INNOVATENC COMMUNITY INNOVATION ASSET MAP

WHAT ASSETS EXIST TO BUILD AN INCLUSIVE INNOVATION ECONOMY?

Innovation is the modern economy's fuel. As the primary source of new technologies, products, services, and practices that yield value, innovation is what creates new industries, makes existing ones globally competitive, and sustains economic growth and improved societal well-being. Innovation is not a term designated for urban communities alone. In fact, communities of all sizes play a critical role in the state's overall ability to innovate and compete.

InnovateNC
A Cross-City Learning Collaborative

INNOVATENC COMMUNITY INNOVATION ASSET MAP

WHAT ASSETS EXIST TO BUILD AN INCLUSIVE INNOVATION ECONOMY?

OVERVIEW

A 2015 study powered by SAS Analytics and the minds of North Carolina State University's Institute for Emerging Issues and the NC Board of Science, Technology & Innovation found that North Carolina ranks mid-pack among the nation's states in overall innovation capacity and effectiveness. In fact, NC sits well below the top quartile of states and even trails the U.S. average on key innovation indicators, including output and compensation. Current trend lines indicate that North Carolina will fail to reach the top quartile unless more people in more cities are involved in a broad innovation turnaround effort to expand innovation capacity. ***North Carolina's roster of leading innovation cities must expand beyond the Triangle and Charlotte.***

MORE PEOPLE, MORE CITIES

Large and small communities alike have unique assets that can be built upon to strengthen innovation and entrepreneurship. However, to unlock a community's true innovation potential, communities must be intentional in their efforts to engage under-connected (i.e., traditionally under-connected from the entrepreneurial ecosystem) and disadvantaged individuals and organizations in the innovation economy. Moreover, for these efforts to produce a sustained economic transformation, they must be broadly

A FIRST-OF-ITS-KIND, TURNKEY TOOL FOR COMMUNITIES OF ALL SIZES WHO WISH TO ASSESS THE QUALITY AND INCLUSIVENESS OF THEIR INNOVATION ECOSYSTEMS.

A COMMUNITY'S CRITICAL FIRST STEP FOR DEVELOPING A CONCRETE ROADMAP TO GROW THEIR INNOVATION ECONOMY MEANINGFULLY.

inclusive and engage more women, minorities, and those with diverse socioeconomic statuses in the innovation economy.

The InnovateNC Community Innovation Asset Map is a first-of-its-kind, turnkey tool for communities of all sizes to work in collaboration to assess the quality and inclusiveness of their innovation ecosystems. The Asset Map is unique in that it:

- Outlines protocol, process, and timeline (i.e., the who, what, when, where, and how of community asset mapping);
- The open-source tool can be used as designed, or modified by communities to meet their unique needs;
- Intentionally assesses the inclusivity of each measure; and
- Looks broadly across an entire entrepreneurial landscape.

Completing the *InnovateNC Community Innovation Asset Map* is a critical step for a community to fully understand its innovation and entrepreneurship assets and to consider strategies to leverage them. Typically, this asset mapping process is part of a comprehensive strategic planning process. More information about this process will be available in a broader, soon-to-be-released InnovateNC toolkit, coming the end of 2017.

The asset mapping exercise is **comprehensive and will take substantial capacity to complete as intended.** It will require significant coordination, collaboration, commitment, and time (see sample timeline on page 11). A community willing to thoughtfully allocate the necessary resources to consider high-quality, comprehensive, and inclusive input will yield meaningful output. Only then can the community fully consider what it will take to grow its innovation economy meaningfully.

Is your community ready to harness its innovation potential?

TABLE OF CONTENTS

For the purpose of the InnovateNC Community Innovation Asset Map, the following terms have been defined:

Innovation is the creation and adoption of new products, services, processes, and business models to yield value (both economic and non-economic). It also includes the recombination of existing products, services, and ideas in new ways.

Entrepreneur refers to someone who starts a new innovative organization.

Community is the geographic boundary in which inclusive innovation efforts will be focused. When considering local assets, smaller/micropolitan communities should include assets available at the regional level.

Inclusion exists when under-connected individuals are participating and/or being actively recruited and engaged in ways that build social capital across diverse networks. Inclusive innovation ensures that the local innovation ecosystem is also intentionally fostering the growth of innovative organizations led and owned by minorities, women, and other under-connected groups.

Quality refers to the usefulness or value that the asset—**as a whole**—brings to the innovation ecosystem. Consider all relevant dimensions (e.g., intrinsic value, accessibility, cost, flexibility).

INTRODUCTION

In 2015, the Institute for Emerging Issues at North Carolina State University and other partners launched InnovateNC, a first-in-the-nation effort to spark statewide, innovation-centered economic development. The two-year cross-city learning collaborative supported five North Carolina communities as they looked to expand their inclusive innovation economies. Participating communities were diverse in size, urban and rural, and spanned the geography of the state.

The InnovateNC Community Innovation Asset Map was developed to help these communities catalog their assets to build an inclusive innovation economy. It also serves as a tool to help communities make relevant connections among those assets. Several resources were consulted to develop the Asset Map, including: *Tracking Innovation: North Carolina Innovation Index* (John Hardin) NC Board of Science, Technology & Innovation, December 2015; *The CITY INITIATIVES for TECHNOLOGY, INNOVATION and ENTREPRENEURSHIP: A resource for city leadership* (John Gibson, Matthew Robinson, Scott Cain) June 2015; *Measuring an Entrepreneurial Ecosystem* (Dane Stangler, Jordan Bell-Masterson) Kauffman Foundation, March 2015; *The Rainforest Scorecard: A Practical Framework for Growing Innovation Potential* (Henry Doss, Alistar Brett) January 2015; *Civic Connections Driving the Heart of Innovation,* remarks at the NC Emerging Issues Forum (Victor Hwang) February 2015; *The Rise of Innovation Districts: A New Geography of Innovation in America* (Bruce Katz, Julie Wagner) The Brookings Institute, May 2014; *Community Innovation Asset Map and BEMAS Framework* presentation (Christopher Gergen) Forward Impact, September 2014.

The purpose of the Asset Map is to collect data that informs discussions to help communities clearly articulate their vision for inclusive innovation and understand the resources available in and around their community (particularly regional assets for smaller/micropolitan communities). These assets, when

INNOVATENC PARTNERS INCLUDE:

InnovateNC Organizing Partner
NC STATE UNIVERSITY
Institute for Emerging Issues

NC STATE
Industry Expansion Solutions

NC STATE UNIVERSITY
College of Design

Forward Impact

THE RESEARCH TRIANGLE PARK

RTI INTERNATIONAL

5

focused, mobilized, and developed to evolve an entrepreneurial strategy, will help position communities for innovation-driven growth and development that is demographically representative of their community. It is intended to help communities jump-start their strategic planning process, and should not be used as a binding measurement tool.

The Asset Map includes three levels of information gathering. The first level involves focusing in on the community's 10-year vision for fostering inclusive innovation and the area(s) of focus (e.g., target industry sectors, opportunities for growth, and other differentiators). The second level is the inventorying of assets related to the 10-year vision for fostering inclusive innovation. For example, if a community decides to focus their vision on nanotechnology innovation, they would inventory both innovation and entrepreneurial assets in general, as well as those specific to nanotechnology. The third level involves key stakeholder perceptions related to the quality of the assets inventoried, with an intentional focus on inclusion. Differences in these perceptions should be thoroughly discussed, so that all stakeholders have both a broad and deep understanding of the assets in their community. Following this exercise, stakeholders should revisit the 10-year vision and refine it as needed. ***More information on the suggested Asset Map completion process can be found beginning on page 8.***

The Asset Map is organized in such a way that allows communities to consider their innovation vision as they examine the five components of a thriving innovation ecosystem: Build, Enable, Measure, Advocate, and Share (BEMAS). Descriptions for each component are embedded throughout the Asset Map.

Figure 1: BEMAS Framework

Define and Refine the Community's 10-Year Vision

Build	Enable	Measure	Advocacy & Policy	Share
Build talent pipelines through local education efforts, talent recruitment, and talent retention	Create strong enabling environments to connect innovators and entrepreneurs with the resources and relationships they need to grow	Develop robust data-gathering efforts to measure the innovation-driven economic and community impact	Advocate for and create community and economic development policies that support inclusive innovation	Use media to highlight the innovation efforts taking place within the community through data and storytelling

Consultants may be available to assist communities in completing the Asset Map. Contact the NC Department of Commerce's Office of Science, Technology & Innovation for more information.

FORM A LOCAL INNOVATION COUNCIL

Economic developers, workforce developers, and others in the community are likely focused on assessing similar information to that discussed in this Asset Map. Some stakeholders may already fully consider the implications of these assets (or lack thereof) for under-connected individuals, and others may be interested in doing so. **To help foster a coordinated approach to assessing inclusive innovation**, and to minimize duplicate data collection efforts, each community is encouraged to **form an innovation council** to complete the Asset Map.

The innovation council should represent a broad and diverse cross-section of the entrepreneurial ecosystem, including: individuals with expertise related to each section of the Asset Map, small business owners and entrepreneurs, social entrepreneurs and nonprofit leaders, and those identified by the community as under-connected (e.g., women, community leaders of color, etc.). Having the right stakeholders at the table will make the Asset Map process more efficient and the output more reliable and reflective of the whole community. Smaller and micropolitan communities should include regional stakeholders.

Members of the local innovation council should include:

- **A diverse group of policy, political, and community leaders** who can authentically represent the needs and interests of the entrepreneurial community and its diverse workforce, and that have successfully "moved the needle" in an important sector for the community's transformation (i.e. education, urban renewal, housing, etc.). Include local policymakers that can help align economic and community policy with entrepreneurial ambitions;
- **Established small business and corporate leaders** committed to building an "intrapreneurial" corporate culture, as well as contributing to an innovation economy, such as contracting with local entrepreneurs/small businesses and "on-boarding" a diverse pipeline of emerging entrepreneurial talent;
- **Potential/emerging innovators and entrepreneurs/social entrepreneurs**, including those who are currently or recently under-connected from enabling entrepreneurial resources;
- **Early-stage investors, banking executives, and philanthropic leaders** who have a vested interest in the community's economic

future. Include funders investing in social/business entrepreneurship development (i.e. foundations, corporations and individual donors);

- **Organizations providing a robust enabling environment for incubating and accelerating emerging ventures** – again, with a focus on inclusion (i.e. capacity building or support organizations working with small businesses and entrepreneurs, incubators, etc.);
- **Education and talent developers/recruiters** focused on developing and connecting emerging talent from across a diverse range of neighborhoods with available opportunities (i.e. key leaders in local K-12, university, community college and technical/vocational education systems, education reform leaders, etc.);
- **Established and new media journalists/storytellers** committed to telling the community's ever-changing story of inclusivity and innovation (i.e. bloggers, journalists, social justice advocates, etc.);
- **Data and local research and policy/advocacy organizations** tracking the evolution of the innovation economy and workforce trends.

The local innovation council, generally led by two co-chairs that are highly regarded in the community, can be any size as long as it represents a broad and diverse cross-section of the entrepreneurial ecosystem. Be intentional to include under-connected individuals the community wants to engage in the entrepreneurial ecosystem. If the local innovation council is large (e.g., more than 15 members) consider forming a smaller data committee to take the initial lead in inventorying assets for the review of the fuller innovation council.

Local innovation councils are encouraged to meet monthly, or more often, until the Asset Map is completed. Suggested local experts to engage in the Asset Map process are provided for each measure in the user's guide, beginning on page 12. If, after completing the Asset Map, the local innovation council wants to take on strategic planning and implementation, co-chairs should consider adding an additional 4-5 people to create an executive committee to move the work forward.

COMPILE AND TALLY POINTS

1. The innovation council (or data committee) should compile data and information for the Asset Map (see Table 1 on page 11 for suggested timeline).

- The data committee should solicit feedback from the broader innovation council to ensure the Asset Map is complete and accurate.

2. Once the Asset Map is complete and accurate, each innovation council member should share their perception of inclusion and quality by assigning points for each measure (see Tally Form beginning on page 32). To ensure anonymity and honest responses, consider using a survey tool (e.g., Google Form) to solicit scores.
   - Include a comment field so that innovation council members can provide context for their points, if needed.

3. After everyone has provided their points for each measure, the innovation council (or data committee) should identify the measures with the greatest variation in points.
4. Innovation council leaders (or data committee members) should facilitate a dialogue among innovation council members about the differences in points within these measures. **The points matter only as a starting point for discussion** *to raise concerns and/or to offer opportunities for clarification concerning the assets. They can also be used to inform a future strategic planning process.*

SHARE

5. The innovation council (or data committee) should develop and execute a strategy to ensure that the completed Asset Map is accessible to innovation ecosystem stakeholders. Communities are encouraged to take multiple approaches to share their enabling assets, based on community size and needs. Whenever possible, the local innovation council should partner with other community stakeholders to disseminate findings to interested parties. **It is not the recommendation that the tally form with assigned points be shared broadly, if at all.**

Table 1. Sample Asset Map Process Timeline

# of meeting(s)*	Focus
1-4	Form local innovation council, introduce each other and the process, identify data committee (if needed), and establish meeting schedule and high-level operating procedures.
1-2	Consider 10-year vision for fostering inclusive innovation (including establishing a common understanding of equity and inclusivity within the community context).
1	Determine process for compiling data (i.e., assignments to divide and conquer or tackle each measure as a group).
1	Discuss **BUILD** assets to include in the Asset Map.
4-5	Discuss **ENABLE** assets to include in the Asset Map.
1	Discuss **MEASURE** assets to include in the Asset Map.
1-2	Discuss **ADVOCACY AND POLICY** assets to include in the Asset Map.
1-2	Discuss **MEDIA AND SHARE** assets to include in the Asset Map.
1-2	Discuss missing assets for completeness of inventory.
1	For communities with a data committee or divide-and-conquer approach, present complete inventory to entire local innovation council, assign points (can also be done virtually).
1-3	Innovation council leaders (or data committee members) should facilitate a dialogue among innovation council members about the differences in points within these measures, refine inventory and 10-year vision as needed.
1-2	Determine next steps for moving forward (e.g., move to a strategic planning process, as outlined in the broader InnovateNC toolkit).

Note: This timeline assumes meetings of 2-3 hours, spaced 2-4 weeks apart. While the timeline can be condensed with longer meetings, keep in mind the attention span of participants. Most communities will spend six months to one year completing the Asset Map, while other communities may need more or less time to accomplish the focus of each meeting.

This section includes descriptions for each of the measures within the BEMAS framework in more detail. For some measures, suggested sources and data notes are provided. This section will assist communities in completing the Tally Form beginning on page 32.

Worksheets 1-17 are recommended for completion of the Tally Form, and are located in the back of the report, beginning on page 46. Worksheets are also available for individual download at InnovateNC.org.

COMMUNITY CHARACTERISTICS

Understanding the community's demographic and socioeconomic profile is critical for informing innovation-led economic development plans and for understanding how inclusive the innovation assets are.

COMMUNITY DEMOGRAPHICS AND ECONOMICS: A SUMMARY OF THE COMMUNITY'S DEMOGRAPHIC AND ECONOMIC MAKEUP CAN BE DETERMINED BY POPULATION SIZE, AGE, RACE, INCOME, EMPLOYMENT, POVERTY, AND HOUSING STATISTICS.

DIRECTIONS: COMPLETE **WORKSHEET 1** AND PROVIDE THE PRIMARY DEMOGRAPHIC AND SOCIOECONOMIC MEASURES. THE WORKSHEET PROVIDES INFORMATION FOR ACCESSING THE COMMUNITY'S U.S. CENSUS BUREAU QUICKFACTS, A SOURCE FOR LOCAL DEMOGRAPHIC AND ECONOMIC DATA. NO POINTS SHOULD BE GIVEN ON THE TALLY FORM FOR THIS MEASURE.

BUILD

Build talent pipelines through local education efforts, talent recruitment and talent retention.

WORKFORCE ASSETS: HOW SKILLED IS THE COMMUNITY'S WORKFORCE?

LOCAL EXPERTS: WORKFORCE & ECONOMIC DEVELOPERS

LEVEL OF EDUCATIONAL ATTAINMENT

A well-educated, skilled workforce is a prerequisite for success in the innovation economy. The educational attainment of the workforce is a fundamental determinant of how well a community can generate and support economic growth centered on innovation. Talent retention enhances a community's ability to generate new innovative ideas that may have economic impacts in the future.

Source: American Community Survey 5-Year Estimates, U.S. Census Bureau.

Note: Weights for the composite score are -0.05 for no high school diploma, 0.25 for some college, 0.5 for associate degree, 1 for bachelor's degree, and 1.75 for graduate or professional degree. Refer to "Tracking Innovation: North Carolina Innovation Index 2015" for detailed methodology.

DIRECTIONS: COMPLETE **WORKSHEET 2** AND PROVIDE DATA FROM THE SOURCE LISTED ABOVE. CONSIDER WHETHER EFFORTS TO BUILD THESE WORKFORCE ASSETS ARE INCLUSIVE.

LEVEL OF EDUCATIONAL ATTAINMENT AMONG IN-MIGRANTS

The ability of a community to successfully attract well-educated, skilled individuals to relocate from other locations enhances that community's ability to foster an innovation economy. Furthermore, attracting outside talent enhances a community's ability to generate new innovative ideas that may have economic impacts in the future.

Source: American Community Survey 5-Year Estimates, U.S. Census Bureau.

Note: In-migration refers to people that moved from different states or abroad.

DIRECTIONS: COMPLETE **WORKSHEET 2** AND PROVIDE DATA FROM THE SOURCE LISTED ABOVE. CONSIDER WHETHER EFFORTS TO BUILD THESE WORKFORCE ASSETS ARE INCLUSIVE.

PERCENT OF WORKING AGE POPULATION

The census describes the working age population as between the ages of 18 and 65.

Source: Census QuickFacts

Note: Census QuickFacts provides percentage of population under 18 and over 65 for years 2010 and 2015. Subtracting the under-18 and over-65 population percentage from 100 percent gives an approximation of the working age population.

DIRECTIONS: COMPLETE **WORKSHEET 2** AND PROVIDE DATA FROM THE SOURCE LISTED ABOVE. CONSIDER WHETHER EFFORTS TO BUILD THESE WORKFORCE ASSETS ARE INCLUSIVE.

HIGH SCIENCE, ENGINEERING AND TECHNOLOGY (SET) EMPLOYMENT ESTABLISHMENTS AS A PERCENTAGE OF TOTAL EMPLOYMENT

This measure reflects the extent to which the labor force is employed in SET business establishments. This can illustrate the nature of the high-growth employment opportunities in the community.

Source: Quarterly Census of Employment and Wages (QCEW), Bureau of Labor Statistics, U.S. Department of Labor.

Note: See definition of "High Science, Engineering, and Technology Employment Industries," in Table 8-C, which is based on North American Industry Classification System (NAICS) codes. If county level data by NAICS code are not available to the general public (which is likely), users may need to consult the Labor & Economic Analysis Division of the NC Department of Commerce, which should be able to provide the data at the county level.

DIRECTIONS: COMPLETE **WORKSHEET 2** AND PROVIDE DATA FROM THE SOURCE LISTED ABOVE. CONSIDER WHETHER EFFORTS TO BUILD THESE WORKFORCE ASSETS ARE INCLUSIVE.

OPTIONAL MEASURE: PERCENT IN SCIENCE AND ENGINEERING OCCUPATIONS

Source: Bureau of Labor Statistics Occupational Employment Statistics

Note: Occupational-level data is available for metropolitan statistical areas (MSAs) as well as non-metropolitan regions as defined by the U.S. Census Bureau. Science and engineering occupations defined by NSF as eight high-level categories: Computer specialists (SOC 15-1), Mathematical science occupations (15-2), Engineers (17-2), Drafters, engineering, and mapping technicians (17-3), Life scientists (19-1), Physical scientists (19-2), Social scientists and related occupations (19-3), Life, physical, and social science technicians (19-4).

LOCAL EXPERTS: K-12 AND HIGHER EDUCATION, WORKFORCE DEVELOPMENT, CHAMBER OF COMMERCE

PROGRAMS FOR YOUTH

Programs that introduce youth (K-12) to innovation and entrepreneurship both in the education system (e.g., science, technology, engineering, and math (STEM) programs, entrepreneurial education, technical education, design) and outside the traditional education system (e.g., those provided by community organizations).

DIRECTIONS: COMPLETE **WORKSHEET 3** AND LIST THE NAME OF EACH PROGRAM. INDICATE WHETHER THE PROGRAM IS SCHOOL-BASED (AND IF IT OCCURS DURING THE SCHOOL DAY OR AFTER SCHOOL) OR COMMUNITY-BASED. CONSIDER WHETHER THE PROGRAMS LISTED ARE INCLUSIVE.

COMMUNITY COLLEGES

Programs that provide key skills related to innovation and entrepreneurship, such as technical certifications and degree programs, computer training, business skills, and workforce development for key innovative sectors.

DIRECTIONS: COMPLETE **WORKSHEET 4** AND LIST THE NAME OF THE INSTITUTION, PROGRAM, AND DEGREE TYPE OF RELEVANT PROGRAMS IN THE COMMUNITY/REGION. CONSIDER WHETHER THE PROGRAMS LISTED ARE INCLUSIVE.

COLLEGES AND UNIVERSITIES

Programs that provide degrees and certificate programs related to research and development, entrepreneurship, and business innovation in fields ranging from STEM to business management, liberal arts, social sciences, design, and others.

DIRECTIONS: COMPLETE **WORKSHEET 4** AND LIST THE NAME OF THE INSTITUTION, PROGRAM, AND DEGREE TYPE OF RELEVANT PROGRAMS IN THE COMMUNITY/REGION. CONSIDER WHETHER THE PROGRAMS LISTED ARE INCLUSIVE.

InnovateNC Community Innovation Asset Map

TRAINING AND WORKFORCE PROGRAMS

Programs sponsored by workforce development boards, workforce partnerships, training centers for technical and entrepreneurial skills, and others (e.g., coding programs). Also includes programs offered by businesses for their employees (i.e. "intrapreneur") and others in the community.

DIRECTIONS: COMPLETE **WORKSHEET 4** AND LIST THE NAME OF THE INSTITUTION, PROGRAM, AND DEGREE TYPE OF RELEVANT PROGRAMS IN THE COMMUNITY/REGION. CONSIDER WHETHER THE PROGRAMS LISTED ARE INCLUSIVE.

APPRENTICESHIP PROGRAMS

Apprenticeship programs can be important pathways for career development.

DIRECTIONS: COMPLETE **WORKSHEET 5** AND LIST THE NAME OF EACH RELEVANT APPRENTICESHIP PROGRAM IN THE COMMUNITY/REGION, THE SPONSOR, KEY SECTOR WHERE IT IS CONCENTRATED, AND THE APPROXIMATE NUMBER OF PEOPLE INVOLVED EACH YEAR. CONSIDER WHETHER THE PROGRAMS LISTED ARE INCLUSIVE.

ENABLE

Create strong enabling environments to connect innovators and entrepreneurs with the resources and relationships they need to grow.

SITE ASSETS: WHAT ARE THE MAJOR PUBLIC AND PRIVATELY OWNED SPACES DESIGNED AND ORGANIZED TO STIMULATE NEW AND HIGHER LEVELS OF CONNECTIVITY, COLLABORATION, AND INNOVATION?

LOCAL EXPERTS: CITY PLANNERS/ECONOMIC DEVELOPMENT, ENTREPRENEURS, SMALL BUSINESS OWNERS, ENTREPRENEURIAL-ENABLING ORGANIZATIONS (I.E. COWORKING SPACES, INCUBATORS, ACCELERATORS, ETC.)

BUILDINGS

Physical spaces that innovators and entrepreneurs use to grow and develop. These may include office space, coworking communities, lab space, retail space, and other physical spaces that foster innovative business growth.

INCUBATORS

For early stage companies, incubators can provide needed space for a low cost, often in the form of coworking space or small offices. They can also provide startup support. *If incubator is not located in a physical building, it should be considered under Associations, Networks, and Events (see page 25).*

PRODUCT DEVELOPMENT SPACE

Product development space gives innovators and entrepreneurs access to equipment, technology, and other tools that can be used for prototyping and manufacturing (e.g., makerspace, scientific labs).

"GRADUATION" COMMERCIAL SPACE

Innovative space(s) for growing companies, commercial space (e.g., offices, manufacturing, and retail) can allow the company to expand.

Source: Access NC, Building and Sites

POTENTIAL SITES

Include buildings with potential for renovation, brownfields, greenfields, and other potential sites that can be developed for innovation (e.g., an emerging innovation district, cluster of buildings).

DIRECTIONS: COMPLETE **WORKSHEET 6** AND LIST THE NAME (OR LOCATION) AND TYPE OF EACH RELEVANT BUILDING/SPACE (E.G., INCUBATOR, PRODUCT DEVELOPMENT SPACE, "GRADUATION" COMMERCIAL SPACE, AND POTENTIAL SITES) IN THE COMMUNITY. FOR COMMERCIAL SPACES, ADD THE SIZE OR APPROXIMATE SQUARE FOOTAGE, WHICH MAY BE AVAILABLE AT ACCESSNC. CONSIDER WHETHER THE BUILDINGS LISTED ARE INCLUSIVE.

OTHER INNOVATION ZONES

Not all innovation occurs in formal spaces or offices, and collaboration can occur through informal or unexpected collisions of ideas and people. These are places where innovators and entrepreneurs often meet up and engage with other innovators, entrepreneurs, and connectors in the community. Include public spaces, innovative districts or neighborhoods, restaurants, civic centers, coffee shops, churches, or other similar areas where people gather to exchange ideas.

Note: Sociologist Ray Oldenburg describes these areas as "third places".

DIRECTIONS: COMPLETE **WORKSHEET 6** AND LIST THE NAME (OR LOCATION) OF OTHER INNOVATION ZONES IN THE COMMUNITY. CONSIDER WHETHER THESE INNOVATION ZONES ARE INCLUSIVE.

INFRASTRUCTURE ASSETS: WHAT ARE THE KEY TRANSPORTATION, TELECOMMUNICATION, AND OTHER INFRASTRUCTURE ASSETS MEETING THE NEEDS OF INNOVATORS AND ENTREPRENEURS IN THE COMMUNITY?

LOCAL EXPERTS: CITY MANAGER, CITY PLANNERS, OIT PROFESSIONAL, ENTREPRENEURS

TRANSPORTATION ACCESSIBILITY

A community's access to transportation can connect innovators and entrepreneurs to key community assets. Transportation accessibility can include public transportation, driving and parking accessibility, ride share, bicycle access and bike share programs, walkability, and mobility for different segments of the population.

DIRECTIONS: COMPLETE **WORKSHEET 7** AND DESCRIBE THE COMMUNITY'S TRANSPORTATION ACCESSIBILITY AND WHETHER IT IS INCLUSIVE.

AIRPORTS

Communities within close proximity to a major airport can link innovators and entrepreneurs to partners, clients, and markets.

DIRECTIONS: COMPLETE **WORKSHEET 7** AND DESCRIBE THE COMMUNITY'S PROXIMITY TO A MAJOR AIRPORT AND WHETHER THAT PROXIMITY IS INCLUSIVE.

ROADS, RAIL, WATERWAYS

Communities with sufficient infrastructure can move goods and people, and connect to markets (regional, national, and global).

DIRECTIONS: COMPLETE **WORKSHEET 7** AND DESCRIBE THE COMMUNITY'S INFRASTRUCTURE TO MOVE GOODS AND PEOPLE, AND TO CONNECT TO MARKETS, AND WHETHER THIS SYSTEM IS INCLUSIVE.

BROADBAND ACCESS

Communities with accessible high-speed broadband can connect innovators and entrepreneurs to people, information, and supportive applications (e.g., e-commerce).

Note: At the time of this release, none of the data sources examined (below) easily captured broadband access and speed by county and/or city. Communities are encouraged to consult with a local Office of Information Technology (OIT) expert and local entrepreneurs that represent the diversity of the community to best determine whether broadband access and speed is meeting their needs.

BroadbandNow compiles public and proprietary data on broadband access, speeds, and prices at the zip code, county, state, and national level. It defines broadband speed as 25+ mbps, 100+ mbps, and 1,000+ mbps.

Broadband Catalysts is a free, open-source mapping application that displays publicly available broadband data from a number of sources, including the FCC and open access fiber networks. Citizens can also contribute data by marking their locations as unserved or underserved.

The FCC is the federal agency responsible for implementing and enforcing America's communications law and regulations. The FCC also publishes regular data, as well as research reports and maps on broadband speed and access.

DIRECTIONS: COMPLETE **WORKSHEET 7** AND DESCRIBE THE COMMUNITY'S BROADBAND CONNECTION AND WHETHER ACCESS TO BROADBAND IN THE COMMUNITY IS INCLUSIVE.

UTILITIES

Utilities (e.g., energy, sewer, water) can support the work of innovators and entrepreneurs.

DIRECTIONS: COMPLETE **WORKSHEET 7** AND DESCRIBE THE ADEQUACY OF THE COMMUNITY'S UTILITIES AND WHETHER THEY ARE BROADLY ACCESSIBLE AND INCLUSIVE.

MENTORING ASSETS: WHAT OPPORTUNITIES AND PATHWAYS EXIST TO CONNECT MENTORS TO INNOVATORS AND ENTREPRENEURS?

LOCAL EXPERTS: ANGEL AND VENTURE INVESTORS, ENTREPRENEURS, ENTREPRENEUR-ENABLING ORGANIZATIONS, COMMUNITY COLLEGE SMALL BUSINESS CENTERS, UNIVERSITY SMALL BUSINESS TECHNOLOGY AND DEVELOPMENT CENTERS (SBTDC)

MENTORS

Mentors/coaches willing and available to provide guidance to innovators and entrepreneurs in the community and help these enterprises reach their growth potential.

DIRECTIONS: COMPLETE **WORKSHEET 8** AND DESCRIBE THE COMMUNITY'S MENTORSHIP SUPPORT AND WHETHER IT IS INCLUSIVE.

MENTORSHIP CONNECTIONS

Mentorship programs and pathways (i.e., formal and informal networks) can connect mentors to innovators and entrepreneurs interested in starting or scaling a business.

DIRECTIONS: COMPLETE **WORKSHEET 8** AND LIST THE NAME OF EACH PROGRAM/PATHWAY AND THE ORGANIZING ENTITY (FORMAL AND INFORMAL). CONSIDER WHETHER THESE PROGRAMS AND PATHWAYS ARE BROADLY ACCESSIBLE AND INCLUSIVE.

FINANCIAL ASSETS: WHAT IS THE READINESS OF INNOVATORS AND ENTREPRENEURS TO ACCESS FINANCIAL RESOURCES IN THE COMMUNITY, AND HOW ACCESSIBLE ARE THEY?

LOCAL EXPERTS: SBTDC, INVESTORS, PHILANTHROPIC LEADERS, ENTREPRENEURS, ENTREPRENEUR-ENABLING ORGANIZATIONS, ECONOMIC DEVELOPMENT, HIGHER EDUCATION

READINESS TO LEVERAGE INNOVATION-CENTERED ECONOMIC DEVELOPMENT RESOURCES

While many sources of funding are critical to innovators and entrepreneurs, local support organizations access and leverage funding for physical spaces, incubators, workforce training, and other grassroots efforts (i.e., entrepreneurial ecosystem). They often depend on funding from grants and foundations (e.g., EDA, NC IDEA, Golden LEAF).

DIRECTIONS: COMPLETE **WORKSHEET 9** AND DESCRIBE THE COMMUNITY'S AWARENESS AND READINESS TO LEVERAGE THESE ECONOMIC DEVELOPMENT RESOURCES AND WHETHER THESE OPPORTUNITIES ARE INCLUSIVE.

EARLY STAGE R&D

For early stage R&D, funding may come from universities, foundation and government grants, and other types of contracts with public and private sector funders.

DIRECTIONS: COMPLETE **WORKSHEET 9** AND DESCRIBE THE COMMUNITY'S AWARENESS AND READINESS FOR EARLY STAGE R&D AND WHETHER THESE OPPORTUNITIES ARE INCLUSIVE.

EARLY STAGE RISK CAPITAL

Early stage companies that cannot access collateralized or secured debt often depend on owner equity, seed capital, local investor, and angel investor networks.

DIRECTIONS: COMPLETE **WORKSHEET 9** AND DESCRIBE THE AVAILABILITY OF EARLY STAGE RISK CAPITAL IN THE COMMUNITY, THE COMMUNITY'S AWARENESS OF AND READINESS TO ACCESS THESE RESOURCES, AND IF THESE OPPORTUNITIES ARE INCLUSIVE.

MID-STAGE RISK CAPITAL, MEZZANINE FINANCING, AND COLLATERALIZED CAPITAL

For startup companies in a growth or scale-up stage, investment can come from a mix of public and private investments, including from venture capital networks and nontraditional debt (e.g., Small Business Administration and Community Development Block Grant programs, community development banks, revolving loan funds, credit unions, commercial banks, lending programs, other sources of debt).

DIRECTIONS: COMPLETE **WORKSHEET 9** AND DESCRIBE THE AVAILABILITY OF MID-STAGE RISK CAPITAL AND/OR OTHER RESOURCES IN THE COMMUNITY, THE COMMUNITY'S AWARENESS OF AND READINESS TO ACCESS THESE RESOURCES, AND IF THESE OPPORTUNITIES ARE INCLUSIVE.

CAPITAL FOR ESTABLISHED COMPANIES

Established companies can access traditional bank debt and sell equity through traded markets (e.g., banks that provide working capital, lines of credit, and fixed asset finance for real estate development and other large investments).

DIRECTIONS: COMPLETE **WORKSHEET 9** AND DESCRIBE THE AVAILABILITY OF CAPITAL FOR ESTABLISHED COMPANIES IN THE COMMUNITY, THE COMMUNITY'S AWARENESS OF AND READINESS TO ACCESS THESE RESOURCES, AND IF THESE OPPORTUNITIES ARE INCLUSIVE.

SEE PAGE 20 OF THE NC SBTDC, Capital Opportunities for Small Businesses (2014) report **FOR A GRAPHIC ILLUSTRATION OF THE RANGE OF DEBT AND EQUITY SOURCES CONSIDERED WHEN FINANCING.**

THE SBTDC'S CAPITAL OPPORTUNITIES FOR SMALL BUSINESSES REPORT PROVIDES INFORMATION ABOUT FINANCIAL RESOURCES AVAILABLE TO SMALL BUSINESSES IN NORTH CAROLINA.

LOCAL EXPERTS: INVESTORS, ENTREPRENEURS, ENTREPRENEUR-ENABLING ORGANIZATIONS, ECONOMIC DEVELOPERS, HIGHER EDUCATION, CHAMBERS OF COMMERCE

TOP INDUSTRIES

Specialized industries in a region can serve as a base for innovation-led economic development. Innovation can be found across a variety of industries, and those that are focused on technology and innovation are more likely to produce the types of growth that drives employment and higher wages in the economy.

Source: 4-digit NAICS can be accessed in the Employment and Wage by Industry, Quarterly Census of Employment and Wages, Bureau of Labor Statistics.

Note: Review data and multiple data measures (e.g., establishment counts, employment totals, and median wages) for the previous five years.

DIRECTIONS: COMPLETE **WORKSHEET 10** AND LIST THE TOP TEN INDUSTRIES IN THE REGION/COMMUNITY. INCLUDE THE NUMBER EMPLOYED, MEDIAN WAGE, AND IF IT IS DRIVING GROWTH. CONSIDER WHETHER THESE INDUSTRIES ARE INCLUSIVE.

TOP SECTORS

Specialized sectors in a region can serve as a base for innovation-led economic development. Innovation can be found across a variety of sectors, and those that are focused on technology and innovation are more likely to produce the types of growth that drive employment and higher wages in the economy.

Source: 2-digit NAICS can be accessed in Employment and Wage by Industry, Quarterly Census of Employment and Wages, Bureau of Labor Statistics.

Note: Review data and multiple data measures (e.g., establishment counts, employment totals, and median wages) for the previous five years.

DIRECTIONS: COMPLETE **WORKSHEET 10** AND LIST THE TOP TEN SECTORS IN THE REGION/COMMUNITY. INCLUDE THE NUMBER EMPLOYED, MEDIAN WAGE, AND IF IT IS DRIVING GROWTH. CONSIDER WHETHER THESE SECTORS ARE INCLUSIVE.

TOP CLUSTERS

A cluster is a group of businesses and industries that are related through presence in a common product chain, dependence on similar labor skills, or utilization of similar or complementary services. Innovation can occur among various actors in a cluster and can lead to a stronger, more resilient economy.

Source: U.S. Cluster Mapping

Note: Review data and multiple data measures (e.g., establishment counts, employment totals, and median wages) for the previous five years.

DIRECTIONS: COMPLETE **WORKSHEET 10** AND LIST THE TOP TEN CLUSTERS IN THE REGION/COMMUNITY. INCLUDE THE NUMBER EMPLOYED, MEDIAN WAGE, AND IF IT IS DRIVING GROWTH. CONSIDER WHETHER THESE CLUSTERS ARE INCLUSIVE.

ANCHOR BUSINESSES

Major employers in the region can serve as an economic engine in the community.

DIRECTIONS: COMPLETE **WORKSHEET 10** AND LIST THE TOP TEN ANCHOR BUSINESSES IN THE REGION/COMMUNITY. INCLUDE THE NUMBER EMPLOYED, MEDIAN WAGE, AND IF IT IS DRIVING GROWTH. CONSIDER WHETHER THESE BUSINESSES ARE INCLUSIVE.

SERVICES SPECIALIZING IN SUPPORTING STARTUPS AND SCALE-UPS: WHAT SERVICES ARE AVAILABLE TO INNOVATORS AND ENTREPRENEURS IN THE COMMUNITY?

LOCAL EXPERTS: ENTREPRENEURS, INVESTORS, ENTREPRENEUR-ENABLING ORGANIZATIONS, ECONOMIC DEVELOPMENT, CHAMBERS OF COMMERCE

TECHNICAL ASSISTANCE

Business services that exist for innovators and entrepreneurs in the community can offer critical support (e.g., accounting, human resources, and other essential business services).

DIRECTIONS: COMPLETE **WORKSHEET 11** AND PROVIDE A NAME AND DESCRIPTION FOR EACH SUPPORT ORGANIZATION OR INDIVIDUAL. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). CONSIDER WHETHER THESE SERVICES ARE INCLUSIVE.

LEGAL

Legal services that exist for innovators and entrepreneurs in the community necessary to establishing a viable business (e.g., lawyers specializing in intellectual property, business incorporation and services, and other legal services directly relevant to innovators and entrepreneurs).

DIRECTIONS: COMPLETE **WORKSHEET 11** AND PROVIDE A NAME AND DESCRIPTION FOR EACH SUPPORT ORGANIZATION OR INDIVIDUAL. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). CONSIDER WHETHER THESE SERVICES ARE INCLUSIVE.

SALES, MARKETING, STRATEGY

Services that exist for innovators and entrepreneurs in the community in need of market research, marketing, sales, and business strategy are essential for start-ups and scaling up.

DIRECTIONS: COMPLETE **WORKSHEET 11** AND PROVIDE A NAME AND DESCRIPTION FOR EACH SUPPORT ORGANIZATION OR INDIVIDUAL. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). CONSIDER WHETHER THESE SERVICES ARE INCLUSIVE.

ASSOCIATIONS, NETWORKS, PROGRAMS, AND EVENTS: WHAT ASSOCIATIONS, NETWORKS, PROGRAMS, AND EVENTS EXIST IN THE COMMUNITY THAT BRING TOGETHER INNOVATORS AND ENTREPRENEURS?

LOCAL EXPERTS: ENTREPRENEURS, ENTREPRENEUR-ENABLING ORGANIZATIONS, HIGHER EDUCATION

ASSOCIATIONS AND NETWORKS

The associations and formal (or informal) networks that exist in the community can bring together innovators and entrepreneurs. Include incubators and accelerators that are not connected to a physical space.

DIRECTIONS: COMPLETE **WORKSHEET 12** AND LIST THE NAMES OF KEY ORGANIZATIONS LEADING THESE ASSOCIATIONS AND NETWORKS. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). CONSIDER WHETHER THESE ASSOCIATIONS AND NETWORKS ARE INCLUSIVE.

ENTREPRENEURIAL/SMALL BUSINESS SUPPORT PROGRAMS

For innovative companies that have developed their idea into a viable business model, good programs (such as accelerators) can offer a physical space and/or services to scale-up through access to capital, services, infrastructure, markets, mentors, and other resources.

DIRECTIONS: COMPLETE **WORKSHEET 12** AND LIST THE NAMES OF KEY ORGANIZATIONS THAT OFFER THESE PROGRAMS. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). CONSIDER WHETHER THESE PROGRAMS ARE INCLUSIVE.

EVENTS

Events in the area bring innovators and entrepreneurs together (e.g., pitch competitions, networking events, innovation summits).

DIRECTIONS: COMPLETE **WORKSHEET 12** AND LIST THE NAMES OF KEY ORGANIZATIONS THAT OFFER THESE EVENTS. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). CONSIDER WHETHER THESE EVENTS ARE INCLUSIVE.

MEASURE

Develop robust data-gathering efforts to measure the innovation-driven economic and community impact.

> **TRACKING OUTCOMES ASSETS: WHAT ORGANIZATIONS, INSTITUTIONS, OR PEOPLE TRACK OUTCOMES RELATED TO INNOVATION AND ENTREPRENEURSHIP, AND DOES IT TRANSLATE INTO MEASUREABLE OUTCOMES, OUTPUTS, AND IMPACTS THAT REFLECT THE DIVERSITY OF THE COMMUNITY?**

LOCAL EXPERTS: ECONOMIC DEVELOPERS, DATA ANALYSTS, HIGHER EDUCATION REPRESENTATIVES, ENTREPRENEURSHIP PROGRAM ADMINISTRATORS/FUNDERS

TRACKING OUTCOMES

List the organizations, institutions, and people that track local outcomes related to inclusive innovation and entrepreneurship and make the information accessible to the broader community.

DIRECTIONS: COMPLETE **WORKSHEET 13** AND LIST THE NAMES OF THE ORGANIZATIONS, INSTITUTIONS, AND PEOPLE THAT TRACK INNOVATION OUTCOMES IN THE COMMUNITY AND WHETHER THE DATA IS INFORMING DECISION-MAKING. CAPTURE THOSE THAT ARE THE MOST RELEVANT (NOT EXHAUSTIVE). CONSIDER WHETHER THE DATA IS INCLUSIVE.

ADVOCACY AND POLICY

Advocate for and create community and economic development policies that support innovation.

LOCAL/REGIONAL GOVERNMENT AND COMMUNITY ASSETS: WHAT ARE THE RELEVANT POLICIES THAT SUPPORT INCLUSIVE INNOVATION AND ENTREPRENEURSHIP IN THE COMMUNITY? WHO ARE THE CHAMPIONS IN LOCAL/REGIONAL GOVERNMENT AND IN THE COMMUNITY THAT ADVOCATE FOR SUPPORTIVE POLICIES, REGARDLESS OF POLITICAL AFFILIATION?

LOCAL EXPERTS: COUNTY/CITY/TOWN MANAGER, CHAMBERS OF COMMERCE

Consider formal and informal policies that influence how open the community is to new ideas and businesses, how the community can optimize its infrastructure for high-growth new businesses, and how the community builds innovation into its own activities (from the CITIE Framework).

Local: May include local government branches, small business offices, chambers of commerce, economic development organizations, and others.

Regional: May include county governments, councils of governments, workforce development boards, regional economic development organizations, and others.

POLICIES

Policies that can advance innovation and entrepreneurship in the community are considered "supportive" and policies that diminish innovation and entrepreneurship in the community are considered "limiting." Some policies are formal (e.g., a law, board policy) and some are informal (e.g., a way of doing business).

DIRECTIONS: COMPLETE **WORKSHEET 14** AND LIST THE TYPE OF POLICY (SUPPORTIVE OR LIMITING) AND THE NAME OR BRIEF DESCRIPTION OF THE POLICY. CAPTURE THOSE THAT ARE THE MOST RELEVANT (NOT EXHAUSTIVE). CONSIDER WHETHER THE POLICIES ARE INCLUSIVE.

CHAMPIONS

The individuals and/or organizations that are advocating for policy change within and across institutional systems that support innovators and entrepreneurs.

DIRECTIONS: COMPLETE **WORKSHEET 15** AND LIST THE TYPE OF CHAMPION (LOCAL/REGIONAL GOVERNMENT, COMMUNITY) AND THEIR NAME AND/OR ORGANIZATION. CAPTURE THOSE THAT ARE THE MOST RELEVANT (NOT EXHAUSTIVE).CONSIDER WHETHER THE CHAMPIONS ARE INCLUSIVE.

SHARE

Use media to highlight the innovation efforts taking place within the community through data and storytelling.

MEDIA: WHAT MEDIA OUTLETS SHARE THE INNOVATION OR ENTREPRENEURIAL STORIES OF THE COMMUNITY THAT CAN HELP BRAND A PLACE BASED ON ITS INNOVATION ASSETS?

LOCAL EXPERTS: GOVERNMENT COMMUNICATION LEAD, MEDIA

MEDIA

Print and digital publications, TV and radio outlets, and/or social media networks that share the innovation and entrepreneurial stories of the region/community.

DIRECTIONS: COMPLETE **WORKSHEET 16** AND LIST THE NAME OF THE MEDIA SOURCE AND WHAT TYPE OF RELEVANT MEDIA THEY PRODUCE. CONSIDER WHETHER THE STORIES ARE INCLUSIVE.

SUMMARY

SUMMARY: HOW WELL-POSITIONED IS THE COMMUNITY FOR INCLUSIVE INNOVATIVE GROWTH?

LOCAL EXPERTS: ENTIRE LOCAL INNOVATION COUNCIL

ADDITIONAL ASSETS

DIRECTIONS: COMPLETE **WORKSHEET 17** AND LIST THE NAME OF THE ASSETS NOT INCLUDED IN THE *INNOVATENC COMMUNITY INNOVATION ASSET MAP* THAT ARE IMPORTANT TO THE COMMUNITY'S 10-YEAR VISION FOR FOSTERING INCLUSIVE INNOVATION. CONSIDER THE DEGREE TO WHICH THESE ASSETS ARE INCLUSIVE. NO POINTS SHOULD BE GIVEN FOR MISSING ASSETS.

SUMMARY

DIRECTIONS: CONSIDER ALL OF THE MEASURES INCLUDED IN THE ASSET MAP AND HOW INCLUSIVE THEY ARE.

COMMUNITY VISION

Consider the community's 10-year vision for fostering inclusive innovation and entrepreneurship, which will provide parameters for completing the Asset Map.

COMMUNITY VISION: WHAT IS THE COMMUNITY'S VISION FOR AN INCLUSIVE AND DEMOGRAPHICALLY REPRESENTATIVE ENTREPRENEURIAL ECONOMY?

DIRECTIONS: IN THE BOX BELOW, DESCRIBE THE COMMUNITY'S 10-YEAR VISION FOR FOSTERING INCLUSIVE INNOVATION AND ENTREPRENEURSHIP. AFTER COMPLETING THE ASSET MAP IN ITS ENTIRETY, REFINE THIS VISION IF NEEDED.

Areas of Focus (e.g., target industry sectors, opportunities for growth)
Vision
What does success look like?

TALLY FORM

DIRECTIONS: CONSIDER ALL OF THE MEASURES INCLUDED IN THE BEMAS FRAMEWORK AND ASSIGN POINTS BASED ON THE RUBRIC PROVIDED BELOW FOR EACH SECTION. MORE INFORMATION ABOUT EACH MEASURE CAN BE FOUND IN THE ASSET MAP USERS GUIDE SECTION, BEGINNING ON PAGE 12.

RUBRIC		
Quality	Points	Inclusion
Low Quality	1	Exclusive
Somewhat Low Quality	2	Somewhat Exclusive
Neither High Or Low Quality	3	Neither Exclusive Or Inclusive
Somewhat High Quality	4	Somewhat Inclusive
High Quality	5	Inclusive

BUILD

BUILD TALENT PIPELINE THROUGH LOCAL EDUCATION EFFORTS, TALENT RECRUITMENT, AND TALENT RETENTION.

WORKFORCE ASSETS

How skilled is the community's workforce?

Consider the quality of the workforce assets (e.g., are they larger or smaller than the state and national averages), and if they are inclusive of the diverse demographics of the community.

	POINTS	
	Quality	**Inclusion**
Level of Educational Attainment *(p.13*		
Level of Educational Attainment Among In-migrants *(p.13)*		
Percent of Working Age Population *(p.14)*		
High Science, Engineering and Technology Employment Establishments, as Percentage of Total Employment *(p.14)*		

COMMENTS:

COMPLETE WORKSHEET 2 BEFORE EVALUATION.

BUILD

TALENT DEVELOPMENT ASSETS

What are key talent development programs in the community that drive thought, organization, and action that foster inclusive innovation and entrepreneurship?

Consider quality over quantity. Quality means useful for – and accessible to – the diversity of the community.

	POINTS	
	Quality	**Inclusion**
Programs for Youth *(p.15)*		
Community Colleges *(p.15)*		
Colleges and Universities *(p.15)*		
Training & Workforce Programs *(p.16)*		
Apprenticeship Programs *(p.16)*		

COMMENTS:

COMPLETE WORKSHEETS 3-5 BEFORE EVALUATION.

ENABLE

CREATE STRONG, ENABLING ENVIRONMENTS TO CONNECT INNOVATORS AND ENTREPRENEURS WITH THE RESOURCES AND RELATIONSHIPS THEY NEED TO GROW.

SITE ASSETS

What are the major public and privately owned spaces designed and organized to stimulate new and higher levels of connectivity, collaboration, and innovation?

Consider quality over quantity. Quality includes the participation of and/or active engagement and recruitment of under-connected individuals within the community.

	POINTS	
	Quality	**Inclusion**
Buildings *(p. 17)*		
Incubators *(p. 17)*		
Product Development Space *(p. 17)*		
"Graduation" Commercial Space *(p. 17)*		
Potential Sites *(p. 17)*		
Other Innovation Zones *(p. 18)*		

COMMENTS:

COMPLETE WORKSHEET 6 BEFORE EVALUATION.

ENABLE

INFRASTRUCTURE

Are the key transportation, telecommunication, and other infrastructure assets meeting the needs of innovators and entrepreneurs in the community?

Consider the quality of the community's infrastructure to meet current and projected demand, and whether it meets the needs of a diverse community.

	POINTS	
	Quality	**Inclusion**
Transportation Accessibility *(p.18)*		
Airports *(p.19)*		
Roads, Rail, Waterways *(p.19)*		
Broadband Access *(p.19)*		
Utilities *(p.20)*		

COMMENTS:

COMPLETE WORKSHEET 7 BEFORE EVALUATION.

ENABLE

MENTORING

What opportunities and pathways exist to connect mentors to innovators and entrepreneurs?

Consider the extent to which mentors are available in the community and whether under-connected individuals are engaged by mentors.

	POINTS	
	Quality	**Inclusion**
Mentors *(p.20)*		
Mentorship Connections *(p.20)*		

COMMENTS:

COMPLETE WORKSHEET 8 BEFORE EVALUATION.

ENABLE

FINANCIAL

What is the readiness of innovators and entrepreneurs to access principal financial resources in the community, and how accessible are they?

Consider the capital investment potential in the community and whether under-connected individuals are aware of and have the ability to access (availability, readiness) these financial resources.

	POINTS	
	Quality	**Inclusion**
Readiness of Community to Leverage Innovation-centered Economic Development Resources *(p.21)*		
Early Stage R & D *(p.21)*		
Early Stage Risk Capital *(p.21)*		
Mid-stage Risk Capital, Mezzanine Financing, & Collateralized Capital *(p.22)*		
Capital for Established Companies *(p.22)*		

COMMENTS:

COMPLETE WORKSHEET 9 BEFORE EVALUATION.

ENABLE

What are the industries, sectors, and clusters in the community?

Consider the quality of these assets (e.g., driving economic growth in terms of employment opportunities and increasing median wages over past five years), and whether under-connected individuals are benefiting (inclusive) or not benefiting (exclusive) from these assets.

	POINTS	
	Quality	**Inclusion**
Top Industries *(p.23)*		
Top Sectors *(p.23)*		
Top Clusters *(p.24)*		
Anchor Businesses *(p.24)*		

COMMENTS:

COMPLETE WORKSHEET 10 BEFORE EVALUATION.

ENABLE

SERVICES SPECIALIZING IN SUPPORTING STARTUPS AND SCALE-UPS

What services are available to innovators and entrepreneurs in the community?

Consider quality over quantity. Quality includes the participation of and/or active engagement and recruitment of under-connected individuals within the community.

	POINTS	
	Quality	**Inclusion**
Technical Assistance *(p.25)*		
Legal *(p.26)*		
Sales, Marketing, Strategy *(p.26)*		

COMMENTS:

COMPLETE WORKSHEET 11 BEFORE EVALUATION.

ENABLE

ASSOCIATIONS, NETWORKS, PROGRAMS, EVENTS

What associations, networks, programs, and events exist in the community that bring together innovators and entrepreneurs?

Consider quality over quantity. Quality includes the participation of and/or active engagement and recruitment of under-connected individuals within the community.

	POINTS	
	Quality	**Inclusion**
Associations and Networks *(p.34)*		
Entrepreneurial/Small Business Support Programs *(p.35)*		
Events *(p.35)*		

COMMENTS:

MEASURE

DEVELOP ROBUST DATA-GATHERING EFFORTS TO MEASURE THE INNOVATION-DRIVEN ECONOMIC AND COMMUNITY IMPACT.

TRACKING OUTCOMES

What organizations, institutions, or people track outcomes related to innovation and entrepreneurship, and does it translate into measurable outcomes, outputs, and impacts that reflect the diversity of the community?

Consider the depth of data collected and whether it translates into measureable outcomes, outputs, and impacts that reflect the diversity of the community.

	POINTS	
	Quality	**Inclusion**
Tracking Outcomes *(p.27)*		

COMMENTS:

ADVOCACY & POLICY

LOCAL/REGIONAL GOVERNMENT AND COMMUNITY ASSETS

What are the relevant policies that support inclusive innovation and entrepreneurship in the community? Who are the champions in local/regional government and in the community that advocate for supportive and inclusive policies, regardless of political affiliation?

Consider the quality of policies (e.g., supportive or limiting to innovators and entrepreneurs) and how they affect under-connected individuals within the community. Then consider whether champions are: effective advocates for innovators and entrepreneurs; represent the demographics of the community; and whether they are effective advocates for a diversity of entrepreneurs.

	POINTS	
	Quality	**Inclusion**
Policies *(p.28)*		
Champions *(p.28)*		

COMMENTS:

COMPLETE WORKSHEET 14-15 BEFORE EVALUATION.

SHARE

USE MEDIA TO HIGHLIGHT THE INNOVATION EFFORTS TAKING PLACE WITHIN THE COMMUNITY THROUGH DATA AND STORYTELLING.

MEDIA

What media outlets share the innovation and entrepreneurial stories of the community that can help brand a place based on its innovation assets?

Consider the quality (e.g., number and types of stories), and whether they represent the diversity of entrepreneurs in the community.

	POINTS	
	Quality	**Inclusion**
Media *(p.29)*		

COMMENTS:

COMPLETE WORKSHEET 16 BEFORE EVALUATION.

SUMMARY

How well-positioned is the community for inclusive innovative growth?

Consider the diversity of those engaged in – and benefiting from – the innovation economy.

	POINTS	
	Quality	**Inclusion**
Summary *(p.30)*		

COMMENTS:

InnovateNC Community Innovation Asset Map

45

COMPLETE WORKSHEET 17 BEFORE EVALUATION TO ADDRESS ASSETS NOT YET ADDRESSED.

WORKSHEET 1- DEMOGRAPHIC AND SOCIOECONOMIC COMMUNITY PROFILE

A summary of the community's makeup can be determined by its population size, age, race, income, employment, poverty, housing and other statistics. Fill in the primary demographic and socioeconomic measures for the summary categories (below) or use the U.S. Census Bureau QuickFacts in place of this worksheet.

For more detailed data, access the U.S. Census Bureau decennial surveys, as well as the annual American Community Surveys (ACS). These surveys enable both a more detailed overview of the community and trend analyses. To access this data, visit American Factfinder or utilize the Social Explorer tool.

	Demographic and Socioeconomic Measures	NC	U.S.	Percent NC Change (as applicable)
Population	Population total			
	Population/persons under age 5			
	Population/persons under age 18			
	Population/persons over age 65			
Race / Ethnicity	White, alone			
	African American, alone			
	American Indian and Alaska Native, alone			
	Asian, alone			
	Two or more races			
	Hispanic or Latino			
	White, not Hispanic or Latino			

Housing	Housing units total			
	Owner-occupied housing unit rate			
	Median value of owner-occupied housing units			
	Median gross rent			
Education	High school graduate or higher, percent of persons age 25 years			
	Bachelor's degree or higher, percent of persons age 25 years			
Employment / Business	Total employment			
	Total employment, percent change			
	In civilian labor force, total, percent of population age 16 years			
	Total all firms			
	Men-owned firms			
	Women-owned firms			
	Minority-owned firms			
	Non-minority-owned firms			
Income* / Poverty	Median household income			
	Per capita income in past 12 months			
	Persons in poverty, percent			

*To understand the region/community's affordability, consider the median household income in relation to localized cost-of-living measures. The following resources provide an estimation of the income required to support a household according to the living expenses of a particular city or region:

1. North Carolina Self-Sufficiency Standard
2. North Carolina Living Standard
3. MIT Living Wage Calculator

WORKSHEET 2 - WORKFORCE ASSETS

COMPLETE THE TABLES BELOW.

In the comment box below, discuss the following:

1. the degree to which the *workforce assets* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate in educational programs and the workforce. What obstacles to participation exist?
3. how these programs build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Educational attainment	County/City	NC	U.S.
Less than high school			
High school graduate (includes equivalency)			
Some college, no degree			
Associate's degree			
Bachelor's degree			
Graduate or professional degree			

Educational attainment: in-migrants	County/City	NC	U.S.
Less than high school			
High school graduate (includes equivalency)			
Some college, no degree			
Associate's degree			
Bachelor's degree			
Graduate or professional degree			

Working age population	County/City	NC	U.S.

High science, engineering and technology employment	County	NC	U.S.

Comments on inclusion:

WORKSHEET 3 - PROGRAMS FOR YOUTH

LIST THE NAME OF EACH PROGRAM AND INDICATE WITH AN "X" WHETHER THE PROGRAM IS SCHOOL-BASED (AND IF IT OCCURS DURING THE SCHOOL DAY OR AFTER SCHOOL) OR COMMUNITY-BASED. ADD ADDITIONAL ROWS IF NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *programs for youth* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these programs build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Program	School-based		Community-based
	School day	After school	

Comments on inclusion:

LIST THE PROGRAM TYPE (COMMUNITY COLLEGE, COLLEGE AND UNIVERSITY, ETC.), THE NAME OF THE INSTITUTION PROVIDING THE PROGRAM, THE PROGRAM NAME, AND CREDENTIAL OR DEGREE TYPE (E.G., ASSOCIATE'S DEGREE, CERTIFICATE) OF RELEVANT PROGRAMS IN YOUR COMMUNITY/REGION. ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *workforce training programs* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these programs build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Program type	Institution	Program name	Credential/degree

Comments on inclusion:

InnovateNC Community Innovation Asset Map

WORKSHEET 5 - APPRENTICESHIP PROGRAMS

LIST THE NAME OF EACH RELEVANT APPRENTICESHIP PROGRAM IN YOUR COMMUNITY/REGION, THE SPONSOR (E.G., BUSINESS, ORGANIZATION), KEY SECTOR WHERE IT IS CONCENTRATED, AND THE APPROXIMATE NUMBER OF PEOPLE INVOLVED EACH YEAR. ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *apprenticeship programs* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these programs build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Program title	Sponsor	Sector	Annual # of participants

Comments on inclusion:

LIST THE NAME (OR LOCATION) AND TYPE OF EACH RELEVANT BUILDING/SPACE (E.G., INCUBATOR, PRODUCT DEVELOPMENT SPACE, "GRADUATION" COMMERCIAL SPACE, POTENTIAL SITES, OTHER INNOVATION ZONE) IN THE COMMUNITY. FOR COMMERCIAL SPACE, ADD THE SIZE OR APPROXIMATE SQUARE FOOTAGE, IF AVAILABLE. ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *buildings and other innovation zones* are accessible and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these spaces build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Name (or location) of space	Type of space	Size of commercial space (if applicable)

Comments on inclusion:

InnovateNC Community Innovation Asset Map

53

WORKSHEET 7 – INFRASTRUCTURE ASSETS

DESCRIBE EACH CATEGORY OF INFRASTRUCTURE ASSETS.

In the comment box below, discuss the following:

1. the degree to which the *infrastructure assets* in the community meet the needs of individuals that are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are benefiting from these assets and/or being actively recruited and engaged to benefit from them. What obstacles to participation exist?
3. how these infrastructure assets build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Transportation accessibility
Airports
Roads, rail, waterways
Broadband access
Utilities

Comments on inclusion:

LIST THE NAME OF EACH MENTORSHIP PROGRAM/PATHWAY AND THE ORGANIZING ENTITY (BOTH FORMAL AND INFORMAL). CAPTURE THOSE THAT ARE MOST RELEVANT (NOT EXHAUSTIVE). ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

5. the degree to which the *mentorship programs and mentors* are representative and inclusive of the community as a whole,
6. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
7. how these programs and individuals build social capital across diverse networks, and
8. how this has changed over the last two to three years.

Mentorship program/pathway	Organizing entity

Comments on inclusion:

WORKSHEET 9 – FINANCIAL ASSETS

DESCRIBE EACH CATEGORY OF FINANCIAL ASSETS.

In the comment box below, discuss the following:

1. the degree to which the *capital investment potential* in the community meets the needs of individuals that are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are benefiting from these assets and/or being actively recruited and engaged to benefit from them. What obstacles to participation exist?
3. how these infrastructure assets build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Readiness to leverage innovation-centered economic development resources
Early stage R&D
Early stage risk capital
Mid-stage risk capital, mezzanine financing, and collateralized capital
Capital for established companies

Comments on inclusion:

LIST THE NAMES OF THE TOP TEN ECONOMIC ASSET TYPES (INDUSTRY, SECTOR, CLUSTER, AND ANCHOR BUSINESS), THE NUMBER OF PEOPLE EMPLOYED, AND THE AVERAGE WAGE. IF CONSIDERED TO DRIVE GROWTH, PLACE AN "X" IN THE LAST COLUMN.

In the comment box below, discuss the following:

1. the degree to which these *economic assets* employ workers that are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate in these economic assets. What obstacles to participation exist?
3. how these economic assets build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Type	Name	# employed	Average wage	Driving growth
Industries				

Type	Name	# employed	Average wage	Driving growth
Sectors				

Type	Name	# employed	Average wage	Driving growth
Clusters				

Type	Name	# employed	Average wage	Driving growth
Anchor Businesses				

Comments on inclusion:

WORKSHEET 11 - SUPPORT SERVICES

LIST THE TYPE OF EACH SUPPORT SERVICE CATEGORY (TECHNICAL ASSISTANCE, LEGAL, SALES/MARKETING/STRATEGY), A DESCRIPTION (E.G., ACCOUNTING, INTELLECTUAL PROPERTY), AND THE NAME OF THE ORGANIZATION. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *support service providers* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these programs build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Type	Description	Name

Comments on inclusion:

LIST THE TYPE OF EACH CATEGORY (ASSOCIATIONS AND NETWORKS, PROGRAMS, EVENTS) AND THE NAME(S) OF THE KEY ORGANIZATIONS OFFERING THESE OPPORTUNITIES TO CONNECT. CAPTURE THOSE THAT ARE THE MOST RELEVANT AND ACCESSIBLE (NOT EXHAUSTIVE). ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *associations, networks, programs, and events* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these programs build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Type	Name(s)

Comments on inclusion:

WORKSHEET 13 – TRACKING OUTCOMES

LIST THE NAMES OF THE ORGANIZATIONS, INSTITUTIONS, AND PEOPLE THAT TRACK INNOVATION OUTCOMES IN THE COMMUNITY AND WHETHER THE DATA IS INFORMING DECISION-MAKING. CAPTURE THOSE THAT ARE THE MOST RELEVANT (NOT EXHAUSTIVE). ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *outcomes tracked* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate in data collection. What obstacles to participation exist?
3. how the data is informing decisions across diverse networks, and
4. how this has changed over the last two to three years.

Name	Informative

Comments on inclusion:

LIST THE TYPE OF POLICY (SUPPORTIVE, LIMITING) AND THE NAME OR BRIEF DESCRIPTION OF THE POLICY. CAPTURE THOSE THAT ARE THE MOST RELEVANT (NOT EXHAUSTIVE). ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which these *policies* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate in policy development. What obstacles to participation exist?
3. how these policies build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Type	Name/description

Comments on inclusion:

WORKSHEET 15 - CHAMPIONS

LIST THE TYPE OF CHAMPION (LOCAL/REGIONAL GOVERNMENT, COMMUNITY), AND THEIR NAME AND/OR ORGANIZATION. CAPTURE THOSE THAT ARE THE MOST RELEVANT (NOT EXHAUSTIVE). ADD ADDITIONAL ROWS AS NEEDED.

In the comment box below, discuss the following:

1. the degree to which the *champions* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how these champions build social capital across diverse networks, and
4. how this has changed over the last two to three years.

Type	Name	Organization

Comments on inclusion:

LIST THE NAME OF THE MEDIA SOURCE AND INDICATE WITH AN "X" WHAT TYPE OF RELEVANT MEDIA THEY PRODUCE.

In the comment box below, discuss the following:

1. the degree to which the *produced media* is representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how the media builds social capital across diverse networks, and
4. how this has changed over the last two to three years.

Name	Type				
	print	**digital**	**TV**	**radio**	**social media**

Comments on inclusion:

WORKSHEET 17 – ADDITIONAL ASSETS

LIST THE ASSETS MISSING FROM THE INNOVATENC COMMUNITY INNOVATION ASSET MAP THAT ARE IMPORTANT TO THE COMMUNITY'S 10-YEAR VISION FOR FOSTERING INCLUSIVE INNOVATION. INCLUDE ADDITIONAL ROWS AS NEEDED.

In the comments column, discuss the following:

1. the degree to which *these assets* are representative and inclusive of the community as a whole,
2. whether or not under-connected individuals are participating and/or being actively recruited and engaged to participate. What obstacles to participation exist?
3. how the asset builds social capital across diverse networks, and
4. how this has changed over the last two to three years.

Additional Asset	Comments

ACKNOWLEDGEMENTS

The ***InnovateNC Community Innovation Asset Map*** was developed with the experience and expertise of the InnovateNC partners, particularly RTI International, the NC Board of Science, Technology & Innovation, Forward Impact, The Kenan Institute of Private Enterprise at the University of North Carolina at Chapel Hill, and the Institute for Emerging Issues at North Carolina State University. The NC communities of Asheville, Greensboro, Pembroke, Wilmington/Carolina Coast, and Wilson piloted the Asset Map and provided feedback that was used to finalize the tool. The Economic Development Administration's NC Representative also provided critical feedback.

The Asset Map would not be possible without the generous support of the Research Triangle Park Foundation and the Kenan Creative Collaboratory, an initiative of the four Kenan Institutes and their host institutions, listed below.

- Frank Hawkins Kenan Institute of Private Enterprise (UNC-Chapel Hill)
- William R. Kenan, Jr. Institute for Engineering, Technology & Science (NC State University)
- Thomas S. Kenan Institute for the Arts (UNC School of the Arts)
- Kenan Institute for Ethics (Duke University)

InnovateNC

A Cross-City Learning Collaborative

Organizing Partner

NC STATE UNIVERSITY
Institute for Emerging Issues

PLEASE VISIT **InnovateNC.org** FOR MORE INFORMATION AND RESOURCES.