Anonymity and Confidentiality

You have the right to remain anonymous for this study and your information will be kept confidential at all times and will be known only to the research team. Your responses to the brief questionnaire will obtain basic information about you including your name, affiliation and contact information, and relationship to the media campaign for which you have knowledge and expertise. This information will be stored separately from your interview responses and will be coded and kept confidential.

Only trained researchers involved in this study will have access to identifiable information about you. At no time will the researchers release identifiable results of the study to anyone other than individuals working on the project without your written consent. It is possible that the Virginia Tech Institutional Review Board (IRB) may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research.

VI. Freedom to Withdraw

Your participation in this study is entirely voluntary, and you are free to withdraw from this study at any time without penalty. You are not obligated to answer all of the questions. If you choose not to answer a question, you will not be penalized.

VII. Subject's Consent

I have read or heard the consent form and conditions related to this research project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent. If the interview is conducted by phone, skype or Zoom I understand that I may give verbal consent prior to the interview rather than written consent to participate. If this is an in-person interview by signing below I acknowledge the above and give my voluntary consent.

Should I have any questions about this study, I understand that I may contact the people below:

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Principal Investigator and Assistant Professor
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As required, the IRB for Research Involving Human Subjects at Virginia Tech has approved this research project.

Should you have any questions or concerns about the study's conduct or your rights as a research subject, or need to report a research-related injury or event, you may contact the Virginia Tech Institutional Review Board at irb@vt.edu or (540) 231-3732

Participants signature_____Date_____

Appendix F Stakeholder Interview Guide

Begin the interview

These questions apply to the current or previous, or future partnerships, collaborations, networks, or coalitions that your food group participates in and the challenges or opportunities food policy groups' face in aligning priorities to develop a healthy, sustainable and resilient food system in the Commonwealth of Virginia.

Demographics

In this section, I will ask you questions regarding your name, affiliation, contact information and relationship to the food policy group

1. What is your name?
2. Your affiliation to the food policy group in question?
3. Your job affiliation?
4. Email?
5. Phone number?
6. Preferred method of contact?

Questions related to current partnerships

In this section, I will ask you questions to explore and clarify the current collaborations of your food policy group related to food systems.

1. What current partnerships does your organization participate in related to food systems?

2. Why is the partnership necessary/important/valuable for your organizations mission and vision or programs and policies?

3. Please list all organizations involved in the collaboration.

4. What is the nature of these relationships? (refer to VicHealth's mapping tool)

Questions related to future collaborative action

In this section, I will ask you questions about the planning and implementation of collaborative action within your food policy group.

1. What actions is your organization taking to partake in collaborative action? (This could be communication streams, decision-making, governance structure, planning)
2. What implementation strategies does your organization participate in to foster collaboration? (this could be policy, programs, protocols, funding, services provided, reporting mechanisms)

Questions related to challenges in establishing collaboration with other food policy group

In this section, I will ask you questions about the barriers or opportunities your food policy group faces in collaborating with other actors.

1. What are some barriers and/or challenges to building partnerships/ collaboration? (this could be differences in goals, priorities, missions, visions, time commitment, structural differences, strategies)
2. What are some opportunities to build partnerships? (this could be in goals, priorities, missions, visions, time commitment, structure, strategies)
3. What are (if any) some collaborative achievements that your organizations have been a part of?
4. What activities does your organization contribute to sustain these successful partnerships?

Conclusion and wrap-up

1. Are there any other important issues, questions or concerns that you want to comment on that we have not covered?

Thank you for participating in this interview about the opportunities and challenges in aligning food policy group activities and priorities with other food system actors to develop a healthy, resilient, and sustainable food system. Your input will help us better understand food policy groups in Virginia and encourage collaboration between food sectors. After completing the other interviews and analyzing the results, I may contact you if I have any questions or need clarifications about what we have discussed today.