



Fostering and Nurturing Entrepreneurship in Northeast Ohio

A report of NorTech's
Entrepreneurship Task Force

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ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT

Northeast Ohio (NEO) is at a critical juncture in its economic development. NEO currently lags the nation and its peers in per capita income growth and job creation, and the gap is growing (Exhibit 1). In 1990, for example, NEO's per capita income was ~98 percent of the national average, while more entrepreneurial cities averaged ~102 percent. By 2002, NEO's per capita income had slipped to ~94 percent of the national average, while entrepreneurial cities improved to ~108 percent.

Job creation drives economic development and, specifically, per capita income growth. NEO cannot rely solely on large, established companies to create new jobs. First, many of NEO's largest companies have left the region, e.g., BP and TRW. Second, job creation in today's economy is driven increasingly by smaller, entrepreneurial companies (Exhibit 2). Small- and medium-sized firms (<500 employees) accounted for 77 percent of net new jobs created in the U.S. economy between 1990 to 1995 (and for a similar number from 1977 to 1990), even though they only account for approximately 50 percent of the total jobs in the economy.

Given this situation, entrepreneurial businesses, defined as young businesses in high-growth (usually technology-driven) industries, are clearly vital to NEO's future prosperity. A vibrant entrepreneurial region enjoys rapid business formation and growth, which accelerates job creation. Technology-based entrepreneurship is especially important because technology businesses generally create high-quality jobs, which boost per capita income growth.

Unfortunately, NEO currently lags entrepreneurial cities, peer cities, and the nation in entrepreneurship. NEO generally rates near the bottom in rankings of major metropolitan areas on entrepreneurship. *Entrepreneur Magazine's* 2002 survey of entrepreneurial regions ranks NEO 61st out of 61 major metropolitan areas. *Inc. Magazine's* 2000 survey of 50 large metropolitan areas ranks NEO 40th out of 50. Analyzing other metrics of entrepreneurship reveals similar results (Exhibit 3). NEO ranks next to last in a group of seven peer cities in annual IPOs and annual venture capital invested (when adjusted for population).

NORTECH'S ENTREPRENEURSHIP TASK FORCE (ETF)

In light of the importance of entrepreneurship to NEO's economic development, NorTech's 2002 strategy prioritized the fostering and nurturing of entrepreneurship in NEO. NorTech convened the Entrepreneurship Task Force (ETF) to diagnose the conditions inhibiting entrepreneurship in NEO and to recommend initiatives to

foster and nurture entrepreneurship in the region. NorTech recruited Bill Seelbach, an experienced business and community leader, to form and lead the ETF.

In Fall 2002, Seelbach recruited 17 regional entrepreneurs and community leaders to serve on the ETF (Exhibit 4). At its first meeting on October 22, 2002, the ETF adopted a 4-month work plan (Exhibit 5). The ETF followed a 3-stage process:

- ¶ Define and assess the current state of entrepreneurship in NEO
- ¶ Develop and prioritize options for improving entrepreneurship in NEO
- ¶ Design/refine and evaluate initiatives to improve entrepreneurship.

In the first stage, the ETF identified the needs of NEO entrepreneurs through analysis of an Enterprise Development Inc. (EDI) survey of 84 entrepreneurs and through personal interviews of more than 40 entrepreneurs and “friends of entrepreneurs.” From this input, the ETF identified key issues inhibiting entrepreneurship in NEO. In the second stage, the ETF codified these key issues, developed a set of criteria for evaluating initiatives to address these key issues, and evaluated a catalog of 68 potential and ongoing initiatives. This evaluation produced seven agreed-upon initiatives to push further.

In the third stage, the ETF refined the vision for each initiative. Best practices from other regions and from existing NEO organizations were built in where appropriate. At the February 11, 2003, ETF meeting, initiative leaders presented the refined vision for each initiative to the ETF. The February 11 meeting generated a set of recommendations to improve entrepreneurship in NEO, which are discussed below.

KEY ISSUES INHIBITING ENTREPRENEURSHIP IN NEO

In assessing the current state of entrepreneurship in NEO, the ETF collected input from regional entrepreneurs on their key, unmet needs. An EDI survey of 84 regional entrepreneurs identified several important needs and asked entrepreneurs to rate these needs on their perceived importance and on NEO’s current performance in meeting those needs. The survey results revealed several areas in which important needs are not being met, e.g., assistance in finding appropriately staged capital and networking between entrepreneurs (Exhibit 6). Personal interviews with regional entrepreneurs confirmed these results and identified other needs as well.

In all, regional entrepreneurs identified eight key issues inhibiting entrepreneurship in NEO (Exhibit 7):

- ¶ NEO entrepreneurs oftentimes lack the skills to convert ideas into nationally competitive business concepts/plans
- ¶ There is a perceived shortage of entrepreneurs and supplemental talent in NEO
- ¶ High-quality networking opportunities for entrepreneurs are scarce
- ¶ There is a limited understanding of the capital continuum, poor visibility into the available capital for different stages of a business' life cycle, and a shortage of capital in the preseed and seed stages
- ¶ Significant ambiguity exists about entrepreneur assistance organizations (EAOs) and there is a perception of duplicative service offerings
- ¶ NEO historically has not celebrated its successful entrepreneurs and has had a low tolerance for entrepreneurial failure
- ¶ Regional marketing efforts have failed to create a fair perception of NEO's strengths
- ¶ The business community has been largely indifferent to supporting or sourcing from local entrepreneurs.

These key issues guided the ETF in selecting high-impact initiatives to improve entrepreneurship in NEO.

ETF-RECOMMENDED REGIONAL INITIATIVES

In light of the key issues inhibiting NEO entrepreneurship, the ETF considered dozens of current and potential initiatives to improve entrepreneurship in NEO. The wealth of good ideas and the desire to be efficient with community resources forced the ETF to prioritize initiatives based on potential impact, ease of implementation (including the resources required for implementation), and examples of similar initiatives succeeding in other regions (Exhibit 8). Guided by these criteria and by the subsequent development and refinement of various initiatives, the ETF recommends implementation of a set of five initiatives that address high-priority, unmet needs of regional entrepreneurs (Exhibit 9).

1. NEOpreneur Inc.

The ETF envisions NEOpreneur Inc. as a world-class entrepreneurship intermediary providing direct, high-quality assistance in business building to entrepreneurs with high-potential business concepts, including capital where appropriate, and acting as a gateway to route the region's entrepreneurs to appropriate regional services (Exhibit 10). The ETF estimates that this initiative will result in the creation of ~4,600 high-quality jobs in NEO over the next 10 years.

NEOpreneur Inc. (NI) would offer three basic service lines: an entrepreneur's gateway, entrepreneur development, and entrepreneur funding. The entrepreneur's gateway would be a "front-door" point of contact for the region's entrepreneurs to access for-profit and nonprofit entrepreneur services. The gateway would be open to all, but would focus on regional entrepreneurs in high-growth businesses. The gateway would provide, among other services, a diagnostic/needs assessment to entrepreneurs prior to routing them to appropriate services.

The second service line offered by NI, entrepreneur development, would involve the provision of high-quality, intensive, tailored assistance in business building to selected entrepreneurs. This assistance would be provided primarily through two selective programs.

The short-term Biz Launch program, based on successful programs in San Diego and Raleigh/Durham, would provide high-impact advice to selected entrepreneurs (~45 entrepreneurs per year). Entrepreneurs would be advised by a volunteer board consisting of capital/service providers, experienced entrepreneurs, technical advisors, etc., and by NI's experienced staff and entrepreneurs-in-residence. Biz Launch program managers would ensure repeated interactions of entrepreneurs with NI entrepreneurs-in-residence, and advisory boards over a 2-month period. In addition to making valuable connections, these interactions would provide the entrepreneur with high-quality advice on a host of issues, e.g., identifying target markets, protecting IP, and accessing capital. With this advice, entrepreneurs will be better able to identify the critical path forward for their business.

The second approach would be a highly selective, long-term entrepreneur development program that is based on an account management model. For each entrepreneur "account," a team would be formed consisting of an NI account manager (with MBA skills and some business experience) and an experienced

entrepreneur-in-residence. The account team would manage the delivery of tailored assistance for each long-term account/client through three primary activities:

- ¶ Accessing pools of resources on behalf of the account to form an appropriate “advisory board” and leverage advantaged relationships with nonprofit and for-profit service provider networks
- ¶ Providing direct guidance as appropriate and staff work on an as-needed basis, e.g., market research
- ¶ Managing/recommending interactions with the advisory board and others (e.g., customer or codevelopment contacts).

The program would select only ~15 new entrepreneur accounts per year. Each account would be served for 1 to 2 years.

The third service line, entrepreneur funding, would involve the management of a preseed/seed fund to be invested in selected startups. The fund would be sized to place ~\$3 million annually in ~15 companies (5 preseed stage, 10 seed stage). Companies in the investment portfolio would receive long-term entrepreneur development services for 1 to 2 years. The fund would focus on placements ranging from ~\$100,000 up to ~\$250,000. Investment returns could replenish the fund in 5 to 10 years.

NI would occupy a unique niche in the NEO community (Exhibit 11). While NI’s entrepreneur development service line is similar to that offered by BioEnterprise in the biosciences sector, NI would serve different sectors, e.g., IT and polymers. In the biosciences sector, NI would serve select companies in the preseed and seed stages that would not otherwise be served by BioEnterprise.

NI’s service lines would also be complementary to the service lines of existing EAOs, including CAMP, EDI and NEOSA (Exhibit 12). While other EAOs concentrate on serving a greater number of entrepreneurs with less intense interactions, e.g., seminars on business plan-writing, NI would focus on more intensive interactions with a small, select group of entrepreneurs.

To have the desired impact, NI will require, when fully operational, ~\$2.5 million annually to fund operating expenses and ~\$3 million annually for placements in select preseed and seed-stage entrepreneurial companies. NI could initially be funded by grants from regional foundations and the public sector. Investment returns could replenish the fund in 5 to 10 years. Additional income could be generated by taking equity-based compensation for entrepreneur development services or through corporate sponsorships, e.g., by service providers.

2. NEOpreneur Exchange

NEOpreneur Exchange (NE) is envisioned as a network of NEO entrepreneurs who engage in a set of managed, high-quality interactions in order to tangibly and measurably improve their odds of success (Exhibit 13). The ETF estimates that this initiative will result in the creation of ~1,200 high-quality jobs in NEO over the next 10 years.

NE would offer two types of networking events – closed events and open events. Entrepreneurs have repeatedly stressed their preference for closed events, which are small-scale, frequent events intended to foster real networking among NE members, e.g., CEO roundtables, “meet-the-customer” events, and sector-specific panel discussions (Exhibit 14). NE would focus heavily on providing these events. The events would be restricted to selected groups of NE members and invited guests. NE’s target membership would be CEOs of small companies (<150 employees). The profile for the typical NE member is the following:

- ¶ Committed to growing his/her company
- ¶ Committed to helping other growth companies in NEO
- ¶ Aspires to build a globally, not just regionally, competitive firm.

NE would also offer open events, which are high-visibility events intended to attract media and community attention to issues related to entrepreneurs and entrepreneurship, e.g., evening socials. These events would be relatively infrequent, fee based, and open to all (not only NE members).

NE, when fully operational, would require ~\$400,000 annually to fund operating expenses.

3. Intermediary Effectiveness and Efficiency

There are several discussions among regional EAOs that, with proper leadership and coordination, could lead to a more effective and efficient entrepreneur - assistance system in NEO. CAMP, EDI and NEOSA are discussing the linkages of their existing service lines and working to better coordinate their efforts to bring focus and scale to these services. The Ohio Aerospace Council (OAC) is discussing a strategic plan to leverage NASA-Glenn Research to create new businesses. There are a host of other initiatives being discussed by organizations in various regional clusters (IT, polymers, biosciences, instruments/controls/electronics, fuel cells).

The ETF believes that opportunities exist for active and explicit leadership in these discussions, particularly in two areas:

- ¶ **NEO technology clusters:** Opportunities exist to ensure that regional efforts to enhance entrepreneurship, e.g., NI, are not duplicated in each of the various regional clusters. To this end, the IT Leadership Steering Committee has decided not to develop IT-specific entrepreneur development and funding capabilities in light of the potential overlap with NI. Discussions should be conducted with other clusters to reach a similar conclusion.
- ¶ **EAOs:** There are opportunities to influence EAOs to focus and appropriately scale existing service lines and to eliminate duplication, e.g., selecting a single EAO to manage NEO's system of incubators. The creation of NI and NE should also be used to focus the CAMP/EDI/NEOSA discussions already under way.

4. Early-Stage Business Attraction

This initiative has emerged out of a prior regional project called “Best New Ventures,” led by business and community leaders including Kip Horsburgh, Gil Van Bokkelen, and Brad Whitehead. The ETF envisions this initiative as an evergreen, targeted approach to identify and attract early-stage, entrepreneurial companies to NEO. The ETF recommends that Team NEO, a new regional attraction/marketing organization, should implement this initiative by adding one full-time employee, focused on the early-stage market segment. To identify target companies, the Team NEO account manager would work with local VCs, angel investors, BioEnterprise, CCF Innovations, and other regional players with access to national and international deal flow. Once potential target companies are identified, the account manager would assess, for each potential target, the attraction package required to attract the company to NEO.

The attraction package for these early-stage companies would likely consist of a relocation cash incentive, entrepreneur development services, subsidized/ free space, access to capital, etc. The account manager would work with the public sector, foundations, and others to raise funds for cash relocation incentives and with regional EAOs, e.g., NI and BioEnterprise, to deliver entrepreneur assistance services once the company has relocated.

5. Star Researcher Attraction and Development

The Star Researcher Attraction and Development initiative (SRA) is an innovative program to help NEO institutions attract star researchers with “commercializeable research” and encourage new business creation by these researchers and their associates (Exhibit 15). The ETF estimates that this initiative will result in the creation of ~400 high-quality jobs in NEO over the next 10 years.

SRA would offer two service lines, a star recruitment fund and new business-creation support services. The star recruitment fund would enhance resources deployed by NEO universities to recruit star researchers (e.g., the fund would provide 50 percent of the endowment, or ~\$1 million per star researcher). The recruitment fund would be open to stars in all areas with significant priority given to those in NEO’s technology clusters (e.g., biosciences, IT, polymers/advanced materials). The fund would focus on stars with a national reputation, whose research agendas have strong commercial potential, particularly where this potential is likely to lead to the formation of new companies in NEO.

The SRA would also provide new business-creation support services to star researchers and their associates by linking them to NI and other regional entrepreneur services as appropriate. Additionally, SRA staff would advocate and support robust technology commercialization efforts at NEO research institutions.

SRA, when fully operational, would require ~\$400,000 annually to fund operating expenses, and an additional \$5 million annually for direct investment to attract star researchers (assuming 5 star researchers are recruited to the region each year).

IMPACT OF ETF-RECOMMENDED INITIATIVES

The ETF-recommended initiatives address high-priority, unmet needs as identified by entrepreneurs in NEO (Exhibit 16). These initiatives squarely address two critical needs of entrepreneurs – acquiring the skills needed to convert ideas into nationally competitive business concepts/plans, and high-quality networking opportunities. The ETF initiatives also have significant impact on other high-priority needs, including the visibility and availability of capital in NEO, ambiguity about and perceived duplication of EAO service offerings, the perceived shortage of entrepreneurs in NEO, and the lack of regional celebration of successful entrepreneurs.

The ETF initiatives would also create thousands of high-quality jobs, many new companies, and would significantly increase the regional tax base (Exhibit 17). In

the next 10 years, for example, the NI, NE, and SRA initiatives would create approximately 12,500 new jobs and 60 new companies in NEO.

NEO would also experience significant improvement in performance on key entrepreneurship indicators (see Exhibit 18). The ETF initiatives would substantially increase the number of IPOs and the amount of VC invested in NEO. As a result, NEO would outperform most of its peers, as compared with the current situation in which NEO ranks near the bottom of its peers.

While this impact is significant, especially with regard to its peer cities, NEO will need to do more if it is to become a truly entrepreneurial region. There are unmet needs of entrepreneurs that have not been fully addressed by the ETF-recommended initiatives, e.g., the lack of celebration of entrepreneurial successes (see Exhibit 16). The ETF believes that key issues not fully addressed by ETF-recommended initiatives can best be attacked, at least in the near term, by bringing scale and resources to existing efforts, e.g., to EDI on the lack of celebration issue, and to Team NEO on regional marketing. In the longer term, NEO should continue to prioritize entrepreneurship and consider the need for additional programs because of the importance of entrepreneurship to the region's overall economic vitality.

NEXT STEPS FOR THE REGION

On February 28, 2003, the chairman of the ETF, Bill Seelbach, presented the recommendations of the ETF to the NorTech Executive Council (EC). In an enthusiastic show of support, the EC voted unanimously to approve these recommendations. More importantly, NorTech and the EC members agreed to assist in the implementation of the initiatives.

Implementation of the ETF initiatives will require a significant commitment of financial resources. For example, to achieve the desired impact of ~12,000 jobs in 10 years, the NI and NE initiatives would require ~\$2.9 million annually to cover operating expenses, and ~\$3.1 million annually to finance the NI preseed/seed fund (see Exhibit 19). SRA, which contributes relatively few jobs but has broader regional benefits, would require \$400,000 annually to cover operating expenses and \$5.0 million annually for direct investment to attract 5 star researchers per year. Much of this funding, at least initially, will have to be in the form of grants from the public sector, foundations, and individuals. High-quality implementation of these initiatives requires sufficient funding to hire highly skilled staff and to operate the initiatives at the recommended scale.

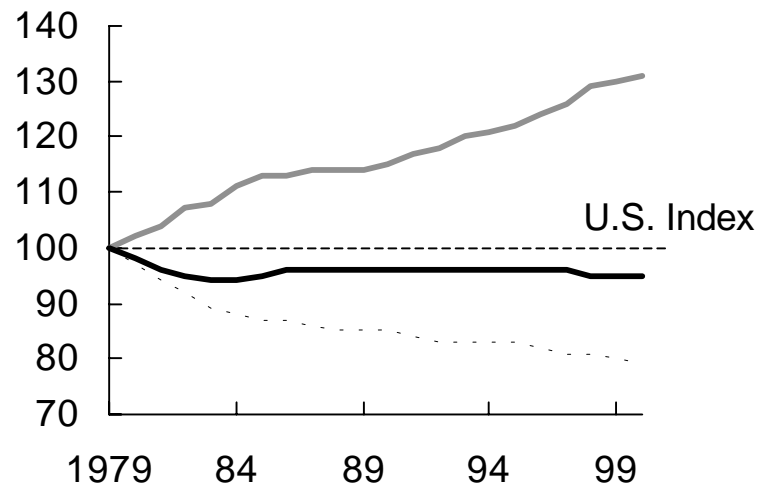
Implementation of the initiatives will also require committed, high-quality leadership, including initiative champions and founding board members with the appropriate commitment, stature and experience to bring the initiatives to life.

The region (led by NorTech) cannot implement these initiatives without a substantial regional commitment of financial support and leadership resources. Inaction or insufficient action on these initiatives could slow the region's economic development for years to come, with NEO falling further behind its peers and the nation. Conversely, immediate NEO action to implement these initiatives at the scale and quality recommended would result in a dramatic improvement in entrepreneurship and in the prospects for economic vitality in the region. We strongly urge NEO to choose the latter route.

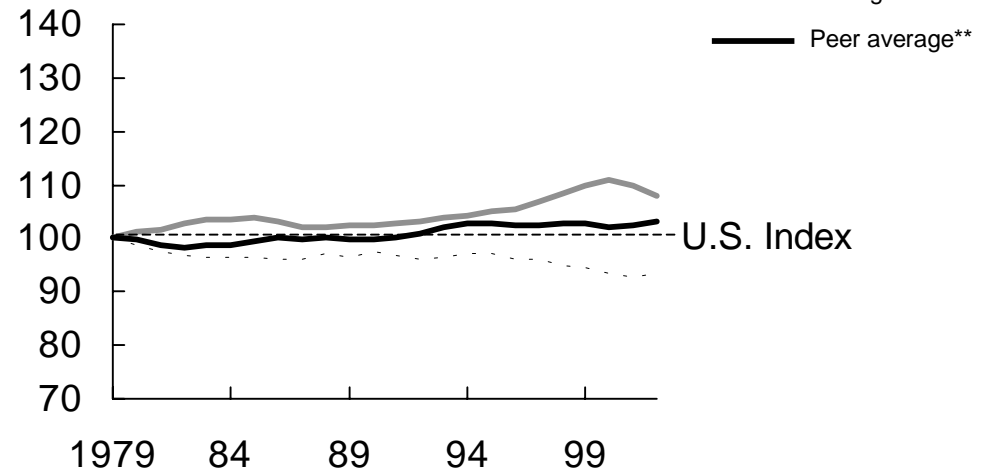
EXHIBIT 1: NEO LAGS BEHIND ITS PEERS AND ENTREPRENEURIAL REGIONS ON KEY ECONOMIC INDICATORS

Percent

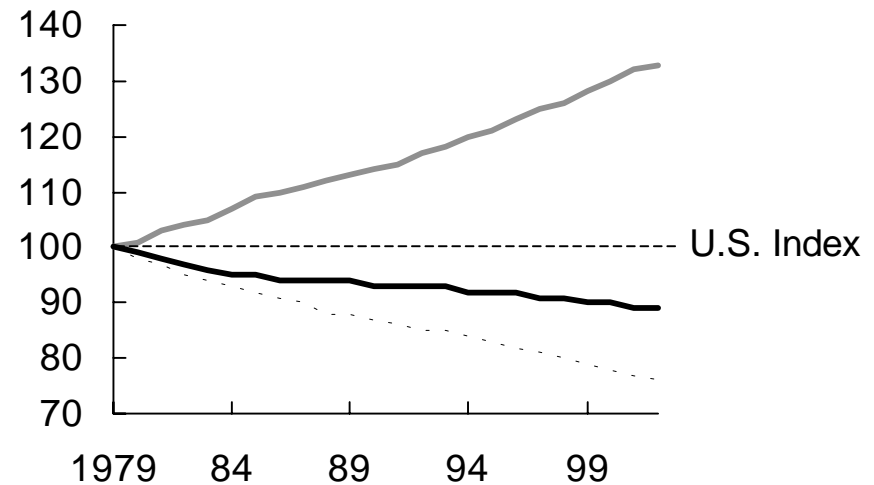
Employment



Per Capita Income



Population



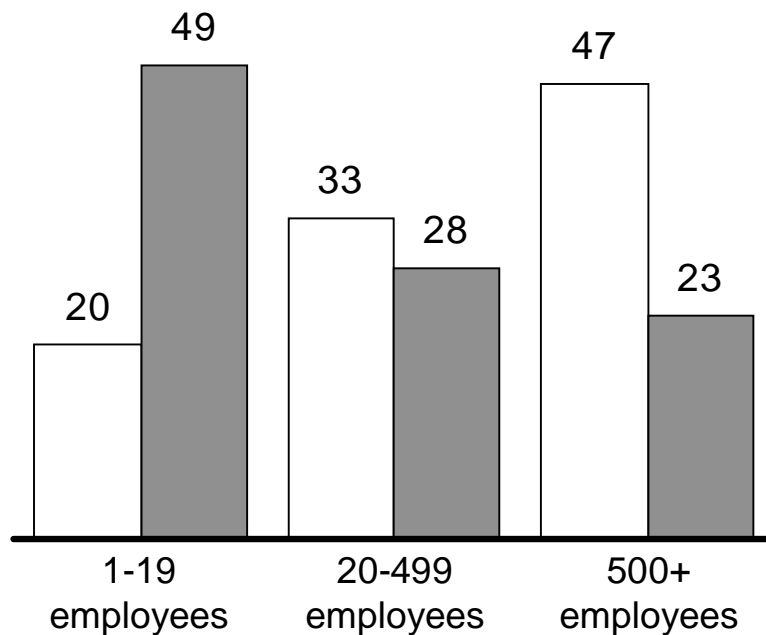
* Atlanta GA MSA, Austin-San Marcos TX MSA, Boston MA-NH NECMA, Dallas TX PMSA, Denver CO PMSA, Houston TX PMSA, Portland-Vancouver OR-WA PMSA, Raleigh-Durham-Chapel Hill NC MSA, Seattle-Bellevue-Everett WA PMSA, Washington DC-MD-VA-WV PMSA

** Baltimore MD PMSA, Buffalo - Niagara Falls NY MSA, Cincinnati OH_KY -IN PMSA, Columbus OH MSA, Detroit MI PMSA, Indianapolis IN MSA, Milwaukee-Waukesha WI PMSA, Nashville TN MSA, Pittsburgh PS PMSA, St. Louis MO-IL MSA

EXHIBIT 2: SMALL- AND MEDIUM-SIZED COMPANIES CREATE MORE JOBS THAN LARGER FIRMS

□ Employment share
■ Net new employment

Sources of new job creation – 1990 to 1995
Percent



Even though small- and medium-sized firms account for just over half the jobs in the economy, they are responsible for creating 77% of net new jobs*

* Data from 1977-1990 show similar results
Source: U.S. Small Business Administration

EXHIBIT 3: NEO PERFORMANCE ON ENTREPRENEURSHIP RELATIVE TO 7 PEERS – 2 MEASURES

Annual IPOs – 1996-2002
Average

Region	Rank	Current IPOs per million population Index value
Minneapolis	1	364
Baltimore	2	176
Pittsburgh	3	156
Columbus	4	147
Indianapolis	5	110
NEO	6	100
Cincinnati	7	83

Annual VC invested – 1996-2002
Average

Region	Rank	Current VC invested per million population Index value
Minneapolis	1	398
Baltimore	2	350
Pittsburgh	3	220
Columbus	4	168
Cincinnati	5	101
NEO	6	100
Indianapolis	7	96

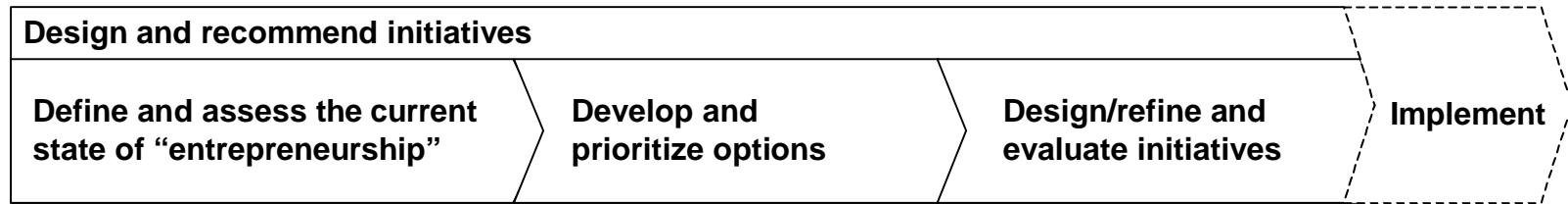
EXHIBIT 4: MEMBERS OF NORTECH'S ENTREPRENEURSHIP TASK FORCE

	Name	Representing	Title/role
Industry (entrepreneurs)	<ul style="list-style-type: none"> • Becca Braun • Ron Copfer • Don Heestand • Jim Hummer • AJ Hyland • Sue Lan Ma • Kenn Ricci • Doug Weintraub 	<ul style="list-style-type: none"> • Supplier Insight • Fathom Interactive Solutions • E-Merging Technologies Grp. • WholeHealth Management • Hyland Software • Blue Dawn • FlightOptions • Centerprise Information Solutions 	<ul style="list-style-type: none"> • Founder & V.P. Dev. • President • CEO • President & CEO • President & CEO • Owner • Chairman & CEO • President & CEO
Universities	<ul style="list-style-type: none"> • Mark Coticchia • George Newkome • John West 	<ul style="list-style-type: none"> • Case Western Reserve University • University of Akron • Kent State University 	<ul style="list-style-type: none"> • V.P. Research & TM • V.P. Research & GS • Director, Liquid Crystal Institute
Capital providers	<ul style="list-style-type: none"> • Eric Von Hendrix 	<ul style="list-style-type: none"> • Shorebank Cleveland 	<ul style="list-style-type: none"> • President
Entrepreneur assistance organizations	<ul style="list-style-type: none"> • Keith Ashmus • Don Knechtges • Bill Seelbach* • Jeff Sinclair • Brad Whitehead 	<ul style="list-style-type: none"> • COSE • GLIDE • NorTech • NorTech • The Cleveland Foundation 	<ul style="list-style-type: none"> • Board Chair • Director • Board Member • Board Member • Senior Fellow

Note: Does not include: Lynn-Ann Gries, Jamie Ireland and Bill Mulligan of NorTech's Early-stage Capital Task Force (ESCTF) who participated in the development of NEOpreneur Inc.; Kip Horsburgh who participated in the development of the early-stage business attraction initiative; or Joe Roman of Cleveland Tomorrow and Dorothy Baunach of NorTech who participated across all initiatives. The ETF was staffed by McKinsey & Company

* Chairman of the ETF

EXHIBIT 5: NORTECH ENTREPRENEURSHIP TASK FORCE – HIGH-LEVEL WORKPLAN



Task Force meetings

▲
Oct. 22

▲
Dec. 10

▲
Feb. 11

Key activities

- Clearly articulate and scope the ETF effort
- Identify needs of entrepreneurs in Northeast Ohio (NEO) through:
 - EDI survey of ~80 entrepreneurs
 - Interviews with ~25 entrepreneurs
- Assess current efforts to foster/nurture entrepreneurship
 - Interviews with intermediaries, capital and service providers, business leaders, etc.
 - Quantify activities, resources, and impact where possible
- Identify and evaluate best practice regions/cities

- Codify key issues inhibiting entrepreneurship in NEO
- Capture list of potential and ongoing initiatives (68 unique options identified)
- Develop and syndicate criteria to evaluate options
- Evaluate options against criteria for impact and ability to capture (ETF working session prioritization)

- Refine/craft vision for each initiative including resources required
 - Build in best practices where appropriate
 - ETF working team input
- Identify champions
- Develop perspective on impact of initiatives
 - Initiative-level impact
 - Impact in total vis-à-vis aspirations

End products

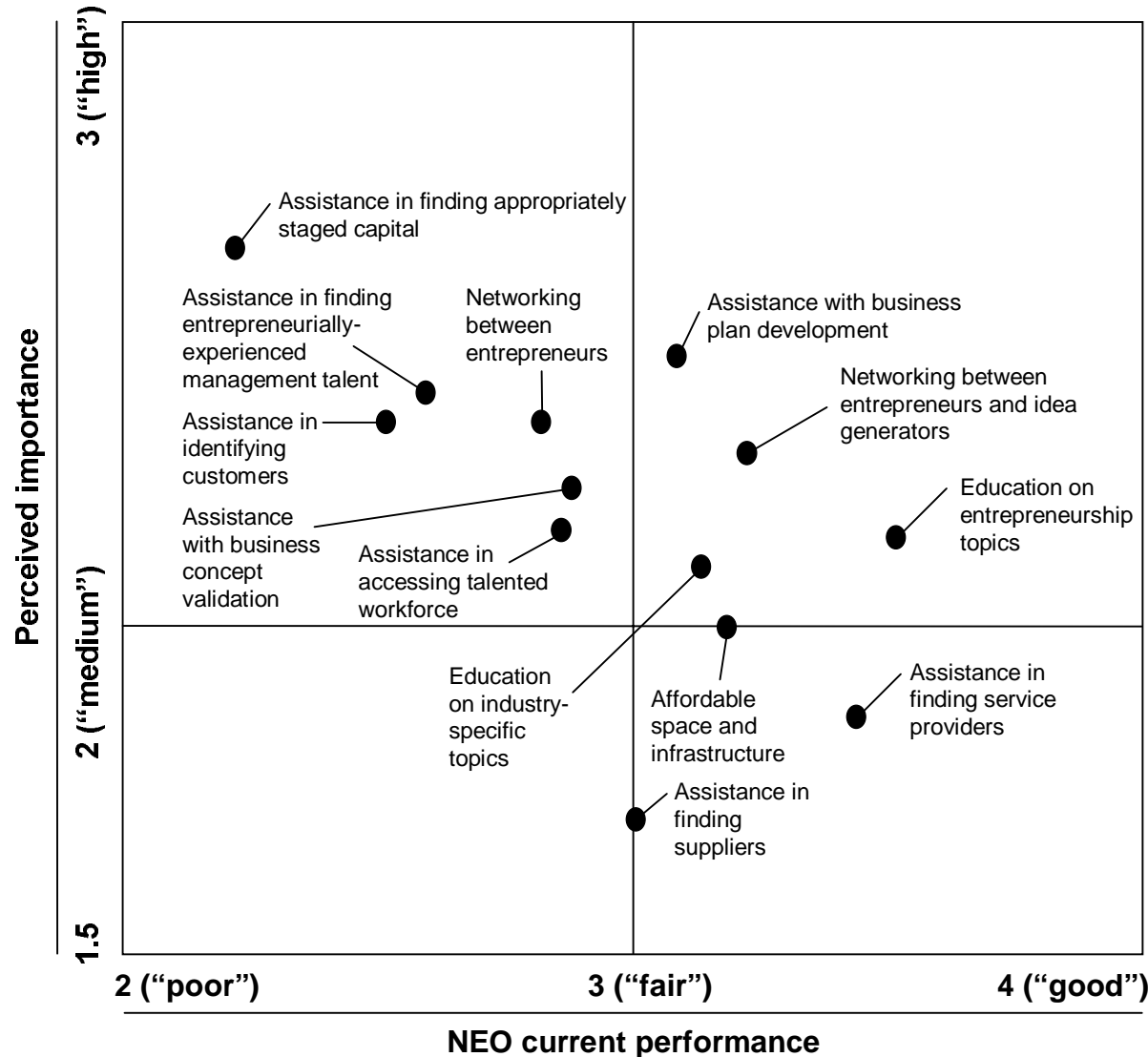
- Diagnosis of entrepreneurial culture in NEO
- Quantification of resources dedicated to service lines of entrepreneur assistance organizations

- 7 agreed-upon initiatives to push further
- ETF volunteer teams to help the working team craft the vision for each initiative

- Recommendation on set of initiatives to improve entrepreneurship
- ETF champions and key supporters identified
- NorTech presentation and white paper

EXHIBIT 6: NEO ENTREPRENEURIAL CULTURE DIAGNOSIS – ENTREPRENEURS’ PERSPECTIVE*

Responses = 84



- NEO is not fully meeting 6 of the 10 more important needs of entrepreneurs, e.g.,
 - Assistance in finding appropriately staged capital
 - Assistance in finding entrepreneurially-experienced management talent
 - Assistance in identifying customers
- NEO performs better, though still not distinctive, in meeting less important needs, e.g.,
 - Assistance in finding service providers
 - Assistance in finding suppliers
- Overall NEO performance score:
 - Average = 3.0
 - Importance-weighted average = 2.9

* Survey respondents ranked importance on a scale of 1 (“low”) to 3 (“high”) and performance on a scale of 1 (“very poor”) to 5 (“excellent”)

Source: EDI survey; Team analysis

EXHIBIT 7: LOCAL ENTREPRENEURS IDENTIFIED 8 KEY ISSUES INHIBITING ENTREPRENEURSHIP IN NEO

- NEO entrepreneurs oftentimes **lack the skills to convert ideas into nationally-competitive business concepts/plans**
- A perceived **shortage of entrepreneurs** and supplemental talent in NEO
- **Limited high-quality networking opportunities for entrepreneurs**
- **Limited understanding of the capital continuum, poor visibility into the available capital** for different stages of a business' life cycle, and a **shortage of capital in the pre-seed and seed stages**
- Significant **ambiguity about entrepreneur assistance organizations (EAOs)** and perception of **duplicative service offerings**
- NEO historically has **not celebrated its successful entrepreneurs** and has had a **low tolerance for entrepreneurial failure**
- Regional **marketing efforts** have failed to create a fair perception of NEO's strengths
- Business community has been largely **indifferent to supporting or sourcing from local entrepreneurs**

Note: Key issues not prioritized or ranked
Source: EDI survey results of 85 entrepreneurs; McKinsey interviews with over 40 entrepreneurs and "friends of entrepreneurs"

EXHIBIT 8: CRITERIA FOR IDENTIFYING ETF RECOMMENDED INITIATIVES

Addresses key issues inhibiting entrepreneurship (proxy for impact)

- High-priority, unmet need in entrepreneurs' survey
- Consistent and “loud” feedback from interviews on an unmet need
- Gap exists in effective delivery of regional services by Entrepreneur Assistance Organizations (e.g., insufficient resources currently allocated, lack of requisite skills, wrong emphasis, etc.)

Ease of implementation

- Champion identified or already in place
- Existing natural owner/organization positioned to execute
- Bias towards exciting new initiatives versus re-energizing existing efforts
- Complexity of idea (timing, nature of activities, required skill set, resource intensity)
- Ability to raise necessary funding

Examples of similar initiatives (programs) in other regions

EXHIBIT 9: SET OF ETF-RECOMMENDED INITIATIVES

Initiative name	Brief description	
1) NEOpreneur Inc.	<ul style="list-style-type: none"> • Gateway routes region’s entrepreneurs to appropriate services after completion of needs assessment • High-quality, intensive, tailored assistance in business building to selected high-potential entrepreneurs • Pre-seed/seed fund 	Implement jointly
2) NEOpreneur Exchange	<ul style="list-style-type: none"> • Highly managed club of NEO entrepreneur CEOs/owners focusing on intimate, “closed” networking events 	
3) Intermediary effectiveness/efficiency	<ul style="list-style-type: none"> • More effective and less duplicative entrepreneur assistance service lines 	
4) Early-stage business attraction	<ul style="list-style-type: none"> • Identification and attraction of high-potential early-stage technology businesses to NEO from around the nation/world 	
5) Star researcher attraction/development	<ul style="list-style-type: none"> • Fund and program that enables NEO universities to hire star researchers with commercializable research and/or new business creation potential 	

EXHIBIT 10: “NEOPRENEUR INC.” VISION

Vision

A world-class entrepreneurship intermediary providing direct, high-quality assistance in business building to entrepreneurs with high-potential business concepts, including capital where appropriate, and acting as a gateway routing the region’s entrepreneurs to appropriate regional services

10-year aspiration

NEO ranked above peers as an entrepreneurial region, with rapid business formation and growth, creating ~4600 high-quality jobs in NEO

Service lines

Entrepreneur’s Gateway	Entrepreneur Development	Entrepreneur Funding
<ul style="list-style-type: none"> • Serves as a “front-door” point of contact for the region’s entrepreneurs to access for-profit and non-profit entrepreneur services <ul style="list-style-type: none"> – Provides traditional and web-based reference materials on entrepreneurship and service providers – Located in a “cool,” “outrageous” physical space – Collects data on NEO entrepreneurs • Provides diagnostic/needs assessment to entrepreneurs prior to routing to appropriate services • Evaluates and provides feedback to non-profit and for-profit service providers 	<ul style="list-style-type: none"> • Delivers high-quality, intensive, tailored assistance in business building to selected entrepreneurs • Assistance provided primarily through 2 selective programs: <ul style="list-style-type: none"> – 8-week Biz Launch program – Long-term entrepreneur development for NI accounts (i.e., clients in portfolio) • Account team (manager and entrepreneur-in-residence) manages tailored assistance for each long-term account/client <ul style="list-style-type: none"> – Accesses pools of resources on behalf of account to form an appropriate “advisory board” and leverage advantaged relationships with non-profit and for-profit service provider networks – Provides guidance as appropriate and staff work on an as-needed basis, e.g., market research – Manages/recommends interactions with advisory board and others (e.g., customer or co-development contacts) • High-quality/impact advice and guidance provided by advisory boards comprised of experienced entrepreneurs, capital/service providers, and other senior business leaders 	<ul style="list-style-type: none"> • Manages a pre-seed/seed fund to be invested in selected start-ups/entrepreneurs <ul style="list-style-type: none"> – Places ~\$3 million annually in ~15 companies (5 pre-seed, 10 seed stage) – Companies in portfolio actively served for 1-2 years – Focuses on placements from ~\$100,000 up to ~\$250,000 – Investment returns replenish fund in 5-10 years • Investment committee, consisting of NI board members and some independents, has approval rights for investment decisions • Links to for-profit seed and early-stage funds in region to enhance visibility of portfolio companies and coordination of follow-on investments

Target market

Open to all, focused on NEO entrepreneurs in high-growth businesses

High-potential entrepreneurs/companies in high-growth (technology) businesses

EXHIBIT 11: NEOPRENEUR INC. WOULD BE A PUBLIC ENTITY SIMILAR TO BIOENTERPRISE THAT PROVIDES CAPITAL AND BUSINESS DEVELOPMENT SERVICES TO SELECT GROWTH BUSINESSES

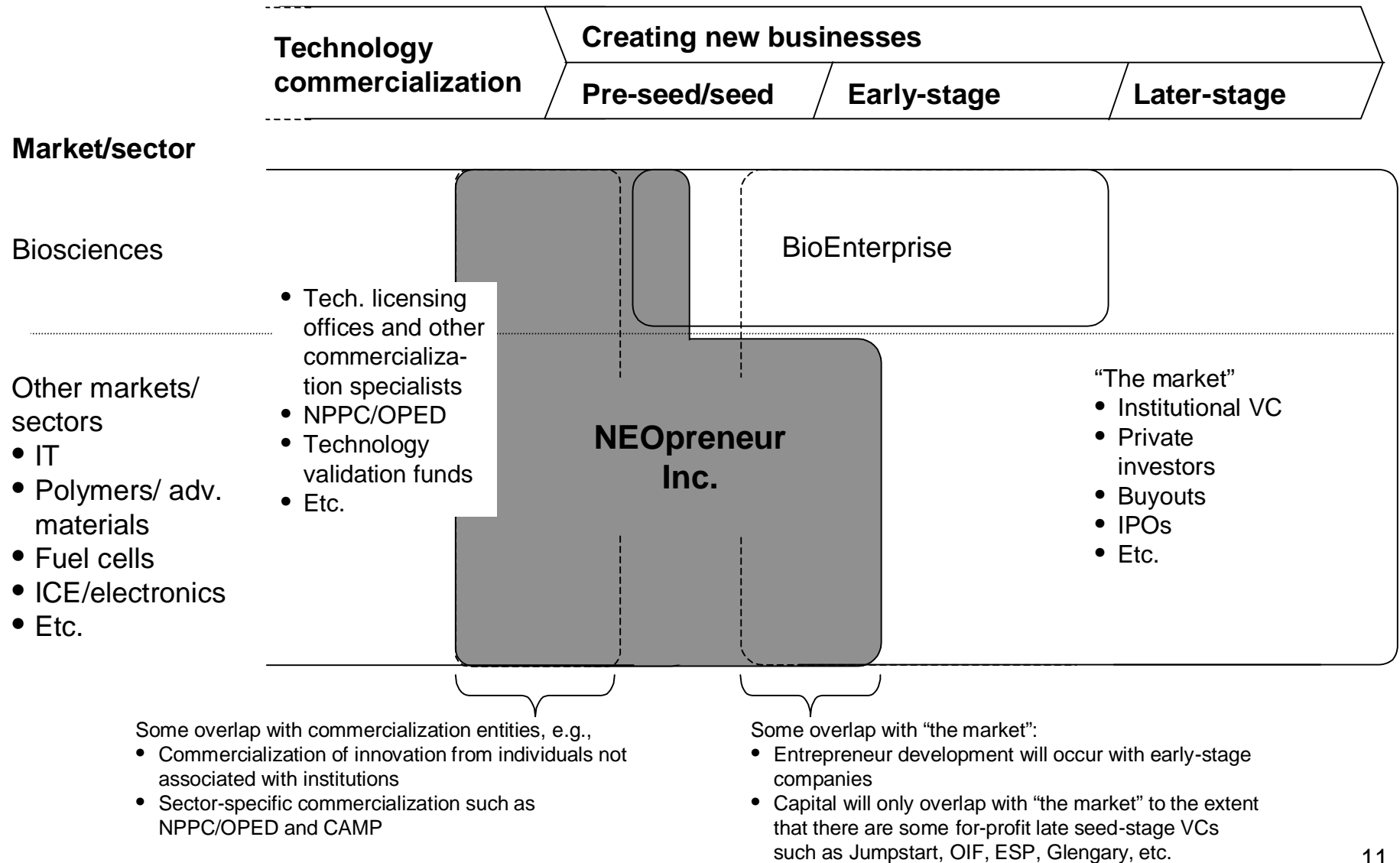


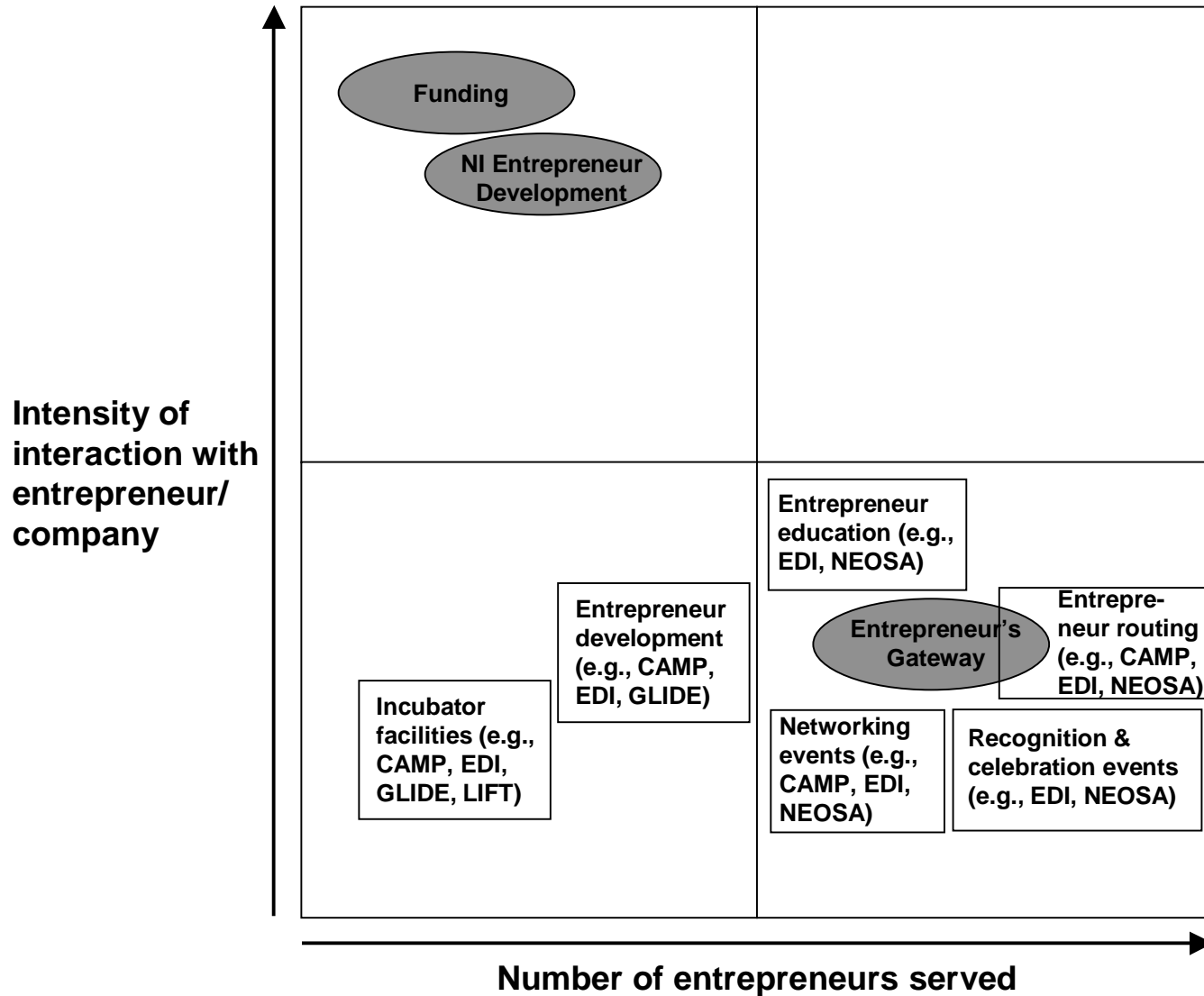


EXHIBIT 12: NEOPRENEUR INC.'S SERVICE LINES ARE COMPLEMENTARY TO THOSE OF EXISTING ENTREPRENEUR ASSISTANCE ORGANIZATIONS

NOT EXHAUSTIVE*
CONCEPTUAL

-  NI service lines
-  Current intermediary service lines



* Does not include service lines of organizations whose primary focus is not entrepreneurship, e.g., COSE's small business support services
Source: Team analysis

EXHIBIT 13: NEOPRENEUR EXCHANGE (NE) – VISION AND DESCRIPTION

Vision

A network of Northeast Ohio (NEO) entrepreneurs who engage in a set of managed, high-quality interactions in order to tangibly and measurably improve their odds of success

Aspirations

- ~1,200 high-quality jobs created in NEO over next 10 years (through increased entrepreneur effectiveness)
- Majority of club members attribute specific revenue/profit increases to club events
- Significant increase in connectivity perceived by NEO entrepreneurs
- Club is a major focal point of media attention on entrepreneurs (quotes, member statistics, etc.)

Club events

Closed events	Open events
<ul style="list-style-type: none"> • Small-scale, frequent events intended to foster “real” networking among NE members • These events are the focus of NE efforts, e.g., CEO round tables, “meet-the-customer” events and sector-specific panel discussions • Free events restricted to all or selected groups of NE members and invited outsiders 	<ul style="list-style-type: none"> • High visibility events intended to attract media and community attention to issues related to entrepreneurs/ship • Examples include evening socials and one-day conferences • Entry fee-based, relatively infrequent events open to all (not only NE members)



Target market

Selective membership with focus on CEOs and owners of high-growth, relatively small companies

Organization/ infrastructure

- Close collaboration and co-branding with NEOpreneur Inc.
- Small, full-time staff to design/organize events
- Database of members for impact tracking, event organization, sharing with members, etc.

EXHIBIT 14: NE EVENT OPTIONS – BALANCED TOWARDS INTIMATE, “CLOSED” EVENTS

	Event type	Brief description	Target participants and fees	Annual frequency	Perceived value*	
	Closed events	<ul style="list-style-type: none"> • “Meet the customer events” 	<ul style="list-style-type: none"> • Open to carefully selected set of NE members who are potential suppliers (free or for a fee) 	<ul style="list-style-type: none"> • 4 events 	High	
		<ul style="list-style-type: none"> • Executive roundtables 	<ul style="list-style-type: none"> • Interaction events between a set of NEO entrepreneurs and established company executives who are potential customers, e.g., presentations by CIOs of large companies to IT entrepreneurs (or vice versa) • Peer-based events for entrepreneurial executives at different levels where they discuss each other’s issues in a confidential setting, e.g., CEO roundtable, CFO roundtable, marketing roundtable 	<ul style="list-style-type: none"> • Free entry to carefully selected set of NE members who are peers 	<ul style="list-style-type: none"> • 36 events (12/round-table) 	High
	<ul style="list-style-type: none"> • Peer group mentoring events 	<ul style="list-style-type: none"> • Regular meetings of groups of entrepreneurial CEOs (group membership constant) who mentor each other and provide business advice, i.e., an informal board of directors for each group member 	<ul style="list-style-type: none"> • Free entry to carefully selected set of NE member CEOs who are not competitors 	<ul style="list-style-type: none"> • 20 events (4/group) 	High	
	<ul style="list-style-type: none"> • Sector-specific panel discussions 	<ul style="list-style-type: none"> • Regular meetings of entrepreneurs/senior managers in each of NEO’s technology clusters to discuss business and sector-specific issues 	<ul style="list-style-type: none"> • Free entry to all NE members in a particular sector 	<ul style="list-style-type: none"> • 36 events (12/cluster) 	Medium-high	
	<ul style="list-style-type: none"> • Speaker series 	<ul style="list-style-type: none"> • Speeches/presentations followed by Q&A and socializing, e.g., by <ul style="list-style-type: none"> – Successful NEO/national entrepreneurs (“how I did it” speeches) – Nationally renowned VCs – Researchers/academics in specific technology clusters 	<ul style="list-style-type: none"> • Open to all but with pre- or post-speech reception restricted to all NE members or to a carefully selected subset of them (depending on speaker, topic, and relevance to members) 	<ul style="list-style-type: none"> • 4-6 events 	Medium	
	<ul style="list-style-type: none"> • Conferences 	<ul style="list-style-type: none"> • One-day events that include <ul style="list-style-type: none"> – Presentations and discussions on entrepreneurship-related themes (e.g., venture capital) – Showcase for NEO’s entrepreneurial companies 	<ul style="list-style-type: none"> • Open to all who pay entry fee <ul style="list-style-type: none"> – NE members – VC firms (local and national) – Service providers 	<ul style="list-style-type: none"> • 1-2 events 	Low	
		<ul style="list-style-type: none"> • Social events 	<ul style="list-style-type: none"> • High visibility events intended to attract media coverage and publicity, e.g., Pickwick & Frolic socials, golf outings 	<ul style="list-style-type: none"> • Open to all who pay entry fee <ul style="list-style-type: none"> – NE members – VC firms (local and national) – Service providers 	<ul style="list-style-type: none"> • 2 events 	Low
	Open events	<ul style="list-style-type: none"> • Other? 				

* Judgment on value of networking event in terms of tangibly improving entrepreneurs’ odds of success (and thus creating jobs)

EXHIBIT 15: STAR RESEARCHER ATTRACTION AND DEVELOPMENT – VISION AND DESCRIPTION

Vision

An innovative program to enable Northeast Ohio (NEO) institutions to attract star researchers with “commercializeable research” and encourage new business creation by these researchers and their associates

Aspirations for impact

- ~5 stars recruited per year
- ~1 pre-seed stage company formed per star every 5 years
- ~400 high-quality jobs created in NEO over 10 years

Service lines

Star recruitment fund*	New business creation support services
<ul style="list-style-type: none"> • Enhance resources deployed by NEO universities to recruit star researchers (e.g., 50% of endowment, ~\$1 million per star) • Open to stars in all areas with significant priority given to those in NEO’s technology clusters (life sciences, IT, polymers/advanced materials) • Focuses on stars whose research agendas have strong commercial potential 	<ul style="list-style-type: none"> • Facilitate and ensure the interaction of university technology transfer offices and NEOpreneur Inc. to assist stars and their research associates <ul style="list-style-type: none"> – Entrepreneur development and training – Connections to VCs and mentors

Governance

- Program administered by independent third party
- All NEO universities eligible to apply

* Similar to State of Ohio’s currently inactive Eminent Scholar Program which provided \$750,000 in 1:1 endowment matching funds to universities to recruit scholars working in Governor Taft’s Third Frontier clusters (but which did not include the new business creation support service line)

EXHIBIT 16: INITIATIVE IMPACT ON KEY ISSUES INHIBITING ENTREPRENEURSHIP IN NEO

- Fully addressed
- ◐ Somewhat addressed
- Unaddressed

Issue	Initiative*					Overall evaluation of initiatives impact
	NI	NE	IEE	ESA	SR	
• Entrepreneurs often lack the skills to convert ideas into nationally -competitive business concepts/plans	✓	✓			✓	●
• Perceived shortage of entrepreneurs in NEO	✓			✓	✓	◐
• Limited high-quality networking opportunities	✓	✓				●
• Poor visibility/availability of capital**	✓✓	✓				◐
• Significant ambiguity about and perceived duplication of EAO service offerings	✓		✓			◐
• Region historically has not celebrated successful entrepreneurs and not tolerated failures	✓	✓				◐
• Regional marketing efforts fail to create fair perception of NEO's strengths		✓		✓		◐
• Business community indifferent to supporting/sourcing from local entrepreneurs		✓				◐

- Most key issues addressed by ETF initiatives
- Key issues not addressed can best be attacked by bringing scale/resources to existing efforts, e.g.,
 - EDI on lack of celebration issue
 - Team NEO on regional marketing
 - Etc.

* NI = NEOpreneur Inc.; NE = NEOpreneur Exchange; IEE = Intermediary effectiveness/efficiency; ESA = Early-stage business attraction; SR = Star researcher attraction/development

** ESCTF also addressing the issue by defining and expanding NEO's capital continuum

EXHIBIT 17: AGGREGATE IMPACT OF SELECTED ETF INITIATIVES (NEOPRENEUR INC., NEOPRENEUR EXCHANGE, AND STAR RESEARCHER ATTRACTION AND DEVELOPMENT*)

Metric	5-year impact	10-year impact	20-year impact
Direct jobs**	1,000	6,000	21,500
Total jobs with multiplier (1.1)	2,000	12,500	45,000
Increase in tax base (\$ Millions)***	100	500	2,000
Incremental new companies (No.)	40	60	100

Note: Numbers rounded

* Star researcher attraction and development contributes less than 10% of the total jobs created over the next 10 years

** Leading initiatives in other regions created between 2,000 and 6,000 jobs over 10 years

*** Tax base is a product of total jobs and average salaries; Assumes average salary of \$55,000 for direct jobs and \$34,000 for multiplier jobs

Source: McKinsey team analysis; NorTech's Early-Stage Capital Task Force "capital continuum" draft assumptions

EXHIBIT 18: ETF-RECOMMENDED INITIATIVES CAN ACCELERATE NEO PAST PEERS IN 7 YEARS*

Annual IPOs – 1996-2002

Average

Region	Rank	Current IPOs per million population Index value
Minneapolis	1	364
Baltimore	2	176
Pittsburgh	3	156
Columbus	4	147
Indianapolis	5	110
NEO	6	100
Cincinnati	7	83



Annual VC invested – 1996-2002

Average

Region	Rank	Current VC invested per million population Index value
Minneapolis	1	398
Baltimore	2	350
Pittsburgh	3	220
Columbus	4	168
Cincinnati	5	101
NEO	6	100
Indianapolis	7	96



Initiatives will lead to significant improvement in entrepreneurship in NEO:

- Relative to peers
- Relative to current performance

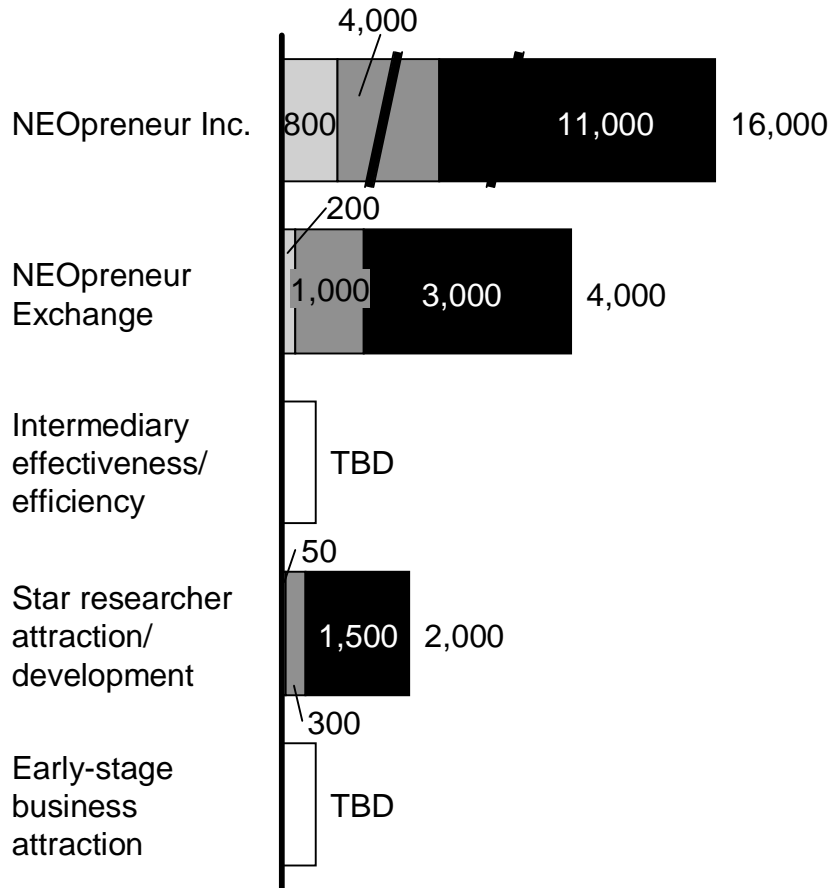
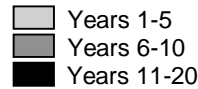
* Assumptions for NEO 2010 improvement are based on ETF-recommended initiatives, and do not include the future impact of other NEO initiatives (e.g., BioEnterprise), or the future impact of ongoing initiatives in other regions

** Assumes 1 of 4 liquidity events is an IPO

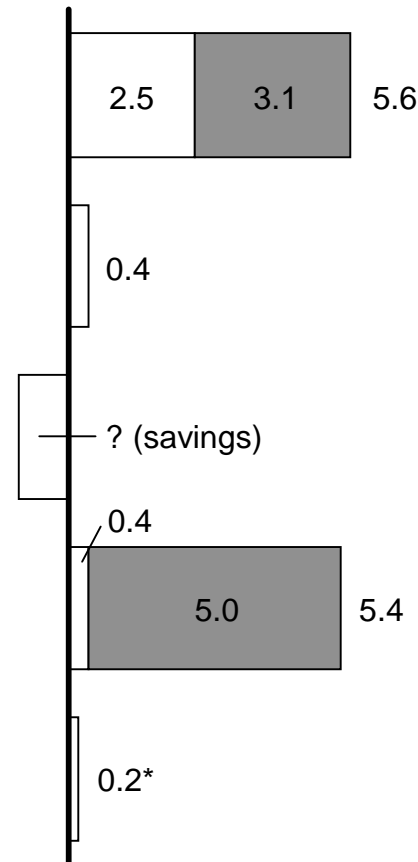
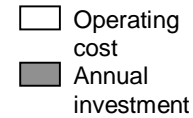
EXHIBIT 19: JOBS IMPACT, REQUIRED FUNDS AND SOURCES

ESTIMATES

High-quality jobs created Number



Annual steady-state cost for recommended initiatives \$ Millions



Potential start-up funding sources

Foundations
State of Ohio

Membership fees
Sponsorships/
contributions
Event fees

N/A

Foundations
State of Ohio
Individual donors

Team NEO budget
Foundations

* Excludes cost of relocation incentives

Source: McKinsey team analysis