Neighborhood Engagement Through an Urban Agribusiness Innovation Center

Prepared for the City and County of Denver Mayor’s Office of the National Western Center

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Capstone Project Disclosures

This client-based project was completed on behalf of the City and County of Denver Mayor’s Office of the National Western Center (NWCO) and supervised by PUAD 5361 Capstone course instructor Dr. Wendy Bolyard and second faculty reader Dr. Todd Ely. This project does not necessarily reflect the views of the School of Public Affairs or the faculty readers. Raw data were not included in this document, rather relevant materials were provided directly to the client. Permissions to include this project in the Auraria Library Digital Repository are found in the final Appendix. Questions about this capstone project should be directed to the student author.
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Executive Summary

Neighborhood engagement is a core component of the vision for the future National Western Center (NWC). To effectively engage the Globeville and Elyria-Swansea (GES) neighborhoods surrounding the NWC in an agribusiness innovation center, the City and County of Denver Mayor’s Office of the National Western Center (NWCO) has requested an analysis of the community engagement efforts of innovation centers across the United States. This capstone project uses a mixed methods approach to identify the challenges and opportunities for engaging the GES neighborhoods in an agribusiness innovation center, and assesses the neighborhood engagement practices of innovation centers located in urban areas across the U.S. for best practices. NWCO staff were interviewed to provide an understanding of GES neighborhood engagement, innovation centers were surveyed to identify their level of neighborhood engagement, and two innovation center case studies were examined to provide an in-depth analysis of their community engagement practices.

Based on the findings of this study, four recommendations emerged for the development of an agribusiness innovation center at or in the area surrounding the NWC. First, the study recommends offering services to GES residents, businesses, and nonprofit organizations, including opportunities to participate in networking and events. Second, the study recommends partnering with local high schools, colleges/universities, and technical schools, to build the workforce pipeline. Third, the study recommends investing in diversity and inclusion efforts that engage women and minorities. Finally, the study recommends partnering with organizations that have experienced success to develop a sustainable innovation center. This information will assist in the development of an agribusiness innovation center at or in the area surrounding the NWC that effectively engages with the GES neighborhoods.
Introduction

The vision of the National Western Center (NWC) is to be a global destination for agricultural heritage and innovation. The 250-acre campus represents a visionary transformation of the National Western Complex and Denver Coliseum sites into a year-round destination for education, research, entertainment, and agribusiness innovation. To strengthen and grow Colorado’s economy, the City and County of Denver commissioned the NWC NextGEN Agribusiness Economic Development Study to expand the NWC conversation beyond the core elements of entertainment, competition, education, and research, into innovation and commerce (AECOM, 2016). Key findings of the NextGEN Agribusiness Study included a focus on the development of an Innovation District in the context of the NWC, and the evaluation of 1 to 3 million square feet of office and lab space, at urban/neighborhood development density (AECOM, 2016). To assist in the implementation of this effort, this capstone project identifies for the client, NWCO, best practices of innovation centers located in urban areas that engage with neighborhood residents, businesses, nonprofit organizations, local educational institutions, and youth (ages 18 and younger). Additionally, the project looks to key NWCO staff to inform elements of successful engagement in the GES neighborhoods surrounding the future NWC. Based on these analyses, the project provides a discussion and recommendations for the development of an agribusiness innovation center at or in the area surrounding the NWC that engages with the local community.

Community and neighborhood integration serves as a guiding principle of the NWC, and are critical components of the future NWC agribusiness innovation center. When Denver’s Mayor Michael B. Hancock established the North Denver Cornerstone Collaborative (NDCC) in 2013, he sought to strategically align six redevelopment projects in Denver’s Globeville, Elyria,
and Swansea (GES) neighborhoods, including the NWC ("Mayor Hancock Establishes New Office," 2016). The GES neighborhoods include approximately 10,000 residents (Denver Department of Environmental Health, 2014). Both neighborhoods have populations that are predominantly Hispanic in ethnicity, with Globeville’s population at 68% Hispanic, and Elyria-Swansea’s population at 84% Hispanic (one of the highest Hispanic populations of any Denver neighborhood). The neighborhoods contain younger populations and more families with children than Denver overall. Household income in GES is significantly lower than Denver’s average, and residents of GES have achieved lower education levels than the average resident in Denver (Denver Department of Environmental Health, 2014). With the NWC campus spanning the GES neighborhoods, it is vital to engage members of these communities to reinforce the commitment to ensuring that these neighborhoods are strong, connected, healthy, and unique.

The purpose of this research is to explore community engagement practices of innovation centers across the U.S. to develop a set of recommendations for effectively engaging GES neighborhood residents, businesses, nonprofit organizations, youth and local educational institutions in an agribusiness innovation center at or in the area surrounding the NWC. Adapted from Geller (2015), neighborhood engagement, for the purposes of this study, is defined as providing opportunities for neighborhood communities to participate in activities or initiatives. The paper is structured to provide a review of the relevant literature, examine the methodology used in this study, present the results of the study, and finally, offer a discussion and recommendations for NWCO. The literature review presents organizational background information and provides an overview of literature connecting community engagement with the innovation center concept and youth engagement in innovation. The methodology section discusses the study’s research propositions, measurement and data collection, sampling plan,
validity and reliability, and data analysis. The results section presents a report of the study’s findings. Finally, the paper provides discussion and recommendations for NWCO, explains limitations of the study, and presents suggestions for future research.

**Literature Review and Statement of Purpose**

The following literature review provides background information on the City and County of Denver Mayor’s Office of the National Western Center (NWCO) and the National Western Center project, as well as a discussion of existing relevant literature and its connection to the proposed research propositions. The literature review examines community engagement in theory and practice, presenting a discussion of building civic capacity, developing social capital, and engaging local stakeholders. The literature review also discusses the innovation center concept and inclusive innovation, and presents scholarship on youth engagement in innovation and makerspaces.

**Organizational Background Information**

The City and County of Denver Mayor’s Office of the National Western Center (NWCO) was established in January 2016 to transform the National Western Complex and Denver Coliseum sites into a year-round tourism destination and regional asset (“National Western Center,” 2017). NWCO works cooperatively with other city departments and agencies, and is responsible for the implementation of the NWC master plan. The master planning effort involved five founding partners, including the City and County of Denver, the Western Stock Show Association, Colorado State University, the Denver Museum of Nature and Science, and History Colorado (“Memorandum of Understanding,” 2013). Financing of the NWC involves multiple sources of funds (NWC and CCC Plan of Finance 2016-2025, 2017). A majority of the project funding committed by the City and County of Denver will come from Ballot Measure 2C, which
Denver voters passed in November 2015 to extend Denver’s Lodger’s Tax (“National Western Center,” 2017). Further funding has been committed by Colorado State University, the Western Stock Show Association, and the Colorado Economic Development Commission (“National Western Center,” 2017).

Community Engagement

Research demonstrates that engaging the local community is often a challenging objective for organizations, yet it is imperative to invite community participation to enhance the development of strong and sustainable cities. Civic engagement describes how “an active citizen participates in the life of a community in order to improve conditions for others or to help shape the community’s future” (Adler & Goggin, 2005, p. 241). Equitable community engagement should be fostered through involving community members in decision-making processes, providing opportunities for the community to engage in initiatives, and creating safe spaces to engage in conversations (Geller, 2015). With the continuum of civic engagement ranging from informal and private individual action, to formal and public collective action (Adler & Goggin, 2005), community members should be engaged in different ways, depending on social and geographical context. In an urban context, community engagement involves building civic capacity and developing social capital.

Building civic capacity. Building civic capacity, or community building, is one way through which organizations can engage their local community. Community building strengthens the capacity of neighborhood residents, associations, and organizations to work collectively to foster positive change in a neighborhood (Nitzberg, 2005). Community capacity building specifically emphasizes relationships, coalitions, and consensus building among residents and organizations (Saegert, 2006). Saegert (2006) stresses that fostering community capacity can be
applied to different goals for a neighborhood, such as economic revitalization, improving the neighborhood for children, or obtaining better public services. Yet, largely, it involves empowering the community to engage in programs and processes (Martin, Smith, & Phillips, 2005). Community building includes investing in the social capital that comprises the “fabric” of a community, such as mutual assistance networks, social and economic relationships, public safety, and education (Nitzberg, 2005, p. 11). Additionally, building civic capacity develops a sense of community, which reinforces the value of partnerships within the community structure (Chavis & Wandersman, 1990). In an urban context, sense of community stimulates satisfaction with one’s residential environment and enhances the perception of personal and group empowerment to influence what happens in the community. Increasing the empowerment of neighborhood residents is important for neighborhood development and helps neighbors collectively act to meet their shared needs (Chavis & Wandersman, 1990). Mandarano (2015) describes civic engagement capacity building as “a program that seeks to build knowledge, skills, networks, norms, and trust with the goal of increasing and enhancing individual involvement in informal and formal planning processes to improve community (neighborhood, city, or county) conditions” (p. 175). Citizen Planning Academies, paralleling community leadership and community capacity building programs, facilitate civic capacity building through public outreach and education programming. Planning Academies have been shown to increase citizens’ understanding of the planning and development process, leading to increased engagement in the community and city planning (Mandarano, 2015).

**Developing social capital.** To effectively engage a local community, organizations should invest in building and bridging social capital within a community. Putnam (1993) refers to social capital as elements of social organization, such as networks and trust, that facilitate
cooperation for the larger group benefit. Building from a similar definition of social capital, which emphasizes the network of trusting relationships that exist in a community, Bowen et al. (2000) note that “extracommunity ties” bridge social capital between a neighborhood and other organizations (as cited in Brisson & Usher, 2005, p. 644). Social capital is an essential ingredient for economic development and can help generate new strategies for development (Putnam, 1993). Additionally, resident participation in neighborhood activities and growth is critical for the development of bonding social capital, or the network of social cohesion among members of a neighborhood (Brisson & Usher, 2005). Thus, building trust with neighborhood communities is necessary to effectively engage a community, especially if planning for economic development.

Community Engagement in Practice: Engaging Local Stakeholders

To assess how organizations can effectively engage the local community, this literature review turns to models of local stakeholder engagement. Community engagement, in practice, involves trust within local relationships, opportunities for deliberation, opportunities for various stakeholder groups to participate, and the use of community hubs and existing communication to understand the needs of community groups (King & Cruickshank, 2010). The term ‘stakeholder’ refers to “persons, groups or organizations that must somehow be taken into account by leaders, managers and front-line staff” (Bryson, 2004, p. 22). More broadly, in his 1984 text on strategic management, Freeman defines a stakeholder as “any group or individual who can affect, or is affected by the achievement of the organization’s objectives” (as cited in Bryson, 2004, p. 22). While definitions of the term ‘stakeholder’ vary, the literature coincides on the need for stakeholder support to ensure the long-term viability of organizations, plans, and programs (Bryson, 2004). In this context, stakeholder identification and analyses are increasingly important for a strategic management process because organizational success depends on
meeting the needs of key stakeholders. Additionally, local stakeholders can identify problems within different communities that may be less visible to the organization (Bryson, 2004).

**Inclusive participation processes.** After identifying stakeholders, organizations should design inclusive participation processes, applicable to the neighborhood context. Community participation processes should fit within the social, demographic, political, technological and physical context of an organization’s environment (Bryson, Quick, Slotterback, & Crosby, 2012). Designing and implementing public participation and engagement requires effective leadership that can identify resources needed to support participation, including funds, staff time, technical assistance, or information infrastructure (Bryson et al., 2012). Research demonstrates that communities in which leaders feel greater accountability to citizens achieve higher levels of involvement from citizens (Handley & Howell-Moroney, 2010). However, achieving higher levels of engagement requires both recognizing and addressing the factors that can hinder engagement (de Lancer Julnes & Johnson, 2011). King, Feltey and Susel (1998) found such barriers to engagement include economic disadvantage and associated problems of transportation, time constraints, family structure, and child care (as cited in de Lancer Julnes & Johnson, 2011). For Hispanic communities in Utah, de Lancer Julnes and Johnson (2011) found that barriers to engagement included a lack of trust, perceived attitudes of racism, tokenism, the lack of an inclusive or welcoming environment, and a lack of transparency. Creating inclusive processes to engage a diverse population is critical; this means optimizing accessibility through language translation, child care, transportation assistance, and other areas that hinder engagement (Bryson et al., 2012). It requires using information, communication, and other technologies to ensure inclusive engagement (Bryson et al., 2012).
Engaging a diverse community. Engaging a culturally and linguistically diverse public involves first understanding the context, and next, responding to needs appropriately. This includes employing a wide range of tools and strategies to give residents different ways to become involved (Hoene, Kingsley & Leighninger, 2013). Meaningful engagement has been evidenced through opportunities for ongoing feedback and collaborating with and empowering the public (de Lancer Julnes & Johnson, 2011). Boosting minority participation has been successful through building substantial partnerships with community-based organizations and increasing minority representation within organizations. Substantial partnerships require meaningful collaboration to ameliorate feelings of alienation and powerlessness, and perceptions of symbolic effort on behalf of an organization (de Lancer Julnes & Johnson, 2011). Addressing the provision of incentives for public participation, Thomas (2013) found that material or financial incentives do not increase coproduction, which occurs when governments partner with members of the public to jointly produce services. Material incentives can be employed as part of a larger strategy for public engagement, but only in combination with other motivational incentives (Thomas, 2013). Unless citizens feel properly recognized and acknowledged, they will not participate solely on the basis of altruism or reciprocity (Yang & Ott, 2016). Public administrators should express gratitude for public participation through acknowledgement by means of a personal card, newsletter, social media, or through another medium (Yang & Ott, 2016). With barriers to civic engagement, significant incentives are likely to positively affect participation (Kleinman, Delborne & Anderson, 2011). A commitment to increasing public participation also requires hiring and maintaining a diverse workforce that mirrors the diversity of the citizens served (de Lancer Julnes & Johnson, 2011).
The Innovation Center Concept

Innovation can be described as a complex and iterative process through which problems are defined, new ideas are developed and combined, and new solutions are implemented and diffused (Harley, Sorensen & Torfing, 2013). However, collaboration is often what stimulates meaningful innovation that crosses traditional disciplinary boundaries. Collaborative innovation brings together stakeholders from the public, for-profit, and nonprofit sectors, as well as citizens themselves, and allows for the exchange of diverse ideas, transformative learning, and shared ownership of new solutions (Harley et al., 2013). Innovation districts and centers facilitate this collaborative innovation. Katz and Wagner (2014) of the Brookings Institute define innovation districts as “geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators” (p. 1). Emerging across the U.S. in recent years, innovation districts increase the ability of cities to grow better and more accessible jobs (Katz & Wagner, 2014). Mehta and Bosson (2010) describe innovation districts as the “Third Place,” where socializing, business transactions, network-building and self-identity all occur (as cited in Giuffrida, Clark & Cross, 2015, p. 3). Innovation districts, shaped by the organizations surrounding it, have the capacity to blur traditional roles among industries, institutions and government (Giuffrida et al., 2015). Additionally, innovation spaces foster interaction between varied groups, which creates bonds of trust and communication among community members, yielding broader social benefits (Obach & Tobin, 2014).

Inclusive innovation. Environments that foster collaborative innovation must be accessible to a diverse population. Directing resources into low-income communities to increase inclusive innovation and entrepreneurship will create a pipeline for the next generation of local entrepreneurs (Pettit & Pitingolo, 2016). This includes developing strategies to support more
entrepreneurs and social innovators living or working in underserved communities (Pettit & Pitingolo, 2016). Innovation districts can promote inclusive growth through creating educational, employment and other opportunities for city residents (Katz & Wagner, 2014). There is an opportunity to develop and support local talent to assist in providing equitable opportunities for economically-mobile career paths with sustainable wages (Katz & Wagner, 2014). Once capital and jobs are redirected into urban cores, jobs will become increasingly accessible for citizens living in underserved communities (Katz & Wagner, 2014).

Youth Engagement in Innovation

A critical component of community engagement in innovation involves engaging youth and young adults. Youth provide a necessary perspective on the issues that are important to the health of a neighborhood (Santo, Ferguson & Trippel, 2010). Through being engaged by their local community, youth can “carry forth a neighborhood narrative” and share that narrative with classmates, teachers, and other community members (Santo et al., 2010, p. 63). Partnerships with local schools are critical to this effort. Adopting area schools through offering teaching assistance and internships in STEM, and other educational areas, gives students opportunities to engage with innovation and an entrepreneurial perspective (Katz & Wagner, 2014). Additionally, innovation centers should experiment with school-to-work programs and apprenticeships that teach career building and on-the-job training (Katz & Wagner, 2014). This will assist in increasing student success and opening opportunities to help youth achieve personal and economic stability. Through career pathways that provide opportunities for post-secondary certificates and degrees, innovation centers can prepare students for jobs in sectors like technology, manufacturing, healthcare, and finance (Katz & Wagner, 2014). Additionally, connecting youth with adults and the broader community and mentors helps develop a sense of
belonging and is a protective factor in reducing susceptibility to engaging in risky behaviors (Santo et al., 2010).

**Makerspaces.** Makerspaces are one avenue through which innovation centers can positively engage with youth in the community. Makerspaces are informal sites for creativity in the arts, science, and engineering, through which people blend digital and physical technologies to explore ideas, learn technical skills, and create new products (Sheridan, Rosenfeld Halverson, Brahms, Jacobs-Priebe & Owens, 2014). This model also encourages community connections, especially among youth. Makerspaces break down disciplinary boundaries and lead to innovative work (Sheridan et al., 2014). Yet, it takes instructors who are committed to creating space for youth to learn to tinker, explore and collaborate (Holbert, 2016). Educational makerspaces inspire deep learning, invite curiosity, encourage playfulness, and celebrate unique solutions (Kurti, Kurti & Fleming, 2014). They also send the message that failure is not a negative outcome, but is a critical part of the learning process (Kurti et al., 2014).

**Literature Review Summary and Statement of Purpose**

Based on the preceding research, this study applies to the theories which link community engagement with the innovation center concept, inclusive innovation, and engaging youth in innovation. The research, as cited above, has been used to develop this study, which assesses how innovation centers in urban areas engage their neighborhood communities. The purpose of this research is to examine community engagement practices of innovation centers across the U.S., to provide recommendations to inform the development and operations of the future NWC agribusiness innovation center. This study provides specific recommendations of ways to engage the GES neighborhoods in an agribusiness innovation center at or in the area surrounding the NWC.
Methodology

Research Propositions

With the expressed purpose to assist in the development of an agribusiness innovation center at or in the area surrounding the NWC that engages with the local community, this study proposes the overarching research question, how do innovation centers engage their neighborhood communities? The following research propositions explore, describe, and empirically evaluate the relationship between innovation centers and community engagement practices.

Proposition 1: Innovation centers that report a high level of neighborhood engagement are likely to offer more services to neighborhood residents.

Proposition 2: Innovation centers that report a high level of neighborhood engagement are likely to offer more services to neighborhood businesses.

Proposition 3: Innovation centers that report a high level of neighborhood engagement are likely to offer more services to neighborhood nonprofit organizations.

Proposition 4: Innovation centers that report a high level of neighborhood engagement are likely to offer more services to neighborhood youth and local educational institutions.

Measurement and Data Collection

This study uses a mixed methods approach in its research design, with quantitative research techniques chosen to benchmark and understand the prioritization of services offered by innovation centers to neighborhood residents, businesses, nonprofit organizations, local educational institutions and youth, and qualitative research techniques chosen to provide depth in addressing the questions of neighborhood engagement.
Quantitative approach. The quantitative approach to the study’s data collection included the construction of a survey (see Appendix B) that was distributed electronically via Qualtrics to 36 innovation centers. Functional focuses of the innovation centers include manufacturing, health, agriculture, technology and food processing and manufacturing. The survey contained 13 questions, including 10 closed-ended questions and three open-ended questions. Questions asked about innovation centers’ priority level of neighborhood engagement and services they offer to neighborhood residents, businesses, nonprofit organizations, local educational institutions and youth.

Qualitative approach. The qualitative approach to the study’s data collection included in-person interviews with three key NWCO staff and phone interviews with the two innovation centers selected as case studies. The interviews with key staff illustrate the challenges and opportunities for engaging the GES neighborhoods in an agribusiness innovation center (see Appendix A for interview protocol). Case study research helps illuminate an innovation center’s decision related to neighborhood engagement, why they were taken, how they were implemented, and with what result (Yin, 2014). The interview protocols for the case studies are found in Appendix G.

Sampling Plan

The unit of analysis for this study is the innovation center. The sample for the survey was drawn from a list of innovation centers provided by the NWC NextGEN Agribusiness Economic Development Strategy consultant team from AECOM, further narrowed to a sample size of 36 innovation centers. Purposive sampling was used to select the sample of 36 centers. The sample provided by the consultant team was narrowed to exclude centers located outside of metropolitan statistical areas, as defined by the U.S. Census Bureau, and centers without a brick and mortar
facility. Centers located in urban areas were chosen to present relevant comparisons to the future NWC agribusiness innovation center, which will be located adjacent to urban Denver neighborhoods. Neighborhood demographic information was gathered for each of the survey respondents through the U.S. Census Bureau’s web-based mapping and reporting application, OnTheMap, to illustrate the total primary jobs, age, earnings, ethnicity, and educational attainment of workers living within a 2-mile radius of the center (see Appendix F). Interviews with key NWCO staff were selected using purposive sampling, with direction from NWCO’s Deputy Director. Purposive sampling was also used to select two innovation center case studies from the list of survey recipients, CIC St. Louis, and Los Angeles Cleantech Incubator (LACI). Selection of these cases was based on similarities in neighborhood demographics to the GES neighborhoods and direction from NWCO (see Appendix F).

**Validity and Reliability**

In the quantitative research, the study maximizes internal validity through survey questions that attempted to explain the intended outcomes of the research and were constructed to measure what was intended. The study maximizes reliability through survey review by the researcher’s faculty instructor and advisor, the client, and the AECOM consultant team. Survey review was used to assess the use of appropriate survey questions, void of leading questions, compound questions, and questions which allow for neutral responses. With survey respondents from different regions across the United States, holding different demographic characteristics, the representative sample can be generalized to the population of innovation centers in the U.S.

In the qualitative research, the study maximizes internal validity through using interview transcripts, reviewed by the client and AECOM consultants. The reliability of the qualitative research is maximized through describing the research context to interviewees.
Data Analysis

Data analysis for this study included generating descriptive statistics and conducting content analyses. Survey data were analyzed through producing relative frequency statistics and deciphering themes from open-ended responses using Qualtrics. To make valid and replicable inferences, interviews with NWCO staff and case study innovation centers were coded. By systematically evaluating the raw data, a thematic analysis of the data was conducted to generate themes from the preliminary coding. The propositions were supported if the average number of services offered by innovation centers to neighborhood residents, businesses, nonprofit organizations, and youth and local educational institutions was greater for innovation centers that place a higher prioritization on neighborhood engagement.

Results

The following section presents a report of the study’s findings. The results are organized into four sub-sections, which include interviews with National Western Center Office (NWCO) staff, neighborhood engagement survey results, case study 1: CIC St. Louis, and case study 2: Los Angeles Cleantech Incubator (LACI). The study’s research propositions are addressed in the neighborhood engagement survey results.

Interviews with National Western Center Office (NWCO) Staff

Interviews with three NWCO staff were conducted to examine community engagement goals for the NWC, and the challenges and opportunities for engaging the GES neighborhoods in an agribusiness innovation center.

Community engagement goals for National Western Center campus. Interviewees expressed that effective engagement involves listening to neighborhood residents and engaging them in open dialogue, to increase transparency and accountability. They communicated the
importance of engaging residents at their community spaces, including schools, churches, recreation centers, and nonprofits. Interviewees shared that hiring staff from the community, who speak the predominant language of the community, can also increase local engagement. Additionally, interviewees shared the importance of communication with GES leaders and groups who have already developed community trust.

**Challenges to engaging the GES neighborhoods.** For the interviewees, a significant challenge to engaging the GES neighborhoods is building trust with residents, who have historically expressed distrust with the local government. Interviewees also expressed the challenge of hearing from residents who are not represented in community meetings. Interviewees shared that in order to better understand neighborhood residents’ needs and gain authentic input, it is vital to draw in representative participation. Additionally, building the workforce pipeline in the GES neighborhoods through equipping the local youth with skills for employment is another challenge that city staff anticipate.

**Opportunities for engaging GES neighborhoods.** Interviewees expressed the opportunity to reach neighborhood families through engaging the youth. The interviewees expect an agribusiness innovation center to provide opportunities for engaging GES youth through experiential learning. Interviewees shared that this engagement can include mentorship and job readiness programming, as well as hands-on workforce training for youth. They also shared that the innovation center can address food insecurity issues in the neighborhoods. Finally, interviewees stressed the importance of surveying the community to understand how to create effective job innovation efforts and partner with neighborhood businesses and nonprofit organizations.
Neighborhood Engagement Survey Results

The neighborhood engagement survey was distributed electronically to 36 innovation centers to examine how innovation centers located in urban areas across the U.S. engage with neighborhood residents, businesses, nonprofit organizations, and local educational institutions. There were 14 responses received, achieving approximately a 39% response rate. A summary of the open-ended survey responses, which describe the innovation centers’ greatest challenges and successes in engaging their neighborhood community, can be found in Appendix E. Additionally, for survey respondents, demographics of workers living within a 2-mile radius of the innovation centers are included in Appendix F.

Prioritization of neighborhood engagement. When asked to prioritize neighborhood engagement relative to their organization’s priorities, 71% (n=10) of respondents rated neighborhood engagement as a high priority, and 29% (n=4) rated neighborhood engagement as neither a high priority nor a low priority (see Appendix C, Figure 1). Additionally, when asked what percentage of their organization’s efforts involve neighborhood engagement, four respondents stated 0-20%, four respondents stated 21-40%, four respondents stated 41-60%, one respondent stated 61-80%, and one respondent stated 81-100% (see Appendix C, Figure 2).

Proposition 1: Innovation centers that report a high level of neighborhood engagement are likely to offer more services to neighborhood residents. Proposition 1 is supported. For the innovation centers that reported neighborhood engagement as a high priority, an average of three services are offered to neighborhood residents. For the innovation centers that reported neighborhood engagement as neither a high priority nor a low priority, an average of one service is offered to neighborhood residents (see Appendix D). The most common service
offered by innovation centers to neighborhood residents is networking/events, followed by
internships, and workshops (see Appendix C, Figure 3).

**Proposition 2: Innovation centers that report a high level of neighborhood
engagement are likely to offer more services to neighborhood businesses.** Proposition 2 is supported. For the innovation centers that reported neighborhood engagement as a high priority, an average of four services are offered to neighborhood businesses. For the innovation centers that reported neighborhood engagement as neither a high priority nor a low priority, an average of three services are offered to neighborhood businesses (see Appendix D). All respondents (n=14) offer one or more services to neighborhood businesses, with networking/events offered by the largest number of respondents, followed by workspace, and workshops (see Appendix C, Figure 4).

**Proposition 3: Innovation centers that report a high level of neighborhood
engagement are likely to offer more services to neighborhood nonprofit organizations.**
Proposition 3 is supported. For the innovation centers that reported neighborhood engagement as a high priority, an average of three services are offered to neighborhood nonprofit organizations. For the innovation centers that reported neighborhood engagement as neither a high priority nor a low priority, an average of two services are offered to neighborhood nonprofit organizations (see Appendix D). Networking/events is the most common service offered to neighborhood nonprofits, followed by workshops, and workspace (see Appendix C, Figure 5).

**Proposition 4: Innovation centers that report a high level of neighborhood
engagement are likely to offer more services to youth and local educational institutions.**
Proposition 4 is supported. For the innovation centers that reported neighborhood engagement as a high priority, the average number of services offered to neighborhood youth is 1.5, and the
average number of local educational institutions the innovation center engages with is 2.8. For the innovation centers that reported neighborhood engagement as neither a high priority nor a low priority, the average number of services offered to neighborhood youth is 0.5, and the average number of local educational institutions the innovation center engages with is 1.75 (see Appendix D). When asked if the innovation center engages with elementary schools, middle schools, high schools, colleges/universities, or technical schools, 77% (n=10) of respondents stated they engage with a high school, 93% (n=13) of respondents stated they engage with a college/university, and 73% (n=8) of respondents stated they engage with a technical school (see Appendix C, Figure 6). When asked about the services they offer to youth ages 18 and under, the most common service provided is internships (26%), yet 26% (n=6) of respondents also said they do not engage youth in any activities (see Appendix C, Figure 7). Additionally, among the innovation centers reporting neighborhood engagement as a high priority, compared with neighborhood residents, businesses, and nonprofits, the least number of services are offered to youth (see Appendix D).

**Case Study 1: CIC St. Louis**

**Background.** Cambridge Innovation Center (CIC) builds innovation communities that provide innovators with workspace and access to resources, allowing them to create positive global impact (CIC, 2017). CIC St. Louis’ General Manager, Kim Plank, shared in an interview that CIC opened a location in St. Louis’ Cortex Innovation Community in October 2014 as the organization’s first expansion outside of its headquarters in Cambridge, MA (personal communication, June 14, 2017). As an independent, for-profit and fee for service organization, CIC St. Louis manages 183,000 square feet of office and lab space called @4240, and an 88,000 square foot incubator/accelerator facility, the Center for Emerging Technologies (CET, 2016;
In the neighborhoods where workers live surrounding CIC St. Louis (2-mile radius), the majority (53%) of workers are between the ages of 30 and 54, the majority (38%) of workers earn between $1,251 to $3,333 per month, 3% are Hispanic or Latino, and the majority of workers (24%) have some college or associate degree (see Appendix F).

**Cortex Innovation Community.** Cortex formed in 2002 as a 501(c)3 by five founding partners, Washington University in St. Louis, St. Louis University, University of Missouri - St. Louis, BJC Healthcare, and the Missouri Botanical Garden (Cortex, 2017). Plank described Cortex as a 225-acre innovation district that serves as an anchor for innovation startup programs and established companies (personal communication, June 14, 2017). Plank shared that the City of St. Louis offered Cortex acreage in a blighted area between downtown and midtown, and Cortex is now a strong presence in the community (personal communication, June 14, 2017).

**Community outreach strategies.** CIC St. Louis focuses on community outreach efforts through its nonprofit arm, Venture Café (K. Plank, personal communication, June 14, 2017). Plank explained that Venture Café has become the largest gathering of entrepreneurs in the world, bringing together an average of 524 people each week around different themes, from women in technology, to how innovation can decrease gun violence, draw kids to STEM, and help teachers teach better. Plank shared that CIC St. Louis conducts outreach to different groups across the region, including school districts, economic development offices, and the Mayor’s office; outreach is funded through sponsorships, with corporations or other groups sponsoring events (personal communication, June 14, 2017).

**Building the workforce pipeline with youth in innovation.** Plank shared that CIC St. Louis’ relationship with the St. Louis School District draws in students and teachers to Venture Café events (personal communication, June 14, 2017). CIC St. Louis also partners with the
school district to take students on tours, educate students around entrepreneurship, host Shark Tank days, and provide teachers with free membership to the center (K. Plank, personal communication, June 14, 2017).

**Diversity and inclusion efforts.** While CIC St. Louis has pushed efforts to create a more inclusive and welcoming community, Plank shared that the organization has experienced challenges in their efforts (personal communication, June 14, 2017). They have been challenged in reaching the local community and finding local entrepreneurs to engage in the organization’s activities. However, CIC St. Louis staff are developing efforts to build an inclusive innovation community, launching an inclusion committee and engaging in anti-bias, anti-racism seminars and trainings. The organization is also pushing efforts to hire staff who are involved in the community. To lower the barrier for entry, CIC St. Louis offers free space to nonprofit organizations, mentoring organizations, and organizations that meet with minority entrepreneurs. Additionally, the organization has conducted targeted outreach to local African American artists to offer them workspace at CIC St. Louis (K. Plank, personal communications, June 14, 2017).

**Metrics for success.** To measure their success, CIC St. Louis surveys participants and relies on their relationships to obtain feedback (K. Plank, personal communications, June 14, 2017). Managing a state-funded incubator, CIC St. Louis is required to report minority engagement, money raised, and number of jobs created, to name a few. Plank shared that thriving innovation centers have a visionary leader with experience. In developing an innovation center, Plank noted the importance of partners like the national organization, CIC, and Venture Café, who have already experienced success. She attributed CIC St. Louis’ success to collaboration and transparency (K. Plank, personal communication, June 14, 2017).
Case Study 2: Los Angeles Cleantech Incubator (LACI)

**Background.** Founded in 2011, LACI is a nonprofit, cleantech business incubator located in the Cleantech Corridor and Arts and Innovation District of downtown Los Angeles (LACI, 2017). LACI accelerates the development of cleantech start-ups through offering flexible office space, CEO coaching and mentoring, and access to a network of experts and capital (LACI, 2017). In the neighborhoods where workers live surrounding LACI (2-mile radius), the majority (56%) of workers are between the ages of 30 to 54, the majority (42%) of workers earn between $1,251 to $3,333 per month, 47% are Hispanic or Latino, and the majority of workers (21%) have some college or associate degree (see Appendix F).

**La Kretz Innovation Campus.** LACI’s Director of Community Engagement, Estelle Reyes, explained in an interview that La Kretz Innovation Campus opened in October 2016 to house the Los Angeles Division of Water and Power (LADWP) and LACI (personal communication, June 15, 2017). LADWP owns the 60,000 square feet of space, yet they only occupy 30,000 square feet for classrooms, an advanced prototyping center, a training center, testing labs, and a customer engagement lab. Housed in the remaining 30,000 square feet, LACI offers co-working spaces, meeting rooms, and conference rooms. The campus creates the unique opportunity to move from an idea, to prototype, to testing, to commercialization, all under one roof (E. Reyes, personal communication, June 15, 2017).

**Community outreach strategies.** Reyes sees a primary focus of her role at LACI as creating a pipeline for talent to participate in the cleantech and sustainability sectors (personal communication, June 15, 2017). LACI receives funding for outreach efforts through government, philanthropy, earned income, and corporate sponsorship. However, they have limited staff capacity for community engagement. Reyes explained how the neighborhood surrounding LACI
has gentrified, the cost of living has increased, and the original residents were pushed out to other cities. Reyes stressed the importance of outreach to the predominantly Latino population living in a nearby neighborhood (personal communication, June 15, 2017).

**Building the workforce pipeline with youth in innovation.** LACI has created workforce development programs to help train people with the skills necessary to participate in the green economy (E. Reyes, personal communication, June 15, 2017). For example, LACI partners with the Youth Policy Institute to provide youth ages 16-24 with training around electronics and embedded programming, to help them achieve higher paying jobs. LACI offers a robust college internship program, with 30% of interns receiving full-time offers with LACI’s portfolio companies following the program. LACI’s high school field trip program provides opportunities for local high school students to tour the innovation campus, do hands-on engineering work, and be exposed to careers in the cleantech industry. Reyes explained that they are seeking to partner with a school from all 15 city council districts. Additionally, LACI is engaging with younger students through STEM camp for girls ages 4-12 (E. Reyes, personal communication, June 15, 2017).

**Diversity and inclusion efforts.** Reyes shared that LACI has developed programming to increase diversity in the entrepreneur pipeline (personal communication, June 15, 2017). In the process of selecting the 40 portfolio companies to be a part of the incubator, LACI actively recruits companies led by women and people of color, and partners with organizations to host events to grow women and minority entrepreneurs. Reyes explained that LACI’s resources allow them to engage underrepresented groups in the product deployment stage, bringing clean technology pilot projects into disadvantaged communities. However, Reyes also expressed that
LACI experiences challenges in knowing where to find local talent in the community (personal communication, June 15, 2017).

**Metrics for success.** During the interview, Reyes explained that LACI assesses their success through an impact report that measures the performance of the 40 portfolio companies and their economic impact (i.e. number of jobs created, revenue generated), environmental impact, and social impact (i.e. percent of women and minorities) (personal communication, June 15, 2017). For their youth engagement efforts, LACI measures attitudinal and knowledge changes through pre- and post-surveys (E. Reyes, personal communication, June 15, 2017).

**Discussion and Recommendations**

The study’s research propositions explore the relationship between an innovation center’s level of neighborhood engagement and the services they offer to neighborhood residents, businesses, nonprofits, and youth and local educational institutions. The study’s propositions were supported, as innovation centers that reported a high prioritization of neighborhood engagement are likely to offer more services to neighborhoods. While a significant majority of innovation centers rated neighborhood engagement as a high priority, this did not always reflect the organizations’ efforts involving neighborhood engagement. A smaller percentage of organizational efforts allocated toward neighborhood engagement may be due to an innovation center’s staff capacity or larger efforts for city-wide engagement and outreach. The two case study examples illustrate how local engagement expands beyond the adjacent neighborhoods, which have experienced significant economic development, bringing in a new demographic of residents. The case studies also illuminate the challenges of identifying entrepreneurs from the underserved local communities near the innovation centers.
Engaging the GES Neighborhoods in an Agribusiness Innovation Center

The study’s findings indicate the importance of engaging Globeville and Elyria-Swansea (GES) neighborhood residents in open dialogue about the NWC and future agribusiness innovation center, to increase transparency and accountability with residents. From the research, the following recommendations emerge.

Recommendations for NWCO

1. Offer services to GES neighborhood residents, businesses, and nonprofit organizations.

It is recommended that the agribusiness innovation center at or in the area surrounding the NWC consider neighborhood engagement as a high priority among its organizational efforts. To address its capacity for neighborhood engagement, the innovation center may also consider hiring a staff person to specifically direct community engagement efforts. Reflecting the practices of innovation centers in urban areas across the U.S., the NWC innovation center should place focus on providing neighborhood residents, businesses, and nonprofit organizations with opportunities to participate in networking and events. For neighborhood residents, an innovation center should also offer internship opportunities (paid or unpaid). For neighborhood businesses, the innovation center should offer workspace through a fee for service model. Finally, the innovation center should offer neighborhood nonprofit organizations with the opportunity to participate in workshops. The center is also encouraged to offer free workspace to local nonprofit organizations. As Harley et al. (2013) describe, the agribusiness innovation center should become a community hub for collaborative innovation, where stakeholders from the public, for-profit, and nonprofit sectors exchange ideas, engage in transformative learning, and share ownership of new solutions. Partnering with local businesses and nonprofit organizations can help increase neighborhood engagement. However, based on the experiences of other innovation
centers, the NWC will likely face challenges with marketing and getting the word out to the local neighborhoods about their services and opportunities for partnerships.

2. **Partner with local high schools, colleges/universities, and technical schools to build the workforce pipeline.**

It is recommended that an agribusiness innovation center partners with colleges and/or universities, local technical schools, and local high schools, in addition to engaging with local youth ages 18 and under. Local youth and university students should be provided the opportunity to participate in internships through the innovation center. To increase engagement with local high schools, NWCO should develop strong partnerships with Denver Public Schools and invite teachers to engage in innovation through events that focus on teaching innovation, and offering teachers free membership to the center. High school student engagement may include hands-on work experience in STEM fields, job readiness programming, exposure to diverse careers, mentorship, tours and field trips to the innovation center, and educational and networking events relevant to youth. As Katz and Wagner (2014) found, adopting area schools through offering teaching assistance and internships in STEM and other educational areas gives students opportunities to engage with innovation. Youth engagement through the innovation center will also create opportunities to reach local families. The innovation center should offer workforce development programs that train local students to achieve higher skill levels and higher paying jobs. Partnering with local high schools, colleges, universities, and technical schools is imperative for building the local workforce pipeline.

3. **Invest in diversity and inclusion efforts that engage women and minorities.**

It is recommended that the innovation center develops programming to increase diversity in the entrepreneur pipeline, especially for the neighborhood community. Just as de Lancer Julnes and
Johnson (2011) note that increasing public participation requires hiring a diverse workforce that mirrors the diversity of the citizens served, the innovation center should hire a diverse staff, both representative of the GES community and from within the GES community. Innovation center staff should participate in diversity and inclusion seminars and trainings. Informed by the case study, the center can create an inclusion committee to lead proactive outreach to women and minorities. In this effort, it is recommended that the center actively recruit companies led by women and minorities. Partnering with organizations that are networked with women and minority entrepreneurs and hosting events focused on women and minorities in innovation will assist these efforts. This includes increasing communication with GES leaders and groups, to engage residents inside their community spaces. The literature indicates that partnerships with community-based organizations boost minority participation (de Lancer Julnes & Johnson, 2011). Additionally, as Bryson et al. (2012) find, it is vital to optimize accessibility to innovation, which may be manifested through language translation, offering childcare, transportation assistance, or bringing technology pilot projects into disadvantaged local communities.

4. **Partner with organizations and institutions that have experienced success, to develop a sustainable and thriving innovation center.**

It is recommended that NWCO maintains ongoing partnerships with both public and private organizations and institutions to develop and sustain an agribusiness innovation center. The center should serve as a community hub through which various stakeholder groups have opportunities to participate and build trusting local relationships (King & Cruickshank, 2010). It is important to seek partners who have already experienced success with innovation districts and centers to assist in programming efforts. This includes hiring a visionary leader with proven
success to lead the development of the innovation district and center, and coordinate community outreach efforts among the NWC campus and the agribusiness innovation center. Success of the innovation center should be measured through assessing impact, including the number of jobs created, revenue generated, and women and minority participation. Finally, pre- and post-surveys should be used to measure attitudinal and knowledge changes among youth and young adults who engage with the innovation center. Building relationships with participants will also be helpful in gathering feedback.

Limitations and Areas for Future Research

Limitations. This study is limited in its generalizability due to the small sample size of innovation centers that completed the neighborhood engagement survey, as well as the limited number of interviews with key partners of the future innovation center. Due to the limited duration of this study, innovation centers were only included in the survey distribution if they had been previously identified by the project consultants. Additionally, the researcher did not have time to interview other key internal partners of the innovation center outside of City and County of Denver staff. The researcher used a simplified coding methodology to detect general themes from the interviews and did not have the capacity to achieve intercoder reliability. Finally, due to the limited research time allotted, the researcher used simplified case study analysis to assess comparative case studies.

Areas for future research. Future research may include interviews with additional key partners of the future innovation center to better understand the challenges and opportunities for engaging the GES neighborhoods. Additionally, follow up dialogues and site visits with the two case studies, CIC St. Louis and LACI, are suggested for future research. General Manager of CIC St. Louis, Kim Plank, expressed interest in piloting Venture Cafè at the future NWC
innovation center. The innovation center may also benefit from an in-depth understanding of
LACI’s goals for school district engagement and the impact report that measures the
performance and economic, environmental, and social impact of LACI’s portfolio companies.
Finally, it is suggested that innovation centers within innovation districts with similar
neighborhood demographics as the NWC be assessed for future comparative case studies. Case
studies in urban neighborhoods that have not been gentrified will provide useful information for
the initial development phase of the innovation center. A thorough examination of comparable
innovation centers located in urban neighborhoods may also provide insight into defining local
engagement as neighborhood-focused, or city-wide focused.

**Conclusion**

With neighborhood engagement as a core component of the vision of the National
Western Center (NWC), this study provides recommendations for the City and County of Denver
Mayor’s Office of the National Western Center, to engage GES neighborhood residents,
businesses, nonprofit organizations, youth, and local educational institutions in the future
agribusiness innovation center at or in the area surrounding the NWC. Through interviews with
key staff of the City and County of Denver Mayor’s Office of the National Western Center,
survey responses from innovation centers located in urban areas across the U.S., and in-depth
interviews with two case study innovation centers, this study has provided a comprehensive and
diverse assessment of prospective challenges and opportunities for community engagement
through the future agribusiness innovation center. Based on the literature review and the study’s
results, it is recommended that an agribusiness innovation center at or in the area surrounding the
NWC offer services to GES neighborhood residents, businesses and nonprofit organizations,
with an emphasis on networking opportunities and events, partner with local high schools,
colleges/universities, and technical schools to build the workforce pipeline, invest in diversity and inclusion efforts that engage women and minorities, and partner with organizations and institutions that have experienced success, to develop a sustainable and thriving innovation center.
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Thomas, J.C. (2013). Citizen, customer, partner: Rethinking the place of the public in public


@4240. (2017). *About @4240*. Retrieved from [http://www.at4240.com/About-@4240](http://www.at4240.com/About-@4240)
Appendix A: Interview Protocol with NWCO Staff

The purpose of this research is to explore community engagement practices of innovation centers across the United States to develop a set of recommendations to effectively engage Globeville and Elyria-Swansea neighborhood residents, businesses, non-profit organizations, and educational institutions in an agribusiness innovation center of the NWC.

Methods: survey, comparative case studies for in-depth descriptions of 2 innovation centers, conduct internal interviews.

Purpose of interviews with internal stakeholders: illustrate the community engagement goals for the NWC, as well as the challenges and opportunities for engaging the neighborhood communities in the future agribusiness innovation center.

1. Can you tell me about your role in the National Western Center Office?

2. What are the goals of community engagement for the National Western Center campus?
   a. What is your office hoping to accomplish with the community?

3. What do you see as the major challenges (or barriers) to engaging the GES neighborhood residents, businesses, non-profit organizations, and schools in an agribusiness innovation center at or in the area surrounding the NWC?

4. How do you envision an agribusiness innovation center engaging the GES neighborhood community?
   a. What engagement strategies and activities do you feel would be most effective for engaging the GES community?

5. Is there anything specifically you would like to know from other innovation centers and how they engage the neighborhood community?
Appendix B: Neighborhood Engagement Survey Protocol

Neighborhood Engagement Survey:
The purpose of this survey is to examine how innovation centers located in urban areas across the United States engage with neighborhood residents, businesses, nonprofit organizations, and local educational institutions.

Neighborhood engagement, for the purpose of this study, is defined as providing opportunities for neighborhood communities to participate in activities or initiatives.

This study is being conducted for the City & County of Denver as part of the University of Colorado Denver, Master of Public Administration Capstone project requirement. Survey results will be used to inform effective strategies for engaging the neighborhoods in the future Agribusiness Innovation Center at the National Western Center in Denver, Colorado. The survey should only take approximately 5 minutes to complete, and your responses will remain confidential, but are not anonymous; survey results will be reported in aggregate.

If you have any questions or comments about the survey, please contact Alexis Adler at Alexis.Adler@ucdenver.edu

Q1 Among your organization's priorities, how important is neighborhood engagement (for the purposes of this study, neighborhood engagement includes engaging neighborhood residents, businesses, nonprofit organizations, or educational institutions)?
- Lowest priority (1)
- Low priority (2)
- Neither a high priority nor a low priority (3)
- High priority (4)
- Highest priority (5)
Q2 Approximately what percentage of your organization's efforts involve neighborhood engagement (for the purposes of this study, neighborhood engagement includes engaging neighborhood residents, businesses, nonprofit organizations, or educational institutions)?
- 0-20% (1)
- 21-40% (2)
- 41-60% (3)
- 61-80% (4)
- 81-100% (5)

Q3 Does your organization offer any of the following services to neighborhood residents? Please select all that apply.
- Workspace (1)
- Networking/Events (2)
- Workshops (3)
- Mentorship/Advisory Services (4)
- Internships (paid or unpaid) (5)
- Apprenticeships (paid or unpaid) (6)
- None of the above (7)

Q4 Does your organization offer any of the following services to neighborhood businesses? Please select all that apply.
- Workspace (1)
- Networking/Events (2)
- Workshops (3)
- Mentorship/Advisory Services (4)
- Business Assistance (5)
- Legal Services (6)
- Access to Capital (7)
- None of the above (8)

Q5 Does your organization offer any of the following services to neighborhood nonprofit organizations? Please select all that apply.
- Workspace (1)
- Networking/Events (2)
- Workshops (3)
- Mentorship/Advisory Services (4)
- Business Assistance (5)
- Legal Services (6)
- Access to Capital (7)
- None of the above (8)
Q6 Does your organization engage with any of the following local educational institutions? (Engagement may include activities such as classes, workshops, mentorship, internships, apprenticeships)

<table>
<thead>
<tr>
<th></th>
<th>Elementary School (1)</th>
<th>Middle School (2)</th>
<th>High School (3)</th>
<th>College/University/Technical School (4)</th>
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</thead>
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<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>No (2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
</tbody>
</table>

Q7 Does your organization offer any of the following services to youth (ages 18 and under)? Please select all that apply.
- ☐ Workspace (1)
- ☐ Networking/Events (2)
- ☐ Workshops (3)
- ☐ Mentorship/Advisory Services (4)
- ☐ Internships (paid or unpaid) (5)
- ☐ Apprenticeships (paid or unpaid) (6)
- ☐ Makerspace (Defined as informal sites for creativity in areas such as science, engineering, and the arts, through which technologies are used to explore ideas, learn technical skills, and create new products) (7)
- ☐ None of the above (8)

Q8 Does your organization charge membership fees?
- ☐ Yes (1)
- ☐ No (2)

Q9 Does your organization charge fees for services?
- ☐ Yes (1)
- ☐ No (2)

Q10 To the best of your knowledge, how many staff does your organization have?

<table>
<thead>
<tr>
<th></th>
<th>FTE (1)</th>
<th>Part-time (2)</th>
<th>Interns (3)</th>
<th>Volunteers (4)</th>
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<tr>
<td>7-9 (4)</td>
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<tr>
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<tr>
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<tr>
<td>16+ (7)</td>
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</table>
Q11 What has been your organization's greatest challenge in engaging the neighborhood community, if any?

Q12 What has been your organization's greatest success in engaging the neighborhood community, if any?

Q13 Is there anything else you would like to share about your organization and how it engages the community?

Thank you for taking the time to complete this survey. If you are interested in sharing more information about the neighborhood engagement practices of your organization, please contact Alexis Adler at alexis.adler@ucdenver.edu
Appendix C: Neighborhood Engagement Survey Results

<table>
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<th>Count</th>
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</tr>
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<td>2</td>
<td>Low priority</td>
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<td>0</td>
</tr>
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<td>1</td>
<td>Lowest priority</td>
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<td>0</td>
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<td>4</td>
<td>High priority</td>
<td>71%</td>
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<td>Highest priority</td>
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<td>0</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
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### Figure 2: Innovation Center Efforts Involving Neighborhood Engagement

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<th>Count</th>
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<tr>
<td>4</td>
<td>61-80%</td>
<td>7%</td>
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<td>3</td>
<td>41-60%</td>
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<td>2</td>
<td>21-40%</td>
<td>29%</td>
<td>4</td>
</tr>
<tr>
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<td>0-20%</td>
<td>29%</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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### Figure 3: Services Offered to Neighborhood Residents

<table>
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<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
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<td>Workspace</td>
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<td>Workshops</td>
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<td>3</td>
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<td>Networking/Events</td>
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<td>4</td>
<td>Mentorship/Advisory Services</td>
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<tr>
<td>5</td>
<td>Internships (paid or unpaid)</td>
<td>23%</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Apprenticeships (paid or unpaid)</td>
<td>3%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>39</strong></td>
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### Figure 4: Services Offered to Neighborhood Businesses

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<th>%</th>
<th>Count</th>
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<td>Workspace</td>
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<tr>
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<td>Workshops</td>
<td>18%</td>
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<td>8</td>
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<td>0</td>
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<td>Networking/Events</td>
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<td>4</td>
<td>Mentorship/Advisory Services</td>
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<td>6</td>
<td>Legal Services</td>
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<td>5</td>
<td>Business Assistance</td>
<td>12%</td>
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<td>7</td>
<td>Access to Capital</td>
<td>10%</td>
<td>5</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>51</strong></td>
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### Figure 5: Services Offered to Neighborhood Nonprofit Organizations

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<td>Networking/Events</td>
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<td>12</td>
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<td>Workshops</td>
<td>22%</td>
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</tr>
<tr>
<td>8</td>
<td>None of the above</td>
<td>2%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>41</td>
</tr>
</tbody>
</table>
Figure 6: Innovation Center Engagement with Local Educational Institutions

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Elementary School</th>
<th>Middle School</th>
<th>High School</th>
<th>College/University</th>
<th>Technical School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>18%</td>
<td>20%</td>
<td>77%</td>
<td>93%</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>82%</td>
<td>80%</td>
<td>23%</td>
<td>7%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>3</td>
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<td></td>
<td>Total 11</td>
<td>Total 10</td>
<td>Total 13</td>
<td>Total 14</td>
<td>Total 11</td>
</tr>
</tbody>
</table>
### NEIGHBORHOOD ENGAGEMENT

#### Services Offered to Youth (ages 18 and younger)

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Workspace</td>
<td>9%</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Networking/Events</td>
<td>13%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Workshops</td>
<td>17%</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Mentorship/Advisory Services</td>
<td>4%</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Internships (paid or unpaid)</td>
<td>26%</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Apprenticeships (paid or unpaid)</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Makerspace (Defined as informal sites for creativity in areas such as science, engineering, and the arts, through which technologies are used to explore ideas, learn technical skills, and create new products)</td>
<td>4%</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>None of the above</td>
<td>26%</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>100%</td>
<td>23</td>
</tr>
</tbody>
</table>

**Figure 7: Services Offered to Youth (ages 18 and younger)**
Figure 8: Does your organization charge fees for services?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>77%</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>23%</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>13</td>
</tr>
</tbody>
</table>
Figure 9: Innovation Center Staff Capacity
## Appendix D: Survey Results - Neighborhood Engagement Prioritization & Service Offerings

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you prioritize neighborhood engagement?</td>
<td>Percentage of organization's efforts involving neighborhood engagement?</td>
<td>Services offered to neighborhood residents?</td>
<td>Services offered to neighborhood businesses?</td>
<td>Services offered to neighborhood nonprofit organizations?</td>
<td>Does your organization engage with any of the following local educational institutions?</td>
<td>Services offered to youth (ages 18 and under)?</td>
</tr>
<tr>
<td>N</td>
<td>21-40%</td>
<td>Wksp, N/E, I</td>
<td>Wksp, N/E</td>
<td>Wksp, N/E</td>
<td>College/Univ</td>
<td>None of the above</td>
</tr>
<tr>
<td>High priority</td>
<td>41-60%</td>
<td>Wksp, N/E, M/A, I</td>
<td>Wksp, N/E, M/A, B, C</td>
<td>Wksp, N/E, M/A, B</td>
<td>High School, College/Univ, Technical School</td>
<td>Wksp, N/E, M/A, I</td>
</tr>
<tr>
<td>High priority</td>
<td>0-20%</td>
<td>N/E, I</td>
<td>N/E</td>
<td>Wksp, N/E</td>
<td>College/Univ</td>
<td>None of the above</td>
</tr>
<tr>
<td>N</td>
<td>21-40%</td>
<td>N/E, Wkshp</td>
<td>Wksp, N/E, Wkshp, M/A, B, C</td>
<td>Wksp, N/E, Wkshp</td>
<td>HS, College/Univ, Technical School</td>
<td>I</td>
</tr>
<tr>
<td>High priority</td>
<td>21-40%</td>
<td>None of the above</td>
<td>Wksp, N/E, Wkshp</td>
<td>N/E, Wkshp, M/A</td>
<td>College/Univ, Technical School</td>
<td>None of the above</td>
</tr>
<tr>
<td>N</td>
<td>0-20%</td>
<td>None of the above</td>
<td>Wkshp</td>
<td>Wkshp</td>
<td>HS, College/Univ, Technical School</td>
<td>Wkshp</td>
</tr>
<tr>
<td>High priority</td>
<td>41-60%</td>
<td>N/E, Wkshp, M/A, I</td>
<td>Wksp, N/E, Wkshp, MA, B, L, C</td>
<td>Wksp, N/E, M/A, B, L, C</td>
<td>Elementary School, HS College/Univ, Technical School</td>
<td>N/E, Wkshp, I, MS</td>
</tr>
<tr>
<td>N</td>
<td>0-20%</td>
<td>None of the above</td>
<td>Wksp, N/E</td>
<td>N/E</td>
<td>None of the above</td>
<td></td>
</tr>
<tr>
<td>High priority</td>
<td>81-100%</td>
<td>N/E, Wkshp, I</td>
<td>Wksp, N/E, Wkshp, B, C</td>
<td>N/E, Wkshp</td>
<td>HS, College/Univ, Technical School</td>
<td>None of the above</td>
</tr>
</tbody>
</table>
### NEIGHBORHOOD ENGAGEMENT

**How do you prioritize neighborhood engagement?**

<table>
<thead>
<tr>
<th>Percentage of organization's efforts involving neighborhood engagement?</th>
<th>Services offered to neighborhood residents?</th>
<th>Services offered to neighborhood businesses?</th>
<th>Services offered to nonprofit organizations?</th>
<th>Does your organization engage with any of the following local educational institutions?</th>
<th>Services offered to youth (ages 18 and under)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>High priority</td>
<td>61-80%</td>
<td>Wksp, N/E, Wkshp, M/A, I</td>
<td>Wksp, N/E, Wkshp, M/A, B, L, C</td>
<td>Wksp, N/E, M/A, B, L, C</td>
<td>HS, College/Univ</td>
</tr>
<tr>
<td>High priority</td>
<td>41-60%</td>
<td>I</td>
<td>Wksp, N/E</td>
<td>None of the above</td>
<td>HS, College/Univ, Technical School</td>
</tr>
<tr>
<td>High priority</td>
<td>41-60%</td>
<td>N/E, Wkshp, M/A, I</td>
<td>N/E, Wkshp</td>
<td>Wksp, N/E, Wkshp</td>
<td>Elementary, Middle School, HS, College/Univ</td>
</tr>
<tr>
<td>High priority</td>
<td>21-40%</td>
<td>Wksp, N/E, Wkshp, M/A</td>
<td>Wksp, N/E, M/A, B</td>
<td>Wksp, N/E, Wkshp</td>
<td>HS, College/Univ</td>
</tr>
<tr>
<td>High priority</td>
<td>0-20%</td>
<td>N/E, Wkshp, I, A</td>
<td>Wksp, N/E, Wkshp</td>
<td>N/E, Wkshp</td>
<td>Middle, HS, College/Univ, Technical School</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residents</th>
<th>Businesses</th>
<th>Nonprofit Organizations</th>
<th>Educational Institutions</th>
<th>Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood engagement high priority: Avg. number of services offered</td>
<td>Neighborhood engagement high priority: Avg. number of services offered</td>
<td>Neighborhood engagement high priority: Avg. number of services offered</td>
<td>Neighborhood engagement high priority: Avg. number of services offered</td>
<td>Neighborhood engagement high priority: Avg. number of services offered</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Neighborhood engagement neither high priority nor low priority: Avg. number of services offered</td>
<td>Neighborhood engagement neither high priority nor low priority: Avg. number of services offered</td>
<td>Neighborhood engagement neither high priority nor low priority: Avg. number of services offered</td>
<td>Neighborhood engagement neither high priority nor low priority: Avg. number of services offered</td>
<td>Neighborhood engagement neither high priority nor low priority: Avg. number of services offered</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1.75</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Appendix E: Neighborhood Engagement Survey Open-Ended Responses (Summary)

Organizations’ greatest challenges in engaging the neighborhood community.
Identifying themes of open-ended responses to survey questions, several respondents indicated that marketing and getting the word out about their innovation center and the services they offer to the community has been the greatest challenge in engaging the neighborhood. Additionally, other innovation centers stated that their specific industry focus limits their ability to conduct neighborhood outreach. Another innovation center has difficulty attracting minorities to the center, as they do not feel welcome.

Organizations’ greatest successes in engaging the neighborhood community. The greatest number of innovation centers have experienced success through events, with some focused on women and minorities in entrepreneurship and others focused on general community building. Other innovation centers have been successful through partnerships with universities located in the neighborhood. Centers have achieved success in getting neighborhood leaders involved, conducting stakeholder analyses to understand the needs of the business community, providing services to residents, and building a board of directors with representation from organizations in the community.

Additional information about how organization engages the community. Multiple innovation centers discussed internships for university students and various age groups, local workforce development programs and building the workforce pipeline, offering space to community organizations, partnerships with nonprofit organizations, engaging high school students, and offering best practices for hiring for diversity.
### Appendix F: Survey Respondents - Neighborhood Demographics

Data retrieved from U.S. Census Bureau OnTheMap. Home Profile Analysis conducted for workers living within 2-mile radius of Innovation Centers

<table>
<thead>
<tr>
<th>Center</th>
<th>Total Primary Jobs</th>
<th>Worker Age</th>
<th>Worker Earnings (per month)</th>
<th>Worker Ethnicity</th>
<th>Worker Educational Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future NWC Agribusiness Innovation Center (Denver, CO)</td>
<td>17,193</td>
<td>29 or younger: 29% 30 to 54: 58% 55 or older: 13%</td>
<td>$1,250 or less: 19% $1,251 to $3,333: 39% More than $3,333: 42%</td>
<td>Not Hispanic or Latino: 69% Hispanic or Latino: 31%</td>
<td>College or Associate degree: 22% Bachelor's or advanced degree: 19%</td>
</tr>
<tr>
<td>Global Cardiovascular Innovation Center (Cleveland, OH)</td>
<td>19,768</td>
<td>29 or younger: 27% 30 to 54: 51% 55 or older: 22%</td>
<td>$1,250 or less: 28% $1,251 to $3,333: 44% More than $3,333: 28%</td>
<td>Not Hispanic or Latino: 97% Hispanic or Latino: 3%</td>
<td>High school or equivalent: 22% College or Associate degree: 25%</td>
</tr>
<tr>
<td>MBI @ Gateway Park (Worcester, MA)</td>
<td>30,320</td>
<td>29 or younger: 27% 30 to 54: 53% 55 or older: 20%</td>
<td>$1,250 or less: 22% $1,251 to $3,333: 38% More than $3,333: 39%</td>
<td>Not Hispanic or Latino: 79% Hispanic or Latino: 21%</td>
<td>College or Associate degree: 22% Bachelor's or advanced degree: 24%</td>
</tr>
<tr>
<td>New Orleans Bioinnovation Center (New Orleans, LA)</td>
<td>32,641</td>
<td>29 or younger: 27% 30 to 54: 54% 55 or older: 19%</td>
<td>$1,250 or less: 24% $1,251 to $3,333: 42% More than $3,333: 34%</td>
<td>Not Hispanic or Latino: 95% Hispanic or Latino: 5%</td>
<td>High school or equivalent: 22% College or Associate degree: 23%</td>
</tr>
<tr>
<td>University Enterprise Laboratories (St. Paul, MN)</td>
<td>21,631</td>
<td>29 or younger: 28% 30 to 54: 51% 55 or older: 21%</td>
<td>$1,250 or less: 20% $1,251 to $3,333: 31% More than $3,333: 49%</td>
<td>Not Hispanic or Latino: 96% Hispanic or Latino: 4%</td>
<td>College or Associate degree: 22% Bachelor's or advanced degree: 28%</td>
</tr>
<tr>
<td>Center for Entrepreneurial Innovation (Phoenix, AZ)</td>
<td>17,955</td>
<td>29 or younger: 31% 30 to 54: 53% 55 or older: 16%</td>
<td>$1,250 or less: 23% $1,251 to $3,333: 50% More than $3,333: 27%</td>
<td>Not Hispanic or Latino: 61% Hispanic or Latino: 39%</td>
<td>High school or equivalent: 18% College or Associate degree: 22%</td>
</tr>
<tr>
<td>Center</td>
<td>Total Primary Jobs</td>
<td>Worker Age</td>
<td>Worker Earnings (per month)</td>
<td>Worker Ethnicity</td>
<td>Worker Educational Attainment</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------</td>
<td>------------</td>
<td>----------------------------</td>
<td>------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Kansas Wheat Innovation Center (Manhattan, KS)</td>
<td>11,935</td>
<td>29 or younger: 32% 30 to 54: 47% 55 or older: 22%</td>
<td>$1,250 or less: 26% $1,251 to $3,333: 39% More than $3,333: 35%</td>
<td>Not Hispanic or Latino: 95% Hispanic or Latino: 5%</td>
<td>College or Associate degree: 21% Bachelor's or advanced degree: 22%</td>
</tr>
<tr>
<td>Agriculture Utilization Research Institute - St. Paul Facility (St. Paul, MN)</td>
<td>18,593</td>
<td>29 or younger: 25% 30 to 54: 53% 55 or older: 22%</td>
<td>$1,250 or less: 17% $1,251 to $3,333: 29% More than $3,333: 54%</td>
<td>Not Hispanic or Latino: 97% Hispanic or Latino: 3%</td>
<td>College or Associate degree: 24% Bachelor's or advanced degree: 29%</td>
</tr>
<tr>
<td>The Edney Innovation Center (Chattanooga, TN)</td>
<td>6,295</td>
<td>29 or younger: 30% 30 to 54: 52% 55 or older: 19%</td>
<td>$1,250 or less: 24% $1,251 to $3,333: 41% More than $3,333: 35%</td>
<td>Not Hispanic or Latino: 96% Hispanic or Latino: 4%</td>
<td>High school or equivalent: 22% College or Associate degree: 23%</td>
</tr>
<tr>
<td>CIC St. Louis (St. Louis, MO)</td>
<td>21,323</td>
<td>29 or younger: 28% 30 to 54: 53% 55 or older: 19%</td>
<td>$1,250 or less: 26% $1,251 to $3,333: 38% More than $3,333: 37%</td>
<td>Not Hispanic or Latino: 97% Hispanic or Latino: 3%</td>
<td>High school or equivalent: 22% College or Associate degree: 24%</td>
</tr>
<tr>
<td>Los Angeles Cleantech Incubator (Los Angeles, CA)</td>
<td>41,896</td>
<td>29 or younger: 25% 30 to 54: 56% 55 or older: 19%</td>
<td>$1,250 or less: 23% $1,251 to $3,333: 42% More than $3,333: 36%</td>
<td>Not Hispanic or Latino: 53% Hispanic or Latino: 47%</td>
<td>College or Associate degree: 21% Bachelor's or advanced degree: 20%</td>
</tr>
<tr>
<td>Catapult Chicago (Chicago, IL)</td>
<td>94,542</td>
<td>29 or younger: 27% 30 to 54: 58% 55 or older: 15%</td>
<td>$1,250 or less: 10% $1,251 to $3,333: 16% More than $3,333: 74%</td>
<td>Not Hispanic or Latino: 93% Hispanic or Latino: 7%</td>
<td>College or Associate degree: 21% Bachelor's or advanced degree: 33%</td>
</tr>
<tr>
<td>Missouri Innovation Center (Columbia, MO)</td>
<td>11,672</td>
<td>29 or younger: 30% 30 to 54: 48% 55 or older: 22%</td>
<td>$1,250 or less: 25% $1,251 to $3,333: 37% More than $3,333: 38%</td>
<td>Not Hispanic or Latino: 98% Hispanic or Latino: 2%</td>
<td>College or Associate degree: 23% Bachelor's or advanced degree: 22%</td>
</tr>
<tr>
<td>Houston Technology Center (Houston, TX)</td>
<td>39,817</td>
<td>29 or younger: 27% 30 to 54: 56% 55 or older: 18%</td>
<td>$1,250 or less: 12% $1,251 to $3,333: 22% More than $3,333: 66%</td>
<td>Not Hispanic or Latino: 83% Hispanic or Latino: 17%</td>
<td>College or Associate degree: 23% Bachelor's or advanced degree: 23%</td>
</tr>
<tr>
<td>Whitewater Innovation Center (Elkhorn, WI)</td>
<td>3,719</td>
<td>29 or younger: 25% 30 to 54: 54% 55 or older: 21%</td>
<td>$1,250 or less: 22% $1,251 to $3,333: 37% More than $3,333: 41%</td>
<td>Not Hispanic or Latino: 93% Hispanic or Latino: 7%</td>
<td>High school or equivalent: 23% College or Associate degree: 25%</td>
</tr>
</tbody>
</table>
Appendix G: Case Studies – Interview Protocols

Interview Questions for Case Study Innovation Center: CIC St. Louis

1. When was CIC St. Louis founded and how did it get started?
2. Why did it get formed? Was there a need or gap that this innovation center was helping to service?
   a. Was this anecdotal? Through a needs assessment?
3. What is your organizational structure? Who owns and operates the centers? Who are your organizational partners?
   a. How are your organizational partners engaged? Fiscal? Cross promotion?
4. Can you talk about your outreach strategies during the first year of operations and your target audience?
   a. What were your main challenges first starting up and how did you overcome them?
5. Can you describe your partnerships with local educational institutions and how you engage the youth/young adults in the community?
   a. Can you talk about your efforts to build the workforce pipeline?
6. Can you expound on your organization’s efforts to attract minorities and the challenges you faced in those efforts?
   a. What other challenges have you faced with neighborhood engagement and how have you addressed those challenges?
   b. How do you define neighborhood engagement?
7. Can you discuss your interaction with locally-based small businesses?
8. What have been your most successful efforts of neighborhood engagement?
   a. Follow-up on funding for engagement (if not already discussed)
9. How would you rate your level of success with neighborhood engagement and what are your metrics for success?
10. You offer a lot of services; do you work alongside community partners to implement those? Coordinated through your FTEs?
11. Logistically how do nonprofits dial in to use of space? Do they rent? Is there revenue generated?
   a. Financial model: Logistics for fee for service model? IRS designation as 501(c)3?
12. What are the demographics and key stakeholders that you were serving? Hoping to reach out to? How did you decide who would be a key stakeholder?
13. How do your outreach efforts function within the Cortex Innovation Community?
   a. Why no middle school?
   b. Largely male? Attracting minorities?
14. Nearly half your staff time is on outreach-- what was the baseline and how successful have you been? How do you define success?
15. Speak a bit more on the regular community-building event in the cafe?

*Highlighted questions were emphasized during interview
Interview Questions for Case Study Innovation Center: LACI

1. When was LACI/La Kretz Innovation Campus founded and how did it get started?
2. Why did it get formed? Was there a need or gap that this innovation center was helping to service? Was this anecdotal? Through a needs assessment?
3. What is your organizational structure? Who owns and operates the centers? Who are your organizational partners?
   a. How are your organizational partners engaged? Fiscal? Cross promotion?
4. Can you talk about your outreach strategies when you first opened and your target audience?
   a. What were your main challenges first starting up and how are you overcoming them?
5. Can you describe your partnerships with local educational institutions and how you engage the youth/young adults in the community? How are they identified (e.g. geographic)?
6. Can you expound on your organization’s efforts to engage the neighborhood community, and the challenges you have faced in those efforts?
   a. How do you define neighborhood engagement?
   b. Follow-up on funding for engagement (if not already discussed)
7. Can you discuss your interaction with locally-based small businesses?
8. Can you speak more on your Diversity & Inclusion effort?
   a. Expand on workforce pipeline programs
   b. Where is your focus programmatically?
9. How would you rate your level of success with neighborhood engagement and what are your metrics for success?
10. You offer a lot of services; do you work alongside community partners to implement those? Coordinated through your FTEs? Does your staff have focused SMEs?
11. Logistically how do nonprofits dial in to use of space? Do they rent? Is there revenue generated?
    a. Logistics for fee for service model? IRS designation as 501(c)3?
12. What are the demographics and key stakeholders that you were serving? Hoping to reach out to? How did you decide who would be a key stakeholder?
13. How do your outreach efforts function within La Kretz Innovation Campus?
    a. Why no elementary school?
    b. Percent of outreach low, how does La Kretz engage with the community?

*Highlighted questions were emphasized during interview
Appendix H: Documentation of Competencies

The following documentation of competencies outlines proficiencies in the Master of Public Administration program competencies through the School of Public Affairs at the University of Colorado Denver. This capstone, prepared for the City and County of Denver Mayor’s Office of the National Western Center, applies the skills and knowledge gained through the MPA program, exhibited in the following three competency areas: (1) To analyze, synthesize, think critically, solve problems and make decisions, (2) To articulate and apply a public service perspective, and (3) To communicate and interact productively with a diverse and changing workforce and citizenry.

To analyze, synthesize, think critically, solve problems and make decisions

Using the skills gained in PUAD 5003 – Research and Analytic Methods, and PUAD 5008 – Evidence-Based Decision Making, I carried out appropriate research methods in the project’s data collection, synthesis, and analysis phases, used appropriate criteria to select interviewees, survey recipients, and case studies, and applied various perspectives to generate policy recommendations for the client. First, with knowledge from PUAD 5003, I recognized I would generate research propositions rather than research hypotheses, due to the client’s interest in best practices of neighborhood engagement for innovation centers. With an understanding of the statistical analysis process learned in PUAD 5003, I also determined that due to the nature of the survey questions and small sample size, I would produce frequency statistics, rather than statistical outputs. Using a mixed methods research approach, I applied multiple perspectives in assessing the research, through interviews, a survey, and case studies. To maximize internal validity and reliability, I used appropriate criteria for selecting interviewees, interview questions, survey recipients, and survey questions, based on input from the client and learned research
techniques. I constructed appropriate survey questions and successfully developed themes from coding interviews through skills gained in PUAD 5008. Finally, case study projects in PUAD 5008 assisted me in developing policy recommendations for the client.

**To articulate and apply a public service perspective**

Through knowledge gained in PUAD 5001 – Introduction to Public Administration and PUAD 5006 – Leadership and Public Service, I applied to this capstone an understanding of public service values, addressing ethical challenges, and government accountability and transparency. A major theme captured during interviews with city staff of the National Western Center Office was the importance of government accountability to the local neighborhoods, and community transparency in the National Western Center project development process. An understanding of government responsibility to accountability and transparency from PUAD 5001 assisted me in conversations with interviewees about these issues. Additionally, reflecting the importance of public service values, interviewees were asked questions related to how they evaluate programs and processes, diversity and inclusion efforts, and general engagement with citizens in the community.

This capstone also applied an understanding of accountability to ethical behavior, discussed in PUAD 5001 and PUAD 5006. I recognized the importance of applying a professional code of ethics in discussions around development of the National Western Center campus surrounding Denver neighborhoods. As a future public administrator, I sought to engage with other administrators as they voiced what they believed was right for protecting and inclusively engaging neighborhood residents, businesses, nonprofit organizations and educational institutions. PUAD 5006 educated me in effective ways to approach ethical challenges. During the research process, I engaged in challenging dialogues related to
neighborhood gentrification as a result of development. I demonstrated a public service perspective through ensuring that communities are engaged around future development and holding an accountability to protecting the historicity and culture of the Globeville and Elyria-Swansea (GES) neighborhoods.

**To communicate and interact productively with a diverse and changing workforce and citizenry**

Knowledge gained through the MPA program assisted me in communicating effectively with a diverse and changing workforce and citizenry during the capstone research process. In PUAD 5002 – Organizational Management and Behavior, we discussed the importance of knowing and managing yourself before managing others. Throughout the research process, I assessed my personal perspectives around community engagement and economic development. I held to the learned values of developing trust with citizens through engaging them in inclusive public participation processes. Additionally, my research included an emphasis on inclusive innovation, and assessing models of effectively engaging diverse perspectives within the community.

The importance of partnering effectively and working in groups and teams was stressed through the MPA program in group presentations, papers and projects primarily in PUAD 5001, 5006, 5503 – Public Budgeting and Finance, and 5115 – Effective Grant Writing. Practice in communications equipped me with an understanding of the value of partnerships. Yet, I recognized that competing values may exist between different community partners. Finally, the MPA program emphasized communicating effectively in both writing to diverse audiences and presenting to diverse audiences. I practiced active listening during interviews, conducted electronic communication with innovation centers across the U.S., and interviewed city staff to
develop a better understanding of the challenges and opportunities facing the diverse groups in the GES neighborhoods surrounding the future National Western Center. Practice writing grants for a Denver nonprofit organization in PUAD 5115, constructing brief policy memos for various assignments in PUAD 5005 – The Policy Process and Democracy, and giving presentations to diverse audiences, assisted me in my ability to work with the various stakeholders in the National Western Center project.
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