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EXTENSION INTO NEW JERSEY'S URBAN CORE

By

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ABSTRACT OF THE THESIS

Extension into New Jersey's Urban Core

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In Camden and Newark, New Jersey, recent efforts to address environmental issues through a collaborative process provide insight into new ways for universities to work with diverse urban constituencies. Cooperative Extension's experience in these two communities is being evaluated to form a proposal for an alternative model for future Cooperative Extension Service work and university efforts in urban communities. The proposed model has been developed based on principals of action research, community-based participatory research, and collective impact to understand and define the roles and responsibilities of the university and local partners within a collaborative structure. This process-based model builds on community-identified need and identifies four critical steps for successful collaboration: engagement of key players leading to commitment and investment; organizing that addresses how the group will communicate and self-organize, thereby enabling a local champion and supporting effective partnerships; collaboration that involves developing a common agenda and framework for action; and sustaining impact, which engages the group in implementation and builds toward behavior change, increased knowledge, and change in condition.

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TABLE OF CONTENTS

ABSTRACT OF THE THESIS	ii
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vii
LIST OF ILLUSTRATIONS.....	viii
LIST OF ABBREVIATIONS.....	x
INTRODUCTION	1
BACKGROUND	6
Cooperative Extension Service.....	6
New Jersey’s Urban Centers.....	11
Purpose of Thesis.....	17
Research Methodology	18
CONCEPTUAL FRAMEWORK.....	19
Action Research.....	21
Community-Based Participatory Research.....	24
Collective Impact.....	26
University – Community Collaboration through Extension	29
PROPOSED COMMUNITY-BASED COLLABORATIVE MODEL FOR URBAN EXTENSION EFFORTS.....	34
A Process for Establishing a Community Collaborative	36
Engagement	37

Organizing	41
Collaboration	46
Sustaining Impact	50
URBAN EXTENSION EXPERIENCES.....	56
Camden Case Study	56
The Camden SMART Initiative	57
Extension’s Experience with Camden SMART.....	63
Newark Case Study.....	66
Newark DIG.....	68
Extension’s Experience with Newark DIG	71
COMMUNITY SURVEY AND INTERVIEWS	77
CASE STUDY EVALUATION	81
Engaging in Camden.....	81
Organizing in Camden	82
A Camden Community Collaborative.....	83
Sustaining Impact in Camden	84
Engaging in Newark	85
Organizing in Newark.....	86
Newark’s Community Collaborative	88
Sustaining Impact in Newark.....	88
CONCLUSIONS & NEXT STEPS	93

APPENDIX 1: IRB APPROVAL	97
APPENDIX 2: SURVEY RESULTS	98
BIBLIOGRAPHY	118

LIST OF TABLES

Table 1: Population in New Jersey's Urban Centers	15
Table 2: Survey Question Categories.....	79

LIST OF ILLUSTRATIONS

New Jersey's Urban Population Map	16
Collaboration Progress over Time	20
A Relationship Continuum	21
Action Research Cycle.....	22
Community-based Participatory Research Diagram.....	25
Conditions for Collective Impact.....	28
The Collective Impact Approach	28
Extension Program Development Model.....	30
Proposed Community-based Collaborative Relational Diagram	35
Proposed Community-based Collaborative Process	36
Engagement Process	38
Organizing Process	42
Collaboration Process	47
Sustaining Impact Process	51
Flooding on Delaware Avenue in Camden, July 2013	56
Map of Camden Neighborhoods.....	58
Camden SMART Collective Impact Diagram.....	61

2015 Camden SMART Accomplishments.....	62
Rutgers Cooperative Extension Water Resources Program conducting site visits with community members in North Camden	65
Newark City Wards.....	67
RCE Water Resources Program Training with Newark Residents in 2009.....	73
Newark DIG Participants with Newark Mayor Ras Baraka in June 2016.....	74

LIST OF ABBREVIATIONS

319(h):	US Environmental Protection Agency Federal Clean Water Act Section 319(h)
CBPR:	Community-based Participatory Research
CCI:	Community Collaborative Initiative
CCMUA:	Camden County Municipal Utilities Authority
CFP:	Cooper's Ferry Partnership
CSO:	Combined Sewer Overflow
DIG:	Doing Infrastructure Green
DOT:	Department of Transportation
EJ:	Environmental Justice
GI:	Green Infrastructure
HUD:	U.S. Department of Housing and Urban Development
MS4:	Municipal Separate Storm Sewer System
NJ:	New Jersey
NJDEP:	New Jersey Department of Environmental Protection
NY:	New York
PVSC:	Passaic Valley Sewerage Commission
RCE:	Rutgers Cooperative Extension
SMART:	Stormwater Management and Resource Training
USEPA:	United States Environmental Protection Agency
U.S.	United States

INTRODUCTION

Environmental problems challenge every urban community and its residents. Urban communities are in need of new ideas and innovative partnerships to begin solving environmental problems such as legacy industrial contamination, aging infrastructure, climate change, and flooding. Many residents living in urban centers do not have equal access to available resources and opportunities due to social, economic, and other systemic inequalities. These disadvantages limit the ability of these populations to affect changes in the community and to control their lives. Residents and organizations in many neighborhoods are working to establish equal opportunity, voice community needs, obtain access to resources to address those needs, and participate in a dialogue free of discrimination and threat of punitive or dismissive actions.

Land grant universities through the Cooperative Extension Service have the mission to extend the knowledge of the university into the community to solve relevant problems. Cooperative Extension programs of the land grant university need new perspectives, ideas, and approaches to effectively engage with urban communities to begin solving environmental problems. While the core mission and vision for Extension to translate research into practice remains the same, the challenges associated with implementing programs have evolved as communities and organizational environments have changed (Ryan J. Gagnon et al. 2015). How can Cooperative Extension embed itself into communities and develop programs working with urban constituencies?

The author of this Master's thesis is a registered Landscape Architect who has practiced for over twenty years. For the past eight years, the author has worked for the Cooperative Extension Service delivering programs to communities across New Jersey. It is through the lens of the Landscape Architect that this research has been developed. The profession of landscape architecture is grounded both in the agrarian and urban context. From its inception, the

profession has worked to improve human conditions in community through manipulation of the land. The breadth of the profession which touches upon all aspects of humans living in community also provides a framework for interdisciplinary problem solving and the open exchange of ideas and knowledge. Early landscape architecture programs were founded within agricultural colleges of land grant universities as the roots of the profession grew out of an in-depth understanding of soils and plants. As the profession evolved, design and planning schools have incorporated and embraced landscape architecture and programs now offer a broad education in art, design, community planning, engineering as well as soils, plants, and ecology. This connection of people with the land is also at the core of what the Land Grant University and the Cooperative Extension Service represent. This broad background as well as the evolution of the profession of landscape architecture provides valuable insight into a possible future for Extension programs. With the rapid shift in our society in recent decades from agriculture and manufacturing, to service and technology, and with an increasing number of people living in dense metropolitan communities, the role of Extension and the land grant university needs to shift. Landscape architecture can provide a bridge between the current Extension model and a future model that embraces equally the agrarian and the urban.

Communities depend on systems that provide reliable and predictable services. For example, a wetland community relies on a water budget to survive. A human community relies on clean, safe drinking water. Both also have infrastructural systems in place to manage waste, break down or biodegrade used up materials, and recycle energy and resources. Healthy infrastructure systems are critical for both a functioning natural environment and a human-built community. In the mid to late 20th Century, society began to recognize that the systems supporting many natural environments were broken. Efforts began to learn and understand natural systems in order to protect and restore critical natural communities. The awareness, knowledge, and successes (as well as failures) of the modern environmental movement provide a model for protecting and

restoring human-built environments. As populations grow and infrastructure systems age, more complex and challenging work will be needed to create healthy, livable communities that are resilient and can be sustained. The country has not invested in infrastructure for decades. Recent reports highlight these shortcomings and the potential for catastrophic results. They also point to the immense amount of funding and resources needed to restore these systems so that communities and economies can continue to thrive and grow. Nevertheless, communities have to continue to function, identifying local, stop gap, economical means to address what they can to mitigate the effect of failing infrastructure. Plus, we must balance protection of the natural environment with efforts to restore the systems that support human-built communities. In this context, we need plans for the continued development and management of healthy, livable urban centers.

In today's urban communities, diverse populations establish unique neighborhoods and networks that frequently rely on non-governmental and civic organizations. These organizations provide a bridge for underrepresented community members to become informed and engaged in the life of the community. Often, these organizations provide vital services including educational support, navigation of governmental programs, language assistance, job training, and housing assistance. It is working with these organizations that Cooperative Extension programs can begin to serve the large diverse populations found in urban centers.

The institution of Cooperative Extension, including administrators and professionals, needs to understand and recognize the value these organizations bring to the community and the role they play in highlighting needs through grassroots efforts. These organizations are an important resource for Extension when approaching a community and developing an understanding of its needs and assets. However, it is important to recognize that these community organizations may compete with one another for resources and recognition and can struggle to effectively work

together. Overlapping missions, politics, and personality conflicts can become hurdles that divide the community and limit impact.

The Cooperative Extension Service has an opportunity to work with communities to develop programs, provide technical assistance, and serve as a non-biased facilitator for collaborations in urban areas. A challenge for an outside entity lies in recognizing the unique capacity of each community's residents, organizations, leadership, and governing bodies. An effective urban collaboration requires leadership, direction, and open communication within a flexible framework. By becoming a partner embedded in the community in open dialogue with community-based organizations, the Cooperative Extension Service can be in a strong position to identify and commit resources to address issues of crime, infrastructure, environment, redevelopment, housing, wages and jobs as well as education, agriculture, food, and health. The opportunity exists for a non-biased facilitator to create a non-threatening forum for open dialogue and idea sharing. Authors from Michigan State University writing about a case for a paradigm shift in Cooperative Extension write that "clients are increasingly looking to Extension to be conveners and organizers empowering them to address their communities' needs (community centric) rather than primarily disseminators of information (information centric)" (Strong et al. 2015). Bringing together multiple organizations actively working to help the community and its residents provides a platform for greater civic engagement, deeper understanding of needs, and leveraging of necessary resources to solve problems. In this role, Cooperative Extension is able to share the resources and support of the land grant university to address a community's needs. Through a new model of collaborative engagement, the Cooperative Extension Service can effectively bring the diverse resources and expertise of the land grant university to bear on critical urban issues.

Extension programs through the land grant university can support these efforts through effective education and outreach programs that engage the community and willingly support populations

who have traditionally not had a voice in the growth, evolution, and development of their community. Successful urban communities will be those that best meet the immense and complex challenges of restoring both human-made and natural infrastructure (Nelson, Allen, and Trauger 2006). The public land grant universities and the Cooperative Extension Service are uniquely positioned to provide leadership in the work to restore complex human-built communities within the context of our natural environment. The science, technology, design, and planning resources of the public university and the community relationships of the Cooperative Extension Service can bring together human capital with the learning, discovery, and engagement required to begin answering difficult, complex questions and preparing our urban communities for the 21st Century and beyond.

BACKGROUND

Cooperative Extension Service

The Cooperative Extension Service was created in 1914 by the Smith-Lever Act “To aid in the diffusing among the people of the United States useful and practical information...giving instruction and practical demonstrations.” The partnership established 100 years ago between Land Grant Universities and the Cooperative Extension Service has been structured to provide education and outreach to people and communities that previously had limited access to academic advancements. The Cooperative Extension designation makes land-grant universities unique by adding specific responsibilities for outreach and service to the more widely recognized research and teaching functions of public universities (Franz and Townson 2008).

When the Cooperative Extension Service was created in the early 20th Century, the population of the United States was predominately rural and agrarian. Extension met the needs of this population with a strong focus on agricultural community needs, home economics, and youth development. But now, the country is experiencing a tremendous shift. The population is trending towards urban centers and working in service and technology sectors. As noted by Dennis Lamm, Assistant Director of Cooperative Extension at Colorado State University in 1992, “Legislative redistricting based on the latest Census figures will give urban dwellers more political clout than they’ve ever had. It’s presumptuous that taxpayers would, over the long-term, encourage the use of their tax dollars to address strictly rural problems” (Lamm 1992). This shift in population and employment needs to be recognized by the land grant university and reflected in Cooperative Extension Service programs. The nation’s transformation from a manufacturing to an information society raises questions as to how to best reach an intended audience (“Extension | National Institute of Food and Agriculture” 2017).

Much of the research and knowledge at today's Land Grant University goes beyond the traditional Extension programs in agriculture, home economics, youth development, and education. Research and knowledge in a variety of new fields of study can help communities and residents improve their lives. As Cooperative Extension professionals in Florida are finding, "Successful urban Extension programs require training of personnel, new resources, comprehensive volunteer-development strategies, and the use of diverse team-based approaches that reach outside the traditional agricultural parts of colleges" (Warner et al. 2017). Programs such as the environmental sciences, landscape architecture, policy, planning, health, ecology, computer technologies, and more have direct bearing on many of the issues urban communities are struggling to address.

In addition to the population shifting geographically, the country's population is also shifting culturally. Communities are becoming much more diverse and mobile. This presents challenges to traditional Extension program methodologies. Previous programs and extension approaches were developed for disseminating information and educating primarily rural communities that were stable and homogenous. As Brian Raison, Assistant Professor at Ohio State University Extension writes, "This original [Cooperative Extension] approach was missional and quite necessary because a century ago information was not readily available as it is today. But the emphasis now is on interpreting information. Clients often need help understanding what data mean. The work of Extension is changing" (Raison 2014). Diverse, mobile, urban communities will require a new approach to effectively deliver programs that meet the needs and challenges of the population.

The Cooperative Extension Service (Extension) was created to make the knowledge within the land grant university available to the people and communities of the United States. The land grant universities were established under the Morrill Act of 1862 which granted each state public land in the amount of 30,000 acres for each of its Senate and House members. States were to use the

proceeds from the sale of the land to endow a college where studies “related to agriculture and the mechanical arts” would be provided “in order to promote the liberal and practical education of the industrial classes” (“Morrill Act of 1862” 2017). This act provided for the establishment of schools but did not provide federal funding for the operation of these schools. In 1890 a second Morrill Act was passed that provided direct appropriations to each state for funding of their land-grant colleges. In addition, the Morrill Act of 1890 “prohibited racial discrimination in admissions to colleges receiving the funds” (Rasmussen 1989). While intended to prevent racial discrimination at the land-grant colleges, states were able to alternatively establish separate institutions for black and white students. As a result, 17 additional land-grant colleges were created following the passage of the Morrill Act of 1890. Land-grant institutions became a platform for resource allocation to help teach practical knowledge to the industrial class.

When the land-grant colleges were established, agriculture was a driver of the nation’s economy. Farmers were contributing mightily to the growth of the nation, with 80% of total exports coming from farms (Rasmussen 1989). But, the young land-grant colleges were struggling to provide courses of study that advanced agriculture and farming. Little science research in agricultural production was available. In response to the need for rigorous science, congress passed the Hatch Act in 1887 to provide annual funding for the support of agricultural experiment stations. The establishment of the Agricultural Experiment Stations provided the land-grant colleges a second responsibility for research above and beyond their first responsibility to teach.

By the late 1890s, the land-grant colleges were experimenting with programs outside college walls. Programs such as institutes, movable schools, farm trains, and short courses were being offered through partnerships with libraries, Boys and Girls clubs, and farm bureaus. However, no national framework or structure was in place. As the nation moved into the early 20th Century and the progressive movement began to influence many aspects of the nation’s life, the country’s leaders turned attention to the needs of the working class. In 1914 the Smith-Lever Act

established a national framework and funding for Cooperative Extension. This new legislation required cooperative agreements be established between the states, institutions, and the federal government to insure that funds were used for the clear intended purpose “[t]o aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same” (Smith-Lever Act 1914). Extension became a third responsibility of the land-grant institutions in addition to teaching and research. As defined in the Act, efforts of Extension programs were to “consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise” (Smith-Lever Act 1914). Through Extension, the land-grant colleges were given the responsibility of making the knowledge of the institution available to the community and residents. With the creation of Extension through the Smith-Lever Act, the land-grant college’s three-fold mission was finalized.

Extension has been working for over 100 years to address community problems by applying the knowledge and resources of land-grant universities. Extension has local offices in more than 3,000 locations (typically county-based), with a common mission of supplying research-based information and education to people to help improve their lives (Franz and Townson 2008). A majority of Extension programs have historically focused on addressing agricultural and food related issues within rural communities. Extension was invented by the American people to meet a vital educational need – the need to provide an educational base for making rural life profitable, healthful, comfortable, and attractive (Rasmussen 1989). This work also ensured that agricultural productivity would increase to support population and economic growth. But the current demographic shift the country is experiencing will require a shift in Extension.

While Extension programs have been effective in disseminating information to rural communities, questions have arisen as to Extension's value and effectiveness in addressing current problems in urban and suburban communities. In an urban context, there are many more organizations and technologies that provide information and expertise. Extension is no longer the only resource to turn to and Extension needs to find its way in a dynamic and competitive urban environment. According to Nancy Franz, the former Associate Dean for Extension and Outreach in the College of Human Sciences and Director of Iowa State University Extension and Outreach to Families:

“The value of Extension as an information disseminator has waned due to the Internet and other factors. This context forces Extension to evolve due to changes in how the public consumes information, increased competition from other organizations and businesses, and urbanization of the United States.” (Nancy Franz 2015)

Historically, Cooperative Extension programs housed at the land-grant universities have predominantly served rural populations and the needs of the agricultural community. These communities and populations typically have remained stable with changes occurring slowly allowing for gradual adaptation. Cooperative Extension programs serving these communities have developed and evolved to meet the needs of this stable rural agrarian community and population. But, today's urban population is diverse, mobile, and in some cases highly educated.

“Although flexibility and nimbleness are characteristics not often associated with large systems like Extension, these are the qualities that it must exhibit to be competitive in a connected, global society. When Extension stakeholders have quick and easy access to information via the Internet, Extension must demonstrate an ability to be timely and relevant.” (Ryan J. Gagnon, Barry A. Garst, and Nancy Franz 2015)

Extension professionals and future extension programs must be able to be responsive to communities needs in a very dynamic urban environment. With information available at the touch of a smart phone or tablet, Extension professionals will be needed that can interpret data and information as well as provide traditional educational programs. The ability to convene and

facilitate community networks and clearly communicate with stakeholders are becoming required skills for Extension professionals working in urban communities.

Growth of urban populations in the United States has continued for the past 200 years. In 1790, the first U.S. census noted that only 5% of the nation's population lived in urban areas. By 1890, that percentage had grown to 35% of the country's population. By 1990, nearly 75% of the U.S. population lived in urban communities. The growth of cities and the increasing diversity of the population strongly suggest that the Cooperative Extension Service needs to transition to maintain relevance to the people and communities it serves. How Cooperative Extension can effectively engage with urban communities and populations is an important starting point for thinking about the future of the Cooperative Extension Service.

Urban communities are diverse and ever-changing. The structure of urban communities often requires an individualized approach to successfully assess community needs and establish new programs. The broad range of urban environmental and social issues requires a wide range of expertise. Rapidly shifting politics, policies, and populations requires nimble, flexible programs. Working in this fluid and often fractious environment presents unique challenges for an Extension service program. The diversity of existing organizations in urban communities requires that programs be able to engage and communicate with a broad range of constituents. Working within this diverse and dynamic environment requires a model framework that is adaptable to a community's individual needs and structure.

New Jersey's Urban Centers

Urban communities across New Jersey face a range of problems as a result of aging infrastructure, legacy contamination from past industries, air pollution, climate change and population growth. Recent storms, including Hurricane Irene in 2011 and Superstorm Sandy in 2012, devastated communities across the state bringing to the forefront many of these issues. In

addition to headline storms and natural disasters, communities located along New Jersey's rivers and streams sustain recurring damage and environmental degradation as a result of annually occurring heavy rains, subsequent stormwater runoff, and flooding. These communities continue to suffer lasting, recurring impacts on natural resources, landscapes and neighborhoods. Communities need guidance to meet a range of environmental challenges, integrate climate change adaptation into local policies, programs, plans, and projects and prepare their communities for the future. As the Cooperative Extension Service looks to serve these communities it needs to be able to communicate effectively with urban constituents to gather input and understand the perceptions and needs of relevant urban issues.

New Jersey's urban core was a driver of the industrial revolution in the 19th Century. Industries in the cities of Camden, Trenton, Newark, and Paterson were leaders in manufacturing and home to numerous companies recognized around the globe. The proximity to both New York City and Philadelphia drove suburbanization in the early 20th Century and the State's population continued to climb. As manufacturing in the United States faded in the late 20th Century, New Jersey's urban core has struggled.

In the early 20th Century, Camden was a thriving city with RCA Victor and New York Shipbuilding Corporation. Located across the Delaware River from Philadelphia, the city now is home to several institutions of higher learning including Rutgers-Camden and Rowan University as well as Cooper Hospital. Yet today, many areas of the city are now largely vacant as businesses, industries, and residents have left in recent decades. The city has had nationally recognized struggles with crime and poverty. Camden residents are living with two USEPA Superfund Sites and over 100 known contaminated sites. Additionally, the city is home to a regional incinerator and wastewater treatment plant. Much of the city's sewer and water infrastructure is nearly 100 years old. Over 300 remaining industries in the city have permits for discharges to air, land, or water resources. These remaining industries also require use of diesel

trucks, ships, and equipment contributing significant particulate matter and pollution to the air. Camden is home to nearly 80,000 residents, of which over 82% are non-white (U.S. 2010 census). The median household income is \$26,705, which is just 37% of the New Jersey median household income (U.S. 2010 census). In 2009, over 38% of Camden residents lived below the poverty level and only 44% of the labor force was employed. Camden covers a total area of 10.4 square miles with a population density of 7,437 people per square mile.

The City of Trenton located on the Delaware River north of Camden in Mercer County is the State Capital. Once a thriving industrial city home to a porcelain industry and Robling cable manufacturing, it has held on to its slogan “Trenton Makes-the World Takes.” The city is the 10-largest in the state, now home primarily to State Capital and Court facilities. Trenton is home to over 80,000 residents, of which 52% are African-American and 34% are Hispanic (U.S. 2010 census). The median household income is \$36,601, less than half of the New Jersey median household income (U.S. 2010 census) with 24% of Trenton residents living below the poverty level. With an area totaling 7.66 square miles, Trenton’s population density (11,101 people/sq. mi.) is an order of magnitude higher than the New Jersey average. Trenton has significant issues to address and residents need the information and tools to begin taking the action needed to improve their quality of life. Significant in the city is that 21% of all properties are vacant and there are 2,400 vacant lots.

Newark is the largest city in the State of New Jersey with over 275,000 residents. It is also one of the oldest cities in the country and has been an important port of entry since its founding due to its proximity at the mouth of the Passaic River at Newark Bay. Newark covers an area totaling 26.16 square miles and is the second largest city in the New York metropolitan area. Newark’s population has been steadily increasing over the past decade, with an all-time lowest population of 275,221 in 1990 rising to 278,154 in 2010, or about 35% of the population of Essex County (U.S. Census 2010). The population density in Newark is 11,458 people per square mile, making

Newark one of the most densely populated cities in New Jersey. Approximately five miles west of Manhattan, Newark is bordered by two major water bodies: the Passaic River to the north and Newark Bay to the east. The Passaic River drains to the Newark Bay which connects to the New York/New Jersey Harbor. Newark is home to Newark Liberty International Airport and the Port Newark/Elizabeth-Port Authority Marine Terminal, one of the largest container shipping ports in the United States. Seven major highways, including the Garden State Parkway, New Jersey Turnpike, Interstate-78, and Interstate-280, pass through Newark. According to the land use/land cover database (NJDEP 2002), 79.8% of Newark is classified as urban land, and 37% is comprised of impervious surfaces.

The City of Paterson has also been known as the “Silk City” for its role in silk production during the 19th Century. It is the third largest city in the State of New Jersey and is located along the Passaic River. The river provided power for mills in the city that supported the textile industry and later a firearms industry and railroad locomotive industry. As of the 2010 U.S. Census, over 25% of the population lived below the poverty line. Large areas of the city are subject to frequent flooding. The aging sewer and water infrastructure also struggle to meet the demands of the community. Lead has been found in the water supply and combined sewer overflows discharge into the Passaic River. Based upon the 2010 United States Census, the population of Paterson is 146,199. The population density was 16,824 people per square mile. Paterson is a racially diverse city in New Jersey with 31% black or African American, 57% Hispanic or Latino, and 3% Asian.

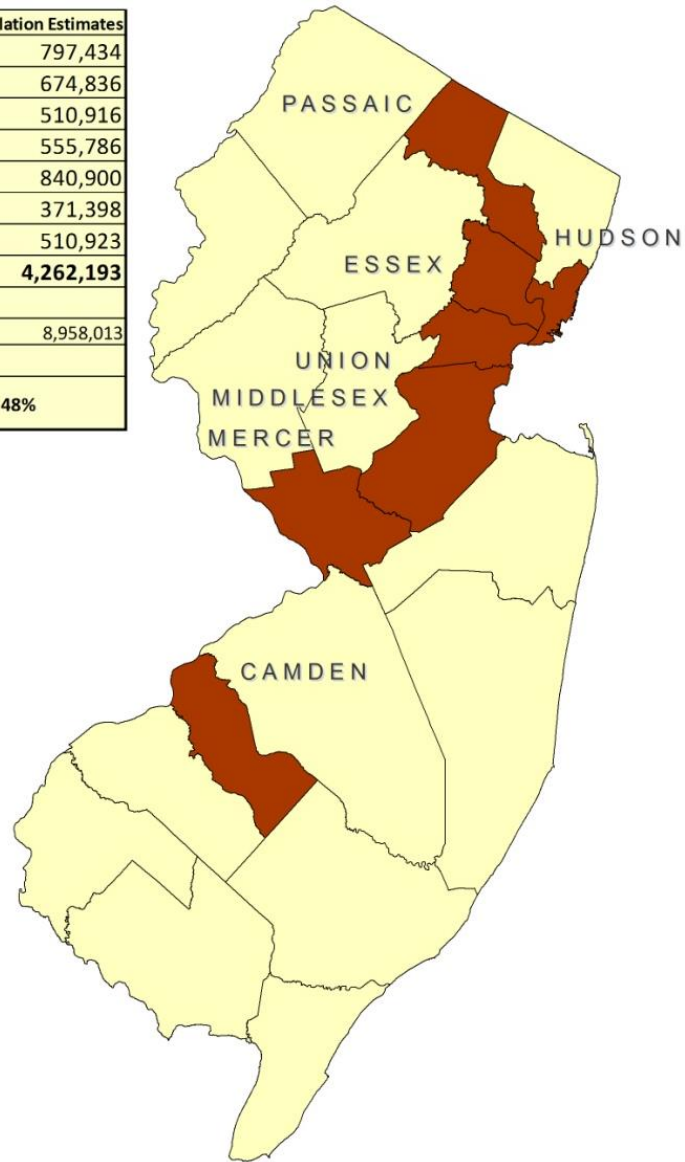
New Jersey is the country’s most densely populated state at 1,185 residents per square mile as of the 2010 census. The largest concentrations of people live in the northeast counties surrounding New York City, counties near Philadelphia and counties along the New Jersey coast. New Jersey has over 8 million residents with approximately 1 million living in the state’s eight designated urban centers.

New Jersey's Urban Centers	2014 Population Estimate
Newark	280,579
Jersey City	262,146
Paterson	146,753
Elizabeth	128,705
Trenton	84,034
Camden	77,332
New Brunswick	57,080
Atlantic City	39,415
TOTAL POPULATION	1,076,044

Table 1: Population in New Jersey's Urban Centers

In addition, over four million people, 48% of New Jersey's population, is concentrated in the seven counties surrounding the state's largest urban centers.

New Jersey's Urban Counties	2015 Population Estimates
Essex County	797,434
Hudson County	674,836
Passaic County	510,916
Union County	555,786
Middlesex County	840,900
Mercer County	371,398
Camden County	510,923
TOTAL	4,262,193
New Jersey Total Population	8,958,013
Percent of State Population in Urban Core	48%



New Jersey's Urban Population Map

SOURCE: Map by Author

According to the 2010 U.S. Census, New Jersey is the second wealthiest state, yet the City of Camden recently has been identified as one of the poorest cities in the nation with nearly 40% of residents living at or below the poverty line. In addition, many residents in the City of Camden live in neighborhoods adjacent to U.S. Environmental Protection Agency (USEPA) superfund sites, as well as a regional garbage incinerator and sewage treatment plant, factories and industries, and tolerate aging and failing infrastructure.

Similar impacts are felt in neighborhoods in the City of Newark, where local organizations and activists are actively working to address pollution in air, water, and land as well as flooding and combined sewer overflows.

Purpose of Thesis

Through listening to the community's voice, Cooperative Extension can identify issues relevant to existing populations and bring to bear the knowledge and resources of the land grant university to begin addressing and solving current problems. Engaging communities and particularly populations who have traditionally not had a voice in the growth, evolution and development of their community is where Extension becomes relevant in the urban context. This research works to identify how Extension can maintain relevance in the urban context through active community engagement and collaboration. Extension methods are needed that include providing both technical expertise and facilitation. Extension is not only about learning what the problems are but also developing capacity and finding solutions within the community itself.

This research effort is focused on learning how the Cooperative Extension Service can effectively develop programs working with urban communities that solve relevant issues and lead to positive change. Having worked in several urban communities over the past six years, the author is looking to document experiences with partnerships in Camden and Newark. Through the research, the author hopes to understand the relationship of the University and Cooperative Extension Service with the community, capture perspectives of community partners, and illustrate processes and strategies for community engagement, organizing, collaborating, and action. The research looks to frame urban Extension programs through models for Action Research, Community-Based Participatory Research, and Collective Impact. Finally, it proposes a methodology for engaging and communicating with urban constituents to develop programs addressing environmental and social needs.

Research Methodology

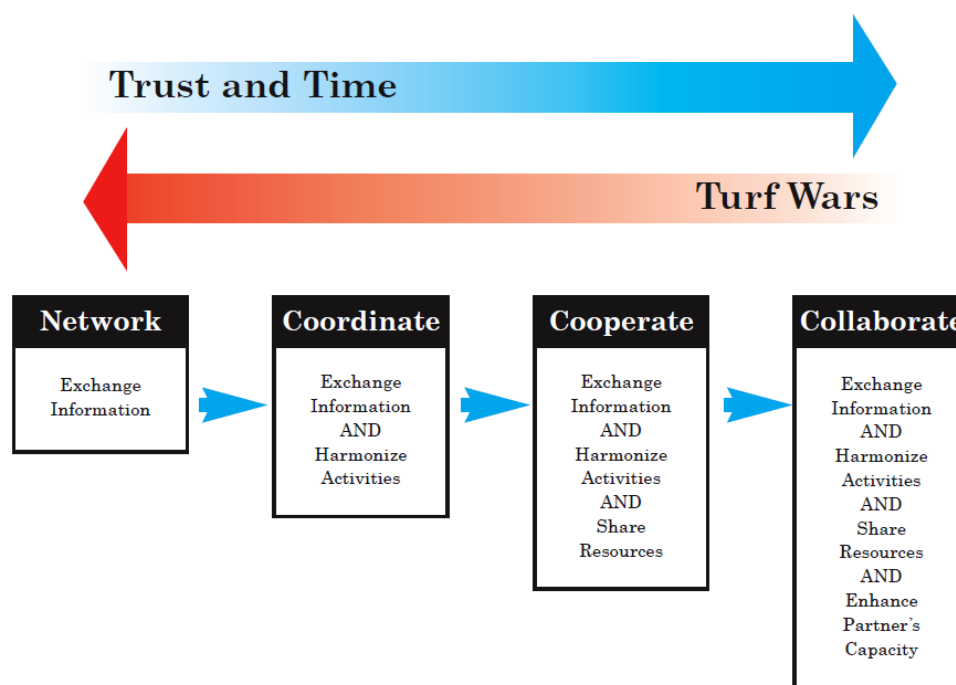
This research analyzes case study urban Extension programs in Camden and Newark, New Jersey working to address issues of environmental health, climate change adaptation, and resiliency. It documents the process used to engage the community and the role of Extension in that process. The work compares the programmatic approach used in the urban community setting to traditional Extension programs. Research efforts include site visits, personal interviews with community partners and leaders. It also includes a survey of participants in New Jersey urban extension program areas to understand the value and impact of these extension efforts.

CONCEPTUAL FRAMEWORK

When the University works with communities outside the institution framework, good intentions are not enough. The best placed efforts can often be seen by local community activists, organizations, and residents as paternal guidance, outside academic research with no direct connection to specific community needs and issues, or a taking of resources that should go directly to the community. Developing programs without direct community participation creates barriers and limits opportunity for change. Interventions created solely by outsiders may perpetuate the inequalities that researchers aim to address, create an atmosphere that discourages community experts from sharing invaluable perspectives and ideas, and thwart entry of researchers and their work into communities (Green and Mercer 2001). To effectively work in community, Extension as a university-based program needs to be able to establish an equitable and open relationship with local leaders. To overcome these challenges, this research frames the university-community partnership through action research and community-based research. Action research provides a framework for Extension professionals to develop knowledge and programs with a community not just for a community, going beyond community outreach and moving toward community engagement. Community-based participatory research is not only about developing knowledge, but about connecting knowledge directly to action, change, or advocacy. It is about communities taking control where previously they were unable to impact decisions affecting their lives. Meeting people where they are is critical to the success of Extension programs and services primarily because participation in Extension offerings is usually voluntary (Barry A. Garst and Paul F. McCawley 2015). Through the relationship building process, an opportunity exists to bring university resources to bear on community issues in a way that responds directly to local need.

Significant in the relationship building process, is the development of multi-party alliances that bring together a variety of disparate organizations, activists, residents, and leaders around a

common issue. This work is time consuming, often contentious, and can be resource intensive. Collaboration involves a change in business as usual, and different kinds of partnerships will involve different levels of collaboration, depending on their goals and the partners' readiness to change how they do business (Williams Torres and Margolin 2010). As illustrated by Williams Torres and Margolin in "The Collaboration Primer," a successful collaboration builds trust between participants, results in serious time commitment from partners, and a diminished need for participants to protect their own turf. Establishing a collaborative effort occurs over a continuum and can fluctuate as participants change and issues evolve.



Based on concepts from A.T. Himmelman "Collaboration for a Change: Definitions, Models, Roles and a Collaboration Process Guide" and a tool developed by Lancaster Community Health Plan.

Collaboration Progress over Time

SOURCE: "The Collaboration Primer", Gretchen Williams Torres and Frances Margolin

University relationships with communities develop and evolve over a continuum. This continuum can range from unilateral relationships driven exclusively by researchers to collaborative and participatory relationships that allow for inclusion and a convergence of

university and community interests to a fully democratic relationship with all individual partners representing institutions that use participatory decision-making processes (Ritas 2003).



A Relationship Continuum

SOURCE: Based on diagram from C. Ritas "Speaking Truth, Creating Power: A Guide to Policy Work for Community-Based Participatory Research Practitioners"

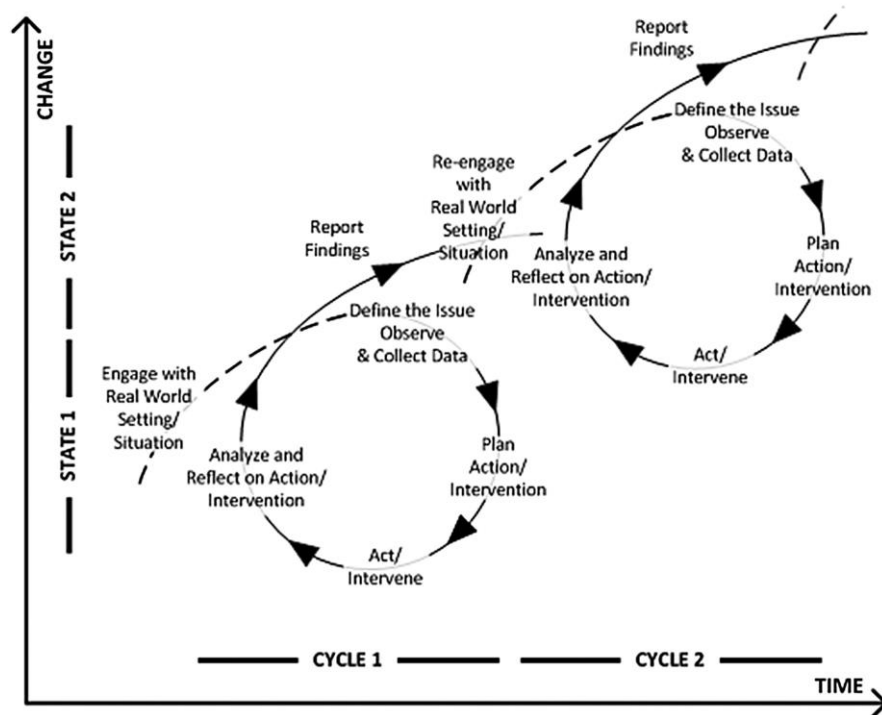
When working in collaboratives, relationships along this relationship continuum will shift and change. As participants establish trust with one another and as the university is able to determine its role, shared leadership and responsibility can provide momentum for increasingly participatory and democratic relations between community and university. To understand the value, capacity, and effectiveness of collaborative efforts, this research has looked to a framework of collective impact. Collective impact has been proposed as a collaborative model that can address the complex social issues facing communities and serves as a more effective approach than individual or independent organizational efforts. It provides a flexible and adaptable structure that allows for the unique qualities of individual communities to define direction and action.

Action Research

Action research is an orientation to knowledge creation that arises in a context of practice and requires researchers to work *with* practitioners (Bradbury-Huang 2010). Action researchers are committed to developing relationships with non-academic partners to explore issues in a systematic way that can lead to transformation. Action research “is not a single academic discipline but an approach to research that has emerged over time from a broad range of fields” (Brydon-Miller, Greenwood, and Maguire 2003). Beginning in the social sciences, action

research has broadened to allow for a range of researchers and practitioners to benefit from an egalitarian process that empowers both insiders and outsiders in generating knowledge and transforming community practices.

Through a collaborative process, action researchers are committed to mutual support and contributions of all participants. Action researchers aim to act morally and promote social justice through research that is politically informed and personally engaged (Somekh 2006). Research is conducted in the context of community and with direct participation from those members who are benefitting from the work. As this collaborative work ensues, it is extremely important that balances of power be managed openly and ethical practices be strictly adhered to.



Action Research Cycle

SOURCE: ("Knowledge Center - P2SL Project Production Systems Laboratory" 2017)

Flexibility and evolution are key characteristics of action research efforts. To sustain action research which occurs in a fluid environment, openness and willingness of both researchers and non-academic participants is needed. Real-time data gathering and analysis often results in

unforeseen plans and action strategies required to bring about positive change. The cyclical nature of data gathering, interpretation, recommendations, action, and evaluation is repeated and becomes an ongoing inquiry that ebbs and flows as individuals, resources, and priorities come and go.

Knowledge and understanding developed through action research is unique. By working with community insiders, researchers have access to information not accessible in the academic setting. Action research engenders powerful learning for participants through combining research with reflection on practice (Somekh 2006). The unique setting and relationships generated through action research creates a shared learning environment where both researcher and community member benefit.

“We have learned that significant, meaningful change can occur when practitioners reflect on their work both with the communities they work in and with practitioners who do similar work.” (Diebel 2008)

Action research provides a framework for Extension professionals to develop knowledge and programs with a community not just for a community, going beyond community outreach and moving toward community engagement. Most importantly, it is research requiring practice. Extension work in community is not only about writing and publishing, but about changing behavior and improving conditions for stakeholders. The work of Cooperative Extension is about discovering in partnership with one another. The research is not qualitative or “about doing,” but is research “by doing with partners.” It is about Extension professionals learning and growing while working with a community. Working collaboratively with others leads not only to community and organizational changes, but also to personal changes in the action researcher (Brydon-Miller, Greenwood, and Maguire 2003).

Community-Based Participatory Research

Randy Stoecker noted in his 1999 article, “Are Academics Irrelevant” that participatory research differs from action research in that the research questions for participatory research are generated by the community (Stoecker 1999). Participatory research models have grown out of an ever increasing perception and reality of patronizing institutions and researchers making decisions for what is often perceived as an uninformed public. Conducting research apart from a community and simply conveying results to the community often limits actual behavior change. Participatory research is an approach that entails involving all potential users of the research and other stakeholders in the formulation as well as the application of the research (Green and Mercer 2001).

Community-based Participatory Research (CPBR) begins in the community. Professionals look to integrate community members in the early establishment of research questions as well as the design of the research project. Barbara Israel and her colleagues at the University of Michigan have developed and proposed a series of principles that have guided CBPR practitioners for nearly twenty years (B. Israel et al. 1998).

- Recognize community as an unit of identity
- Build on strengths and resources within the community
- Facilitate collaborative, equitable involvement of all partners in all phases of the research
- Integrate knowledge and intervention for mutual benefit of all partners
- Promote a co-learning and empowering process that attends to social inequalities
- Involve a cyclical and iterative process

- Address health from both positive and ecological perspectives
- Disseminate findings and knowledge gained to all partners
- Involve long-term commitment by all partners

CBPR is not only about developing knowledge, but about connecting knowledge directly to action, change, or advocacy. It is about communities taking control where previously they were unable to impact decisions affecting their lives. Through partnerships and collaboration, CBPR brings communities and researchers together with resources and a diversity of perspectives to affect positive change. At its core, CBPR requires a “commitment to build on community strengths and resources, to foster co-learning and capacity building, and to balance research and action for mutual benefit of all partners” (B. A. Israel et al. 2010).



Community-based Participatory Research Diagram
 SOURCE: Based on Diagram by Detroit URC (“What Is CBPR” 2017)

CBPR strives to provide a balance of power in the relationships that develop through a research project. In the CBPR process, establishing a balance of power to enable local partners is essential. Through a balance of power, communities are able to affect real change and fully engage in decision-making that impacts their lives. As Sherry Arnstein, in her 1969 article, “A Ladder of Citizen Participation” states,

“It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future.”
(Arnstein 1969)

It is necessary to overcome what may often be a shallow or empty participation process. Through structured partnerships and collaboration, CBPR provides a platform for power-sharing and sustainable relationships that encourage communication and capacity building.

When Cooperative Extension works in a community, it is necessary to establish trust and relevance. Simply applying acquired expertise and knowledge without input from local practitioners and local context limits the ability for Extension professionals to affect behavior change. Participatory Research provides the Extension professional an approach for working with a community where the community has “an opportunity to examine their own circumstances, to pilot-test the best practices within their own context and to adapt these practices to their own needs (Green and Mercer 2001). In turn, the approach allows Extension professionals the opportunity to make unique contributions to the academic community and increase their knowledge of local practice.

Collective Impact

With resources continually becoming harder to secure and sustain, a new structured community collaborative approach has evolved. In 2011, the Stanford Social Innovation Review introduced "collective impact" as a framework for community collaboration. The article defined collective impact as initiatives that involve a centralized infrastructure, a dedicated staff, and a structured

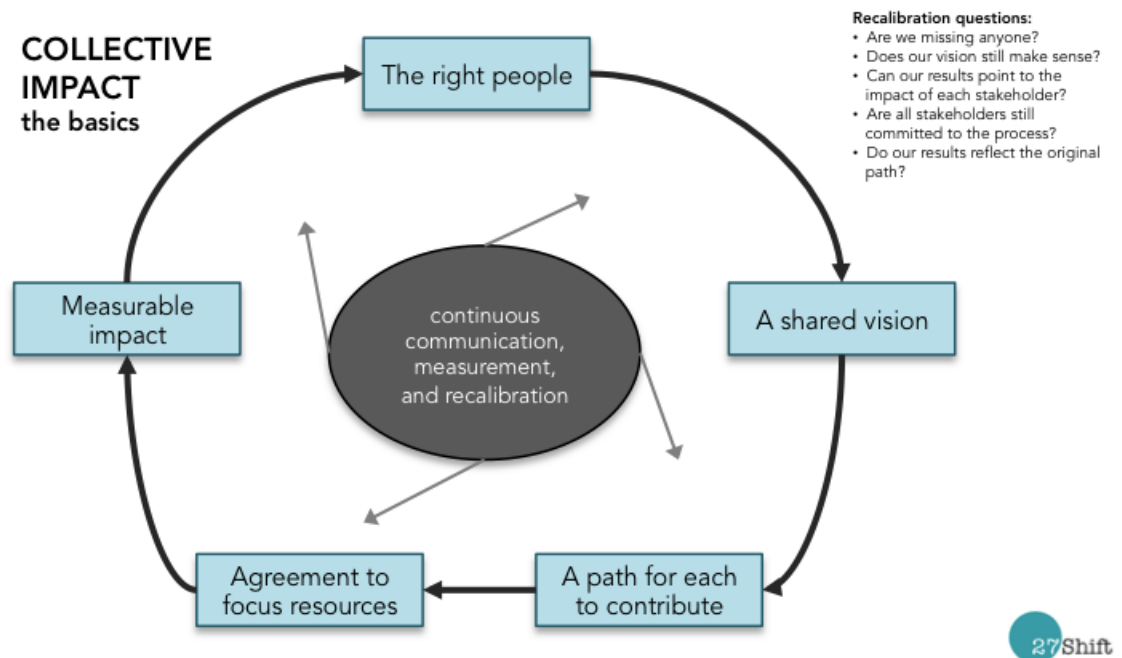
process that leads to a common agenda, shared measurement, continuous communication, and mutually reinforcing activities among all participants (Kania and Kramer 2011). This model for community collaboration is flexible, adaptable, and allows for the unique qualities of individual communities to define direction and action. The concept of collective impact has been proposed as a collaborative model that can address the complex social issues facing communities. It has been argued as a more effective approach than individual or independent organizational efforts. Collective impact is growing in acceptance as a collaborative model that “represents a fundamentally different, more disciplined, and higher performing approach to achieving large-scale social impact (Hanleybrown, Kania, and Kramer 2012). Significant in collective impact efforts are the presence of a visionary leader, an organization capable of providing consistent and reliable backbone support, and an open dialogue of trust that can lead to a common agenda.



Conditions for Collective Impact
SOURCE: The Forsyth Promise ("Collective Impact" 2017)

The collective impact approach requires participating organizations to set aside individual organizational priorities to focus on a single issue and be willing to share resources and recognition. The value of this approach is realized when previously unrelated organizations with overlapping agendas are able to collectively achieve more by working together than by working alone. The complexity of today's social problems requires multiple entities to work together rather than in isolation.

“Collective Impact Initiatives are long-term commitments by a group of important actors from different sectors to a common agenda for solving a specific social problem. Their actions are supported by a shared measurement system, mutually reinforcing activities, and ongoing communication, and are staffed by an independent backbone organization.” (Kania and Kramer 2011)



The Collective Impact Approach
SOURCE: Trina Isakson (Isakson 2015)

University – Community Collaboration through Extension

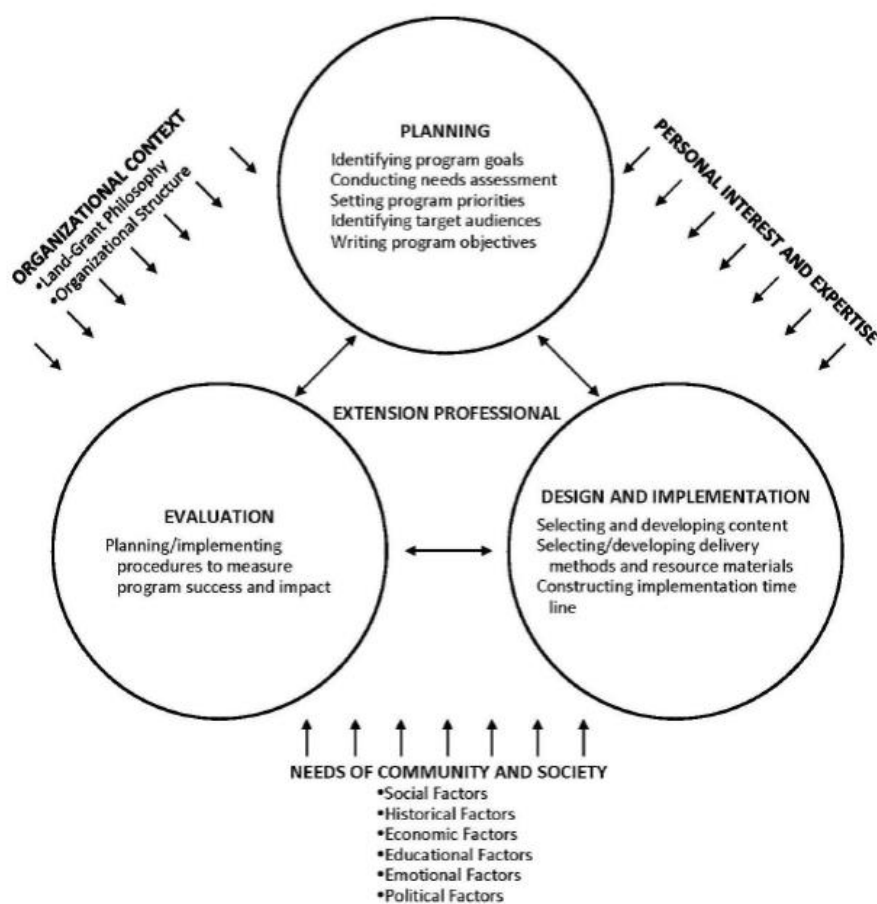
The institution of Cooperative Extension is in a unique position. Non-traditional research methods and applied projects provide opportunities for community partnerships between faculty, specialists, students, and community residents to cooperatively learn and explore while increasing knowledge. This transition will require changes to a few key principles.

Extension has historically emphasized research as a core to its programs. Research is the search for answers to a specific question. The question or goal is kept at the forefront as resources are applied through a set process or procedure. Alternatively, discovery as an emphasis can happen during or as a result of research. But, discovery requires an open-ended approach and open-mind to allow for finding and recognizing the unexpected or undetermined. Discovery is a useful focus for faculty and students engaged in Extension activities with urban communities.

“Service” or “Outreach” to community results in achievement of a specific goal through an action. But, service and outreach do not require relationships be established with the community. Service and outreach can be provided “for” a community without the involvement of the community. Service and outreach typically respond to a particular need and result in a one-time effort tied to a specific individual or stakeholder group. Alternatively, “engaging” with communities requires that a relationship be established and trust be built among partners and involved persons and organizations. All participants are equally represented and work together and “with” each other. Resulting experiences are transformative for everyone with all participants benefitting from the effort. An engaged program as opposed to a service or outreach program is done in and with community partners. Input and guidance is shared and change occurs within all engaged in the program. Specific needs and pre-determined agendas are set aside or become secondary to the will of the group.

The Cooperative Extension Service is situated between the university and the community. Extension remains relevant by identifying and developing programs, products, and services that address the problems, issues, and concerns of local communities (Barry A. Garst and Paul F. McCawley 2015). The program development model most often used by Extension professionals includes (1) needs assessment, (2) program design and implementation, (3) program evaluation and reporting, and (4) stakeholder involvement (Nancy Franz, Barry A. Garst, and Ryan J. Gagnon 2015).

The following graphic illustrates a basic program development model used by many extension professionals in the Cooperative Extension Service.



Extension Program Development Model
 SOURCE: (Seevers, Graham, and Conklin 2012)

But, this program development model has limitations when applied within the dynamic context of an urban community. The Extension professional cannot be at the center of an urban extension program. Community interests are at the center and Extension is only one of many organizations available to assist urban communities. Engaging with diverse and mobile constituencies requires Extension to be flexible and be able to respond quickly and effectively to changing needs and populations. Programs developed outside the community and without the community's input and participation often do not meet the needs of the community. According to Wayne Rasmussen in his book on the history of Cooperative Extension, Taking the University to the People, Seventy-five Years of Cooperative Extension:

“The traditional model of Extension program development has its foundation in an Extension faculty specialist conducting research on a subject. He/she then developed an educational program or other series of activities to translate the research into application. County Extension educators were then trained to implement the program and evaluate it with the state specialist.” (Rasmussen 1989)

The community does not know extension and extension does not know the community. It is incumbent upon Extension and the University to introduce itself and engage with a community before investing significant resources into the implementation of new programs.

“For Extension to continue to leverage an important place in community-university engagement, it must more fully align the Program Development Model with the standards for assessing successful community-university engagement. This alignment helps university faculty and administrators experience a direct connection between Extension programming and faculty performance related to community-university engagement.” (Karen Bruns and Nancy Franz 2015)

Recent research has found that as many as seven out of 10 urban residents have no knowledge of Extension. These same researchers propose that increased urbanization and the perception that Extension is an agricultural focused organization have limited Extension in its efforts to reach urban audiences (Yang et al. 2009). The surveys conducted as part of this study found 30% of respondents had no knowledge of extension prior to working with the RCE Water Resources

Program and another 35% of respondents had a limited knowledge of Extension. As stated by multiple partners in Camden and Newark interviewed during this research project:

“I had heard of Cooperative Extension and 4H was this thing in the City helping people with community gardens but not understanding what that meant in a tangible way. It did not intersect with what I was doing.” (Daniels 2016)

“I was aware of Rutgers Cooperative Extension providing advice to community gardens and gardeners throughout the State. We had actually done a small project where we put a flier from the Rutgers Cooperative Extension which explained about how you could obtain a soil testing kit and also how you could speak to a Master Gardener.” (Burns 2016)

“I always thought of [Cooperative Extension] as an agricultural organization that really didn’t work in urban areas. They had a lot of things to do with food or health.” (Mitchell 2016)

These results are consistent with prior research and point to a need for Extension to commit to a new program development model that raises awareness of Extension programs and services in urban communities.

Extension needs to evolve building on its existing programs, methodologies, and experience to provide a solid foundation for an efficient and effective transition. Moving from teaching, research, and service to learning, discovery, and engagement is significant in both rhetoric and practice as we look to the future of the Cooperative Extension Service. One example of this transition is the movement towards “service learning.” This concept, embraced by many Extension professionals, applies academic learning in real-world situations to foster and enhance civic engagement. This model is a good starting point to push forward a broader community engagement agenda that opens the door to a more interactive dialogue between community and the public land grant university. Learning becomes a two-way street with both university students and faculty alongside community residents all fully engaged in programs to expand knowledge. This model also supports discovery. Through cooperative learning and engagement programs, diverse constituents participating together are able to explore questions and solutions in a format that encourages open discussion and equal voice to promote resolution of conflict and

problems. Service learning can be one tool in future Cooperative Extension Service programs focused on community. But, service in and of itself is not community engagement. Extension professionals can work through service learning exercises to strengthen relationships with community and explore issues in a supportive framework that gives a voice to all participants. But, the work completed during service learning is just a first step. It must take the questions asked and discoveries made back to the university to be fully vetted and researched so that sound science can be applied to solving unanswered question and developing ongoing solutions. The Cooperative Extension Service must then take knowledge gained and apply it in partnership with community.

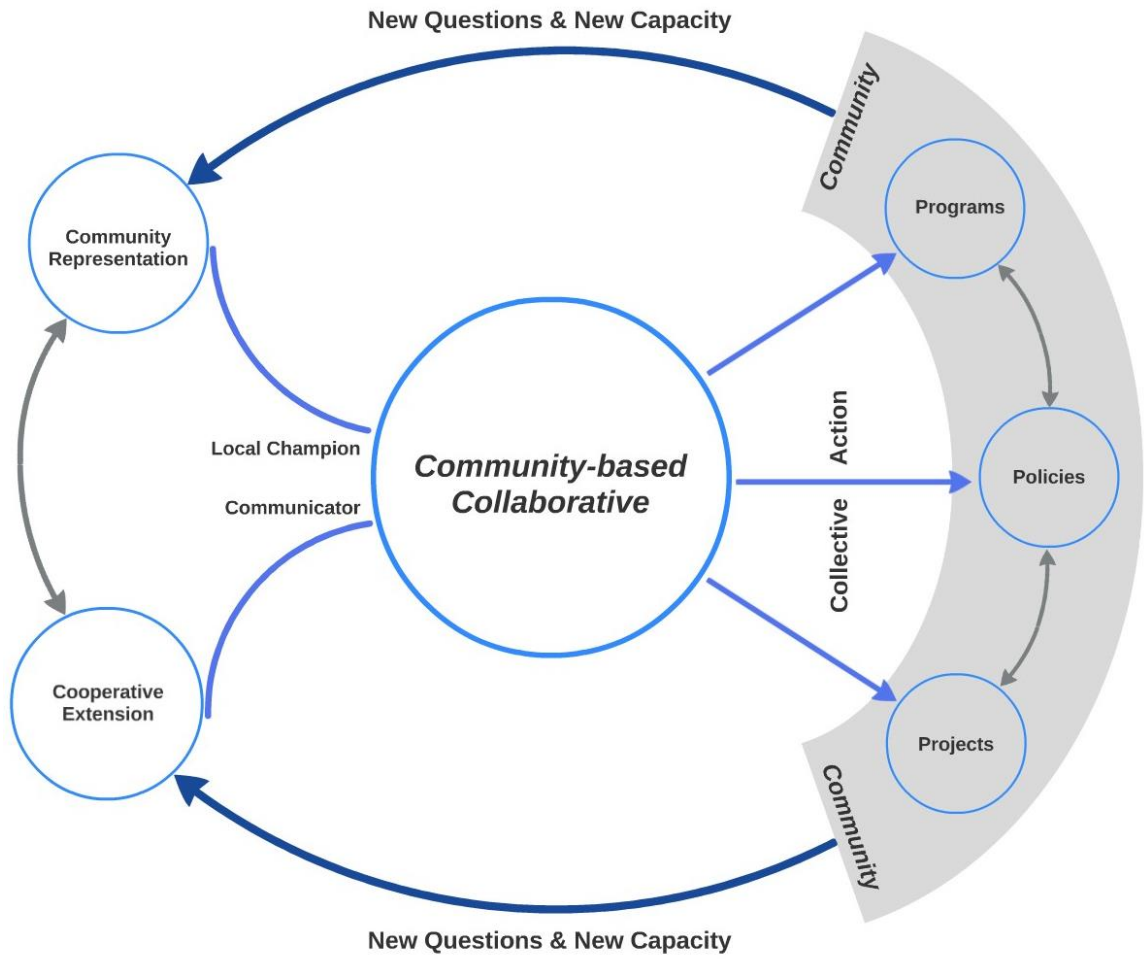
Many of the issues facing communities are exceedingly complex, involving social, political, economic, and environmental components. Frequently, communities and organizations try to individually identify and address complex issues with limited resources. These efforts commonly result in a short-term effort with minimal long-term change or impact. The complex nature of most social problems belies the idea that any single program or organization, however well managed and funded, can singlehandedly create lasting large-scale change (Hanleybrown, Kania, and Kramer 2012).

The value that the university can bring to community collaboratives can be captured through a commitment to learning, discovery, and engagement. The action research model allows for development and sharing of knowledge through physical interventions in communities outside the university classroom and laboratory. But, university interventions must be framed through a collective agenda developed in collaboration with community partners. Without community participation in the development of university service programs, efforts of the university can encourage imbalances of power and inhibit shared decision making.

PROPOSED COMMUNITY-BASED COLLABORATIVE MODEL FOR URBAN EXTENSION EFFORTS

Through the research, experiences, and community input, a structure for collaboration in urban communities has been proposed. The collaborative structure expands on traditional methods of engagement and action to incorporate and emphasize the importance of organizing and collaborating around a common agenda with a balance of power. The model is a process where Extension is invited by the community and initially introduces itself in the community through outreach and technical assistance in response to a specific community need. Once a relationship is established and trust is built between Extension and local community groups, the community is able to recognize the value of Cooperative Extension and Extension professionals have an opportunity to commit and invest in open dialogue with residents, organizations, activists, and political leaders struggling with environmental, infrastructure, and water resources issues. Through collaborative discussions, Extension is able to participate in local partnerships with community-based organizations to create a sustainable collective effort for research and action.

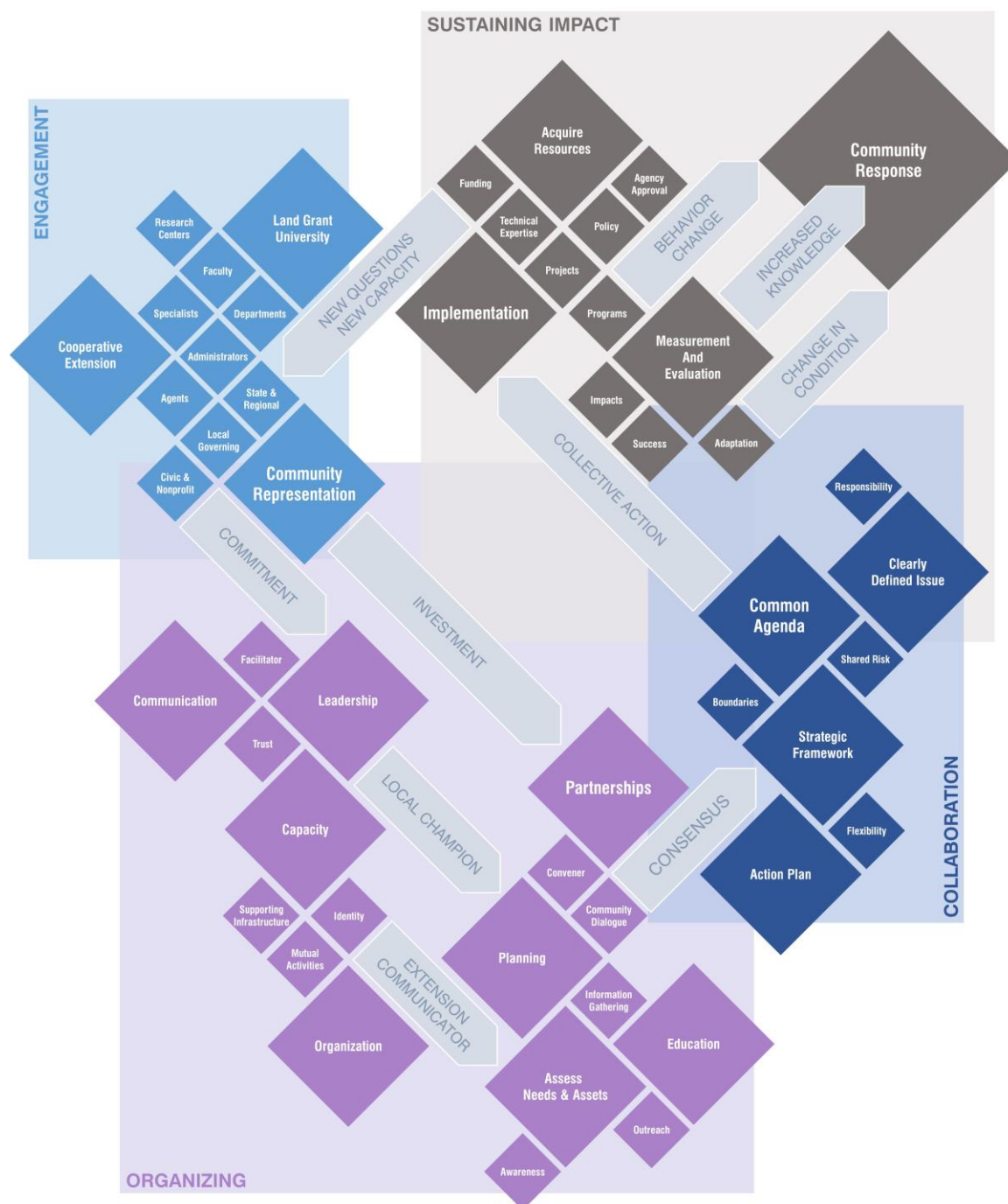
This model for a community-based collaborative builds on principles of Action Research and Community-based Participatory Research working to establish Extension and the University as equal partners in a community collaborative through a structured Collective Impact approach. This approach can be used as an effective model for organizing multi-party alliances around a common issue to secure outside resources and bring them to bear directly on the needs identified by community constituents. Creating and sustaining the collaborative effort requires commitment and flexibility. Through this approach, Cooperative Extension has a unique opportunity to collaborate with diverse urban communities, extend the university institution beyond the campus classroom and laboratory, and overcome the top-down approach of the traditional extension research, outreach, and service model.



Proposed Community-based Collaborative Relational Diagram

SOURCE: Diagram by Author

A Process for Establishing a Community Collaborative



Proposed Community-based Collaborative Process
SOURCE: Diagram by Author

Engagement

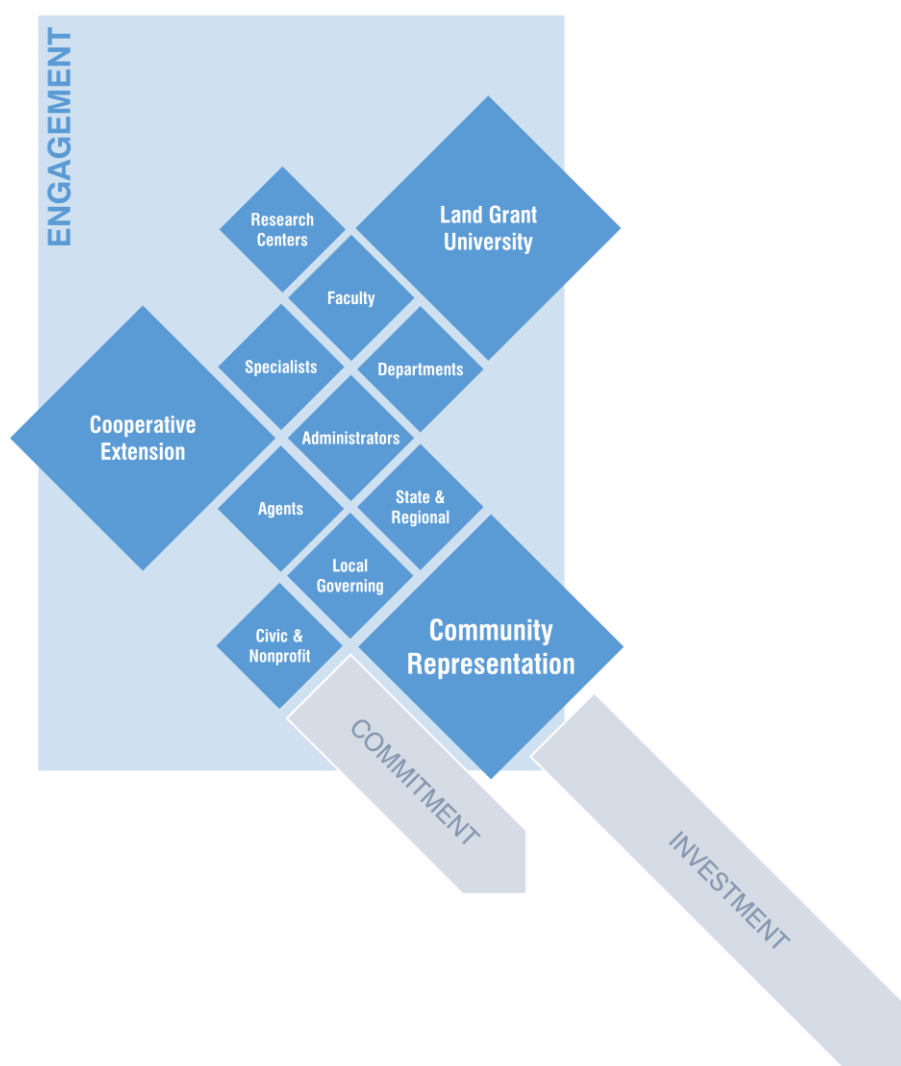
The process begins with engagement and building relationships. Cooperative extension needs to work in partnership with community-based organizations to understand community specific needs, assets, and opportunities and be able to share the resources and support that the land grant university and cooperative extension service can provide. As shared by Jessica Franzini of the New Jersey Tree Foundation active in Camden:

“A really effective community partnership involves stakeholder organizations but it also involves residents and community people. Sometimes the University has to be willing to either do it on their own and go out and make those connections with individuals or work through their community organizations...Going that extra mile to make sure that connection to the people is really important.” (Franzini 2016)

Extension professionals need to be willing, able, and empowered by their administration to build and establish relationships with local organizations. To be able to work with diverse populations from different backgrounds will require training and experience. Extension professionals, in most cases, come from outside the community. As an outsider or new member of the community, the university and extension will need to provide resources to staff to help them understand and navigate the racial, cultural, and economic complexity and diversity of the urban communities they are working with. Communication and trust is critical. Understanding the sensitivities and the complexities of urban communities is time consuming and difficult. The University and its professionals need to have the ability to relate to the needs of constituents to generate a vested interest in the community they intend to serve and assist. Without strong community relationships, Extension efforts may not lead to clear, direct or even measurable solutions.

“It is really important to be respectful to them (community organizations) and to always talk with them first and try to involve them in any sort of community outreach...You don’t want to enter a community in a way that accidentally seems disrespectful to the community.” (Franzini 2016)

Once in place, Extension and the University can then commit to maintaining relationships to effectively build relevance and standing with the community. Within this framework, Cooperative Extension is able to provide urban extension professionals with access to an array of resources and expertise across the many departments and disciplines of the State Land Grant University. As a large institution, the university has the ability to provide consistent long-term capacity to support local initiatives. But, this investment also needs to be matched with local commitments and resources. When local commitments and resources are not available, Extension cannot fully engage in a community.



Engagement Process
SOURCE: Diagram by Author

To move forward to the next step in the process of organizing for collaboration it is necessary for the engaged partners to commit and invest in relationship building. It is important to understand that investment does not always refer to funding. Investment can also include time from a dedicated local staff member or political leader with access to local resources and the support of the larger community to allocate and share these resources in support of the collaboration.

Institutional Commitment

Experience has found that it can take one to two years to organize an open dialogue built on trust to shape a community-based collaborative. Throughout this development period, consistent leadership is needed and the commitment of time and resources to facilitate a community-based collaborative initiative can be significant. But, it is incumbent on the university and Cooperative Extension to understand that they are visitors being invited into the community. To establish trust within the community requires the institution to respect existing organizational structures and capacity when offering to commit institutional resources to the community.

Community Investment

Without willing local support, the best of efforts cannot be sustained. It is important for new initiatives to tap into existing community structures to leverage resources and local knowledge. But this needs to be done in a way that empowers and enables those individuals and organizations to expand and improve their capacity. They also need to be willing to dedicate resources and invest in the problem alongside outside entities. From within the community, a commitment of time and resources needs to be established to provide a foundation for collaboration and sustained effort.

Local Champion

When approaching a new community, it is important for Cooperative Extension to identify a local champion or host organization that knows or is willing to learn more about and work with

Extension. Through the engagement process, it is important that a Local Champion step up and advocate for collaboration with Extension and with community partners. It is incumbent upon Extension to build a relationship with a local champion and for them to recognize the value that Extension and the land-grant university can bring to the community. This is a significant hurdle and may require that Extension invest in delivering specific programs that meet an immediate need while looking to educate and inform the local champion and other local stakeholders of the larger, multi-disciplinary and inter-disciplinary resources available through Extension and the land-grant university.

A local champion is a partner willing and able to accept Extension into the community, recognizes the opportunity for shared and collective effort with Extension and that Extension is recognized as an advocate for the needs of the community residents. This individual, organization, or local collaboration is the key to Extension establishing a presence and learning how to work with the community it is looking to serve and assist.

As Extension begins to work with a community, it can help to facilitate collaborative and collective effort, but must quickly be able to identify community-based leadership to establish relevancy.

“It requires a very special type of leader, however, one who is passionately focused on solving a problem but willing to let the participants figure out the answers for themselves, rather than promoting his or her particular point of view.” (Hanleybrown, Kania, and Kramer 2012)

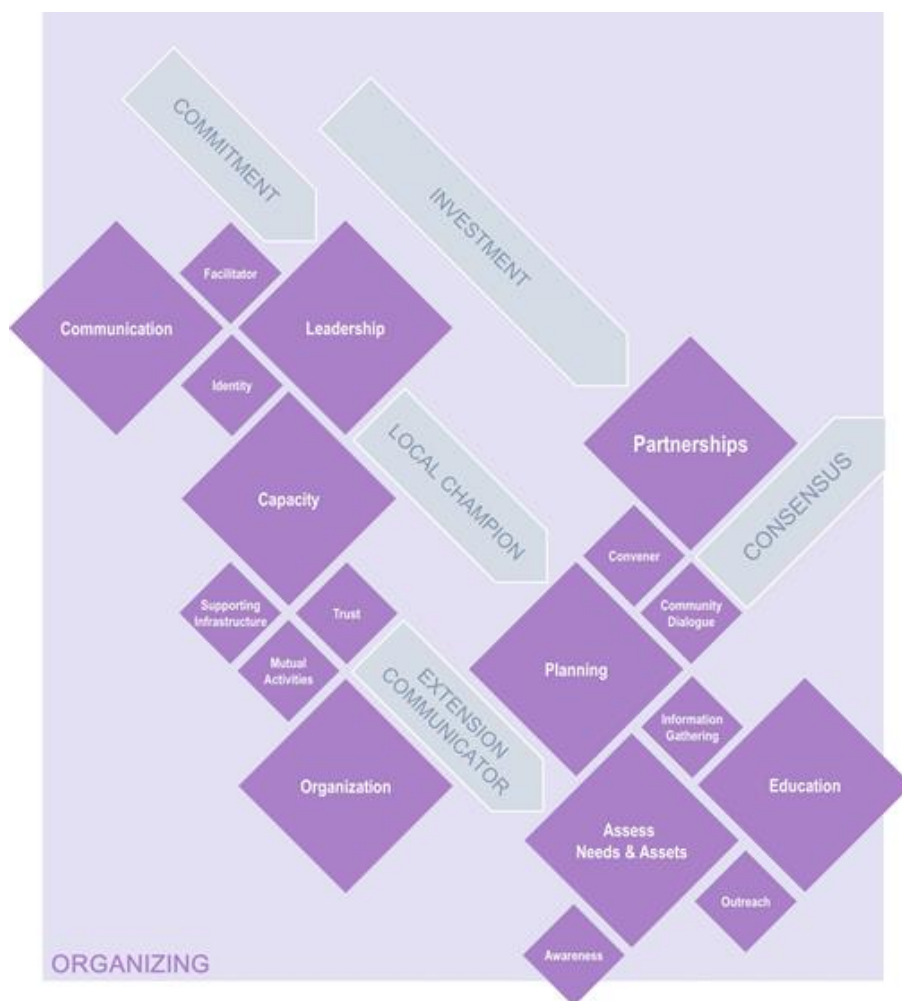
An inspiring local leader is able to galvanize support from community organizations, facilitate meetings, and has the political capital to bring organizations and activists to the table and keep them there during the formative period. Extension’s relationship with and commitment to supporting and enabling this local champion is important in establishing a strong foundation for Extension’s role in urban programs.

Organizing

Each community is unique. It is unique in its leadership, in the experiences and structure of its neighborhoods and local organizations. These differences require that leadership in the establishment of a collaborative initiative be flexible and willing to adapt to meet the specific needs and expectations of each community. In Newark, relationships between the city, its organizations and residents with large institutions have had a contentious history. Active non-governmental organizations are often skeptical of new institutional initiatives due to past efforts that have taken advantage of underrepresented community members. When proposing Newark DIG (Doing Infrastructure Green) as a new initiative to address combined sewer overflows and flooding in the City, Rutgers representatives initially met resistance due to this legacy of doubt and skepticism in the community. Stephanie Greenwood, Newark resident and former Newark City Sustainability Officer, while initially skeptical of the university efforts was key in establishing Newark DIG and states:

“One of the most important things for a university-community partnership is coming willing to listen and willing to grow relationships over time that allow community representation in the partnership to be real and to be strong. Build trust so that the community feels that we are not going to be exploited for our local knowledge for somebody else’s grant and we are going to be able to help shape the agenda here.” (Greenwood 2017)

It is incumbent on institutions to build trust among and with local organizations and constituencies to open a collaborative dialogue. It is also important that institutions bring new resources and capacity to the community and do not take away from resources that are already going directly to the community. Often, community-based organizations are competing with one another for resources and recognition and are not able to effectively work together. Overlapping missions and personality conflicts can become hurdles that divide communities. By establishing a collaborative dialogue, cooperative extension will be able to effectively partner with a community, its leadership, its networks, and its residents.



Organizing Process
SOURCE: Diagram by Author

To meet the challenges of working with urban communities and collaborate effectively with local organizations, we need to look to Extension programs and professionals that can communicate. Work in urban communities requires an effective communicator that can engage in public dialogue and facilitate a potentially difficult and dynamic partnership. Necessary components for successful organizing include partnerships, communication, and capacity.

Partnerships

Once Extension has committed to working with an urban community, it is important to enable local partners who value, understand and are able to articulate the opportunities of working with

the Cooperative Extension Service and the land-grant university. Debbie Mans of the NY/NJ Baykeeper is a strong advocate for environmental health and policies and as director of a small non-profit organization based in the NY/NJ harbor estuary region has partnered with Rutgers University on multiple environmental studies. “As a nonprofit we don’t always have the resources to bring on the technical expertise. To have the State University which should have a great presence everywhere in the State doing that is really helpful” (Mans 2016). Partners can be individuals, organizations, agencies, City employees, or leaders that are embedded in the community and have an established presence and voice with other organizations as well as the ability to get the attention of elected officials and policy makers. This partnership is an important first step for Extension to begin establishing relevance within a community. Partners, together with Extension, are able to convene initial working group meetings. This is Extension’s opportunity to introduce itself to the community and begin to create relationships that can be the foundation for long-term collaboration. Working together with community members and organizations with overlapping missions and a similar mindset, a collaborative partnership can begin to articulate the problem and needs of the community.

When beginning work in an urban community, it is critical that Extension recognize that they are not the only organization or entity working to assist the community. “Nonprofits bring a lot of good will and relationships to the table and Rutgers needs to value that and not take that for granted” (Mans 2016). A series of diverse neighborhoods and communication networks are already in place in most urban communities that provide services and help to represent the many unique cultures that call the city home. Extension needs to identify and work with the organizations that have an established track record and the trust of local residents and leadership. Resources and funding are scarce and if a Cooperative Extension program begins to compete with local organizations for these resources, it will marginalize itself and not be able to effectively deliver programs and reach residents. Extension can also not hire enough staff to effectively

communicate with all of the diverse cultures and languages represented in today's urban community. Many residents and communities rely on local neighborhood and civic associations to represent them and communicate their needs to local leadership. It is through trusting relationships with the many entities that already exist in urban centers that Extension can serve and have an impact on the quality of life of urban residents.

Communication

Communication is the foundation for an effective community collaborative. Regular and reliable dialogue is necessary to keep multiple partners informed of collective activities and to establish and maintain trust. Early in the process, partners need to identify and agree on communication strategies and procedures. Open communication is critical to establishing trust in collaborative relationships. With today's technology, the collaborative can quickly and easily share documents, work cooperatively on agendas and mission statements, and widely distribute all work done under the umbrella of the collaboration.

In addition to communication between active partners, continuous engagement and feedback with community members is needed. Direct communication with residents, organizations, and other community stakeholders maintains relevance of the collaborative and builds capacity for influencing local leaders and policy makers.

To begin building relationships within an urban community, it is important that Extension identify, select, and support an effective communicator within the institution. Within the urban context, interactions with diverse partners will be needed and it is essential that professionals from the University and Extension have the skills necessary to communicate effectively. This Extension leader needs to be able to articulate to both the university administration and the community the need for a long-term commitment in relationship building and information gathering that will be required to construct the foundation for ongoing community collaboration.

This is the time for Extension to learn and discover the community, its structure, its organizations, the existing foundation, and its needs to identify the institutional infrastructure needed to establish a presence within the community, regardless of Extension's physical presence.

Capacity

To move efforts forward, a collaborative needs to have an organization willing and able to provide support necessary for convening meetings, communicating with participants, and recording all work, discussions, and actions of the group. The expectation that collaboration can occur without a supporting infrastructure is one of the most frequent reasons why it fails (Kania and Kramer 2011). An organization with capacity needs to be able to contribute to the team providing direction and guidance in a way that does not place the organization's agenda ahead of the collaborative effort. This capacity and backbone support needs to be provided in a way that allows all participants to contribute and be heard. Respect for equal participation must be maintained for the collective efforts of the group.

“In the best of circumstances, these backbone organizations embody the principles of adaptive leadership: the ability to focus people's attention and create a sense of urgency, the skill to apply pressure to stakeholders without overwhelming them, the competence to frame issues in a way that presents opportunities as well as difficulties, and the strength to mediate conflict among stakeholders.” (Kania and Kramer 2011)

Early partnership meetings are important for clearly identifying the problem that the collaborative members are currently working to address and to bring in other relevant community partners that may be missing or were initially overlooked. The result of the first collaborative meetings should lead the group towards an agreed upon organizational structure, clearly stating the problem and proposing preliminary goals for addressing the problem. Experiences have shown that this work can take six to twelve months (or meetings) depending on the size and number of participants.

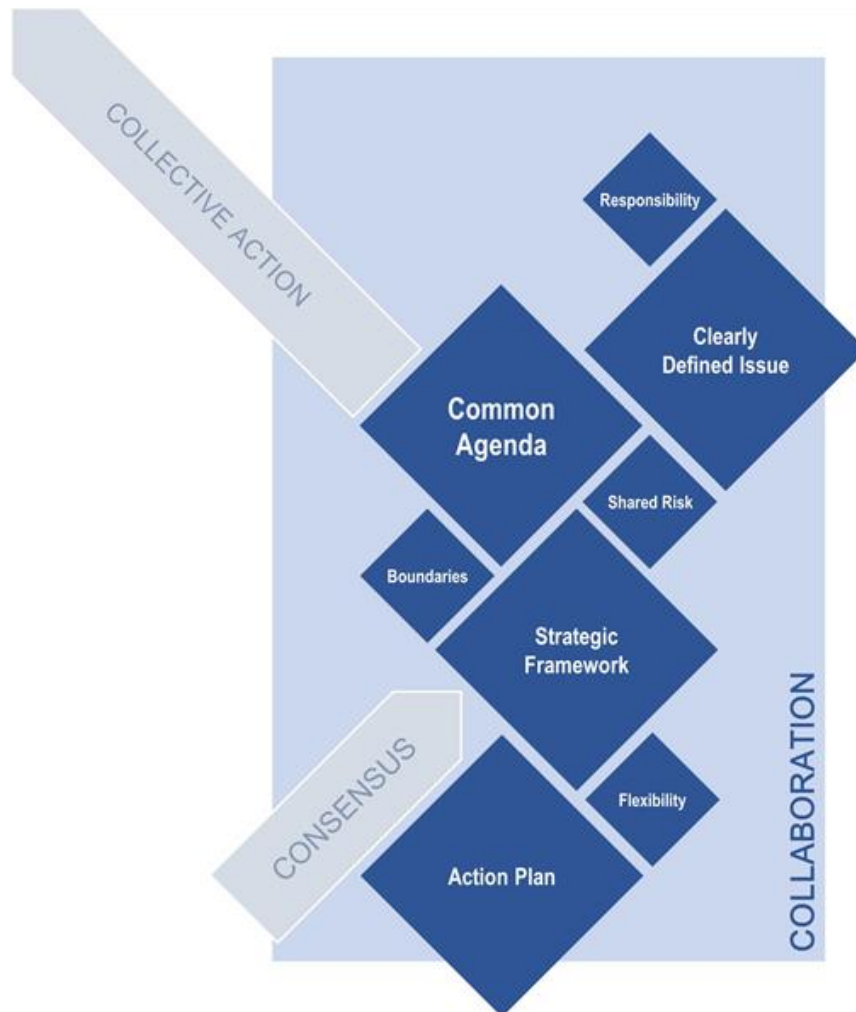
“Being realistic about the time it will take to get through these initial organizing stages is equally important. It takes time to create an effective infrastructure that allows

stakeholders to work together and that truly can ameliorate a broken system.” (Hanleybrown, Kania, and Kramer 2012)

Collaboration

Once an organizational structure is in place and partners are able to communicate effectively with one another, collaboration can occur. The collaborative structure that takes shape needs to remain flexible. In Camden, New Jersey a nearly seven year partnership has seen many shifts and changes. Meishka Mitchell of Cooper’s Ferry Partnership and founding member of the Camden SMART (Stormwater Management and Resources Training) Initiative points out that, “Sometimes the relationship between the people and the roles people are playing have to adjust. That is something that needs to continue to evolve” (Mitchell 2016). As time passes, leadership and participation in community collaboratives will shift and change. These changes may require the collaborative to evolve to remain relevant.

Collaboration can occur once consensus is reached among partners as to the needs and assets. Important in the consensus building is education and information sharing so that all participants understand and are able to articulate the purpose and direction of the initiative. With consensus, the partners are able to then develop an agenda as well as plan and propose actions to address a clearly defined issue.



Collaboration Process
SOURCE: Diagram by Author

As a community collaborative develops, the group will need to engage local elected officials and others members of government. While support and endorsement of local governing bodies can help a community collaborative, a rejection can derail a collective effort. To avoid misunderstanding and skepticism, the community collaborative needs to develop a clear strategy for engaging local officials and work through existing relationships of local partners to manage the introductions and conversation. Collaborative members can use the opportunity to interface with official and policy makers to inform them of the common agenda, showcase work and initiatives, as well as secure endorsements for ongoing and future efforts. Community benefits of

collective efforts need to be clearly articulated throughout discussions and all members must be able and willing to promote the common agenda set forth for the group. The collaborative understanding of a clearly defined issue and the development of a common agenda provides the foundation for collective action.

Clearly Defined Issue

With many disparate and sometimes competing interests at one table, it is essential for a successful collaborative to establish a common agenda around a key issue of concern. Without focus, participants are unable to articulate the need for a collective effort. With a clear mission and understanding of the community needs, participants can share responsibilities, risks, and resources. This presents an opportunity for Extension as it begins to assess the needs of a community.

“...needs assessment has become an important tool to engage stakeholders in the learning process and to broaden their understanding and motivation to solve complex societal issues. Needs assessment has provided a means for Extension professionals to transform their own role into that of convener and partner in situations that require a more in-depth approach to problem solving.” (Barry A. Garst and Paul F. McCawley 2015)

Framing the problem and developing a strategy for taking action are two important steps in developing a common agenda for collective effort. Issues can be broad and multiple organizations who claim to be focused on addressing the issue may have very different goals and objectives related to solving the problem. A collaborative effort will require that all participants agree on boundaries that clearly frame the issue and allow for defining actions that can be quantified and measured in response to the community need. But, with all definitions, there must be a level of flexibility as collaborative efforts will change over time. Although it is important to create clarity on what the common agenda is and what is not part of the collective efforts, most boundaries are loosely defined and flexible (Hanleybrown, Kania, and Kramer 2012).

Common Agenda

With the successful creation of an initiative of key players in a community, work must be done to focus efforts and clearly define the problem and the approach to addressing the problem. This is best captured in a “common agenda.” Once the problem is framed and collaborative participants agree on the boundaries and definition of the issue, the common agenda can propose a strategic framework for action.

“The strategic framework must balance the necessity of simplicity with the need to create a comprehensive understanding of the issue that encompasses the activities of all stakeholders, and the flexibility to allow for the organic learning process of collective impact unfold.” (Hanleybrown, Kania, and Kramer 2012)

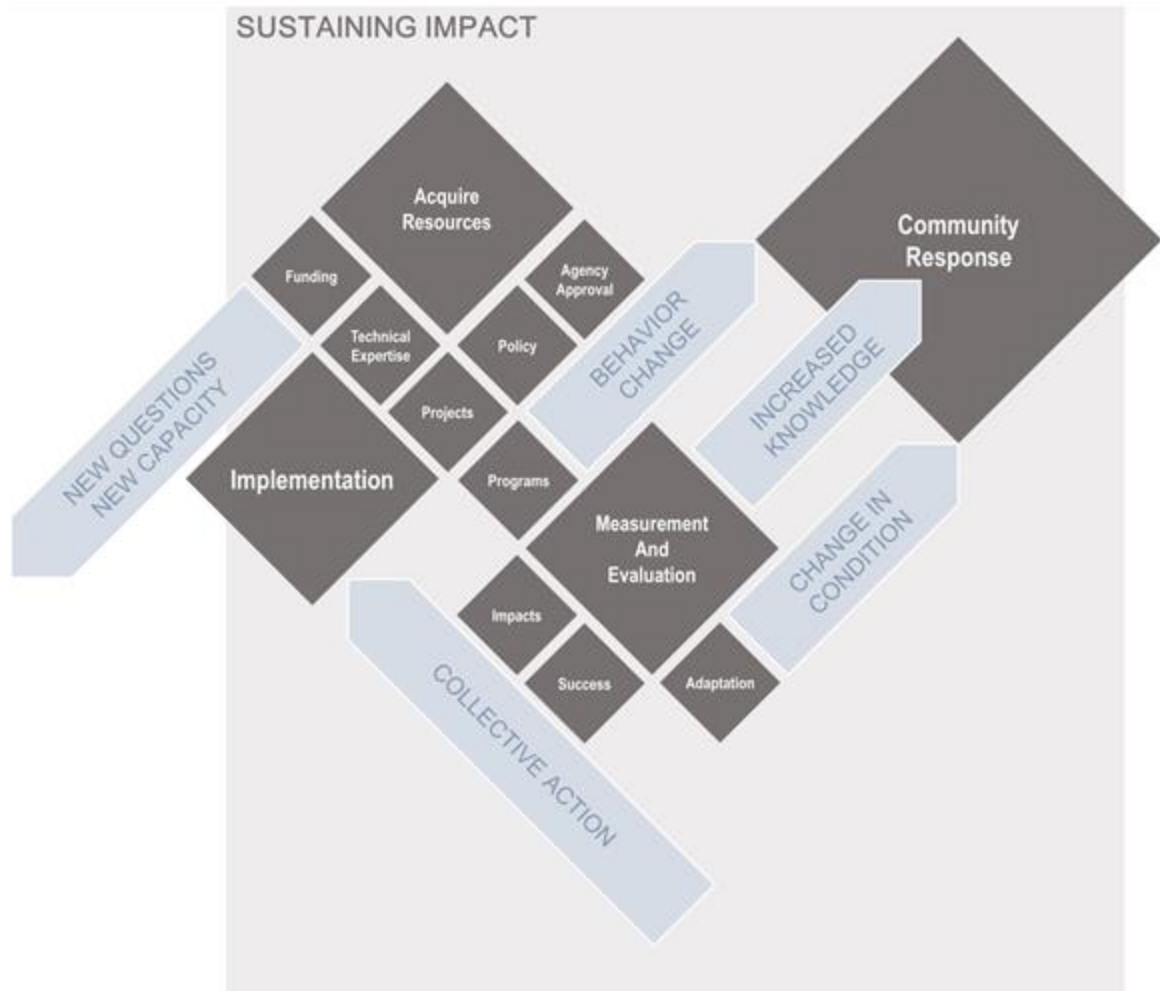
All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions (Hanleybrown, Kania, and Kramer 2012). A common agenda brings clarity to the purpose of the collaborative, establishes shared measurements of success, and provides an overall understanding for egos to be checked at the door. A common agenda and shared goals are the foundation for articulating the actions of the collaborative.

Time is needed for organizations and community members around the table to all become adequately informed of the issue, establish trust within the group, and agree to a shared vision for the collaborative effort and activities. In these first collaborative meetings, Extension is able to develop an understanding of its role and establish itself as an equal contributor and collaborator in the process. Initial meetings can often be tense, questioning, and fractious and require discovery of the community dynamics unique to the group and setting. Extension as facilitator, presenter, or partner can help to maintain and build relationships between previously unrelated or competing entities. Guiding the conversation to ensure that the following topics are clearly explored and discussed will reinforce the shared collaborative purpose of the group and establish relevance for the work of the collaborative in the community:

- All relevant stakeholders are invited (local, regional, and state/federal)
- All participating organizations and members share their mission and work with the group for transparency and collective impacts
- Identify mutually reinforcing activities among participants
- Ensure all participants clearly understand the problem and issues
- Ensure the collaborative works toward a common agenda

Sustaining Impact

As a community-based collaborative develops around a common purpose, the partners can move forward collectively to implement projects, programs, and policies. To avoid misunderstanding and skepticism, the community collaborative needs to develop a clear strategy for engaging residents and local officials. Collaborative members will need to interface with officials and policy makers to inform them of the common agenda, showcase work and initiatives of the collaborative, as well as secure endorsements for ongoing and future efforts. Community benefits of collective efforts need to be clearly articulated throughout discussions and all members must be able and willing to promote the common agenda set forth for the group.



Sustaining Impact Process
 SOURCE: Diagram by Author

With established trusting relationships between organizations, collective action to secure funding and technical assistance can elevate the relevance and significance of the collaborative. Once established, the collaborative members must be willing to jointly evaluate the effectiveness of projects, programs, and initiative strategies. A continuous reevaluation of success through the collective efforts of the group is important as the collaborative works to identify community needs and secure resources and funding to continue the program.

Finally, the community collaborative needs to identify shared measurements of success. The ability to measure impacts of collective effort and agree on how work is evaluated is critical to

maintaining long-term commitment of the partners and support of the community and its leaders. Shared measurement is essential, and collaborative efforts will remain superficial without it (Hanleybrown, Kania, and Kramer 2012). Through shared measurements, the partners can revisit collaborative goals and establish new goals based on evolving community needs. The collaborative can remain flexible and nimble through consistent dialogue and communication between partners and community members. In this way the collaborative is able to lead a community in its response to emerging needs and issues. Sustained impact as a result of collective action requires shared resources and shared measurement.

Shared Resources

Equity in all aspects of collaborative efforts is essential to sustaining the initiative. Working together to provide resources to participants committed to and actively supporting the work of the collaborative provides the opportunity for recognizing the value of local organizations. A healthy collaborative provides funding and resources to participants willing and able to continuously commit time and effort in support of the common agenda. According to Debbie Mans, the NY/NJ Baykeeper and facilitator at Newark DIG:

“In collaborative partnerships...you are asking groups and people to do a lot more and they should be compensated for that. Even though they may be with a nonprofit organization that is not something they normally do. They have to take away from other work to do the [collaborative] work.” (Mans 2016)

Resources can come in many forms to address local issues and requires local input and support. Extension can often serve as a resource when beginning to engage with a community. The resources of the land grant university and the expertise of Extension professionals should be brought to bear on immediate needs of the community. “Coming in as an outside expert is a major challenge. Although it brings a lot of potential benefit it does throw up barriers of distrust. It can be well intentioned but misguided” (Greenwood 2017). This service can help to establish

Cooperative Extension as a valuable resource in the community, but Extension professionals need to be cautious when delivering programs developed outside the community.

“Interventions created solely by outsiders may perpetuate the inequalities that researchers aim to address, create an atmosphere that discourages community experts from sharing invaluable perspectives and ideas, and thwart entry of researchers and their work into communities.” (Horowitz CR et al. 2009)

Shared Measurement

Working together will require that the collaborative establish shared measurements of success. The ability to measure and articulate the impact of collective efforts is how participants can justify their commitment to individual constituencies.

“Having a small but comprehensive set of indicators establishes a common language that supports the action framework, measures progress along the common agenda, enables greater alignment among the goals of different organizations, encourages more collaborative problem-solving, and becomes the platform for an ongoing learning community that gradually increases the effectiveness of all participants.” (Kramer, Parkhurst, and Vaidyanathan 2009)

Resources are scarce and organizations and governments are looking for ways to do more with less. Documenting the impact of collective efforts is a way to ensure that the value of a collaborative is understood in a world where limited resources continue to be stretched.

With an agreed upon common agenda, shared goals, and shared measurement of success, the initiative can begin to collectively address community needs. The strength of an urban initiative is found when the previously individual actions of organizations are directed collectively to an issue. Within this context, Extension can play a critical role by leveraging the resources of the land-grant university and Extension in support of collective action. Specifically, Extension can provide access to:

- Funding

- Technical Expertise
- Educational Programming

Working through community organizations, Extension resources of funding, technical expertise, and educational programming are able to inform collaborative partners, provide timely and cost-effective support for shared action, and support community engagement moving the common agenda forward.

As a collaborative begins to act, it is important for the partners to rally and celebrate around early successes. These often include completion and acceptance of planning documents, implementation of projects or programs, awarding of grant funds, and other joint initiatives. It is through these early accomplishments that the collaborative can begin to develop a portfolio of work, strengthen trust among member organizations, and develop an identity for branding the collaborative. Collective effort establishes relevance with residents and community leadership. It is the foundation for change that can directly address the issue of concern. Success shared collectively provides the collaborative with momentum for continued dialogue and support for ongoing investment and commitment in multiple implementation efforts:

- Programs (formal and informal outreach)
- Projects (demonstration and celebration)
- Community Initiatives (capacity building and advocacy)
- Policy Initiatives (long-term goals and impacts)

Once established, the collaborative members must be willing to evaluate the effectiveness of projects, programs, and initiative strategies. A continuous reevaluation of success through the

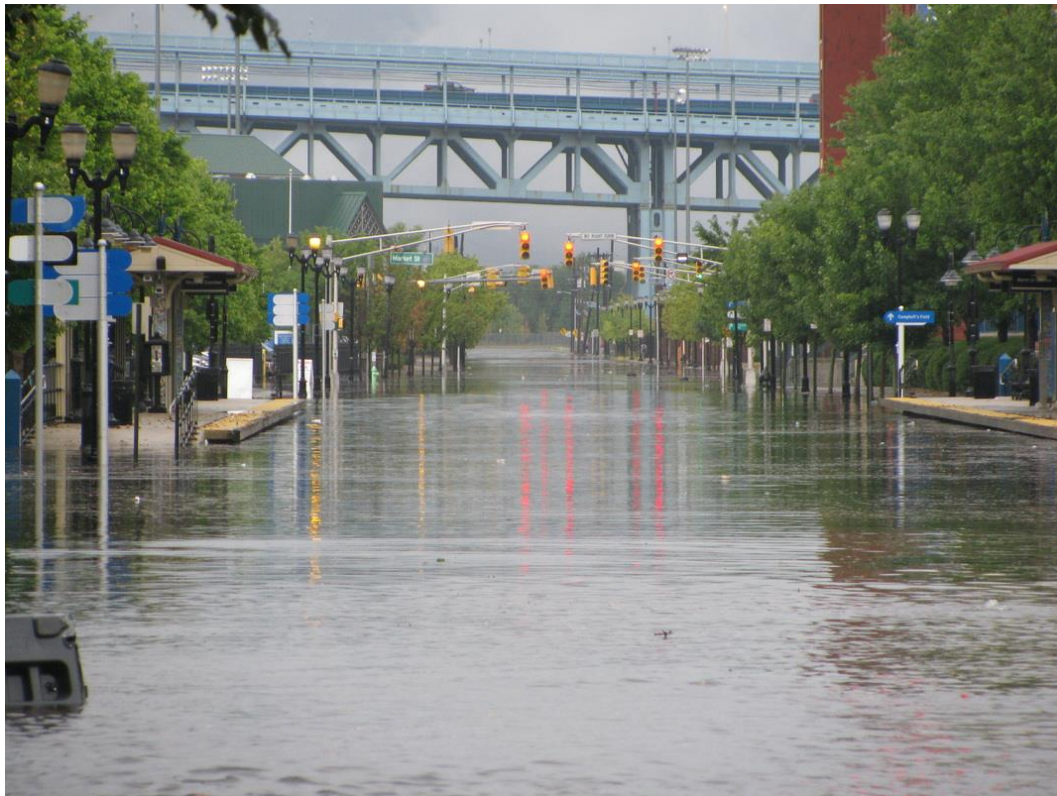
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URBAN EXTENSION EXPERIENCES

Camden Case Study

As a result of Camden's aging and overtaxed combined sewer system, a one-inch rainstorm can leave major roads impassable, turn parking lots into stagnant lakes, and send sewage into parks, homes, and waterways. Not only is this a nuisance, it is a public health crisis that degrades the quality of life of Camden's residents and negatively impacts the economic viability and environmental quality of Camden. The unseasonably wet summer of 2013 created several large street floods that shut down public transportation and cut off roads, stranding residents, workers, and visitors. A fire company's boat was needed to rescue passengers from train platforms surrounded by floodwaters. The significant flooding impacts from typical rainfall further underscores the threat that severe weather events and aging infrastructure can have on the City.



Flooding on Delaware Avenue in Camden, July 2013
SOURCE: Cooper's Ferry Partnership

Camden is tackling extreme urban water infrastructure challenges through an innovative and dynamic partnership called the Camden SMART (Stormwater Management and Resource Training) Initiative.

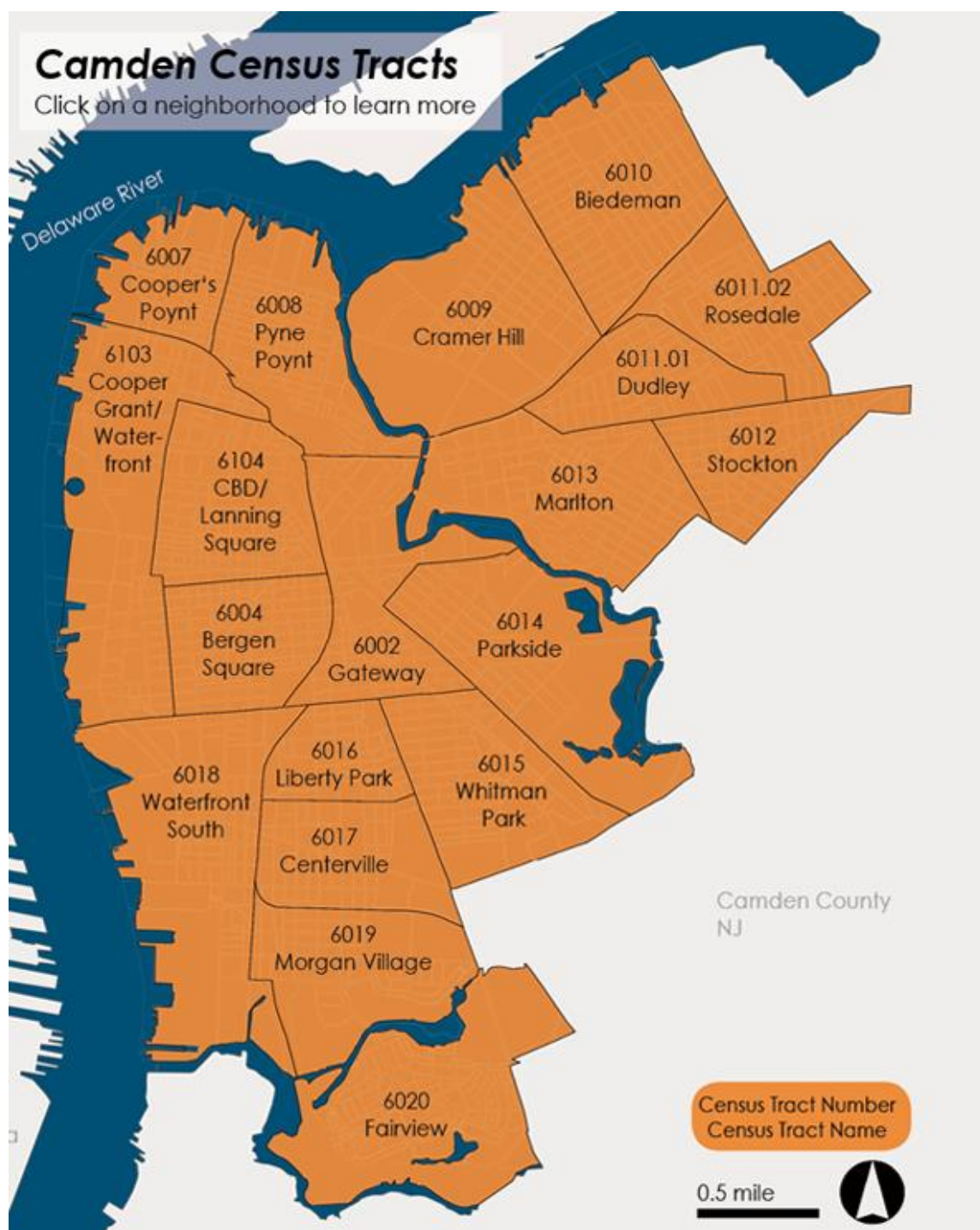
The Camden SMART Initiative

The Camden SMART (Stormwater Management and Resource Training) Initiative is a community-driven movement to protect human health, improve conditions for economic development, improve water quality, and enhance the quality of life for Camden City, its residents, and the Delaware River watershed through the broad use of green and grey infrastructure techniques for stormwater management. This collaborative effort has provided guidance, leadership, and resources to begin addressing human health impacts resulting from combined sewer overflows and flooding in the city. According to Andy Kricun, Executive Director of the Camden County Municipal Utilities Authority:

“Camden City’s [combined sewer] system is especially bad. It hasn’t been repaired. It hasn’t been replaced as it should. It is way past its useful life and hasn’t been maintained properly and combined sewage flooding is a real problem in Camden City.” (Kricun 2017)

The Camden SMART partnership consists of six member entities. CCMUA is the regional wastewater utility for Camden County with its treatment facility located in the City of Camden. Cooper’s Ferry Partnership is a city-wide non-profit working to establish public and private partnerships to effect sustainable economic revitalization and promote Camden as a place in which to live, to work, to visit and to invest. The City of Camden represents its 20 unique neighborhoods and their individual and collective plans for redevelopment. The NJDEP, through its collaborative community initiative, provides guidance and direction related to state-wide environmental policy and regulatory initiatives. The NJ Tree Foundation is a statewide nonprofit organization dedicated to planting trees in New Jersey’s most urban neighborhoods. The RCE

Water Resources Program is a specialized program of RCE that works to identify and address community water resources issues using sustainable and practical science-based solutions.



Map of Camden Neighborhoods

SOURCE: ("CamConnect: Change What You Know. Know What to Change." 2017)

The Camden SMART Team has maintained consistent community dialogue and open communication through regular monthly meetings. CCMUA, through its Executive Director Andy Kricun, has provided vision, capacity, and leadership for the SMART Team. CCMUA hosts monthly meetings and numerous programs and through this agency, large-scale funding is available through a number of public funding mechanisms including state & federal low-interest loans. These funds have been used to complete both grey and green infrastructure upgrades needed throughout the city. Cooper's Ferry Partnership (CFP) provides supporting infrastructure support in facilitating team meetings and communicating efforts of the SMART Initiative throughout the City of Camden. The planners at CFP provide leadership and advocacy for policy changes and the need for infrastructure improvements as part of redevelopment efforts. As stated by Caroline Gray, Project Manager at Cooper's Ferry Partnership:

“Cooper's Ferry Partnership acts as the backbone organization. We provide support in creating agendas, facilitating meetings, writing meeting minutes, sending them out. We have a strong connection with the City of Camden. We act as a communicating agency between Coopers Ferry Partnership, Camden SMART, and the City of Camden.” (Gray 2016)

The City of Camden provides political endorsement, and support of Camden SMART efforts. With support from the Mayor's office, the SMART Team has been able to elevate the identity of the collaborative. The city administration supports and advocates planning and raises awareness for better management of sewer infrastructure projects and enhancement of the city's landscape through green infrastructure across the city's 20 unique neighborhoods. The NJDEP has provided strong foundational support and commitment through advising and enforcement as environmental policies and programs continue to be implemented across the state. The NJDEP has also been an important source of funding and a leveraging partner for implementation of individual projects as well as city-wide programs and initiatives supporting the work of the SMART Team. As stated by Frank McLaughlin from the NJDEP:

“DEP has a lot of programs that are looking at media around the state. We have air programs, water programs, land use programs, site remediation programs, open space programs, green acres programs, things like that but we don’t have many urban focused programs. This is one of the few urban focused initiatives working with this Camden partnership. We have experts from the water resources management program now working directly on Camden SMART and they are doing a terrific job bringing technical expertise and funding to the problem.” (McLaughlin 2016)

Funding through NJDEP has come from a variety of programs, including 319(h) grants, brownfields grants, NJ Environmental Infrastructure Trust, and more. The NJ Tree Foundation has been working directly with residents across the City of Camden for over 15 years. The Urban Airshed Reforestation Program has engaged local residents to plant over 6,000 trees to improve the quality of life in the city. NJ Tree Foundation provides a community dialogue with many active neighborhood associations and residents leading outreach efforts of the Camden SMART Team.

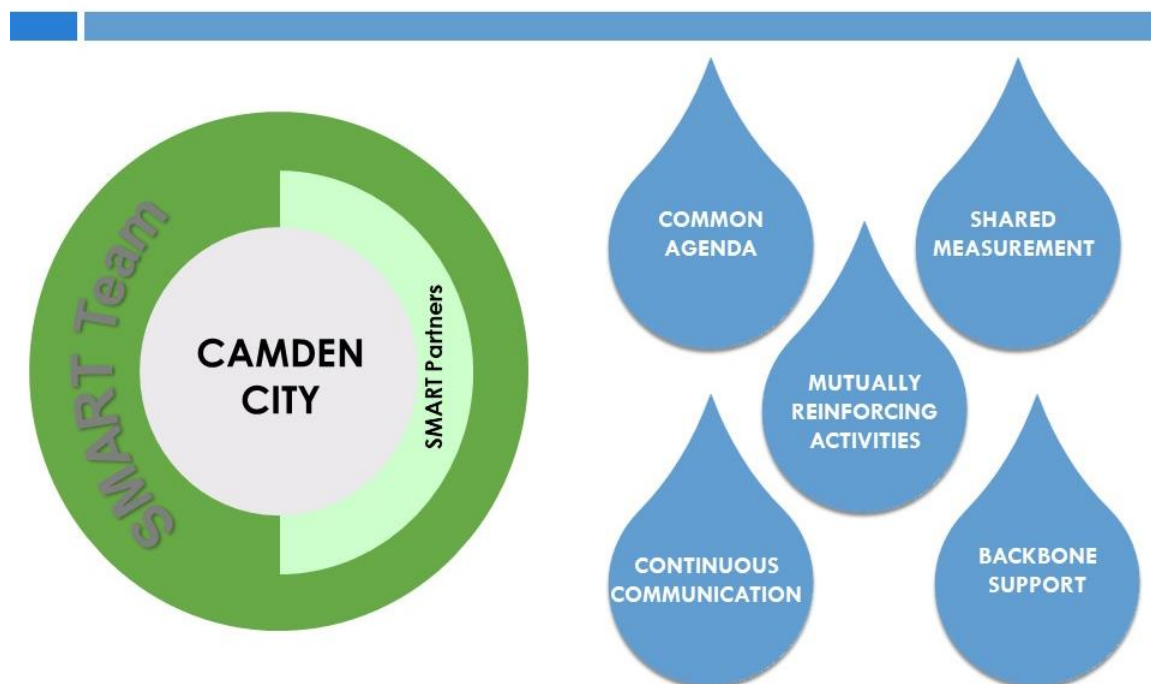
“I have...experience working with community groups...and use that perspective when I am in meetings. Thinking about how we can be engaging with our community partners and how we can do projects that impact the neighborhoods. Our organization’s role...is to do tree planting...community organizing...also green infrastructure maintenance in the future.”(Franzini 2016)

In addition, they provide installation and maintenance support for green infrastructure projects. The RCE Water Resources Program provides technical expertise and assistance with the assessment, planning, development, design, and construction of green infrastructure projects. RCE staff also develop and deliver training and education programs in support of Camden SMART. The technical expertise provided by RCE serves to support many of the grant applications submitted by all project partners.

The Camden SMART Team is using a “Collective Impact” approach to address these issues by jointly coming together around a common agenda. “We were each doing work in Camden already in one way or another but by pooling our resources we could do more and do a project together that we couldn’t do separately” (Kricun 2017). The team members have been able to

continue working on individual organizational efforts while bringing collective resources together to develop and implement projects, programs, and community outreach addressing water and sewer infrastructure needs.

SMART – Collective Impact



Camden SMART Collective Impact Diagram
SOURCE: Cooper's Ferry Partnership

It is important to note, that the SMART initiative has been aggregated into a larger community collaborative effort focused on a broader set of environmental issues in the city. The Camden Community Collaborative Initiative (CCI) established in a similar framework, is working to address air quality, waste and recycling, brownfields, environmental justice, environmental education, and water issues. Both of these collaborative efforts bring together and rely on the combined work of governmental, non-profit, private, and community-based entities to organize and develop strategies to promote a healthy and sustainable city. The SMART Team continues to

meet monthly and has built on early successes to achieve several key milestones. The team continues to reach out to the city following its initial meetings and for the past five years has held an annual forum in the city to document its work and recognize the contributions of city partners.

With the combined efforts of all organizations, Camden SMART has secured over \$25 million dollars for projects and programs, has installed over 50 green infrastructure projects, and has diverted over 11 million gallons of stormwater from the combined sewer system. Most recently, the city was able to secure a three-year PowerCORPs grant through the Federal AmeriCORPs program that will provide additional training and education to young city residents, including specific experience with water and sewer improvement programs.

Camden SMART Accomplishments



2015 Camden SMART Accomplishments
SOURCE: CamdenSMART.com

Extension's Experience with Camden SMART

In Spring 2010, Andy Kricun, Chief Engineer at the CCMUA, contacted Rutgers Cooperative Extension and asked if Rutgers would be able to assist the City of Camden and CCMUA. Mr. Kricun had recently learned about efforts in the City of Philadelphia led by the Philadelphia Water Department (PWD) to begin addressing water resource impacts resulting from combined sewer overflows (CSOs). In Philadelphia's efforts to address CSOs, local universities including Drexel and Villanova were conducting research and providing technical guidance to begin exploring techniques, technologies, and programs that could be applied to the problem.

In response to Andy Kricun's request for assistance from the University, Dr. Christopher Obropta, Extension Specialist in Water Resources, and his colleagues at the RCE Water Resources Program scheduled a meeting at CCMUA to learn more and to begin establishing a relationship with CCMUA and the City of Camden. At the time, the RCE Water Resources Program had been working on stormwater management programs throughout rural and suburban New Jersey. The majority of this work included large-scale watershed planning funded through NJDEP nonpoint source pollution mitigation 319(h) grants. Completed plans supported development of implementation programs that resulted in design and construction of stormwater best management practices and watershed restoration demonstration projects. These plans and projects were completed in numerous communities across the state in partnership with municipalities with separate storm sewer systems (MS4s). The RCE Water Resources Program had not yet engaged with partners in an urban New Jersey community with a combined sewer system.

The initial meeting with CCMUA and resulting discussion challenged RCE to address its lack of an active presence in the City of Camden and the RCE Water Resources Program's lack of knowledge and experience of relevant urban water resources issues resulting from aging combined sewer systems. The meeting presented several opportunities for participants to begin

developing a partnership. First, CCMUA was in early planning and design phases of a supplemental environmental project in the Waterfront South neighborhood where its wastewater treatment facility is located. In response to previous treatment plant violations, CCMUA and NJDEP had agreed to settle on a project that would directly benefit the neighborhood in the immediate vicinity of CCMUA's facility. This project to convert a vacant building, paved and overgrown lot into a community asset was a significant opportunity. CCMUA requested assistance from RCE Water Resources Program to create a plan for final development of the site with input from local neighborhood leaders. RCE collaborated with the civil engineers to develop a final plan and program for the site informed by local residents.

During this initial project as the relationship and partnership developed between CCMUA and RCE, additional opportunities arose. RCE Water Resources Program began researching urban water resources issues and looking at CSO impacts. Numerous cities across the country including Philadelphia were beginning to wrestle with violations of the Clean Water Act as a result of frequent CSO events. USEPA was looking to these cities to develop multi-tiered solutions that engaged the community, provided for immediate action, and looked at evaluation of long-range infrastructure upgrades and investments. In addressing the first two needs, community engagement and immediate actions, many cities turned to green infrastructure.

With its background and experience in watershed planning and stormwater best management practice design, the RCE Water Resources Program recognized the opportunity to develop and apply green infrastructure programs in urban communities of New Jersey. The previous experience and expertise of the program could be directly applied to meet New Jersey's urban community needs for managing water resources and CSOs. As CCMUA and RCE continued discussions, the partners proposed a robust initiative to evaluate green infrastructure opportunities in the City of Camden. In Summer 2010, CCMUA and RCE entered into a formal interagency agreement to develop a green infrastructure feasibility study for the City of Camden. The process

would include evaluation of all 20 individual neighborhoods of the city and a series of public forums to solicit input and participation from community organizations and residents.



Rutgers Cooperative Extension Water Resources Program conducting site visits with community members in North Camden

SOURCE: RCE Water Resources Program

For over six years, this author has been actively involved in all aspects of work in the City of Camden beginning with the initial introductory meeting with Andy Kricun at CCMUA. As Senior Research Project Manager for the RCE Water Resources Program, the author has served as the extension communicator and program coordinator for RCE's work with Camden SMART. The author regularly participates in monthly Camden SMART meetings held at CCMUA, conducts public presentations, presents educational programs to local partners, leads rain barrel and water conservation workshops, and conducts site evaluations for proposed green infrastructure projects. Through grants and interagency agreements, the author directs design and development of green infrastructure demonstration projects working with RCE Water Resources Program technical staff and student interns. The Camden SMART partners look to RCE Water

Resources Program for guidance and direction regarding proposed green infrastructure efforts.

According to Sarah Bryant, Director of Community Initiative at Cooper's Ferry Partnership:

“Rutgers has really taken ownership over these projects, not just building them and walking away. Its clear Extension really cares about the projects, comes back, checks on them, and goes above and beyond to makes sure they still function years later. It's not just about being a contractor and coming and building. It is about making a serious commitment to these projects.” (Bryant 2016)

The Rutgers Cooperative Extension Water Resources Program (RCE) has been an active member of the Camden SMART Initiative. In this partnership effort, RCE has played a key role in providing technical expertise for the design, development, and implementation of demonstration green infrastructure projects throughout the city. RCE has worked in partnership with local educators and summer intern programs to engage youth raising awareness and understanding of environmental issues; and the RCE has partnered with multiple neighborhood associations to conduct educational programs and hands-on workshops.

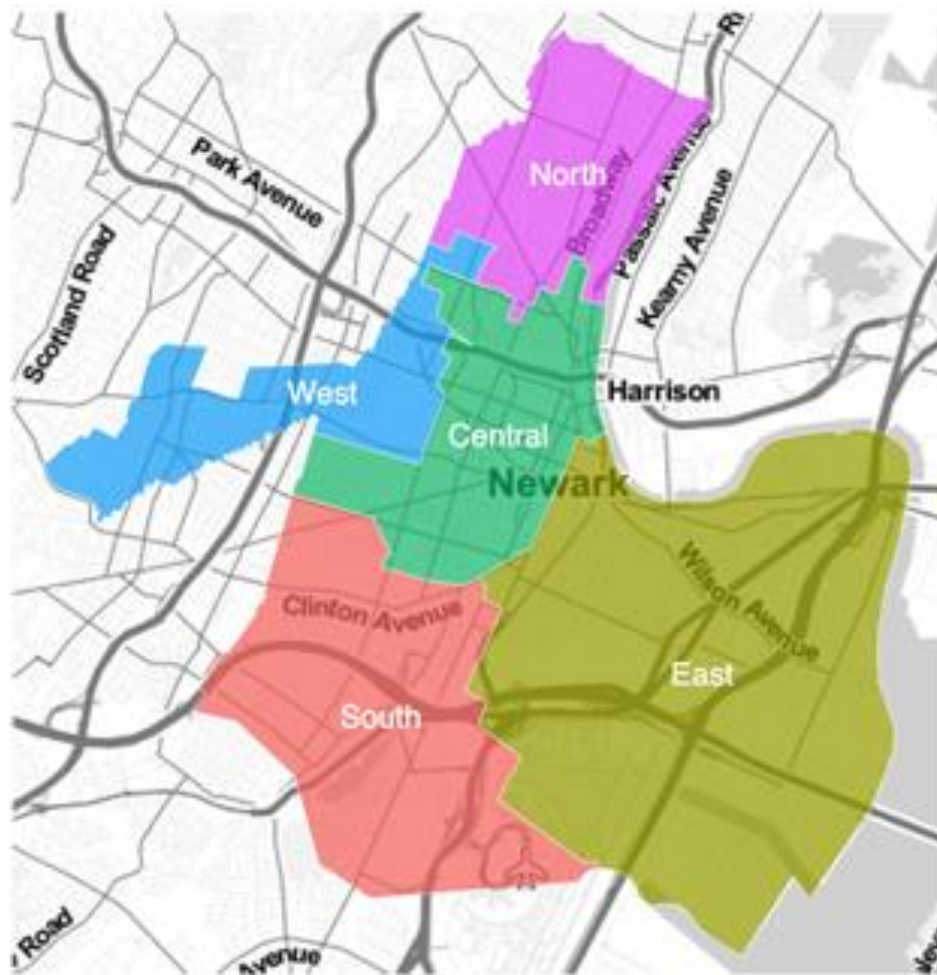
“Rutgers Cooperative Extension's [role] has really been two fold. One is really helping facilitate...the community outreach...but also bringing the technical expertise that none of the organizations at the table have about green infrastructure and stormwater management. [RCE knows] how to bring that technical expertise directly to the residents. It (RCE) helps to serve as the liaison making sure that residents are getting the information they need on the technical side. From the rain barrel workshops that Cooperative Extension has done very successfully in the City to providing the engineering support to the green infrastructure projects.” (Mitchell 2016)

RCE's role has been to bring the latest technology and science in the field of green infrastructure to the City of Camden to empower local stakeholder organizations and agencies and to educate community leaders and residents.

Newark Case Study

Residents in the City of Newark are subject to a concentrated amount of environmental pollution due to the dense transit network including a major airport and seaport, industrial uses, and waste and sewer treatment facilities. The City is home to the largest trash incinerator in the Northeast

and the second largest port in the nation with 7,000 diesel trucks making an estimated 10,000 trips daily. Additionally, nearly one in four school-age children in Newark have asthma, double the state and national average. In July 2016, the City of Newark passed an innovative Environmental Justice Ordinance which will require new development applications to clearly document the environmental impacts of a project and their cumulative impacts to the community, a first of its kind across the nation. It will direct the Newark Environmental Commission to establish a baseline for environmental conditions and work to address the environmental injustices that have led to unhealthy, concentrated levels of pollution in the region's poorest communities, particularly in Black and Latino neighborhoods.



Newark City Wards

SOURCE ("What's Next for Newark?" | Center on Reinventing Public Education" 2017)

Environmental justice has been a major issue in recent years as the city struggles with flooding, air pollution, aging infrastructure, combined sewer overflows and the sixth largest wastewater treatment plant in the nation. “Newark is lucky that it has a strong environmental justice activist history with a lot of groups that have been at the forefront of EJ [Environmental Justice] work in New Jersey and nationally” (Greenwood 2017). Local organizations have advocated for a healthy, clean city on behalf of residents for many years.

Newark DIG

Newark DIG has developed out of a recognition of the urgent need to cool, green, and beautify the City of Newark. Partners are committed to increasing the City’s viability as a leading urban center for the region. The combined efforts of the partners are focused on reducing incidents of Combined Sewer Overflow (CSO) that discharge pathogens into the Passaic River; protecting the health, viability, and quality of life of Newark residents; expanding community-driven urban design; and improving resiliency in a City disproportionately impacted by pollution and climate change. As stated by Debbie Mans, NY/NJ Baykeeper and facilitator for Newark DIG:

“Newark DIG...allows us to help people facilitate and identify the problem areas in their community related to flooding and water quality issues and elevate those in conjunction with other partners to do something about that.” (Mans 2016)

Initial work has been guided by the Newark’s Sustainability Action Plan including establishment of a priority policy using Green Infrastructure as a first line of defense against CSOs. The Action Plan commits Newark to identify and implement at least five pilot projects in green infrastructure by 2017. Newark DIG partners are working directly with city leaders to meet and exceed this goal while also providing leadership and advocacy for advancing green infrastructure policy and practice in Newark as a model for northern New Jersey to generate economic development and improve the lives and health of Newark residents. Newark DIG was initiated to promote green infrastructure as a first-line of defense in addressing overflows from the City’s aging combined

sewer system. This has been a multi-pronged effort including education and outreach to residents and political officials, implementation of demonstration projects, and supporting new and innovative policies and programs. The collaborative has worked to develop a city-wide green infrastructure plan and work closely with city leaders to leverage technical and financial resources to implement plan recommendations.

Membership and a seat at the table for Newark DIG is open to all community groups who petition the collaborative co-chairs. The collaborative meets monthly and the meeting agenda is driven by dialogue and discussion amongst the many partners present at the meetings. This organizing structure allows for Newark DIG to be nimble and provide additional resources to grassroots organizations that may have limited funding or technical expertise for a program or project of interest that fits within DIG's mission. With an open door policy, Newark DIG partners together established rules of engagement for participating organizations to speak with a common voice. Members would provide input for demonstration green infrastructure pilot projects, making residents aware of issues of stormwater and the benefits of green infrastructure, assist in recruiting new partners or establishing new partnerships, provide leadership to promote policies that advance green infrastructure, and host an activity annually to highlight Newark DIG's accomplishments and future goals.

The City of Newark is an active member of Newark DIG with multiple departments participating in monthly meetings. The city administration has agreed to host the collaborative and provides political support and endorsement through the Environmental Commission and current administration. The City of Newark representatives also have a direct role as part of Newark DIG in that the participating representatives act as the liaison to other city agencies and invite those agencies to Newark DIG meetings as requested by its members. The NY/NJ Baykeeper, a private non-profit organization working to protect, preserve, and restore the ecological integrity and productivity of the NY-NJ Harbor Estuary, has accepted responsibility to co-chair Newark DIG

and regularly facilitates and convenes monthly meetings. A local resident and Environmental Commissioner is the second co-chair for Newark DIG, and together the co-chairs provide direction in agenda setting, exploring funding opportunities, and extending invitations to guest speakers to further educate Newark DIG's partner organizations. RCE, with funding from NJDEP and the Surdna Foundation, provides supporting infrastructure for the organization as well as technical expertise for green infrastructure efforts, educational workshops, and training programs. The multiple community partners have a seat at the table each month and have been directly engaged throughout the three-year organizing efforts of the collaborative. These partners have accepted responsibility leading the community dialogue and regularly reach out to their constituencies in each of the five wards across the city to educate and inform residents and political leaders. With training and technical support from RCE, multiple civic organizations are now leading outreach and education programs addressing CSO, flooding, and resiliency issues.

Through the open communication and interactive organizing and collaboration processes, partners have expanded inter-organizational efforts to include initiatives beyond infrastructure and water. Newark DIG formally established two subcommittees to address the needs of the local community. A Quality of Life subcommittee was formed to address issues related to littering, air quality, the need for an increased tree canopy, and support for urban agriculture through the municipal adopt-a-lot program. A DIG Funding subcommittee was formed to provide a source of technical expertise to assist in pursuing funding opportunities that align with Newark DIG's mission and assist in building capacity with active organizations. These efforts, aligned with the collaborative mission, contribute to the overall strength of the collaboration and continue to open doors for new organizations and continually dynamic inputs to the working group.

Newark DIG partners were successful in 2015 in securing a \$30,000 grant from the Victoria Foundation to support partner organizations in their continued efforts to educate and inform residents and community leaders. In a 2015 settlement announced in the USEPA Consent Order

No. CAA-02-2015-1006 Port Authority, \$600,000 was given to the City of Newark for violations of the clean air act in the South and East Wards of Newark for implementation of green infrastructure practices. In the settlement, Newark DIG is named as the entity to provide guidance and direction to the city regarding how and where the funds should be spent to mitigate environmental impacts. Finally, in 2016, multiple project partners worked through training provided by NJDEP and RCE and have initiated community outreach and education programs directly with residents. Local community activists are leading efforts in schools, parks, and community centers to educate residents about the issues and problems with the existing infrastructure and environment and encouraging each resident to take action to help address the problems. This program has been called the GI Reformers Program. GI being an abbreviation for Green Infrastructure.

Newark DIG has evolved as a grassroots collaboration with an open-door policy. The collaborative convenes regularly in a City Hall conference room and the public venue encourages open and honest discourse among all participants. The City, NY/NJ Baykeeper, and RCE work together to facilitate the meetings, but allow for direction and priorities of the collaborative to develop in response to all partners input and active grassroots activities. The many voices around the table can at times slow progress as shared consensus can require more time to develop, but the many partners also are being regularly and directly engaged and are able to carry information directly to residents, stakeholders, and political officials. Currently, the capacity of the collaborative to secure large-scale funding for programs and projects is limited, but efforts of the collaborative have recognized this limitation and a dedicated working group is working to outline strategies for future collaborative funding requests.

Extension's Experience with Newark DIG

In July 2009, the Rutgers Cooperative Extension (RCE) Water Resources Program partnered with the Greater Newark Conservancy to develop and deliver stormwater education and outreach

programs in the City of Newark. This program established relationships with various community groups, schools, and the city government. Several educational programs were delivered to youth and adults where rain gardens and rainwater harvesting systems were installed to reduce stormwater flows to the combined sewer system. Despite the positive experience in these initial projects and programs, the City of Newark's Office of Sustainability was unaware of RCE in the city and requested a meeting to further discuss efforts in creating a sustainable Newark. The Office of Sustainability, at the time, was developing a Sustainability Action Plan for the city and the demonstration projects resonated with them in wanting to add green infrastructure into their Action Plan. The Office of Sustainability lacked the technical expertise in green infrastructure and requested a meeting with the RCE Water Resources Program to further collaborate with RCE. The Newark Office of Sustainability completed a Sustainability Action Plan in 2013 which established a five-year agenda for policy and environmental priorities including stormwater management and community greening. Through a grant from Together North Jersey (including funding from HUD and US DOT), the City of Newark in 2015 completed an assessment for using Green Stormwater Infrastructure throughout the streetscape of the city to advance the City's green streets initiative. Finally, in 2015, Passaic Valley Sewerage Commission provided funding to RCE to develop a city-wide feasibility study identifying community-based green infrastructure demonstration projects. With these plans as guidance, an opportunity existed for a collaborative effort to push forward with development of programs and securing funding to implement recommendations.



RCE Water Resources Program Training with Newark Residents in 2009
SOURCE: RCE Water Resources Program

In July 2013, RCE Water Resources Program convened a meeting at the offices of Trust for Public Land in Newark, New Jersey. The purpose of the meeting was to discuss creating a coalition to pursue community-based green infrastructure projects and programs to begin addressing combined sewer overflows in the city. The RCE Water Resources Program had recently completed an initial partnership effort with Greater Newark Conservancy (completed in 2011) funded through the NJDEP 319(h) program which gain the attention of the Office of Sustainability. With support from NJDEP, an additional \$300,000 grant was provided to the RCE Water Resources Program to further expand efforts in the City of Newark. NJDEP wanted to support the development of a municipal action team that could expand community outreach in Newark increasing resident awareness of the aging infrastructure, the combined sewer overflows, and the need for best stormwater management practices to address these issues. This next phase

of work in Newark was looking to engage additional partners and establish a municipal action team of city agencies and organizations to develop and guide the program.



Newark DIG Participants with Newark Mayor Ras Baraka in June 2016
SOURCE: RCE Water Resources Program

Utilizing the RCE's experience working in Camden, the RCE presented the framework of Camden SMART as a way to formulate a Newark program. Newark, historically, has a large grassroots presence with organizations that have been active for decades. As an organizational rich city, the Camden SMART model was not appropriate for developing Newark DIG.

“Our priority was to make sure some community organizations that had real geographic territory in Newark got a chance to participate...Our hope was that we could also include some of the community organizations that work with particular neighborhoods...A lot of people were interested in getting involved in a project that could help improve the look of a neighborhood as well as help manage some of the environmental issues like flooding and heat island. Those groups did take up the offer...and a number of them have become part of the coalition.” (Greenwood 2017)

The following city agencies and organizations attended this meeting in addition to representatives from RCE Water Resources Program and NJDEP:

- City of Newark Department of Planning

- City of Newark Sustainability Office
- NY/NJ Baykeeper
- Greater Newark Conservancy
- Brick City Development Corporation
- New Jersey Tree Foundation
- Trust for Public Land
- RCE Specialist in Landscape Architecture

The partners continued to meet monthly for the remainder of 2013 spending significant time working to identify the many organizations with interest in participating in the Newark DIG coalition. As the partnership developed, new organizations and agencies were engaged and invited to participate in Newark DIG. Others attending meetings and participating, included:

- Passaic Valley Sewerage Commission (PVSC)
- RCE of Essex County
- Newark City Forester
- Ironbound Community Corporation
- Penn Rose Development

In just three years, this collaborative has grown to include over 15 organizations and agencies all working together to promote sustainable green infrastructure strategies as a first step in addressing the city's aging water and sewer infrastructure. Additionally, the partners address issues of frequent flooding, combined sewer overflows, and water quality in the Passaic River. As part of Newark DIG's mission, the team has implemented over 15 green infrastructure projects throughout the city, engaged with over 825 Newark residents in outreach programs, informed over 10,000 residents on the issues of stormwater runoff and CSOs. This unique and active collaboration continues to gain momentum and receive recognition as it works to inform

and educate local elected officials, community residents, and private development leaders to effect change in this environmental justice community.

“Newark DIG really became for us a real go to for a lot of thought capital as well as tangible resources. Our organization has not traditionally been in a sustainability space and so we heavily rely on those who have been doing this work...I have a passion for sustainability and for getting back to the roots of really appreciating the environment. Being able to bring that passion as well as the organization’s point of view to the forefront of the collaborative table has been great...Because we are at the table now with Newark DIG, Extension has truly been a beneficial partner for our work.” (Daniels 2016)

The RCE Water Resources Program has provided technical assistance and facilitated efforts to Newark DIG and has secured additional funding for programs and demonstration projects from the Passaic Valley Sewerage Commission (PVSC) and the Surdna Foundation. These resources have been used to develop a city-wide green infrastructure feasibility study, install green infrastructure practices, and support local education and outreach efforts in partnership with multiple local non-governmental organizations.

Through the grassroots communication and agenda setting of this initiative, organizations across the city have committed to actively educating residents and participating in other related priority topic programs. Success is best captured in the dialogue that is now occurring across neighborhoods and previously isolated community-based organizations. Initial efforts have resulted in securing capacity funding for local organizations to continue participating and growing the initiative, and improved communications with city offices and departments.

COMMUNITY SURVEY AND INTERVIEWS

Building on the experiences and relationships established in Camden and Newark, the author conducted a series of interviews with multiple project partners from both cities. These interviews provided insight into other organization's and partner's perspectives of the collaborative efforts in each city as well as their knowledge of and perception of Rutgers Cooperative Extension.

Regarding efforts in Camden, the following individuals were interviewed.

- Andrew Kricun, Executive Director and Chief Engineer at Camden County Municipal Utilities Authority
- Doug Burns, Chief Accountant at Camden County Municipal Utilities Authority
- Frank McLaughlin, Site Remediation Program and Community Collaborative Initiative at New Jersey Department of Environmental Protection
- Caroline Gray, Project Manager at Cooper's Ferry Partnership
- Meishka Mitchell, Vice President of Neighborhood Initiatives at Cooper's Ferry Partnership
- Sarah Bryant, Senior Project Manager at Cooper's Ferry Partnership
- Jessica Franzini, Senior Program Director at New Jersey Tree Foundation

Regarding efforts in Newark, the following individuals were interviewed.

- Stephanie Greenwood, Program Officer at Victoria Foundation in Newark
- Pamela Daniels, Outreach Coordinator at Unified Vailsburg Services Organization

- Debbie Mans, Executive Director at NY/NJ Baykeeper

Interviewees were asked a series of questions as to their familiarity with the Cooperative Extension service and their participation in Cooperative Extension Service programs. In total, three interviews were completed with partners working in the City of Newark and with seven partners working in Camden. Interviews were audio recorded. The interview questions as well as full transcripts of the audio recordings are included in the appendices.

Interviews provided perspective on several issues critical to university-community relationships. Several themes were consistent throughout the interviews. Community members and local organizations do not know how to access the university or cooperative extension. Many also are not aware of what resources may be available. Larger institutions and government entities generally have respect for the University as an independent scientific institution and value what it can bring to local efforts. The interviews also indicate that past performance of university efforts in the community leave a legacy that new efforts can either build on or may have to overcome. Previous relationships with university staff and programs that have not been successful from the community's perspective can be a significant hurdle to overcome when trying to establish or create new programs. Excerpts from the interviews have been included in the proposed model discussion and case study evaluation.

The research effort also included an anonymous online survey with community partners to evaluate the community engagement activities of the Rutgers Cooperative Extension Water Resources Program in Camden, Newark, and other communities. The survey was intended to collect input from participants to identify relevance of existing Extension efforts, perception and understanding of the presence of Cooperative Extension in the community, and the opportunities and challenges for university-community collaborations in urban centers. Survey results provide

an understanding of the unique challenges of working in urban communities as they relate to establishing a successful Cooperative Extension Service program.

The online survey consisted of 16 questions separated into four categories. All questions were multiple choice or required ranking except for one open-ended question allowing participants to provide individual written input.

Question Category	No. of Questions
Affiliation with and participation in existing Extension Program	3
Knowledge and understanding of Rutgers Cooperative Extension	4
Assessment of Rutgers Cooperative Extension Activities	4
General Survey Statistics (Optional)	5

Table 2: Survey Question Categories

The online survey was emailed to over 275 individuals who participated in one of 11 Rutgers Cooperative Extension Water Resources Program community outreach and engagement efforts. In total, 75 responses from participants were recorded (27% response rate). 31 respondents (41%) identified as participants in the programs in Camden or Newark discussed in-depth in this research. Additionally, 25 respondents (33%) identified as residents of the communities they are actively participating in.

A full summary of all responses as well as filtered summaries are included in the appendix. In reviewing the responses, researchers noted that over 30% of respondents indicated they were not aware of Rutgers Cooperative Extension in their community and another 36% indicated that they were only somewhat aware of Rutgers Cooperative Extension. The results indicate that nearly two-thirds of participants had little to no knowledge of Rutgers Cooperative Extension and the resources that Extension can bring to support efforts in their community. Over 50% of respondents strongly agreed that RCE provides valuable resources to the community and over

77% strongly agreed that RCE should continue to provide resources to address needs, but only 36% strongly agreed that RCE is addressing priority issues in the community.

Respondents identified “Technical Assistance (planning, design, and engineering support)” as the most significant contribution to the community by Rutgers Cooperative Extension. Nearly equal in significance were providing funding, education, and demonstration projects. The least significant contributions of Rutgers Cooperative Extension as identified by respondents were community engagement and research.

The survey asked respondents to rank, by importance, a series of eight urban community issues as identified by CQ Researchers. The top four issues scoring between 5 and 5.67 were identified as education, crime, wages and jobs, and the environment. The next three priority issues scoring between 4.11 and 4.20 were housing, infrastructure, and health. The least important of the issues presented was food security with a score of 2.58.

Respondents were asked to identify how Rutgers Cooperative Extension could improve service in the community. Over 40% of respondents indicated that increasing physical presence in the community was the best way to improve service and meet the needs of the community.

As noted previously, of the 75 respondents to the online survey, only 25 respondents (33%) identified as residents of the communities they are participating in. Of the 69 respondents that completed the optional personal statistics questions, 47 respondents (68%) identified as white and 20 respondents (29%) identified as a member of another ethnicity. A total of 70 respondents indicated the type of community they live in with 28 individuals (40%) living in urban areas, 40 individuals (57%) living in suburban areas, and 2 individuals (3%) living in rural areas. While individuals may identify their community as suburban, New Jersey’s suburbs meet and exceed the U.S. Census definition of urban communities and are included in the 2010 census as lying within urbanized areas due to their density, total population, and proximity to major cities.

CASE STUDY EVALUATION

For the past six years, the Rutgers Cooperative Extension (RCE) Water Resources Program has worked to establish and support community collaboratives to address environmental and infrastructure issues related to aging water and sewer infrastructure, combined sewer overflows, and flooding in the cities of Camden and Newark. These efforts have developed independently and organically, and the role of the university has evolved over time. The resulting university-community partnership has supported effective research and interventions that continue to provide lasting impact and change to these communities. The experiences of RCE Water Resources Program in Camden and Newark provide a framework for interfacing with communities outside the traditional Extension model. Evaluating and contrasting the two case study programs in Camden and Newark using the proposed Community Collaborative Model provides insight into how complex as well as how fluid and productive collaboration with local organizations can be for Cooperative Extension.

Engaging in Camden

Cooperative Extension was approached directly by local representatives from Camden and requested to provide support for a specific issue. As stated by Andy Kricun, the Executive Director at Camden County Municipal Utilities Authority:

“I met you on one of the first rain garden projects and it was happenstance...that we said we should try to replicate this and figure out a way to work together. That’s where the idea grew from a rain garden to the Camden SMART program.” (Kricun 2017)

This opening, while providing an outreach opportunity for direct application of specific expertise to address a local need, developed into an opportunity to engage with multiple community organizations to explore larger programmatic issues and solutions. Extension’s expertise and technical assistance was recognized as a valued contribution and provided for a seat at the table as a collaborator with community partners.

“There is value in having the State University be part of the mission. That the State University is behind the program for the same reasons we all are...it elevated the status of the program... that the State University saw this as important.” (Kricun 2017)

Organizing in Camden

Initial Extension activities were provided through a typical outreach and technical assistance approach involving planning, design & implementation, and evaluation to meet the immediate community need and request. When the community leaders welcomed Extension to the table to collaborate and Extension committed to participating in the local collaborative is when the relationship began to move towards a community collaborative. The expertise and outreach services of Cooperative Extension directly applied to the community's needs, made Extension relevant and a valued resource to community partners. Organizing a collaborative effort in Camden was initially led by CCMUA and its dynamic Executive Director, Andy Kricun who has provided inspiration, vision, and leadership for the Camden SMART Initiative. CCMUA recognized the value that the State University could bring and provided initial funding to support initial planning and project efforts.

“There was a value far beyond hiring ABC Inc. or Jones Engineering to hiring the State University...There is a status that you [Rutgers] bring to solving this problem in cooperating on this project with us.” (Kricun 2017)

The CCMUA was willing to invest and commit to a collaborative approach with Extension at the table – CCMUA became a local champion. The agency continues to hosts monthly meetings and numerous programs and through this agency, large-scale funding has been made available through a number of public funding mechanisms including State & Federal low-interest loans. These funds have been used to complete both grey and green infrastructure upgrades needed throughout the City.

In the Camden SMART Initiative CCMUA and Cooper's Ferry Partnership have both helped to organize the program from the beginning, providing administrative and organizational capacity.

Cooper's Ferry Partnership has invested heavily in the Camden SMART initiative and provides consistent and reliable support in facilitating Team meetings and communicating efforts of the SMART Initiative throughout the City of Camden. The planners at CFP provide leadership and advocacy for policy changes and the need for infrastructure improvements as part of redevelopment efforts across the City. These examples of local investment were important early steps in the engagement process and organizing a community-based collaborative.

But, the willingness and commitment of Extension to participate in community dialogue transformed the relationship to a mutually beneficial collaboration between the university and the community. According to Frank McLaughlin of the New Jersey Department of Environmental Protection:

“The value of nontraditional partners speaks to the strength of Camden SMART and to cities like Camden; bringing together people from academic institutions, to sewage treatment authorities, from nonprofits that do either social justice or economic development or housing, people who think about the energy, transportation and the environment. The future in urban areas has all these diverse partners coming to the table to work on things like flooding. This has been tremendously successful in Camden and hopefully we can replicate that model in other cities.” (McLaughlin 2016)

A Camden Community Collaborative

In Camden, The Camden SMART efforts are framed within a “Collective Impact” approach to address issues by jointly coming together around a common agenda. The team members have been able to continue working on individual organizational efforts while bringing collective resources together to develop and implement projects, programs, and community outreach addressing water and sewer infrastructure needs. “Camden SMART represents the first city-wide initiative that we undertook in Camden, sustainability-wise. It represents a new way of looking at things” (Bryant 2016). Partners clearly defined the issue of concern and continue to focus work under the Camden SMART initiative meet its objectives as stated on the CCMUA’s website.

The objective of the Camden SMART Initiative is to develop a comprehensive network of green infrastructure programs and projects for the City of Camden. The initiative includes neighborhood green and grey infrastructure projects, stormwater management policy development, and green infrastructure training programs. The Camden SMART Initiative will benefit the City of Camden by:

- Preventing neighborhood flooding
- Reducing combined sewer overflows
- Creating sustainable green jobs
- Improving air, water and climate quality
- Developing environmental policy
- Increasing property values
- Providing economic development opportunities
- Adding recreational amenities and open space
- Beautifying neighborhoods

SOURCE: (“Green Infrastructure - Camden County MUA” 2017)

It is important to note, that the SMART initiative has been aggregated into a larger community collaborative effort focused on a broader set of environmental issues in the City. The Camden Community Collaborative Initiative (CCI) established in a similar framework, is working to address air quality, waste and recycling, brownfields, environmental justice, environmental education, and water issues. Both of these collaborative efforts bring together and rely on the combined work of governmental, non-profit, private, and community-based entities to organize and develop strategies to promote a healthy and sustainable city. “We have formed together to try and identify ways we can better improve the environment and quality of life here in the City of Camden” (Gray 2016).

Sustaining Impact in Camden

Moving from organization and planning to actions that impact the community has required multiple organizations. The City of Camden provides political endorsement, agency approval,

and support of Camden SMART efforts. With support from the Mayor's office, the SMART Team has been able to elevate the need for better management of sewer infrastructure projects and enhancement of the City's landscape through green infrastructure across the City's 20 unique neighborhoods. The NJDEP has provided strong foundational support and guidance through advising and enforcement as environmental policies and programs continue to be implemented across the State. The NJDEP has also been an important source of funding and a leveraging partner for implementation of individual projects as well as city-wide programs and initiatives supporting the work of the SMART Team. Funding through the Department has come from a variety of programs, including: 319(h) grants, brownfields grants, the NJ Environmental Infrastructure Financing Program, and more. The NJ Tree Foundation has been working directly with residents across the City of Camden for over 15 years. The Urban Airshed Reforestation Program has engaged local residents to plant over 6,000 trees to improve the quality of life in the City. NJ Tree Foundation provides a direct connection to many active neighborhood associations and residents leading outreach efforts of the Camden SMART Team. In addition, they provide installation and maintenance support for green infrastructure projects. The RCE Water Resources Program provides technical direction and assistance with the assessment, planning, development, design, and construction of green infrastructure projects. RCE staff also develop and deliver training and education programs in support of Camden SMART. The technical expertise provided by RCE serves to support many of the grant applications submitted by all project partners.

Engaging in Newark

In Newark, Cooperative Extension took the positive experiences of community engagement from Camden and began to assemble a similar collaborative. The collaborative began through relationships established with community partners in a previously completed outreach and technical assistance grant. Building on these relationships and with additional financial resources

provided by a state agency, Cooperative Extension was able to facilitate initial collaborative efforts using a community engagement model. As the collaborative grew, Cooperative Extension's role evolved. As shared by Stephanie Greenwood, formerly the Sustainability Officer at the City of Newark and founding partner of Newark DIG:

“The Rutgers Cooperative Extension has played a critical role...by bringing some important early resource to the table and really opening up the opportunity to found Newark DIG. Then providing some really important business management and maintenance work in terms of keeping minutes and agendas and facilitating meetings...Also being able to do pilot projects and bring implementation resources to the City so that not only is it a coalition that talks about green infrastructure, but a coalition actually participating in installing green infrastructure.” (Greenwood 2017)

Our experiences with organizing community-based collaboratives in Camden and Newark have been very different. But, similarities can be found in the organizational process that has moved partners toward successful collaboration.

Organizing in Newark

In Newark the organizational capacity for Newark DIG has been driven for the past three years by the Rutgers Cooperative Extension Water Resources Program and the NY/NJ Baykeeper. The NY/NJ Baykeeper, a private non-profit organization working to protect, preserve, and restore the ecological integrity and productivity of the NY-NJ Harbor Estuary, has accepted responsibility to co-chair Newark DIG and regularly facilitates monthly meetings and pursues grant funding on behalf of the partnership. RCE, with funding from NJDEP and the Surdna Foundation, provides administrative capacity for the organization as well as technical assistance for green infrastructure efforts, educational workshops, and training programs. The City of Newark is an active member of Newark DIG with multiple departments participating in monthly meetings. The city administration has agreed to host the collaborative and provides political support and endorsement through the Environmental Commission and current administration. The multiple community partners have a seat at the table each month and have been directly engaged

throughout the 3-year establishment of the collaborative. These partners have accepted responsibility to reach out to their constituencies in each of the five wards across the city and are actively educating and informing residents and political leaders. With training and technical support from RCE, multiple civic organizations are now leading outreach and education programs addressing CSO, flooding, and resiliency issues. As stated by Stephanie Greenwood:

“Newark DIG means there is an organized voice for residents and community groups for this very complicated and often obscure world of stormwater management regulation. They have been able to bring together a number of people who represent residents that are affected by stormwater management issues including flooding and lack of green space and sewage backups and the overall quality of life issues in the city and put them into an educated conversation with policy makers and with regulators.” (Greenwood 2017)

Newark DIG has evolved as a grassroots collaborative with an open-door policy. The collaborative meets regularly in a City Hall conference room and the public venue encourages open and honest discourse among all participants. The City, NY/NJ Baykeeper, and RCE work together to facilitate the meetings, but allow for direction and priorities of the collaborative to develop in response to all partners input.

During initial development, Cooperative Extension served as facilitator, backbone support, technical service provider, educator, and funder. Over time, local ownership of the collaborative resulted in other organizations facilitating and directing the initiative. Additionally, funding has been secured through multiple organizations. Mutually-beneficial programs informing and engaging university professionals and students as well as community residents and leaders have successfully been directed by a number of local organizations active in the collaborative. Finally, Cooperative Extension has been able to access university resources and partners across departments and programs and connect them with Newark organizations working to address multiple social and community development issues. “Extension is like having an access point to the University that we always wanted and that we were not aware of how to get” (Daniels 2016).

Newark's Community Collaborative

In Newark, collaboration in Newark DIG (Doing Infrastructure Green) has grown through the grassroots communication and agenda setting of this initiative. Organizations across the city have committed to actively educating residents and participating in other related priority topic programs. Success is best captured in the dialogue that is now occurring across neighborhoods and previously isolated community-based organizations. “A lot of times we feel like we are doing a lot of things in a bubble and we don’t know that trial and error as well as strategic approaches have already been tested or considered or worked on in other regions” (Daniels 2016). Initial efforts have resulted in securing capacity funding for local organizations to continue participating and growing the initiative, and improved communications with city offices and departments. As in Camden, the collaborative has clearly identified the issue and a strategic framework to collectively advocate and move forward.

“Newark DIG (Doing Infrastructure Green), established in 2013, is committed to continuously improving the quality of life, health, and viability of the City of Newark and its residents through the use of strategic collaborative methods including: community-driven urban design, public policy planning, environmental and social justice advocacy, education, and local capacity building. Our primary goal is the establishment of sustainable green infrastructure as the first line of defense to better manage stormwater runoff, improve water quality and resiliency to flooding, and reduce combined sewer overflows (CSOs), with a focus on the Passaic River and its tributaries” (“Newarkdig | About” 2017).

Sustaining Impact in Newark

With these plans as guidance, the partners have moved forward with development of programs and securing funding to implement recommendations set forth in these plans. Through the open dialogue and interactive collaborative process, partners have expanded inter-organizational efforts to include initiatives beyond infrastructure and water. These efforts, aligned with the collaborative mission, contribute to the overall strength of the collaboration and continue to open doors for new organizations and continually dynamic inputs to the working group.

Through the interviews and survey conducted as part of this research, several key challenges for Extension were highlighted by project partners in both Camden and Newark. Extension professionals need to “understand the landscape” (Daniels 2016). “The problem we see with the Extension program is that disconnect between on-the-ground work and what the community wants, and what they [Extension] will go get money for” (Mans 2016). The University and Extension need to commit to building local knowledge and relationships before making significant investments in urban communities. “Coming in as the outside expert is a major challenge. In initial efforts, the University coming in and saying I have a hypothesis to test, let me test it here without first developing enough local knowledge to make sure the hypothesis is grounded in local context is a challenge” (Greenwood 2017). The University needs to be sure that in its urban partnerships that it “leaves some capacity with the community that it didn’t have before” (Greenwood 2017). As Nicole Webster and Patreese Ingram from Pennsylvania State University write:

“It is important for the Extension educator to understand the perspectives of urban communities and the historical, political, economical, and social nuances that have helped shape them. If an individual is seeking to program and work with individuals to improve the quality of life, a basic understanding of how people live and operate is very important to the success of the program and the acceptance of the program deliverer.” (Webster and Ingram 2007)

Extension needs to establish itself as a knowledgeable partner in the community willing to work with the community to develop and sustain programs.

Extension needs to “brand and advertise itself a little better. Who you are and what you do. It’s a little bit of a mystery to a lot of people” (Bryant 2016). “There are a lot of organizations and even government [entities] that might be able to avail themselves of the resources of Extension but they may not know it exists. They may not know that those resources are available for people to participate in or how to access those resources” (Mitchell 2016). Extension has a lot of work to do to make itself known and relevant in the urban context. Expanding the understanding of

what Extension and the State University can do and how it is positioned to partner with communities is an important first step to beginning work in an urban community. “A lot of times you know the University is there. People tell you to partner with University, but you are like how?” (Daniels 2016). A community-based collaborative model provides a new approach for universities and Extension to engage and interface with communities outside the classroom and laboratory. This model can establish an open and equitable dialogue for university-community partnerships that responds to the needs of both entities. But, for this to occur, the university needs to adequately inform the community of its presence and the resources available to the community.

In today’s urban communities, diverse populations establish unique networks that frequently rely on non-governmental and civic organizations. These organizations provide a bridge for underrepresented community members to become informed and engaged in the life of the community. It is through these organizations that Cooperative Extension and universities can begin to serve the large diverse populations found in urban centers. University's needs to understand and recognize the value local organizations bring to the community and approach them to understand what needs they have and be able to share the resources and support that the university can provide. Bringing together multiple organizations actively working to help the community and its residents provides a platform for greater civic engagement, deeper understanding of needs, and leveraging of necessary resources to solve problems.

So what have we learned from these collaborative efforts in New Jersey’s urban core communities of Camden and Newark? While the Camden SMART team has been able to consistently move forward with larger-scale projects and programs, the Team is only represented by a small number of entities with limited connections to local residents. Dialogue and input from residents and neighborhood organizations is limited due to the structure of the Team. The agenda and priorities of the Camden SMART initiative is driven by the six team member organizations and opportunity for direct community input is minimal.

In Newark, the many voices around the table can at times slow progress as shared consensus can require more time to develop, but the many partners also are being regularly and directly engaged and able to carry information directly to residents, stakeholders, and political officials. Currently, the capacity of the collaborative to secure large-scale funding for programs and projects is limited, but efforts of the collaborative have recognized this limitation and a dedicated working group is working to outline strategies for future collaborative funding requests.

The challenge for Extension organizations is that they will have to continuously adapt to change to be effective at engaging diverse stakeholders (Charles French and George Morse 2015). The community-based collaborative approach proposed provides a structural framework for Extension professionals responding to the dynamic and shifting needs and populations of urban communities. The work in Camden and Newark has evolved in different directions but yet both rely heavily on the collective investment and action of multiple organizations to effect change. Camden SMART is a collaboration between government, Extension, and experienced non-profit organizations. The agenda is driven by charismatic leadership and the expertise of experienced and knowledgeable professionals. Newark DIG has evolved as a grassroots dialogue with an open door policy to any organization that has an interest in the collaborative agenda.

The experiences of the RCE Water Resources Program in Camden and Newark have provided a foundation for community engagement efforts in Paterson, Perth Amboy, Trenton, Gloucester City, and Jersey City. But, in contrast with Camden and Newark, experiences with collaborative efforts in Paterson and Perth Amboy have resulted in limited impact as organizations and institutions in these communities, while interested, have had very little capacity to leverage the work of Extension. In both Paterson and Perth Amboy, RCE with funding from NJDEP has begun work to establish community-based collaborative efforts. In both cases, meetings with local partners have been convened for over a year with little progress made. Specifically, local governments, while interested have very limited capacity to prioritize work needed to address

CSO issues. In addition, no local organizations have been identified that appear willing to step up and invest in the effort. While funding and commitments from both RCE and NJDEP continue to move demonstration green infrastructure projects forward, very limited progress appears to have been made in establishing a focused collaborative working group. These more recent collaboratives have yet to be fully realized and are continuing to take shape as partners work to understand the issues and form a viable coalition that can effectively work with each community and its leadership.

CONCLUSIONS & NEXT STEPS

Urban communities are in need of new ideas and innovative partnerships to begin solving complex problems. Universities, and specifically land grant universities through the Cooperative Extension Service, have an opportunity to extend the knowledge of the university into urban communities to address relevant problems. But, universities and Cooperative Extension need new perspectives, ideas, and approaches to effectively partner with urban communities. To effectively work and sustain meaningful programs in urban communities, universities and Cooperative Extension will have to overcome some challenges. This research has pointed to specific challenges that include:

- Understanding the local community and its specific context
- Making the University and Extension known in the community
- Creating increased capacity within the community being served
- Developing relationships with active non-governmental and civic organizations
- Maintaining flexibility in developing and delivering programs, services, and projects
- Providing consistent, long-term commitment to the community and collaborative efforts

The proposed community-based collaborative approach can be replicated and used as an effective model for organizing multi-party alliances around a common issue to secure outside resources and bring them to bear directly on the needs and issues identified by community constituents. Creating and sustaining the collaborative effort requires commitment and flexibility. Working collaboratively with local organizations allows the university to better understand community needs. Working with these organizations, universities can identify available resources and develop programs with the community to begin solving problems. It is through an engaged,

collaborative process that universities will be able to work in partnership with urban communities to effectively solve problems, meet challenges, and strengthen cities.

When beginning a collaborative process and working to apply a collaborative model to the efforts of the university and Extension, it is important to ask a series of questions. It needs to be understood that answers to these questions will not be able to be answered immediately, but the answers will reveal themselves over time. Collaboration takes time. Also, the answers may change as new partners become involved and new capacity becomes available. But, to understand and work within a collaborative framework, answers to these questions are critical.

ENGAGEMENT

How long can the university and Extension maintain a commitment to the community?

What is the level of investment of the university and Extension?

Is the community well represented?

Is there a local commitment to the issue and working through a collaborative effort?

Is there strong local investment of time, resources, political will, and/or capital from the community?

ORGANIZING

Who should we be partnering with?

Is there local leadership and capacity?

Is there open communication and trust between partners?

Is there community dialogue with residents raising awareness and providing outreach?

Are partners assessing needs and assets and preparing plans for action?

Does the university and Extension have the right personnel working with the community?

Is there a supporting infrastructure to facilitate and convene regular meetings and communication?

COLLABORATION

Have the partners clearly identified the issue of concern and a strategic framework for moving forward?

Have the partners developed and endorsed a common agenda around an action plan for creating change in the community?

Do all partners take ownership and accept responsibility for the work of the collaborative?

SUSTAINING IMPACT

Are partners willing and able to take action as a member of the collaborative?

Are partners able to share resources and recognition for the work of the collaborative?

Are the actions and efforts of individual partners contributing to and strengthening the impact of the collaborative?

What are the increased resources and capacity now available to the community as a result of the collaborative effort?

Are the partners bringing new ideas, opportunities, capacity, and energy back to the collaborative to sustain the work of the larger group?

It is through questions like these and a commitment to a framework that emphasizes the importance of organizing and collaboration that Cooperative Extension can strengthen its presence and relevance in urban communities. Participation and roles for Cooperative Extension will evolve when engaging in community dialogue through collaborative efforts. But, through this collaborative framework, community organizations are able to identify needs, assets, issues, and concerns to then work with Cooperative Extension to request assistance and resources from the University to support community-based efforts to solve problems. Through a commitment to work with community-based organizations and an investment to deliver resources, projects and programs relevant to the community, Cooperative Extension can sustain a collaborative relationship between an urban community and the University.

APPENDIX 1: IRB APPROVAL

RUTGERS

Office of Research and Regulatory Affairs
Arts and Sciences IRB
Rutgers, The State University of New Jersey
335 George Street / Liberty Plaza / Suite 3200
New Brunswick, NJ 08901

orra.rutgers.edu/artsci
732-235-9806

October 21, 2016

P.I. Name: Bergstrom
Protocol #: E17-166

Jeremiah Bergstrom
Landscape Agriculture
14 College Farm Rd.
New Brunswick NJ 08901

Dear Jeremiah Bergstrom:

This project identified below has been approved for exemption under one of the six categories noted in 45 CFR 46, and as noted below:

Protocol Title: "Extension into New Jersey's Urban Core"

Exemption Date: 10/20/2016 Exempt Category: 2

This exemption is based on the following assumptions:

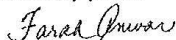
- **This Approval** - The research will be conducted according to the most recent version of the protocol that was submitted.
- **Reporting** - ORSP must be immediately informed of any injuries to subjects that occur and/or problems that arise, in the course of your research;
- **Modifications** - Any proposed changes MUST be submitted to the IRB as an amendment for review and approval prior to implementation;
- **Consent Form (s)** - Each person who signs a consent document will be given a copy of that document, if you are using such documents in your research. The Principal Investigator must retain all signed documents for at least three years after the conclusion of the research;

Additional Notes: ▪ **HSCP Certification will no longer be accepted after 7/1/15 (including for anyone previously grandfathered). CITI becomes effective on July 1, 2015 for all Rutgers faculty/staff/students engaged in human subject research.**

Failure to comply with these conditions will result in withdrawal of this approval.

Please note that the IRB has the authority to observe, or have a third party observe, the consent process or the research itself. The Federal-wide Assurance (FWA) number for the Rutgers University IRB is FWA00003913; this number may be requested on funding applications or by collaborators.

Sincerely yours,



Acting For--
Beverly Tepper, Ph.D.
Professor, Department of Food Science
IRB Chair, Arts and Sciences Institutional Review Board
Rutgers, The State University of New Jersey

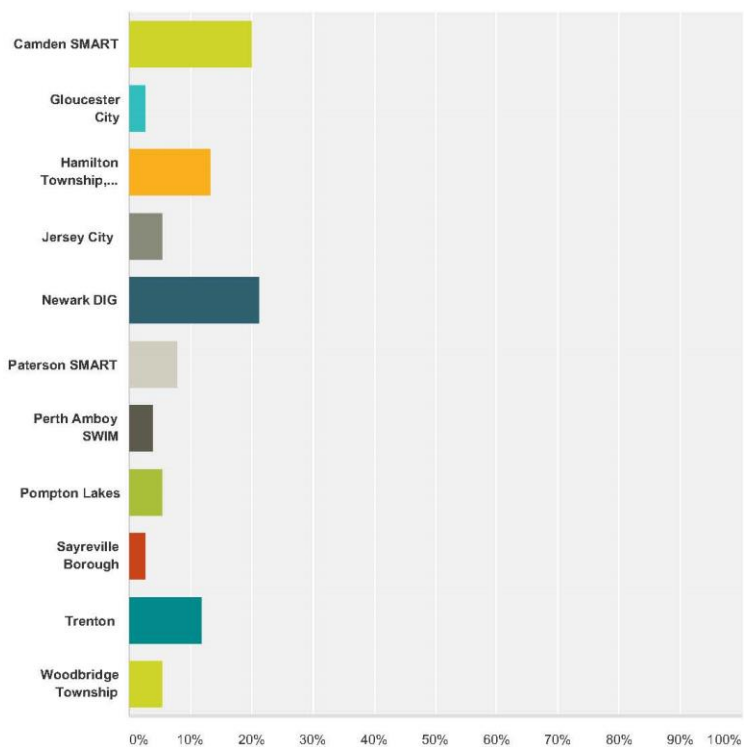
cc: Laura Lawson (FA:hb)

APPENDIX 2: SURVEY RESULTS

Municipal Action Team Urban Program Survey

Q1 Which community and/or extension program are you affiliated with? (Please select one)

Answered: 75 Skipped: 0



Answer Choices	Responses
Camden SMART	20.00% 15
Gloucester City	2.67% 2
Hamilton Township, Mercer County	13.33% 10
Jersey City	5.33% 4
Newark DIG	21.33% 16
Paterson SMART	8.00% 6
Perth Amboy SWIM	4.00% 3
Pompton Lakes	5.33% 4

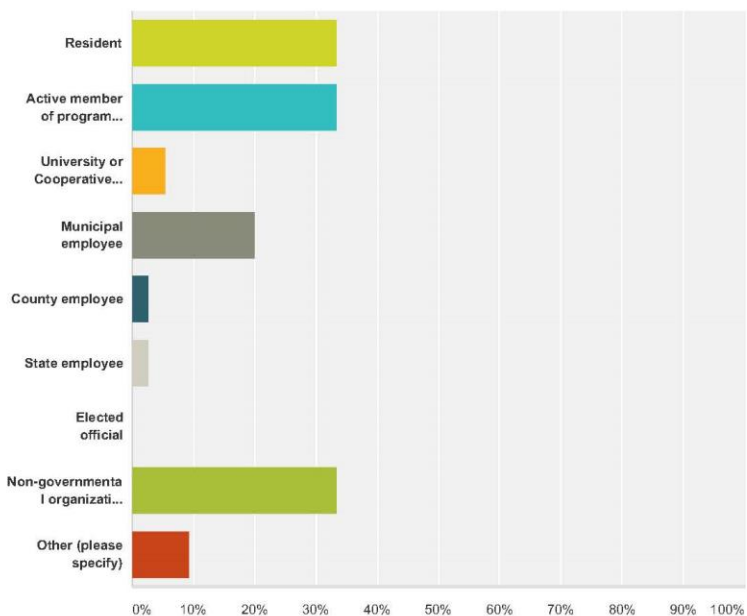
Municipal Action Team Urban Program Survey

Sayreville Borough	2.67%	2
Trenton	12.00%	9
Woodbridge Township	5.33%	4
Total		75

Municipal Action Team Urban Program Survey

Q2 What is your relationship with the community and/or extension program selected in question number #1? (Please select all that apply)

Answered: 75 Skipped: 0



Answer Choices	Responses	
Resident	33.33%	25
Active member of program (attended 3 or more meetings in the past year)	33.33%	25
University or Cooperative Extension employee	5.33%	4
Municipal employee	20.00%	15
County employee	2.67%	2
State employee	2.67%	2
Elected official	0.00%	0
Non-governmental organization / nonprofit organization employee/member	33.33%	25
Other (please specify)	9.33%	7
Total Respondents: 75		

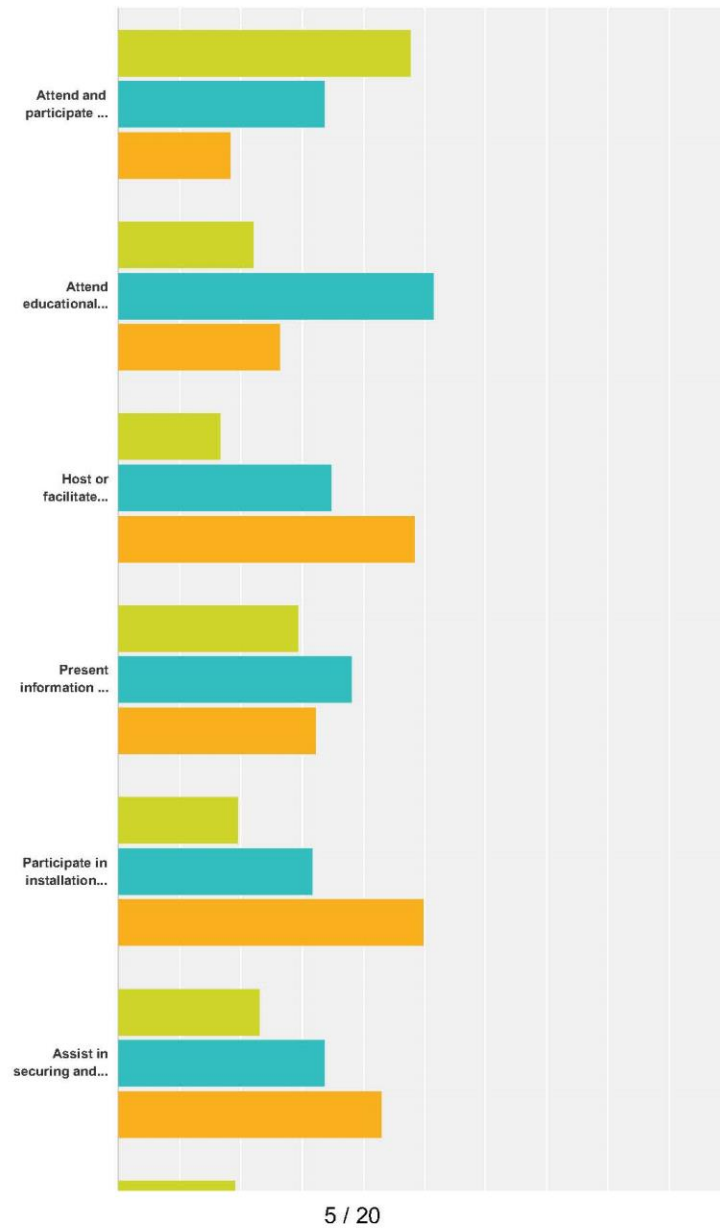
Municipal Action Team Urban Program Survey

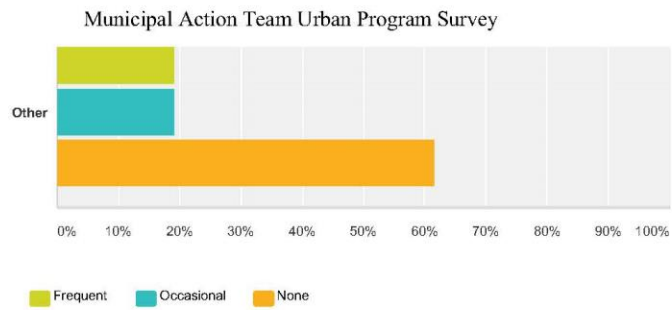
#	Other (please specify)	Date
1	College Researcher	2/14/2017 2:40 AM
2	Flood Board	2/13/2017 8:26 AM
3	Community Leader	2/6/2017 7:50 AM
4	Municipal Volunteer - Flood Advisory Board	1/10/2017 11:25 AM
5	Master Gardener, Urban Farmer	1/9/2017 10:49 AM
6	Volunteer	1/9/2017 9:48 AM
7	co-founder of initiative	1/9/2017 8:43 AM

Municipal Action Team Urban Program Survey

Q3 What has been your level of participation in the extension program?

Answered: 75 Skipped: 0



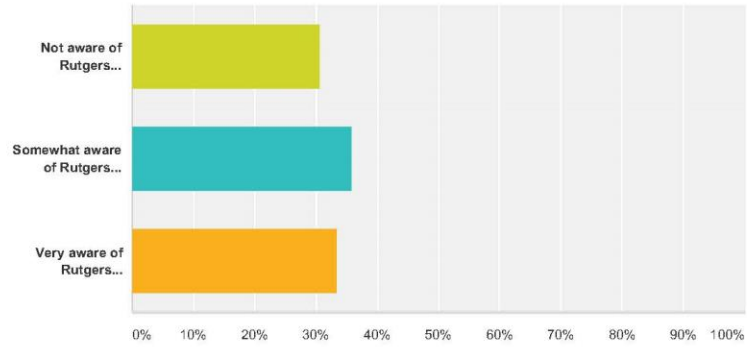


	Frequent	Occasional	None	Total Respondents
Attend and participate in meetings	47.89% 34	33.80% 24	18.31% 13	71
Attend educational workshops and trainings	22.06% 15	51.47% 35	26.47% 18	68
Host or facilitate educational workshop or training programs	16.67% 11	34.85% 23	48.48% 32	66
Present information to community and/or officials	29.41% 20	38.24% 26	32.35% 22	68
Participate in installation of demonstration projects	19.70% 13	31.82% 21	50.00% 33	66
Assist in securing and/or providing funding for educational programs or projects	23.08% 15	33.85% 22	43.08% 28	65
Other	19.23% 5	19.23% 5	61.54% 16	26

Municipal Action Team Urban Program Survey

Q4 Prior to your participation with this extension program, how aware were you of Rutgers Cooperative Extension?

Answered: 75 Skipped: 0

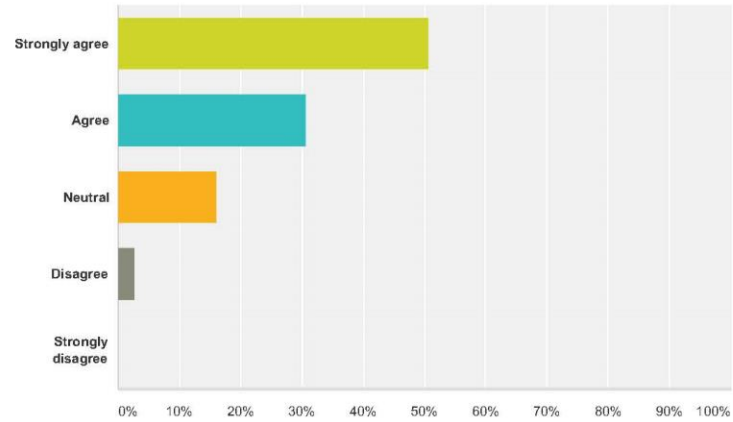


Answer Choices	Responses	
Not aware of Rutgers Cooperative Extension in my community	30.67%	23
Somewhat aware of Rutgers Cooperative Extension in my community	36.00%	27
Very aware of Rutgers Cooperative Extension in my community	33.33%	25
Total		75

Municipal Action Team Urban Program Survey

Q5 Does Rutgers Cooperative Extension provide valuable resources to your community and the existing extension program?

Answered: 75 Skipped: 0

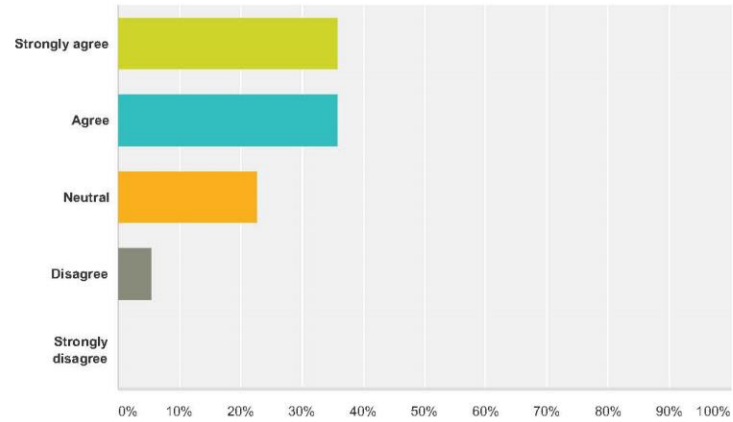


Answer Choices	Responses	
Strongly agree	50.67%	38
Agree	30.67%	23
Neutral	16.00%	12
Disagree	2.67%	2
Strongly disagree	0.00%	0
Total		75

Municipal Action Team Urban Program Survey

Q6 The issues addressed by Rutgers Cooperative Extension and the existing extension program are a priority in your community.

Answered: 75 Skipped: 0

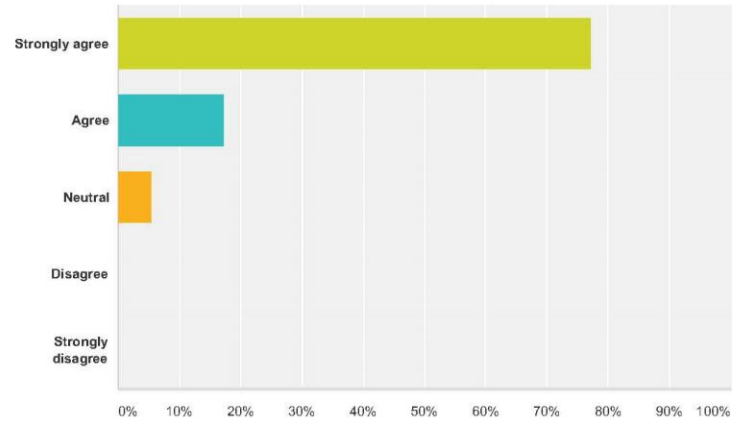


Answer Choices	Responses	
Strongly agree	36.00%	27
Agree	36.00%	27
Neutral	22.67%	17
Disagree	5.33%	4
Strongly disagree	0.00%	0
Total		75

Municipal Action Team Urban Program Survey

Q7 Should Rutgers Cooperative Extension continue to provide resources to address environment and infrastructure needs in your community?

Answered: 75 Skipped: 0

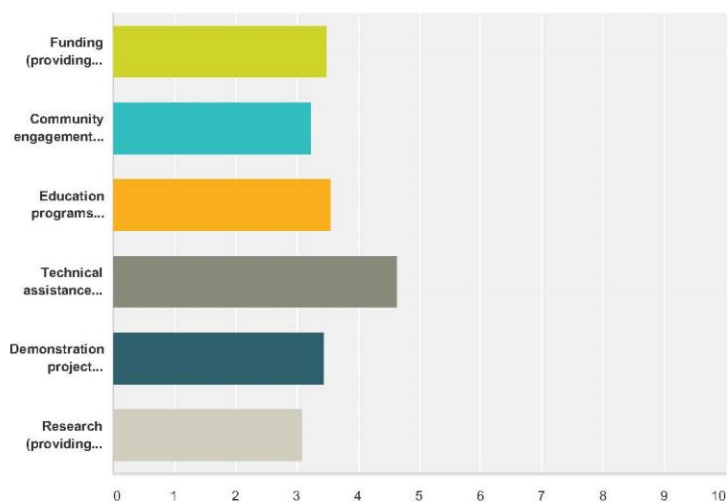


Answer Choices	Responses	
Strongly agree	77.33%	58
Agree	17.33%	13
Neutral	5.33%	4
Disagree	0.00%	0
Strongly disagree	0.00%	0
Total		75

Municipal Action Team Urban Program Survey

Q8 Please rank the following contributions provided by Rutgers Cooperative Extension from the most significant (1) to the least significant (6) as they relate to your community.

Answered: 69 Skipped: 6

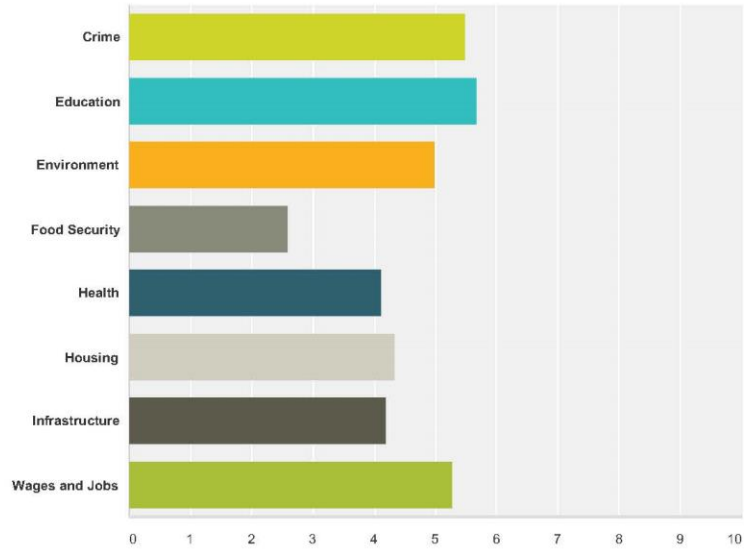


	1	2	3	4	5	6	Total	Score
Funding (providing funds for projects and programs and assisting with grant applications)	17.31% 9	17.31% 9	17.31% 9	17.31% 9	5.77% 3	25.00% 13	52	3.48
Community engagement (facilitating and leading public meetings)	11.11% 6	11.11% 6	24.07% 13	14.81% 8	22.22% 12	16.67% 9	54	3.24
Education programs (developing and delivering workshops and trainings)	16.67% 9	12.96% 7	20.37% 11	20.37% 11	16.67% 9	12.96% 7	54	3.54
Technical assistance (planning, design, and engineering support)	40.00% 22	20.00% 11	12.73% 7	18.18% 10	9.09% 5	0.00% 0	55	4.64
Demonstration project installations (construction support)	15.25% 9	18.64% 11	13.56% 8	16.95% 10	18.64% 11	16.95% 10	59	3.44
Research (providing access to university knowledge and facilities)	12.31% 8	18.46% 12	9.23% 6	10.77% 7	23.08% 15	26.15% 17	65	3.08

Municipal Action Team Urban Program Survey

Q9 Please rank the following issues in relative importance to your community, #1 being the most important.

Answered: 67 Skipped: 8

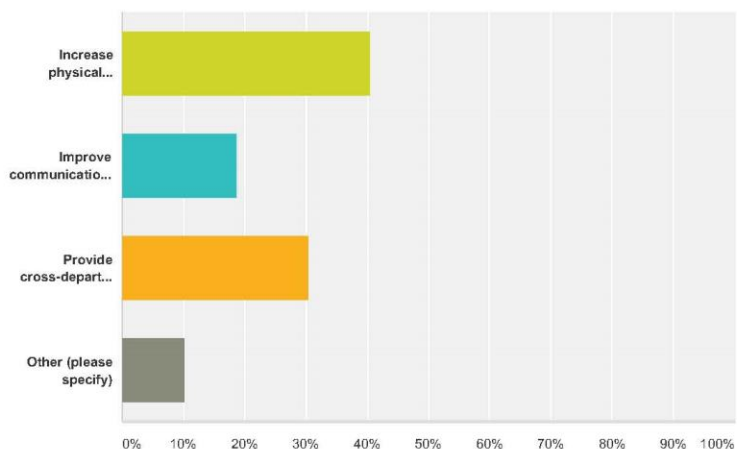


	1	2	3	4	5	6	7	8	Total	Score
Crime	28.81% 17	18.64% 11	11.86% 7	8.47% 5	8.47% 5	3.39% 2	10.17% 6	10.17% 6	59	5.49
Education	14.29% 9	25.40% 16	17.46% 11	19.05% 12	11.11% 7	6.35% 4	4.76% 3	1.59% 1	63	5.67
Environment	20.97% 13	11.29% 7	14.52% 9	16.13% 10	6.45% 4	6.45% 4	16.13% 10	8.06% 5	62	5.00
Food Security	1.67% 1	5.00% 3	3.33% 2	8.33% 5	5.00% 3	15.00% 9	21.67% 13	40.00% 24	60	2.58
Health	1.61% 1	8.06% 5	14.52% 9	14.52% 9	19.35% 12	25.81% 16	11.29% 7	4.84% 3	62	4.11
Housing	6.67% 4	15.00% 9	10.00% 6	13.33% 8	15.00% 9	20.00% 12	10.00% 6	10.00% 6	60	4.35
Infrastructure	7.81% 5	14.06% 9	17.19% 11	6.25% 4	10.94% 7	12.50% 8	12.50% 8	18.75% 12	64	4.20
Wages and Jobs	24.24% 16	10.61% 7	13.64% 9	10.61% 7	19.70% 13	7.58% 5	10.61% 7	3.03% 2	66	5.29

Municipal Action Team Urban Program Survey

Q10 How can Rutgers Cooperative Extension best improve service to your community?

Answered: 69 Skipped: 6



Answer Choices	Responses
Increase physical presence in community	40.58% 28
Improve communication with stakeholders and government officials	18.84% 13
Provide cross-departmental support from University faculty and extension professionals	30.43% 21
Other (please specify)	10.14% 7
Total	69

#	Other (please specify)	Date
1	Give a presentation annually about Rain Gardens in Hamilton, Mercer County or elsewhere in NJ. The Training Program is good, but an informative presentation is needed to publicize the importance of safe water and how everyone makes that happen.	1/9/2017 3:48 PM
2	You can't improve on excellence	1/9/2017 11:15 AM
3	Work with department directors more	1/9/2017 9:33 AM
4	Having a more physical presence and increasing/improving communication with stakeholders	1/9/2017 9:14 AM
5	More community engagement	1/9/2017 8:46 AM
6	become part of the solution and not the problem of the residence	1/9/2017 6:53 AM
7	First find out from what the Community what they would like assistance with.	1/8/2017 7:07 PM

Municipal Action Team Urban Program Survey

Q11 Please provide comments regarding your assessment of Rutgers Cooperative Extension's activities in your community.

Answered: 26 Skipped: 49

#	Responses	Date
1	Rutgers Cooperative Extension has been very helpful in coordinating with local communities to make them aware of environmental issues and ways to tackle them.	2/14/2017 10:42 AM
2	RCE's activities are worthwhile, and appreciated. However, RCE seems to be overextended and has limited personnel and resources. It may be worthwhile for RCE to reach out to potential partner institutions to augment it's reach.	2/14/2017 2:46 AM
3	They assisted in designing and building a rain garden on campus, but haven't been back for follow-up. We'd like a continued presence on our campus, as well as find ways to employ our youth.	2/13/2017 9:33 AM
4	Have been on the board of the local neighborhood association non-profit for over 8 years and can't recall any significant communication/outreach between Coop and neighborhood group. Not to say they aren't doing anything, just not a pro-active partnership effort.	2/13/2017 9:24 AM
5	Coop offers so Much- not even sure of all the offerings. It is important to understand being available when the residents are available is important to get true resident community buy in not just stakeholder buy in.	2/13/2017 8:12 AM
6	Continue to provide services as it's an important part of the combination of organizing the return of a healthy city.	2/13/2017 7:35 AM
7	Currently sending Americorps volunteer to represent my organization at SMART meetings so not personally involved. Rutgers Coop Ext staff are part of an educational/planning pilot team which is relatively new so it's hard to determine the full value of the effort and/or the contributions of individual members.	2/13/2017 7:27 AM
8	Could have more of a presence/impact or balance between suburban/urban offerings & outreach. For example, Master Gardener program geared more towards retirees...not working professionals.	1/17/2017 11:38 AM
9	The education programs are a nice option that Rutgers presents to the community. I found the water garden seminar to be very helpful to me.	1/17/2017 9:32 AM
10	The Rutgers Cooperative Extension has been exceptionally helpful in providing technical support to urban agriculture efforts and helping us address our stormwater management issues.	1/11/2017 4:18 PM
11	Very helpful, cost effective means of providing service to the Township	1/10/2017 4:33 PM
12	The Borough has a great partnership with both Amy Rowe and Jeremiah Bergstrom in aiding the Borough to try to accomplish its many environmental goals.	1/10/2017 11:29 AM
13	Great job at engaging interested parties and maximizing the work that can be done with limited resources.	1/10/2017 9:32 AM
14	The facilitators in Hamilton and in Trenton are terrific. Implementing and installing my Rain Garden with my sump pump is intimidating. Have any residential rain gardens been installed in Hamilton or Mercer County and how and where? By the way, who is the Hamilton official that had invited the Rutgers Coop to train residents in Rain Gardens? Perhaps that person could be present at the meeting to encourage participation. Perhaps some of my questions could be answered by the Hamilton contact. Pinterest suggested doing the Rain Garden installation in stages, over a period of one year to follow and observe the land's natural run-off needs and to spread out the work load. Doing the job as suggested in one shot seems too big a job to me. How about incorporating/translating some of the Rain Garden terms into other terms already used by landscapers, excavators, plumbers, permaculture? People look at me cross-eyed when I talk to them about Rain Gardens. There's a lot to be advertised about Rain Gardens and the future of potable water and healthy environment.	1/9/2017 3:48 PM
15	The cooperative extension office could extend their services to help establish a sustainable local food system for urban farmers who are interested in entrepreneurship. The extension office can better help with resources that would aid local government with policy changes with regard to zoning and land use.	1/9/2017 11:16 AM
16	They have exceeded all expectations.	1/9/2017 11:15 AM
17	As a result of Super Storm Sandy Sayreville had a need to restore a devastated area where over 100 homes were sold to Blue Acres. The program being provided by Rutgers is meeting the need.	1/9/2017 11:05 AM
18	Awareness of the programs seems to only reach only those involved with school aged children. The question is how to engage those not affiliated with school programs. My first thought would be through the "Church".	1/9/2017 10:36 AM

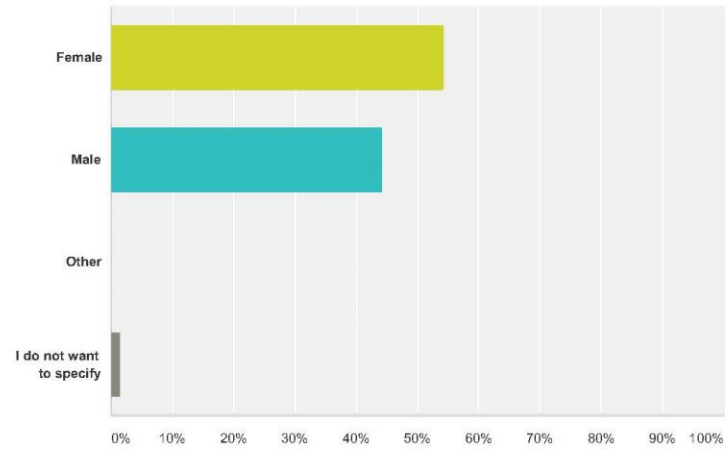
Municipal Action Team Urban Program Survey

19	Programs are very informative, but the same dozens of people show up to the different events. Outreach in engaging different people may be helpful.	1/9/2017 10:18 AM
20	Invaluable support and assistance from talented professionals- effective engagement with the city and community.	1/9/2017 9:51 AM
21	Rutgers WRP is the glue to our initiative. Without their technical support and innovative ideas, we would not be as successful as an initiative.	1/9/2017 8:46 AM
22	RCE has engaged the Camden Community in a number of efforts for environmental awareness, stewardship and advocacy. This was much needed to improve opportunities for learning about ways in which community members and organizations can take ownership for creating a healthy environment.	1/9/2017 8:16 AM
23	cronyism	1/9/2017 6:53 AM
24	Extremely valuable resource, with access to experts that our community could not otherwise afford. Our biggest obstacle is that the experts are often very busy and scheduling can be difficult.	1/8/2017 4:15 PM
25	a significant partner in addressing critical needs and providing support to the local community to confront those issues.	1/8/2017 12:32 PM
26	I have been to one program and that was on creating a rain garden on my property. Love the idea. The process for someone like me (aged 62) is onerous.	1/8/2017 12:05 PM

Municipal Action Team Urban Program Survey

Q12 Gender:

Answered: 70 Skipped: 5

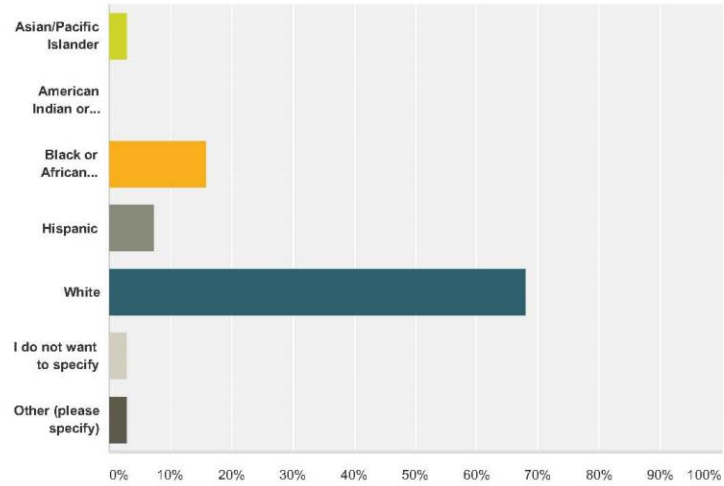


Answer Choices	Responses	
Female	54.29%	38
Male	44.29%	31
Other	0.00%	0
I do not want to specify	1.43%	1
Total		70

Municipal Action Team Urban Program Survey

Q13 Ethnicity:

Answered: 69 Skipped: 6



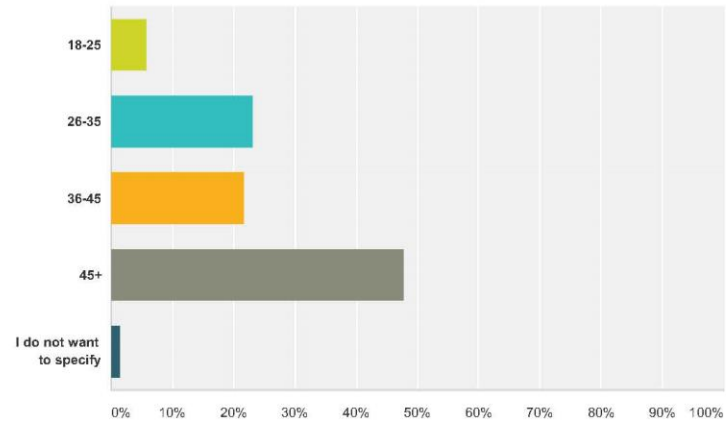
Answer Choices	Responses
Asian/Pacific Islander	2.90% 2
American Indian or Alaska Native	0.00% 0
Black or African American	15.94% 11
Hispanic	7.25% 5
White	68.12% 47
I do not want to specify	2.90% 2
Other (please specify)	2.90% 2
Total	69

#	Other (please specify)	Date
1	American	2/13/2017 8:13 AM
2	Bi racial	1/9/2017 11:17 AM

Municipal Action Team Urban Program Survey

Q14 Age:

Answered: 69 Skipped: 6

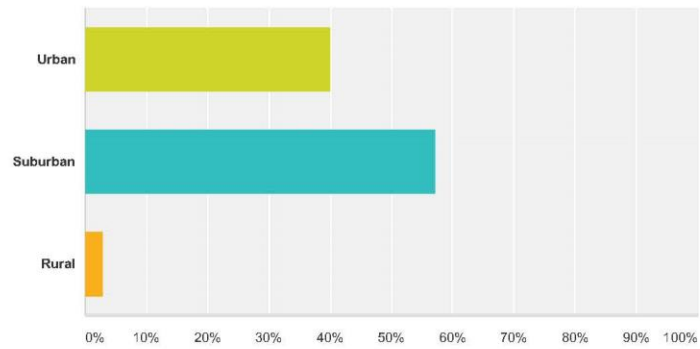


Answer Choices	Responses	
18-25	5.80%	4
26-35	23.19%	16
36-45	21.74%	15
45+	47.83%	33
I do not want to specify	1.45%	1
Total		69

Municipal Action Team Urban Program Survey

Q15 Which of the following communities do you live in?

Answered: 70 Skipped: 5

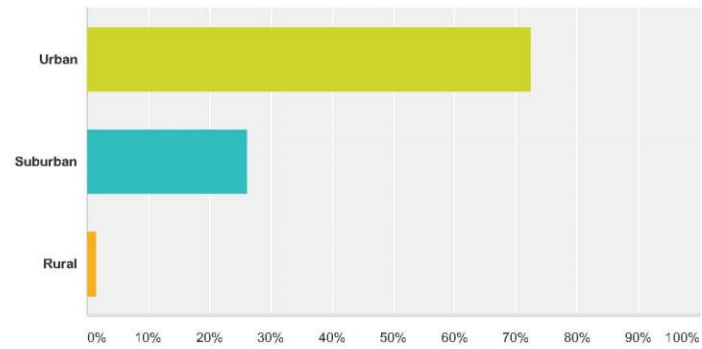


Answer Choices	Responses	
Urban	40.00%	28
Suburban	57.14%	40
Rural	2.86%	2
Total		70

Municipal Action Team Urban Program Survey

Q16 Which of the following communities do you work in?

Answered: 69 Skipped: 6



Answer Choices	Responses
Urban	72.46% 50
Suburban	26.09% 18
Rural	1.45% 1
Total	69

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