# INTRODUCTION

# PREFACE

#### A VIBRANT FUTURE

In 2010, leaders representing a 12-county region of Northeast Ohio recognized that our communities' futures are intertwined and concluded that the region could be more successful if we work to anticipate, prepare for, and build our future together, instead of apart. The Northeast Ohio Sustainable Communities Consortium (NEOSCC) was created to figure out how to achieve this goal.

NEOSCC's assignment was not to "plan" the future of Northeast Ohio—those are decisions for the leaders and residents of Northeast Ohio's communities to make. In broad terms, NEOSCC was created to answer three questions for Northeast Ohio:

- 1. What course is Northeast Ohio on?
- 2. What future does Northeast Ohio want for itself?
- 3. How do we make that future a reality?

NEOSCC launched its Vibrant NEO 2040 initiative to answer these questions and provide Northeast Ohio with two things: an aspirational **Vision** for the future and a **set of tools** needed to make it happen.

NEOSCC hopes that the shared vision for Northeast Ohio's future that was developed through Vibrant NEO 2040's robust engagement process can give communities a reason to align their planning and resource allocation decisions to build a healthier, more economically competitive, and socially equitable region.

#### WHAT DID WE FIND?

The Vision creation process used two kinds of inputs: objective findings and community values. Much of the three years of Vibrant NEO 2040 was spent collecting and analyzing data, modeling trends and alternatives, and interviewing experts across the region. This information provided the factual basis for the Vision.

This process revealed sobering facts about the course of the region. If Northeast Ohio continues to experience modest population and job growth, and we maintain our current approach to land use and infrastructure development, our region will face unprecedented challenges by 2040. Under this Trend Scenario, Northeast Ohio will experience:

- "Churn" with Lagging Growth: Minimal growth in population and jobs while continuing to spread out, abandoning our long-established cities and suburbs for newly developed communities at the edges of the region.
- Abandonment: Widespread abandonment of homes and businesses. An estimated 174,900 homes will be abandoned by 2040. Northeast Ohio will also continue to put at risk many of the significant community assets it has inherited from previous generations.
- Jeopardized Natural Resources: Continued threats to Northeast Ohio's natural resources as a result of the region's land use decisions and infrastructure investments.
- Extreme Fiscal Challenges for Local Governments: Rising costs from maintaining current development policies and practices will place every county in the region at significant financial risk as local governments find themselves faced with an unrelenting pressure to spend more tax dollars than they take in. In this scenario, Northeast Ohioans will have to choose between two bad options: acclimating to a diminished quality of life or paying significantly more in taxes and fees to maintain community services at levels they have come to expect.

#### WHAT DO WE WANT?

Thousands of Northeast Ohioans created the Vibrant NEO 2040 Vision by participating in a process that enabled them to discover and share the values and aspirations they hold in common and explore their choices about the future.

NEOSCC synthesized the feedback it received and the choices participants made during the development of Vibrant NEO 2040.

Northeast Ohio residents aspire to create a region where:

- We have created a regional economy that is competitive, growing, and fair
- We have strengthened our communities, built upon their assets, and improved their fiscal health
- We have grown stronger connections across our region both in our transportation networks and in our system of parks and natural areas
- We have been effective stewards of our resources and achieved a better balance between nature and the things we build
- We have worked together to improve our quality of life and have avoided squandering our regional inheritance and legacy

Throughout this report, the Vibrant NEO 2040 Vision is described in specific, measurable actions and outcomes we need to achieve together. The implementation of Vibrant NEO 2040 is up to Northeast Ohio's communities and residents.

# PRODUCTS AND OUTCOMES

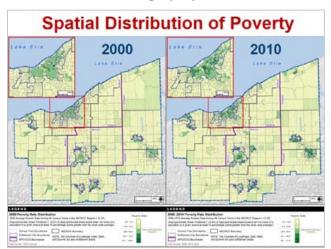
This section provides a visual roadmap of the major Vibrant NEO 2040 products and outcomes. Some of these products and outcomes are presented within this document, while others are provided online at <a href="http://vibrantneo.org/">http://vibrantneo.org/</a>.

#### **Conditions and Trends Platform**



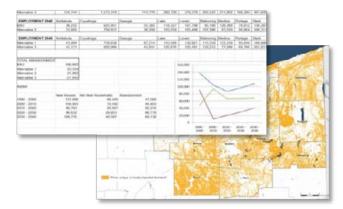
Web platform presenting the state of the region and significant regional trends

#### Regional Analysis of Impediments to Fair Housing Choice and Fair Housing Equity Assessment



A region-wide analysis of access to fair housing

#### Vibrant NEO 2040 Database



Data created and assembled as part of Vibrant NEO 2040, including standardized zoning and land use information for the 12-county area

#### **Public Feedback Library**



All public feedback received through the process is available online

#### **Tool Kit and Best Practices**



Tools for implementing the Vision

#### **Policy Framework**



Analysis of existing policy impacts and suggested future changes to achieve the Vision

#### **Pilot Projects**



Existing or proposed projects that demonstrate emerging best practices

#### Dashboard



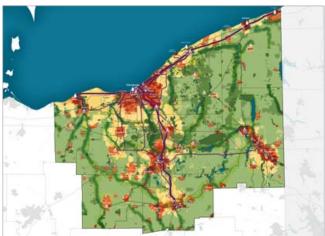
Design specifications for a regional dashboard to track Vision progress

#### **Envision Tomorrow**



Open source software tool used to generate the alternative scenarios

#### **Regional Vision**



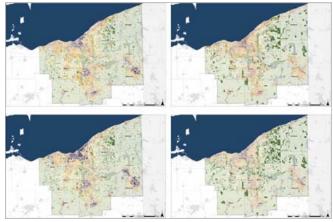
Aspirational future for Northeast Ohio (pg 89-220)

#### **Development Strategies**



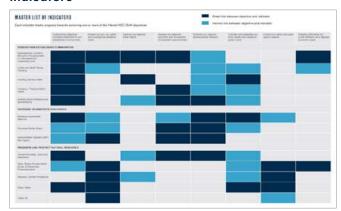
Local strategies for creating great places consistent with the Vision (pg 192-216)

#### Scenarios



Four alternative futures for the region, with accompanying analysis (pg 23-81)

#### Indicators



Regional metrics and goals to assess progress toward the Vision (pg 106-121)

#### **Everyday Actions**



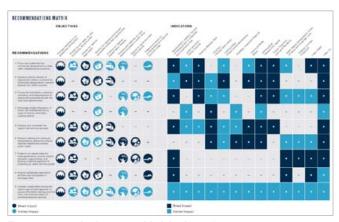
Individual citizen actions for advancing the Vision (pg 218-219)

#### **ImagineMyNEO**



Online engagement tool to explore regional planning trade-offs and elicit public priorities (Results summary: pg 82-86)

#### Recommendations



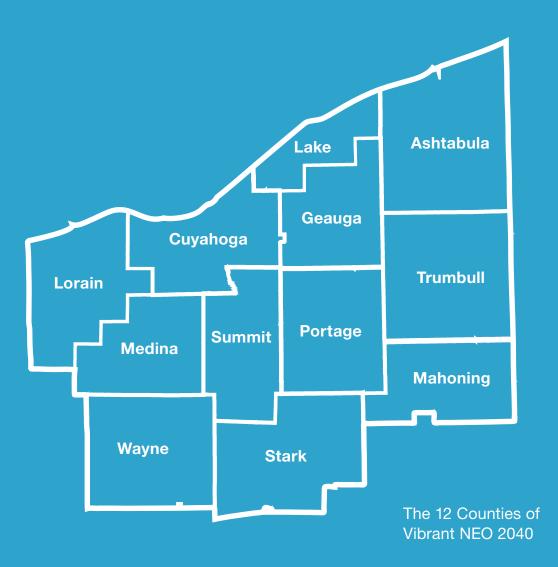
Recommendations and initiatives for achieving the Vision (pg 122-190)

#### **Special Research Sections**



Additional research addressing important regional topics, including Barriers to Redevelopment in Northeast Ohio (pg 135), Transit Supportive Policies (pg 162), and the Economic Benefits of Complete Streets (pg 169)

# PROJECT BACKGROUND



#### WHAT IS VIBRANT NEO 2040?

Vibrant NEO 2040 is an initiative founded on the idea that a shared regional Vision and decision-making framework for the future of the 12 counties of Northeast Ohio (Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Mahoning, Medina, Portage, Summit, Stark, Trumbull and Wayne), developed through a robust community and stakeholder engagement process, will lead to a healthier, more economically competitive, and socially equitable future for the region. Vibrant NEO 2040 represents an opportunity for Northeast Ohio communities to explore the region's long-term development patterns and for Northeast Ohioans to think together about what we want for the future of our region.

#### WHO IS VIBRANT NEO 2040?

## PARTNERSHIP FOR SUSTAINABLE COMMUNITIES

The story of Northeast Ohio Sustainable Communities
Consortium (NEOSCC) and Vibrant NEO 2040 began on June
19, 2009, when the US Department of Housing and Urban
Development (HUD), the US Department of Transportation
(DOT), and the US Environmental Protection Agency
(EPA) jointly announced the formation of an interagency
collaboration, the Partnership for Sustainable Communities.

The stated purpose of the Partnership is:

To coordinate federal housing, transportation, water, and other infrastructure investments to make neighborhoods more prosperous, allow people to live closer to jobs, save households time and money, and reduce pollution.

The Partnership supported the Sustainable Communities Initiative, a competitive planning grant program administered by HUD and designed to promote the adoption of sustainable development practices at the local and regional levels.

In 2010, leaders of communities across the Northeast
Ohio region began to discuss how best to respond to the
opportunity presented by the Sustainable Communities
Initiative. Early in these discussions, the Fund for Our
Economic Future, a unique multi-county coalition of Northeast

Ohio philanthropies and allied civic organizations, convened governmental and non-governmental organizations from each of the region's four metropolitan areas (Akron, Canton, Cleveland, and Youngstown/Warren) and encouraged them to apply jointly for funding from the first round of the highly-competitive Sustainable Communities Initiative. The Fund provided the catalytic funding essential to convene a diverse "proposal team" representing the 12 counties and prepare a competitive grant proposal. With the Northeast Ohio Areawide Coordinating Agency (NOACA) serving as the lead applicant, in 2010 the region secured a \$4.25 million, three-year Sustainable Communities Regional Planning Grant from HUD to develop a strategic regional framework.

### THE NORTHEAST OHIO SUSTAINABLE COMMUNITIES CONSORTIUM (NEOSCC)

NEOSCC is an Ohio 501(c)(3) nonprofit corporation established in January 2011 by the 23 members of the proposal team. Its mission is to create conditions for a more **vibrant, resilient, and sustainable** Northeast Ohio that is full of vitality, a good steward of its built and natural resources, and adaptable and responsive to change.

**VIBRANT** – Full of energy and enthusiasm; vigorous, lively, and vital

**RESILIENT** – Responsive to change; adaptable; able to spring back; rebound

**SUSTAINABLE** – Meeting present needs while retaining the ability to meet future needs; not exhausting resources

After receiving the federal grant, the Consortium expanded its membership to address more intentionally issues of diversity, inclusion, and geographic balance. Ten new members were added, bringing the total membership to 33.

Current Consortium members, listed by organization type, are:

### Metropolitan Planning Organizations/Areawide Coordinating Agencies:

- Akron Metropolitan Area Transportation Study (AMATS):
   Summit and Portage counties and Chippewa Township in Wayne County
- Eastgate Regional Council of Governments (Eastgate):
   Mahoning and Trumbull counties as an MPO; Ashtabula,
   Mahoning and Trumbull as a Council of Governments
- Northeast Ohio Areawide Coordinating Agency (NOACA):
   Cuyahoga, Lake, Lorain, Medina and Geauga counties
- Stark County Areawide Transportation Study (SCATS): Stark County
- Northeast Ohio Four County Regional Planning and Development Organization (NEFCO): Portage, Stark, Summit, and Wayne counties

#### **Counties:**

- Ashtabula
- Cuyahoga
- Lorain
- Mahoning
- Stark
- Summit
- Trumbull

#### Cities:

- Akron
- Cleveland
- Elyria
- Youngstown

#### Colleges/Universities:

- Cleveland State University, Levin College of Urban Affairs
- Lorain County Community College, Public Services Institute
- Youngstown State University, Center for Urban and Regional Studies

#### Metropolitan Housing Authorities (MHAs):

- Akron MHA
- Cuyahoga MHA
- Stark MHA

#### **Entities by Representation:**

- Cleveland Metroparks (on behalf of the region's metropolitan, state, and federal park systems)
- Greater Cleveland Regional Transit Authority (on behalf of the region's transit systems)
- Summit County Health District (on behalf of the region's health districts and departments)

#### **Regional Non-Governmental Organizations:**

- Fund for Our Economic Future
- Regional Prosperity Initiative

#### **Community-Based Organizations:**

- Akron Urban League
- Catholic Charities, Diocese of Youngstown
- The Center for Community Solutions
- Cleveland Museum of Natural History
- Northeast Ohio Community Development Alliance
- Policy Bridge

## PROJECT STAFF, VOLUNTEERS, AND CONSULTANT TEAM

The NEOSCC Board has been supported by a professional Program Management Office (PMO) staff hired to guide development of the Vibrant NEO 2040 and action products. The PMO established its main office in Akron, Ohio, in a space donated by the City of Akron with furniture donated by the City of Youngstown. The Consortium also established field offices in downtown Cleveland and in downtown Youngstown in spaces provided by NOACA and the Eastgate Regional Council of Governments, respectively. The Consortium engaged a staff of full- and part-time employees, augmented by in-kind leveraged match staff resources from board members.

In addition to paid and in-kind staff, the Consortium has been supported by a wide range of local subject matter experts and a team of consultants, both local and national. The Consortium engaged representatives of 170 organizations to participate in its five Work Streams, two Enabling Working Groups, four Product Working Groups and seven Caucuses. These individuals selflessly shared their knowledge and passion for Northeast Ohio, thus enriching Vibrant NEO 2040 and ensuring that it speaks with an authentic voice to the concerns of our people and our communities. Among these contributors were professional planners, geographers, economists, urban designers, and GIS specialists from Cleveland State University's Northern Ohio Data and Information Service (NODIS) and Youngstown State University's Center for Urban and Regional Studies and the Lorain County Community College's Public Services Institute.

To augment and support the work of local staff and volunteers, the Consortium's Board elected to engage a team of local and national consultants. The initial team included R Strategy of Cleveland (media and communications), 427 Design of Akron (website development), and Currere Associates of Cleveland (organizational development). The Consortium subsequently engaged a multi-disciplinary team, headed by Sasaki Associates of Watertown, Massachusetts, to lead the scenario planning and fiscal impact analysis effort that lies at the center of Vibrant NEO 2040. Sasaki brought to the project a depth of national and international experience in regional planning. The full consultant team included Fregonese Associates of Portland, Oregon (scenario planning), Nelson\ Nygaard of San Francisco, California (transportation planning),

City Architecture of Cleveland (urban design and development strategy), and Cobalt Group (community engagement). Finally, the Consortium engaged Strategy Design Partners of Cleveland to assist in defining its mission, activities, and organizational structure following the completion of the Vibrant NEO 2040 Vision.

#### HOW WAS VIBRANT NEO 2040 DEVELOPED?

The Vibrant NEO 2040 process was designed to achieve a broadly-supported, publicly-created, region-wide Vision of how Northeast Ohio's citizens want the region to develop over the course of the next several decades. In short, the process focused on where we are, where we could go, and where we want to be.

The first phase of the Consortium's work was centered around gathering data on current conditions and trends. Board members committed in-kind staff for the project, who, along with local subject matter experts and engaged citizens, were convened in five core Work Stream committees that ultimately comprised over 150 individuals and 120 organizations. The Work Streams were organized by the following subject areas:

- Economic Development
- Environment
- Housing and Communities
- Connections (Multimodal Transportation)
- Quality Connected Places (Place-based Design)

Two additional Enabling Working Groups were created to ensure that the Regional Vision would be based on sound data (objective findings) and a clear articulation of the region's shared concerns and aspirations (community values):

- Communications and Engagement Working Group (CEWS)
- Data/GIS (Geographic Information Systems) Working Group

The five Work Streams each identified key findings that were based on their review of existing plans and data. The result of this work was the creation of a Conditions & Trends **Platform** that integrated these finding and existing plans into a single resource that explored the current state of the region. The Conditions & Trends Platform and additional research from

the Workstreams are available at http://vibrantneo.org/. The information that the Platform provided formed the foundation for developing alternative futures for the region.

In order to explore these alternative futures, Vibrant NEO 2040 utilized **scenario planning** to engage people from across Northeast Ohio to participate in a scenario-building process that focused on the topics that Northeast Ohioans think are most important. Working with the information gathered through this process and the other aspects of engagement, the Project Team created a Trend Scenario and a set of Alternative Scenarios for Northeast Ohio's future.

The Project Team used scenarios because the future is uncertain. One policy may work well if the future is like the past, but what if the future is different? Scenario planning acknowledges that there is no such thing as a crystal ball: rather than trying to predict the future, scenarios enable us to explore several possible futures before we commit to a course of action. Scenarios are not plans or forecasts—they are tools for asking "what if..." and sparking meaningful discussion about the region's future.

As part of understanding the likely results of the choices we make, the Project Team was particularly interested in discerning the financial implications of the scenarios. To accomplish this, Vibrant NEO 2040 developed a regional Fiscal Impact Tool that demonstrated the financial trade-offs the region might have to make to achieve its aspirations.

Synthesizing the information received through engagement and the insights provided by the scenarios, the Vibrant NEO 2040 process culminated in the creation of a **Regional Vision**, which is an aspirational future for Northeast Ohio and a set of tools and knowledge necessary to achieve it. The Vision has many components, including a list of objectives, maps, indicators, targets, and recommendations. It also presents a number of specific resources such as precedents, case studies, best practices, funding resources, and more.

#### **Major Findings of the Conditions and Trends Platform**

- 7% fewer people live in the region than did in 1970
- 5% more of our land has been developed since 1979
- 23% fewer people reside per developed acre since 1979
- 11% fewer people were employed in Northeast Ohio per developed acre in 2006 than in 1979
- 4% more daily vehicle miles are traveled since 2000, despite a 2.5% decrease in population
- 79% of our trips in Northeast Ohio are driven alone
- 100% more freeway miles were built from 2000 to 2010 than were built in 1990 to 2000
- 31% of all in-bound freight enters the region on rail (displacing 5.1million trucks)
- 10% of the projected total of all brownfield sites have been identified
- 90% of Northeast Ohioans live within one mile of a park or protected space



Some of the tools have been packaged as **Action Products** for direct application by regional leadership. The Action Products are available online at http://vibrantneo.org/ and include the following elements:



Tool Kit and Best Practices: Assembled to empower the local and regional actions essential for transformation. Included is the Regional Analysis of Impediments to Fair Housing Choice/Fair Housing Equity Assessment and generalized regional landuse and zoning data.



**Policy Recommendations**: Policy changes recommended by Vibrant NEO 2040 to have a high impact on regional sustainability.



**Pilots**: A listing of innovative, replicable, real-world solutions reflective of the goals and objectives of the Regional Vision.



**Dashboard**: A quick reference guide to keep the region moving in the right direction. The draft dashboard includes indicators and measures, prioritized by the public and Consortium members, which cover topics such as land use, transportation, environmental protection, the economy, health, and quality of life.

#### **OUTREACH AND ENGAGEMENT**

Outreach and engagement were fundamental to Vibrant NEO 2040. Based on the successes and challenges of previous engagement efforts in Northeast Ohio, and given the scale of the Vibrant NEO 2040 initiative, the NEOSCC Board determined that it was critical to engage a diverse group of community leaders, stakeholders, and residents throughout the 12 counties. The Project Team understood that the Regional Vision would only be successful if were built on our region's unique values and expressed what is important to the residents of Northeast Ohio.

The Project Team had the following goals related to outreach and engagement:

- Reach out to as many individuals and organizations throughout the 12 counties as possible, paying particular attention to groups that are typically underserved or unrepresented in the planning process
- Create an understanding of regional and local challenges and opportunities
- Engage the public in a dialogue that develops common ground for collaboration and action
- Develop and nurture enduring relationships, both existing and new
- Implement and model an engagement platform that is both vibrant and enduring



In order to meet these aspirations, the Project Team identified four key elements of its engagement process to ensure a more meaningful participatory experience: **Learning, Sharing, Creating, and Acting**.

The Project Team used a multi-format, multi-pronged approach to achieve these goals that included the following elements:

- Network of Networks: a two-tiered network of regional leaders and engaged stakeholders from a diverse range of sectors and backgrounds. The initial step was to establish relationships with network leaders from throughout the region each of whom subsequently brought their own network to the Vibrant NEO effort. The Network served as a foundation for later outreach and engagement events.
- Surveys: two statistically valid surveys conducted over the phone and online intended to assess regional values, attitudes, and aspirations. See the section titled Our Region's Shared Concerns later in the Introduction for a summary of the results.
- Targeted Outreach: the Project Team convened meetings throughout the Vibrant NEO process with several strategic stakeholder groups, including elected officials and the Young Leaders Network. See vibrantneo.org and the section titled Our Region's Shared Concerns for more information.
- Public Scenario Planning Events: 27 large, public events
  were conducted throughout 2013 to present updates and
  solicit feedback on the scenario planning process. These
  events, and their outcomes, are described in detail in the
  sections on the Trend Scenario, Alternative Scenarios, and
  the Regional Vision.
- ImagineMyNEO: an interactive, online tool offering participants the chance to explore potential policies and investments and to learn about planning issues, opportunities, and trade-offs. More information can be found at the end of the Alternative Scenarios section.
- Expert Caucuses: small groups of regional leaders and technical experts formed to provide guidance on the creation of the Recommendations in the Regional Vision.
   Seven caucuses were convened with 100 individuals. See the Regional Vision section for more information.

### VIBRANT NEO 2040 TIMELINE

2010

October 201

NORTHEAST OHIO AWARDED GRANT



November 201

1ST MEETING OF NEOSCC BOARD

2011

January 201

ARTICLES OF INCORPORATION FILED TO CREATE NEOSCC

April 201

ORIGINAL WORK PLAN APPROVED BY HUD June 2011

ENGAGEMENT OF PROFESSIONAL STAFF BEGINS

uaust 2011

PROJECT
MANAGEMENT
OFFICE OPENS
ITS DOORS



September 201<sup>.</sup>

FIVE WORK STREAMS
AND TWO ENABLING
WORK GROUPS
LAUNCHED



September 2011 – June 2012

WORK STREAMS
INCLUDING OVER
120 DIFFERENT
ORGANIZATIONS
ANALYZE THE
CURRENT TRENDS
OF THE REGION

September 2011

NEOSCC.ORG LAUNCHES (LATER RENAMED VIBRANTNEO.ORG) 2012

January 2012

COMMUNICATIONS
AND ENGAGEMENT
FRAMEWORK
PUBLISHED



April 2012 – June 2012

WHAT DOES
VIBRANT LOOK
LIKE EVENTS FOR
YOUNG LEADERS
IN 5 LOCATIONS
THROUGH THE
REGION



NEOSCO

April 2012

1ST EVER 12 COUNTY LAND USE MAP PRESENTED April 2012

1ST PUBLIC OPINION POLL CONDUCTED

June 2012

LAUNCH OF THE CONDITIONS AND TRENDS PLATFORM



June 2012

BOARD BEGINS
TRAVELLING
MEETINGS IN
MAHONING COUNTY



VEOSCC

July 2012

BOARD VISITS
LORAIN COUNTY



NEOSCO

July 2012

1ST EVER 12 COUNTY ZONING MAP PRESENTED

August 2012

BOARD APPROVES
UPDATED WORK
PLAN, INCLUDING
SCENARIO PLANNING
AND FOUR ACTION
PRODUCTS



August 2012

BOARD VISITS
STARK COUNTY



BOARD VISITS
CUYAHOGA COUNTY

September 2012



VEOSCC

September 2012

VIBRANT NEO 2040 IS ANNOUNCED AS THE NAME FOR THE VISIONING PROCESS



September 2012

REGIONAL ANALYSIS
OF IMPEDIMENTS
FOR FAIR HOUSING
CHOICE AND FHEA
LAUNCHED

October 2012

BOARD VISITS
ASHTABULA COUNTY



October 2012

VIBRANTNEO.ORG IS
LAUNCHED



November 2012

BOARD VISITS
SUMMIT COUNTY

BAKRON URBAN LEAGUE

#### 2013

January 2013

NEOSCC BEGINS
WORK WITH
CONSULTING TEAM
LED BY SASAKI
ASSOCIATES
FOR SCENARIO
PLANNING, FISCAL
IMPACT ANALYSIS,
AND REGIONAL
PLANNING

February 2013

QUALITY
CONNECTED PLACES
FINAL REPORT
PRESENTED

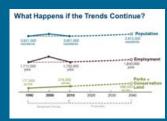


March 2013

REGIONAL AI FAIR HOUSING FORUMS HELD IN 12 LOCATIONS

April 2013

TREND SCENARIO
PRESENTED AT
BOARD MEETING



April – May 2013

TREND SCENARIO
PUBLIC WORKSHOPS
HELD IN SIX
LOCATIONS



Fregonese Associates

May 2013

BOARD VISITS
PORTAGE COUNTY



AMATS

June 2013

IMAGINE MYNEO
LAUNCHES



June 2013

REGIONAL AI DRAFT REPORT REVIEW SESSIONS HELD IN 11 LOCATIONS

June - July 2013

IMAGINEMYNEO
VISITS EVENTS IN
NINE COUNTIES



NEOSCC

July 2013

REGIONAL AI FINAL REPORT PRESENTED



July 2013

ALTERNATIVE
SCENARIOS
PRESENTED AT
BOARD MEETING



July – August 2013

ALTERNATIVE
SCENARIOS OPEN
HOUSES HELD IN 10
LOCATIONS



Fregonese Associates

August 2013

BOARD VISITS
MEDINA COUNTY



Medina County Park District

September 2013

PRELIMINARY DRAFT
OF REGIONAL VISION
PRESENTED



October 2013

VISION SESSIONS
HELD IN 11
LOCATIONS



NEOSCC

October 2013

SEVEN SUBJECT
MATTER CAUCUSES
CONVENED
TO REVISE
RECOMMENDATIONS

2014

February 25, 2014

NEOSCC BOARD
APPROVES AND
ENDORSES THE
VIBRANT NEO 2040
VISION, FRAMEWORK
AND ACTION
PRODUCTS

REGIONAL ORGANIZATION

COUNTIES

CITIES

TOWNS

> TOWNSHIPS

LOCAL ORGANIZATIONS

# REGIONAL CONTEXT

## RATIONALE FOR LONG-TERM, REGIONAL THINKING IN NORTHEAST OHIO

The choices we make today will have profound consequences on our communities many generations from now. Simply put, what legacy are we going to leave for future generations? What kind of future do we want to create for our children and grandchildren? A collaborative vision of the future based on shared values enables better planning and decision-making today and throughout the next 25 years.

Northeast Ohio increasingly functions as an economically integrated region. In prior generations, most people lived and worked in the same community. Vibrant NEO 2040 recognizes that the world is changing and our region must change with it. Increasingly our country's metropolitan regions—and not just our historical core cities—are the geographic units of global competitiveness. The degree of a region's success in the global marketplace depends on how agile it is in meeting the

demands of an ever-changing global economy; therefore, we must work together as a region to address our challenges and safeguard our future.

Vibrant NEO 2040 recognizes that Northeast Ohio is a unique, "polycentric" region built around seven "legacy cities" and their suburbs. These legacy cities—Akron, Canton, Cleveland, Elyria, Lorain, Warren, and Youngstown—were the region's economic engines in the industrial era. Since 1980, they have lost industrial jobs and employment opportunities as oncebooming businesses downsized or closed entirely, leaving behind industrial brownfields, abandoned neighborhoods, and downtowns emptied of the department stores and other retail activities that once made them the center of community life.

Northeast Ohio, like many other Great Lakes regions, has experienced little, if any, growth in population and employment over the past several decades, but at the same time has experienced significant new residential, commercial,

Polling Question: Is your community's future (positive or negative) linked to the rest of the communities in Northeast Ohio?

#### **CLEVELAND**

74%	1) Yes, significantly
18%	2) Somewhat
8%	3) No, not really

#### **WARRENSVILLE HEIGHTS**

61%	1) Yes, significantly
27%	2) Somewhat
11%	No, not really

#### **OBERLIN**

41%	1) Yes, significantly	
48%	2) Somewhat	
11%	3) No, not really	

Data source: Trend Scenario Feedback-Public Feedbiack

#### **AKRON**

52%	1) Yes, significantly
31%	2) Somewhat
16%	3) No, not really

#### **CANTON**

53%	1) Yes, significantly
30%	2) Somewhat
18%	3) No, not really

#### **WARREN**

55%	1) Yes, significantly	
33%	2) Somewhat	
12%	3) No, not really	

# 74% of NEO residents say their community's economic future depends a lot on the rest of Northeast Ohio<sup>1</sup>

and industrial development. While the new development that has taken place at the edges of our already-established communities mirrors development patterns found in regions experiencing significant population growth, Northeast Ohio's new fringe development has been accompanied by wide-spread abandonment of long-established communities in the region's legacy cities and 1st ring suburbs. This pattern of "no-growth sprawl" creates long-term fiscal challenges for our region's governments and unnecessarily burdens the region's taxpayers.

Though Northeast Ohio faces many challenges, the region also possesses significant assets which should be celebrated and leveraged to their fullest potential. These assets, viewed regionally, can serve to drive residential and business retention and growth, and offer an opportunity to improve the quality of life for all.

Transportation and environmental systems also operate on a regional scale. Roads, buses, trains, and trails cross local boundaries and require coordination across many different communities and levels of government. Rivers and lakes also transcend political boundaries: decisions made by residents living upstream directly affect their neighbors living downstream. Systems like these connect the communities of Northeast Ohio, and since these systems function regionally, we are well served to consider them regionally.

Vibrant NEO 2040 provided a forum for Northeast Ohioans to engage in community visioning—a grassroots process of exploring and articulating community values, priorities, and shared concerns—to craft a shared vision for the region's long-term future, complete with goals related to its major systems of land use, housing, transportation, economic development, and environmental protection. The Consortium believes that, by viewing systems through both a regional and a local lens and encouraging associated communities of practice among local governments and non-

profit organizations, Northeast Ohio can improve efficiency across all sectors, lessen the burden on government, and improve the region's ability to compete in the emerging global economy. Put simply, collaboration is the key to both resilience and growth.

Members of the public that attended the Vibrant NEO 2040 Trend Scenario Workshops largely shared the idea that the health of individual communities is critically linked to the health of the overall region, as indicated by the keypad poll results shown on the previous page.

#### OUR REGION'S SHARED CONCERNS

Prior to the onset of the scenario planning process, the PMO and local consultants looked to identify local and regional concerns and opportunities in Northeast Ohio. Utilizing surveys, Young Leader engagement, and a series of county briefings, NEOSCC was able to raise awareness about Vibrant NEO 2040 and begin preliminary conversations to learn what matters most to the region.

In the opinion surveys conducted during the month of April 2012, participants expressed concerns about jobs and education, as well as ensuring that Northeast Ohio is a sustainable place to live for future generations (92%). There was general satisfaction found with the quality-of-life aspects of the region, but a split on what direction the region was headed.

The most important regional goals for residents were:

- Developing a wide variety of good jobs
- Decreasing the number of people who live in poverty
- Having a variety of housing options

#### • Strengthening environmental protections

Almost all residents (89%) indicated a desire for local governments to work more closely together to grow the economy. This collaboration is important to the residents as 74% indicated that their area's economic future depends a lot on the rest of Northeast Ohio. The region is also open to change, with 72% of all participants indicating that adapting to changing conditions is more important than preserving the traditional ways of doing things.

Launched nearly at the same time as the survey, five "What Does Vibrant Look Like?" Young Leader events that drew 330 participants were held at regional venues. Participants at each location offered differing opinions on what makes for a vibrant region, but there were also a great number of similarities between the Young Leaders. For instance, the need for more public transit was a popular topic in Lorain County, while other communities that already have robust transit systems called for greater efficiency and usage of existing transit services.

The Young Leaders identified key actions that are turning communities around in Northeast Ohio, including the creation of independent businesses and entrepreneurship that can lead to attracting or retaining talent in an area, fixing infrastructure, reusing vacant buildings, a positive attitude toward committing to a community, and initiatives such as the Euclid Corridor Project and the Oberlin Project.

These events were followed by another series of Young Leader engagement activities that explored the Conditions & Trends Platform findings. While some differences again arose by geography, there were also consistent concerns about housing choices, cleaning up Northeast Ohio's industrial legacy, the reliance on cars, lack of alternative transportation options, and the connection between education and the economy.

In the fourth quarter of 2012 and the first quarter of 2013, NEOSCC conducted a series of county briefings to discuss Vibrant NEO 2040. Conversations at these briefings focused on important local issues including workforce and economic development, housing and how to deal with abandonment, brownfield remediation for both economic and environmental benefit, and making better connections across the region. These briefings were also an opportunity to discuss the

<sup>1</sup> Data source: NEOSCC Survey, 2013 (NEOSCC and TRIAD Research Group)

Vibrant NEO process and how it fit in with local initiatives. Participants wanted to ensure that the process respected individual and local decision-making in the counties, townships, and villages. One group of attendees also expressed their distrust of the process and disagreement with the initiative as a whole.

There were strong recommendations made that the process be as customized locally as possible. Participants stressed that this would enable the engagement process to truly connect with local issues and opportunities. They also shared some of the success and best practices that had been implemented or that were currently underway in their areas. Participants also wanted to explore how some of these best practices could be furthered by the Vibrant NEO 2040 process.

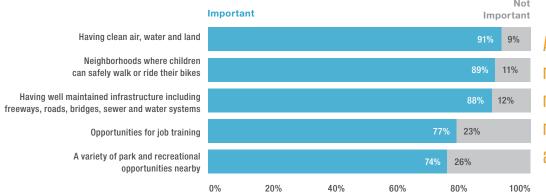
The documentation of the public polling, Young Leader engagement, and county briefings was used as a basis for some of the early discussions in the scenario planning process, including the development of the ImagineMyNEO online tool. It continued to be utilized as the scenarios and the Regional Vision were developed.

In 2013, a second public opinion survey was conducted. Like the first survey, this one focused on the following issues: perceptions of the region, quality of life, sustainability, and the role of government. The results were used to inform the scenario planning process and the development of the Regional Vision.

In both surveys, satisfaction with Northeast Ohio as a place to live ranged from 86 to 89%. In the second survey, more participants said "things are getting better" (up from 39% to 45%). There was also consistency in what is important to the area where they live and their priorities for sustainability. The three most identified priorities were clean air, water, and land (91%), safe neighborhoods (89%), and well maintained infrastructure (88%).

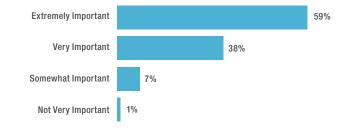
#### PUBLIC OPINION POLLS

#### TOP 5 FACTORS THAT MATTER TO RESIDENTS



A clean environment, safe neighborhoods, and a well maintained infrastructure are most important to residents and where they live

#### IMPORTANCE OF MAKING SURE NORTHEAST OHIO IS A SUSTAINABLE PLACE TO LIVE FOR FUTURE GENERATIONS



Just over half of NEO residents said it is extremely important that Northeast Ohio remain sustainable for future generations.

#### **OUR REGION'S SHARED HISTORY**

At the core of Northeast Ohio is the historic Connecticut Reserve: 10 of the region's 12 counties lie within its boundaries (Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Mahoning (part), Medina, Portage, Summit (part), and Trumbull). Only Stark and Wayne lie entirely outside the Reserve. The unique development patterns and civic traditions established during the early years of the Reserve continue to exert influence on our region's development.

The history of the Connecticut Western Reserve begins in 1662 when King Charles II granted the Colony of Connecticut a Charter establishing, among other provisions, expansive colonial boundaries: the colony's territory extended from the Atlantic coast to the Pacific Ocean (the "South Sea") between the 41st and 42nd and 2 minute parallels. The fact that the Charter established boundaries that conflicted with the claims of New York and Pennsylvania was to become a source of conflict in later years.

Following the Revolutionary War, the new nation faced the challenge of settling the expansive and often conflicting claims of the colonies to lands west of the

#### Map of the Connecticut Western Reserve



Ohio Historical Society, Map of Connecticut Western Reserve, "Connecticut Western Reserve," Ohio History Central, http://www.ohiohistorycentral.org/w/Connecticut\_Western\_Reserve (accessed on 14, November 2013).

Appalachian Mountains. In addition to Connecticut, Virginia, Massachusetts, North Carolina, South Carolina and Georgia each asserted claims to western lands based on their royal charters or grants. All but Connecticut agreed to abandon their claims in exchange for assumption of their Revolutionary War debt by the national government. Connecticut claimed that it would lose land that been granted to it by the 1662 Charter due to the counter claims by New York and Pennsylvania and held out until it succeeded in securing the right to retain a 3.3 million acre "Western Reserve" extending 120 miles west of the Pennsylvania border. The state saw this land as an opportunity to raise funds to support public education and compensate Connecticut citizens who property had been burned by the British during the Revolutionary War.

Connecticut sold the bulk of its holdings to the Connecticut Land Company, a real estate syndicate, for \$1.2 million and invested the proceeds in the state's school system. The state retained some 500,000 acres at the western end of the Reserve and granted it as compensation to the victims of the Revolution. Known as the "Fire Lands," it became today's Erie and Huron Counties.

#### **EARLY EUROPEAN SETTLEMENT**

The Connecticut Land Company sent General Moses Cleaveland, one of its investors, and a company of surveyors to subdivide the land into townships and lots. Cleaveland and his surveyors demonstrated their "Yankee ingenuity," deciding to subdivide the Reserve into 25 square mile (5 mile by 5 mile) townships rather than follow the US Land Ordinance of 1785 that required lands under national control be subdivided into 36 square townships (6 mile by 6 mile).

On the banks of the Cuyahoga River, Cleaveland and his party surveyed a new city that was to bear his name (shortened to "Cleveland" early in the city's history by a printer wanting to save space on his paper's masthead). Founded in 1796, Cleveland was destined to become the northern terminus of the Ohio and Erie Canal thirty years later and to emerge as the region's largest and wealthiest industrial city.

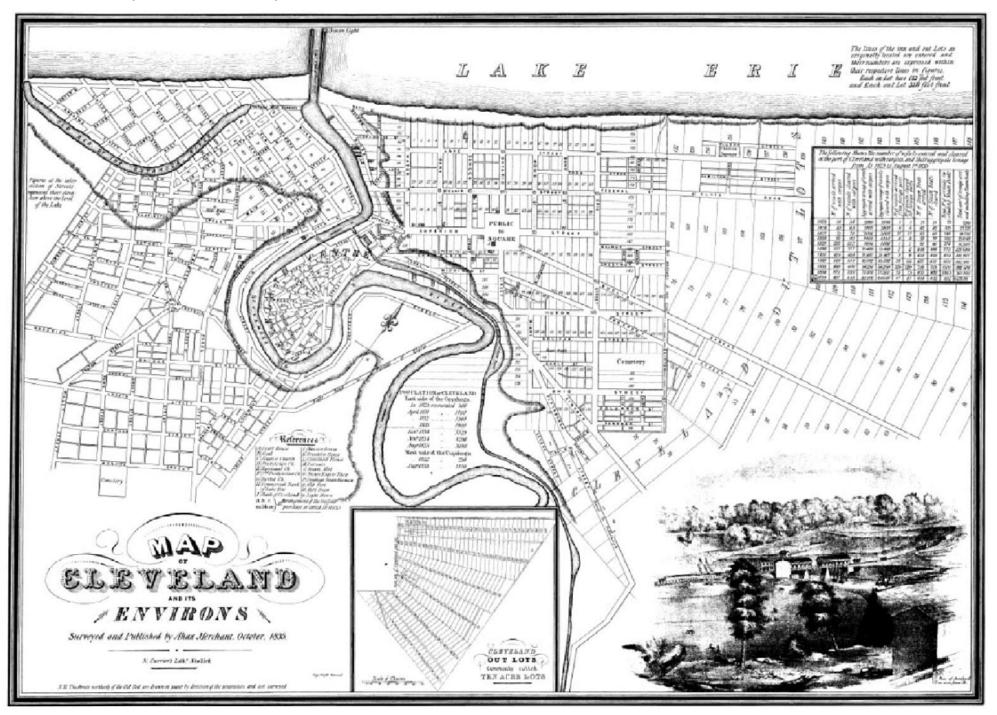
At the time of their survey, however, Cleaveland and his party were content to lay out an agricultural market town centered on a large and regularly-shaped public square and surrounded by small "town lots" that extended out upon radiating streets. This pattern was to define a unique place type, the Western Reserve Town, which spread throughout the Reserve.

Cleaveland returned to Connecticut after the summer of 1796, never to return. His surveyors remained for several years surveying the Land Company's vast holding. As they came from New England, they brought with them both the tradition of local self-determination and direct democracy best known as the "New England town meeting" and the community design concept of the New England town. In township after township, the early settlers intentionally planned their communities in accordance with time-tested principles: each community was centered on a public square or town green which had a geometric shape, such as a rectangle or triangle when a true square was not employed. Around this square, sites were located for a court house, houses of worship, a school or a college. Beyond the square, the surveyors laid out a ring of small "town lots" suitable for erecting a house or business. Beyond this compact core, they laid out larger parcels for farming.



A Western Reserve Public Square Painting by Sebastian Heine and Lewis Chevalier, Western Reserve Historical Society

#### First Published Map of Cleveland (1835) by Ahaz Merchant



Ahaz Merchant, Cleveland and its Environs (1835) "Local Cleveland Area History," Michael Schwartz Library, Cleveland State University, http://researchguides.csuohio.edu/content.php?pid=235933&sid=2225318 (accessed 14, November 2013).

Stark and Wayne counties and portions of Mahoning and Summit counties lie to the south of the Western Reserve in the Congress Lands North of the Old Seven Ranges. This land was surveyed between 1801 and 1807 into 36 square mile townships in accordance the requirements of the Land Ordinance of 1785. While outside the boundaries of the Western Reserve, these counties share many of the geographic features, land use practices, development patterns, and civic values of the counties to the north.

#### A TRADITION OF LOCAL GOVERNMENT

Ohio, by law and custom, is a state that strongly favors local decision making, particularly in the area of land use. Unlike many other states, Ohio does not assert a superior right to intervene in local decision making by requiring that local governments adopt plans and zoning codes that conform to state-established guidelines or make use of state-wide standards and projections in calculating the amount of land required for different land uses. While the state requires that county governments undertake a land use planning activities on behalf of their townships, it otherwise defers to the principle of municipal home rule when dealing with land use at the local level.

The principle of local decision making finds its basis not only in the state constitution but also in the unique history of the Western Reserve as a place apart from the rest of state. Unlike the communities established to the west and south of the Reserve, Western Reserve communities were not subject to the national land policies established by Land Ordinance of 1785. These national land policies were applied to land relinquished to the national government by the states and Native American tribes and required that this land be surveyed into square townships with each side measuring 6 miles. The township was further divided into 1 square mile sections. In each 36 square mile township, range 16 was to be set aside for a public school. Four sections were to be retained by the national government to provide land bounties to Revolutionary War veterans.

Because Connecticut retained ownership of the lands of the Western Reserve, it was not subject to the provisions of the Land Ordinance. Rather than provide for public education in

the Reserve, the State of Connecticut chose to sell the land in its entirety to the Connecticut Land Company and invest the \$1.3 million proceeds in public education in Connecticut.

This unique history means that for the Western Reserve, what was important to an individual community when defining the "public interest" or "common benefit" would need to emerge from community members and land owners independent of national or state policy. The results of this local decision-making often included setting a common space at the center of town, building public schools on donated land, building churches shared by several denominations, and establishing shared obligations for local defense, road building, and clearing forest land for farms.

The early reliance on local decision-making and shared responsibility for the common good shaped the form of Western Reserve communities, as well as their civic institutions and political traditions. While not required to adopt a standardized settlement pattern, Western Reserve communities developed a distinctive form. The tradition of localism later manifested itself in the history of fiercely independent home-rule industrial cities that successfully resisted "good government" efforts to merge them with adjacent communities or with their home counties, and in the proliferation of independent home-rule suburbs that surround each of the region's legacy industrial cities.

The tradition of local citizens taking responsibility for local decisions is deeply embedded in the civic culture of Northeast Ohio. To some advocates of "regionalism," Northeast Ohio's practice of relying on local government as the nexus of community decision-making is an impediment to governmental efficiency and civic progress. To others, local government will shape Northeast Ohio's future as individual communities effectively address the challenges they face. Vibrant NEO 2040 builds upon our traditions of civic collaboration and mutual aid that have long enabled local communities to work together to address mutual concerns and provides a Vision and Framework for the region that encourages local communities to work collaboratively at the county, metropolitan, and regional scales to build a more prosperous future.

## THE INDUSTRIALIZATION AND URBANIZATION OF NORTHEAST OHIO (1830-1960)

Northeast Ohio encompasses four metropolitan areas, each of which is anchored by one or more of the region's seven historically industrial cities: Akron, Canton, Cleveland, Elyria, Lorain, Warren, and Youngstown. For over 180 years, the growth, decline, and re-emergence of these legacy cities and their adjacent suburbs have defined patterns of land use, transportation, and development in Northeast Ohio. Understanding these patterns is an essential step in developing an authentic vision for Northeast Ohio and building a framework for our region's future.

The 12 counties of Northeast Ohio remained uniformly rural during the first several decades of development. With the development of canals from the early 1830s, the character of Northeast Ohio became increasingly industrial. The Ohio and Erie Canal linked Cleveland on Lake Erie and Portsmouth on the Ohio River, making a direct connection between the Great Lakes basin and the Gulf of Mexico and opening Northeast Ohio to the ports of New York (via the Erie Canal) and New Orleans (via the Ohio and Mississippi Rivers). The canal was a spine of waterborne commerce through Cleveland, Akron, and Massillon, each of which became centers of the export industry in their own right. The shorter Pennsylvania and Ohio Canal connected Akron, Warren, and Youngstown to Pittsburgh and likewise supported the early industrialization of the Mahoning Valley.

By 1860, railroads were superseding canals as preferred means of transporting goods and passengers. Cleveland had already leveraged its position at the northern terminus of the Canal to become the state's most active lake port and a center of commerce and industry. It attracted investments from several major railroad services. The New York Central and Pennsylvania railroads built termini on Lake Erie and instituted regular passenger service to the city; the Baltimore and Ohio, Erie Lackawanna, and Nickel Plate followed suit. Cleveland's favorable location in an expanding national network of infrastructure enabled it to mature into a national center of heavy industry supported by a diverse manufacturing base in iron and steel, oil, automobile, ship building, electrical equipment and electric light, telegraph, and the needle trades.

Akron's position along the Ohio and Erie Canal and the intersection with the Ohio and Pennsylvania Railroad also afforded it development opportunities in manufacturing and distribution. The rubber industry came to dominate the city's economy, though other areas of production, including cereals, farm equipment, and matches also thrived.

Youngstown, Warren, and the smaller cities of the Mahoning Valley between them emerged as a "steel valley" destined to become the country's third largest center of steel production at its height, leveraged its strategic location halfway between the two larger steel centers of Cleveland and Pittsburgh. In addition to iron and steel, the Valley was home to aluminum production as well as machined goods, kitchen equipment, and, most recently, automobiles.

Canton, unlike it fellow industrial centers, missed the canal era and built its future on the rail network that grew to serve it. By the 1880s it had a diversified manufacturing economy that included the production of iron and steel, agricultural implements, and watches. More recently, the city has been known for its production of bearings, vacuum cleaners, and security devices.

The region's rail network created several other smaller industrial centers around their harbor termini. Lorain and Elyria emerged as industrial cities around the steel, ship building, automobile, and medical equipment industries while Ashtabula's port served as a gateway to the steel centers in Youngstown and Pittsburgh and a center of chemical production.

The burgeoning industrial cities of Northeast Ohio attracted large numbers of immigrants—both from the United States and from Europe—who arrived to work in the region's mills and factories via the direct rail connections from East Coast ports of entry. Immigrants came from the British Isles and Ireland, Germany, Italy, Russia, and Eastern Europe, later joined by migrants from the American South and Appalachia, and settled in ethnic neighborhood segregated by country of origin, race, and in some cities, by position in the mill or factories. The immigration fueled explosive growth: during the 50 years from 1910 to 1960, Northeast Ohio's seven legacy cities collectively grew by almost 100%, from about 800,000 to 1,600,000. This accounted for at least a third of the growth of the 12-county region over the same time period.

Immigrants to the region brought diverse customs, music and foods; religious affiliations and practices; and architectural traditions, creating rich tapestries of unique communities that live on today in the shared memories, customs, and affiliations of their descendants. While many of the ethnic communities and their "old neighborhoods" close to the mills and factories have disappeared, significant artifacts of this era persist in the many historic churches and commercial buildings they built.

## THE DEINDUSTRIALIZATION AND SUBURBANIZATION OF NORTHEAST OHIO (1960-2010)

With the end of World War II, a host of policy initiatives such as the GI Bill, federally guaranteed mortgages, and the development of the region's freeway network encouraged city dwellers to begin leaving the "old neighborhoods" for modern suburbs developed beyond the boundaries of the legacy cities and their early suburbs. The process of suburban migration began modestly in the 1950s and 1960s and accelerated in the decades that followed. Lured by the opportunity to buy a new or newer house than the one they left behind, and pushed by the dysfunction they perceived to be growing in many of the region's cities, households in large numbers settled the suburban cities and townships surrounding the region's industrial cities.

The growth of suburbs at the edges of the region's metropolitan areas corresponded to widespread demolition of working class neighborhoods in the legacy cities. Much of this destruction was done in the name of "urban renewal." The development of public housing and the construction of the region's interstate highway system reflected the widespread belief that the future of the region's legacy cities lay in modernizing their downtowns, reducing the density of their neighborhoods, and moving large numbers of people via freeway corridors to new communities beyond the teeming neighborhoods of the industrial city.

Dense white ethnic and African American neighborhoods in the cities bore the brunt of this "progress." Households that could afford to move to other neighborhoods or adjacent suburbs did so. Many could not afford to, or were barred by discriminatory real estate practices in both the cities and the suburbs; these households moved into the few city neighborhoods they could afford, often relocating to public housing. Severe overcrowding and concentrated poverty resulted, contributing directly to urban riots in Cleveland (1966 and 1968), Akron (1968), and Youngstown (1968).

The migration from the centers of our region to the perimeters came during a period when the region's industrial base was undergoing profound and permanent change. Beginning in the late 1960s and early 1970s, the region's industrial firms stopped their practice of importing labor from outside the region to support the growth of production and began substituting technology for labor. "Automation" accelerated dramatically as the growth of available computing power fueled the spread of robotics, automated processing, remote sensing, and "workerless" factories. To be profitable, manufacturing firms found that they needed fewer, more highly-skilled workers that would enable them to replace labor-intensive production processes with those requiring fewer workers to produce the same output.

Changes in production technology were accompanied by changes in freight movement patterns as firms moved away from rail transport—and urban sites that provided access to freight rail—to truck transport. This shift privileged suburban sites that had ready access to the region's freeway network. Multi-story factories with rail sidings lost favor as places to "make things" and were abandoned; the new commercial and industrial vernacular became single-story, truck-friendly, greenfield suburban sites.

Also impacting the practices and patterns of production in the region was the emergence of stringent environmental regulations promulgated by state and federal agencies to clean the air, water, and land, often disadvantaging older mills and factories which employed "dirty technologies" in their production processes. Rather than retrofit their aging factory, many firms choose to abandon them and shift production and jobs elsewhere. One of the earliest and most dramatic examples of this pattern of abandonment was the decision by Standard Oil of Ohio (SOHIO) in 1966 to shut down Refinery #1 in Cleveland—John D. Rockefeller's first refinery—because meeting environmental regulations was perceived as too costly.

Finally, the development of increasingly sophisticated tools to reduce costs and manage capital allocation gave rise to widespread "rationalization" of the region's historic base industries. This began with the closure of SOHIO Refinery #1 in 1966, picked up speed with the closure of Youngstown Sheet and Tube in 1977, and accelerated in the 1980s, culminating in the loss of Akron's rubber industry following Sir James Goldsmith's attempted hostile takeover of Goodyear in 1986. The region's legacy cities experienced a rush of plant closings, layoffs, and industrial abandonment as capital fled Northeast Ohio for more economically attractive regions of the country and the world.

The region's industrial decline has come at a demographic price. During the 50 years from 1960 to 2010, Northeast Ohio's seven legacy industrial cities (Cleveland, Akron, Canton, Lorain, Elyria, Youngstown and Warren) collectively shrunk by 44.7%, from about 1,600,000 to slightly less than 800,000. The 12-county region's population growth was virtually flat, with a very modest 1.9% increase in the same 50-year period.

During the past 25 years (1985-2010) the region's legacy cites have worked to stabilize their neighborhoods and reimagine their futures. Cleveland has focused on preserving its historic fabric by renovating the Playhouse Square theaters and repurposing obsolete office buildings, factories, and schools; building new housing; and expanding neighborhood capacity. It has leveraged its universities—Cleveland State and Case Western Reserve—and its hospitals and research centers to build its biomedical cluster. Akron has worked to retain its legacy rubber industry, stabilize its neighborhoods, and leverage the University of Akron, a national leader in polymers. Canton has focused on retaining legacy industries and attracting the emerging oil and gas industry. Youngstown has built its manufacturing base and leveraged Youngstown State and the Youngstown Business Incubator to attract the America Makes, the National Additive Manufacturing Innovation Institute.

#### SPECIAL SECTION:

# THE FUTURE OF OUR REGIONAL ECONOMY: A REPORT FROM THE NORTHEAST OHIO REGIONAL ECONOMIC COMPETITIVENESS STRATEGY (RECS)

Northeast Ohio's Regional Economic Competitiveness Strategy (RECS) is an economic development planning initiative involving 150 private sector business leaders engaged to examine the region's current economy and assess its future. The initiative is led by TeamNeo, a collaboration of the region's Chambers of Commerce, and the Fund for Our Economic Future (the Fund), a collaboration of the region's philanthropic organizations, and focuses on the economy of TeamNeo's 18-county Northeast Ohio region.

The RECS process began in 2011 and has taken place concurrently with the Vibrant NEO 2040 Regional Visioning process. In so far as the two efforts involve several of the same organizations, including the Fund and Cleveland State University's Levin College of Urban Affairs, the leadership of NEOSCC agreed to align its spatially driven 30-year (2010–2040) examination of the region's future with the RECS aspatial analysis of the region's economy for the varying time periods extending up to 15 years (2010–2025).

The RECS project began with a deep analysis of the region's existing competitive strengths and an assessment of the drivers of the region's economy. Additionally, the region's cyclical performance over time was examined. As part of the assessment of the cyclical performance of the economy, two employment scenarios were generated.

The first scenario was based on an extrapolation of the performance of the economy in terms of jobs, income, and gross product. The projections were expressed as percentage difference from the nation's average growth rate. The second scenario was based on a number of assumptions that would boost the growth rates of these three variables up to national average growth rates. NEOSCC and its consultants used the growth rates modeled in the second RECS scenario to establish growth projections from 2010 to 2040 in the Vibrant NEO 2040 scenario planning analysis.

The findings of the RECS economic planning process were spatially agnostic. The planning effort took on three distinct competitive themes based on time.

In the near term (1 to 5 years into the future) the region's development challenge is one of marketing the region's current set of competitive assets (people, places, and products) to business investors. This was widely referred to as "selling the assets we have."

In the medium term (5 to 10 years in the future), the region's competitive challenge is one of investing to improve the competitive positions of the industries that make up the current economic base. This was frequently described as "strategic investing in competitive assets."

In the long term (10 to 15 years and beyond), the region must focus on investing in ways that develop new, more competitive, regional economic assets. These are people (education), ideas (intellectual property that can serve as the basis of new products), and places (an environment that supports quality places in fiscally sustainable ways.) This was termed as "investing in new competitive assets."

The RECS analysis found that Northeast Ohio remains a vibrant manufacturing region with very strong competitive positions in the automobile industry, supply chains that service the aircraft, truck and rail industries, and chemicals (especially plastics, paints, and coatings). The region's manufacturing base is enjoying an improvement in its international competitive position due to increased labor costs in China, the increased cost of international shipping, and the effort of major Original Equipment Manufacturers (OEMs) to shorten their supply chains. This has become especially evident in the automobile industry.

The chemicals industry increased its national market share over the study period. Both chemicals and plastics expect that their competitive positions will improve as the nation's economy switches from oil as the principal energy source to one based on natural gas. Further benefits will flow to the manufacturing base if the region's natural gas liquids are "cracked" somewhere in the tri-state region that contains the Utica shale formation.

Stark, Mahoning, and Trumbull counties have emerged as service locations for the natural gas industry. Additionally, manufacturers throughout the region are finding opportunities in providing drilling supplies, including pipe, and materials related to building and maintaining the infrastructure that connects the wells to the national distribution and refining networks.

Both the economic opportunities and the land use and environmental issues that attend the development of the region's oil and gas industry are emerging throughout Northeast Ohio. Balancing the region's need for economic growth, the desire of land owners to extract value from their property, and the desire of citizens for clean air, land, and water will require thoughtful analysis and careful balance in the years to come.

The medical instruments industry may also be joining the region's economic base through a combination of the high performance of the region's venture capital industry and efforts to support technology-based entrepreneurship. A second area of strength that lies behind the medical instruments industry is the strong performance of the medical imaging cluster in Cleveland's eastern suburbs.

Another emerging nexus of related economic activity is food production and processing. This is an industry that spans the entire region and is urban, suburban, and rural. The emergence niche markets for local food, the vibrancy of traditional agricultural markets and practices, and significant investment in nationally distributed food products manufacturing strongly suggest the continued strengthening of this sector.

One asset that can generate disruptive industrial change based on agricultural products is the Ohio Agricultural Research and Development Center in Wayne County. The role of agriculture in the region's future and the continued loss of prime farmland to urbanization are related land use issues facing the region.

RECS and NEOSCC jointly recognize that the emergence of high value local food and localized distribution through farmer's markets, locally owned grocery stores, and restaurants that source locally provide a tangible connection between the land and the economy and bridges the region's urbanized areas and its rural communities.

The strong presence of manufacturing, the location of the region in relation to the population centers of the United States and Canada, and the deep supplies of natural gas mean that the region is and will continue to be an important hub of truck-based logistics. A critical land use issue facing the region's communities is the need to maintain a high quality road network that provides competitive, "just in time" truck access to the region's manufacturing firms and logistics facilities, both of which are typically found on low-density suburban industrial sites.

The region has witnessed strong performance in headquarters locations and in related professional services. There are globally competitive headquarters operations centered on each of the region's central cities, though the weight of this activity is centered on the I-77 and the I-271/SR 8 corridors connecting Cleveland, Akron and Canton. Ensuring that the region's centers of corporate headquarters and professional services remain attractive and nationally competitive is a land use and development challenge that will face Northeast Ohio in the years to come.

## NEAR-TERM STRATEGY: STRENGTHEN THE CURRENT ECONOMIC BASE

Reinforcing the competitive position of the current economic base is RECS's focus for near-term action. The RECS analysis identified three near-term actions that respond to an opportunity that its competitive review revealed. Each has impacts that span the entire Northeast Ohio region.

Prepare the region's work force for the future: There are three forces reshaping the demand side of labor markets. First, the industries in the region's economic base require a literate and numerate workforce with a complementary set of soft skills to be globally competitive at all levels. Second, manufacturing is undergoing a disruptive new industrial revolution. The digitization of the factory floor and the use of integrated flexible manufacturing systems have changed global locational economics. Manufactures will require relatively less labor in the future, but that labor will be much more technically sophisticated. Finally, the current workforce is aging. The labor market will be more highly stressed by the demand to replace existing workers then in responding to the creation of net new jobs. These challenges exist at a time when our region has a surplus of under-skilled workers relative to market demand.

Preserve and expand the region's system of air service while rationalizing the region's air service capacity: Access to national and global areas of commerce is important to the region's headquarters and professional services industries. Correspondingly, global access to the region is important to the region's tourism industry and to attracting flows of investment capital. At the same time, the region has a significant air service capacity, some of which is arguably redundant. The region's existing capacity is neither recognized nor invested in and managed as a system. This capacity is expensive to maintain even though some of the true economic cost is offset by subsidies from the federal government. By taking a thoughtful, regionally-balanced and collaborative approach, Northeast Ohio could rationalize its existing capacity and manage the air service system for the benefit of the region as a whole

Obtain as much economic advantage as possible from the development of the shale natural gas resource: The Utica Shale formation contains a mixture of natural gas liquids ("wet gas") and methane ("dry gas"). This resource is a relatively low-cost and dependable source of energy to both manufacturers and the logistics industry. If the capacity is established in or near the region to refine ethane from natural gas liquids, then substantial competitive benefit will flow to the region's chemicals, paints and coatings, and plastics industries. At the same time, the extraction, transportation, and refining of wet and dry gas must be done in ways that preserve environmental quality.

#### MEDIUM-TERM STRATEGY: CHANGE THE PRODUCT MIX

Northeast Ohio's economy is large and complicated. The regional economy is not dominated by any one product. Instead its traded sector is comprised of a highly diverse portfolio of products. Those products are capital intensive and technologically sophisticated, but they tend to be old. And, because they are old, growth is slow and competitors abound. This raises the imperative of changing the mix of products within the traded sector's portfolio. The RECS has three responses aimed at the medium term:

**Focus on product innovation**: This is designed to stimulate, support, and speed up product innovation within existing firms.

**Support "Gazelle" companies**: Identify infant businesses with strong business plans, proprietary intellectual property that is the basis of a product, and a leadership team that is committed to building a high growth company.

**Build and support an innovation infrastructure**: The innovation infrastructure includes stimulating entrepreneurship, supporting technical innovation, accelerating technology transfer, and catalyzing private placement capital markets.

#### LONG-TERM STRATEGY: GET SMARTER

The RECS analysis led to the conclusion that the long-term asset value of the region's workforce has to improve if the region is to compete and to provide good incomes. Specifically, educational attainment has to improve across the board. The analysis notes that Northeast Ohio is a region that traditionally has secondary school graduation rates that are above the national average, higher educational attainment rates among its adult population that are below the national average, and levels of literacy and numeracy among its central city populations that are disastrously low.

RECS acknowledges that improving the region's overall educational attainment is a long-term initiative that overlaps with the more immediate need to meet the region's workforce challenge. While the region's workforce efforts can be characterized as near- and medium-term because they either connect current workers to the labor market or improve the skills of current workers to match existing jobs, efforts to improve educational attainment are medium- to long-term because they aim to change the quality of the educated workforce in fundamental ways.