WAYMAKERGROUP | SMITHGROUP

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HOW CAN AMERICA'S MIDDLE-TIER CITIES BECOME HUBS FOR INNOVATION?

A framework for addressing the complexities of population loss, talent migration and economic reinvention in smaller urban centers

TABLE OF CONTENTS

INTRODUCTION

As we recover from the impact of the COVID-19 pandemic, significant focus has been made on the reinvention and resiliency of Middle America (considered here to be any market between New York and San Francisco). New light has been shed on social and racial equity, the need for greater access to healthcare and childcare, and the evolving needs of the labor market.

Whole industries have shifted, as have the needs of our workforce. Add to this the accelerated impact of automation and technology and no one can argue that we're in one of the most transformative economic chapters in our country's recent history.

Knowing city and institutional leaders are seeking new ways to improve resiliency, build on their assets and support the talent we know drives local economies, **Waymaker and SmithGroup have come together to outline some immediate steps city and institutional leaders can take to initiate or advance innovation ecosystems in their markets.**

Innovation ecosystems are complex yet achievable for middle-tier markets. While we know the list of ingredients for successful innovation ecosystems is long—visionary leadership, equitable access to learning and training, engaged businesses, generational and racial diversity, political will, access to healthcare, etc.—we also know there are practical steps you can take today to lay a strong foundation for the decades to come.

DEFINING INNOVATION FOR THE MIDDLE MARKET

We use the term innovation very broadly here. It encompasses far more than the latest advances in technology. Therefore, when we define innovation as a process where people come together to create, we can see that innovation has been a driving part of the U.S. identity and economy for the last 150 years. It is not inherently disruptive – and does not have to be approached as a winner-take-all competition for limited talent and resources. In its most forward-looking sense, an innovation economy is not defined by what it used to be – e.g., post-industrial – but rather by what it can become through a creative process.

At the same time, however, it's clear that America's middle-tier cities, many once thriving urban hubs of economic activity, have in recent decades been forced to reckon with several negative factors stemming from larger market shifts. Globalization, digital transformation, and aging populations have hit smaller U.S. markets hard, resulting in population loss, talent migration and ultimately, declining tax revenues. Add to that the shifting demands of industry and the new skill sets increasingly required for employment and you have a lot to keep up with as a middle-tier leader.

Do middle markets have a chance at repositioning and building back better in this current environment – especially as we continue to grapple with what "post-pandemic" means?

Is it too late or too much to combine economic recovery strategies with the task of repositioning for the New Economy?

We believe that it's not only not too late but instead a prime time for middle-markets to make creative moves and invest boldly.

Perhaps most importantly, we believe that the innovation playbook that's been defined for larger cities is the wrong approach for smaller ones. When it comes to innovation, one size definitely does not fit all. It's increasingly apparent that smaller markets have a unique combination of underappreciated assets and macroeconomic headwinds blowing in their favor. New forces including workforce redistribution, increased interest in work-live-play models, and permanent shifts in work-from-home mean that middle markets, if positioned correctly, will have a shot at new economic opportunity.

Regardless of declining tax bases and the need to improve funding pathways for our cities, one thing is certain. Standard economic development practices need a healthy shake when it comes to diversity, equity and inclusion. The wealth gap in the U.S. has continued to grow over the past four decades, with 10% of the population now holding 70% of the country's net wealth.[1] The following framework is offered with a guiding assumption that a middle-market innovation economy will require new and intentional efforts to offer equitable opportunities for education, workforce training, entrepreneurial options, as well as wages that uphold health, home and family care.

Repurpose current industrial or agricultural assets

Invest in community building and infrastructure

Double down on talent-development initiatives

STEP #1

SHIFT TO AN INCLUSIVE SERVICES-BASED ECONOMY

In December 2019, the Brookings Institute reported that 90% of the nation's innovation employment growth over the last 15 years was generated in just five major coastal cities: Seattle, Boston, San Francisco, San Diego and San Jose, California. While this begs the question of whether innovation was defined in such a way that it could only apply to major urban markets, the study reveals some key market dynamics that are important for smaller cities to note.

Job growth within these five cities is correlated with high-skill, higher-wage occupations that are less vulnerable to elimination or automation.

As a result, these urban markets saw less economic decline during recessions and during COVID, because the high ratio of professional and high tech/scientific service jobs helped **insulate them from the economic downturns**.

In addition, the growth of these services-based occupations helped fuel growth in certain innovation-based industries that attracted more companies within the same sector – which is called agglomeration. While it sounds a little like something that's stuck to your windshield, think "like attracts like" to explain why certain markets develop a depth in specific areas of expertise (e.g., fintech in Atlanta, software development in Austin, etc.).

Middle-tier cities confronting economic decline can learn from these growth trends. One of the primary reasons for employee migration out of middle-tier communities has been the decline of industrial-era occupations. Global outsourcing and an increased need for companies to be near deeper technically-skilled talent pools has meant that qualified workers go to where the jobs are (and companies go to where the talent is). **If these communities are beginning to battle against job and population loss, a services-based job growth strategy is key. As you might imagine, skilled employees are essential to services-based job growth.**

While the skills required for these new services-based occupations will range widely (from initial or early-career digital skills to more advanced engineering/scientific occupations), embracing far-reaching workforce development and increasingly creative training and recruitment models will be critical to the economic and social success of all our communities. Keep in mind also that many middle-tier markets are gaining an upper hand in touting a diverse workforce. Higher rates of immigration in the last decade and shifting non-white urban populations means that smaller markets can frequently offer the same access to workforce diversity as their urban peers.

Economic diversification and agglomeration might seem like separate strategies, but they can complement each other extremely well. Many smaller cities have successfully focused their economic development and reinvestment efforts around existing assets, ranging from agricultural production and historic manufacturing to forestry or communications, and built a more services-oriented economy that attracted and generated other related businesses.

Many smaller cities have successfully focused their economic development and reinvestment efforts **around existing assets**.

Cortex Innovation Community

In 2002, Cortex was founded as a 501(c) 3 tax-exempt organization to transform a once blighted St. Louis industrial area into an inner-city center for job creation, inclusive neighborhood growth, entrepreneurial activity and transformative economic development impact. The project currently includes 415 companies and 5,800 employees.

STEP #2

CENTER YOUR ECONOMIC DEVELOPMENT STRATEGY AROUND YOUR PEOPLE AND PLACE

Larger cities have increasingly adopted the innovation district model as a way to develop for innovation. Does this same approach work the same way in smaller cities – or provide the same kind of benefits/advantages?

While we're familiar with what traditional retail, residential and office environments look like, innovation environments are the culmination of physical and social assets. Culture (which is a social/experiential asset) as well as physical density and sense of place all play an important role.

Successful innovation districts or centers are viewed as physical spaces where both intentional and "serendipitous" interactions can happen between different innovators: manufacturers, inventors, researchers, academic faculty and students, entrepreneurs, etc. This makes proximity and density a key consideration for innovation district development, especially in larger cities where greater physical distances can limit collaborative interactions.

What does innovation look like? How can we foster the conditions that help nurture and sustain it?

The Innovation Ecosystem

Given the vast distinctions in regional economies, the form and function of innovation districts differ markedly across the United States. Yet all innovation districts contain economic, physical, and networking assets. When these three assets combine with a supportive, risk-taking culture they create an innovation ecosystem—a synergistic relationship between people, firms and place that facilitates idea generation and accelerates commercialization.

(The Rise of Innovation Districts, Brookings Institute 2014)

A lot of dialogue is dedicated to the importance of developing a unique place for these interactions between innovators, but what does that mean exactly?

Be true to your community's heritage, history and character

Bring innovative people with similar motivations/ interests together in close proximity

In many instances, this has become more about creating new amenities intended to attract innovators who currently live and work somewhere else. It's an approach that can lead to design that is not grounded in a true sense of place.

Authenticity, being true to a community's heritage, history and character, while looking to the future, is possible, although exceedingly difficult. Thankfully, middle U.S. markets have access to "place" with abundance. Most industrial communities have a number of assets that are still usable, or ready for repurpose. Unique manufacturing or industrial buildings or sites, parcels for development along a river or body of water (historically used for transporting industrial goods), have been leveraged in a number of markets to combine the function of honoring a community's past while nodding to its economic future.

The extent to which "high design" contributes to an innovation ecosystem is often debated. **In fact, MIT's famous Building 20 — which was never given a name because it was viewed as a temporary facility — became a galvanizing center for innovation in spite of a complete lack of amenities.** What it had was the interactive culture, bringing innovative people with similar motivations/interests together in close proximity. In this way it is similar to New York City's famous Brill Building — which became a songwriting and producing hit factory during the 1960s. The building's tenants and the cultural dynamic they created had more to do with its success than building or amenities design considerations.

Building 20—MIT

Known as "MIT's Magical Incubator," Building 20 was a temporary plywood structure built in 1943 as part of the U.S. emergency war research effort. Its low-budget but uniquely collaborative environment led to major innovations in radar technology, physics, chemistry, linguistics, and acoustics.

Finally, a note about the necessity and desirability of the work-from-home or hybrid office movement. Fresh out of COVID-19 and evolving quickly into an environment of forever dealing with new hybrids will require significant patience on everyone's part. At the time of developing this piece, there remains a significant disconnect between leadership and staff about what and where the ideal work environment should be.

Historically, **Work-Live-Play**, in that order, was the sequence of focus for generations. Now the lines are significantly blurred. Next-generation employees value work and work time differently. They absolutely value live and play time and space differently.

How does a city take into account these generational and post-pandemic realities?

How do regional leaders plan for the future knowing society is in training?

How should future plans integrate what we know to be the new sequence of priorities for employees?

Gone are the days of a 9-to-5. Gone also are the days where research, commercialization and entrepreneurialism are all sequestered to different parts of a city's campus.

Critically, planners are having to nudge cities to think futuristically and not to be nostalgic.

Next generation knowledge economy workers seek urban amenities and thankfully, the ease of lifestyle that comes with smaller markets. They also seek the ultimate in flexibility—especially as we continue to sort through the new power dynamic (which favors the talent) and what it means to live in a post-pandemic world.

STEP #3

LEVERAGE EXISTING BUILDINGS AND INFRASTRUCTURE FOR ADAPTIVE REUSE

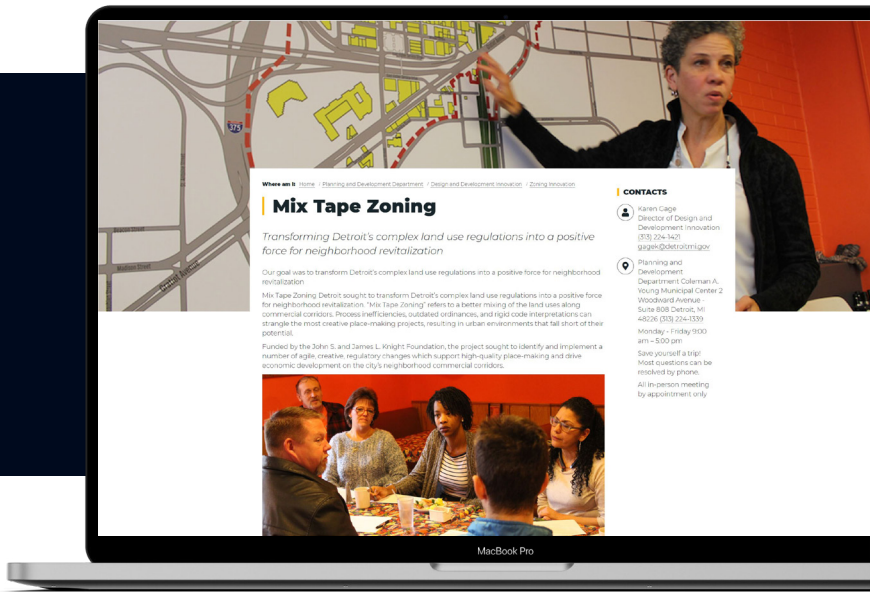
The built form of our cities has been forged over time, creating legible physical testaments to our heritage and shared identity. The most successful innovation districts in the future will leverage the inherent assets of a place to advance economic opportunity and growth. Similar to biological ecosystems, thriving innovation ecosystems require a high level of place-based adaptation. **The key is for a community to understand and embrace its natural assets and competitive strengths and to center its plans for innovation development around those advantages.**

With broad shifts in our economies throughout the second half of the 20th century, previous infrastructure for manufacturing, power generation, and commercial enterprise are increasingly ripe for new futures. In many middle-tier, middle-American cities, historically overlooked assets in post-industrial environments include infrastructure and buildings that were built with oversized scale and flexibility. In recent years, many individuals, organizations and cities have gained greater appreciation for the fact that our once-limitless scope of production and consumption is neither ecologically nor economically sustainable. Reinforced by the advantage of interconnected networks in urban centers, reinvestment in cities and their existing forms of land and structures is yielding a transformative impact.

This kind of adaptive re-use is not only limited to industrial buildings, but also infrastructure. This includes the transformation of defunct industrial rail lines into dynamic greenways and the reconsideration of the very policy and regulatory mechanisms our cities use to guide new investment, through work like the City of Detroit is leading with its Mix Tape Zoning Initiative.[2]

Mix Tape Zoning—City of Detroit

To help jumpstart the zoning code changes needed to support more innovative and equitable approaches to mixed-use infill redevelopment, the City of Detroit engaged three teams to provide galvanizing design overlays for key commercial corridors.



STEP #4

BE BOLD—AND AUTHENTIC

Forging new economic paths in middle-tier cities and re-thinking the potential of overlooked U.S. markets will require vision, bold risk and commitment to people and place. Authentic future design must respond to a post-pandemic population desiring to live in cities with the right mix of attractions, amenities, and quality of life. This makes city building an essential part of creating an innovation ecosystem. **It is important for middle-tier cities to employ thoughtful policy, prudent decision-making, and informed regulation to create safe environments that ensure our cities remain vital centers of advanced economic, social, and ecological performance.** Moreover, we need to realize that cities will not only provide equitable platforms for many to realize more opportunity over time, but they will also continue to be – as they have for millennia – the undisputed progenitors of innovation and exchange we will need to adapt and thrive together.

Above all, successful and enduring design for innovation must start at the human scale. We must put people first when we shape and adapt our middle-tier cities. Design must emphasize social linkages and connections not only as the cornerstone of the design approach, but employ thoughtful design strategies that create new public gathering spaces and dynamic hubs of economic activity. We must collaborate with local artists and artisans to authentically express what makes a place special, put people first in our thinking about the future of urban mobility, and incorporate public health and wellness metrics into our plans and decisions.

Creative solutions that rethink and reframe existing infrastructure so it can be utilized anew, becoming part of an accumulated narrative with a shared history of place, will differentiate themselves in new innovation centers. These solutions must work across district and regional scales and incorporate new strategies and systems for technology and telecommunications, shared mobility, ecological recovery, and sustainable development in a human-centric way.

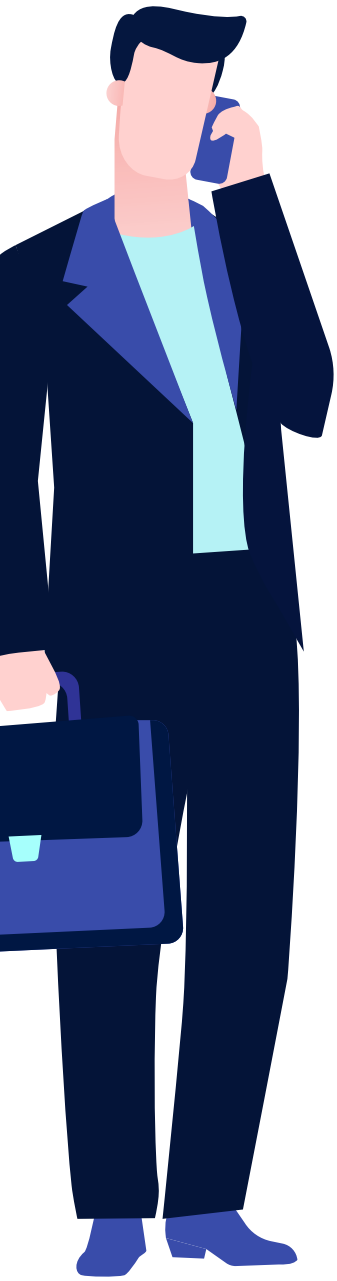
Successful innovation design is human-centric.

Create new gathering spaces and economic activity hubs

Collaborate with local artists and artisans to express authenticity

Put people first in our thinking about the future of urban mobility

Incorporate public health and wellness metrics into decision making



By 2030, more than **85 million global jobs** could go unfilled because there aren't enough skilled people to take them (a shortage valued at $8.5 trillion).

STEP #5

CENTER YOUR GROWTH STRATEGY AROUND NURTURING LOCAL TALENT

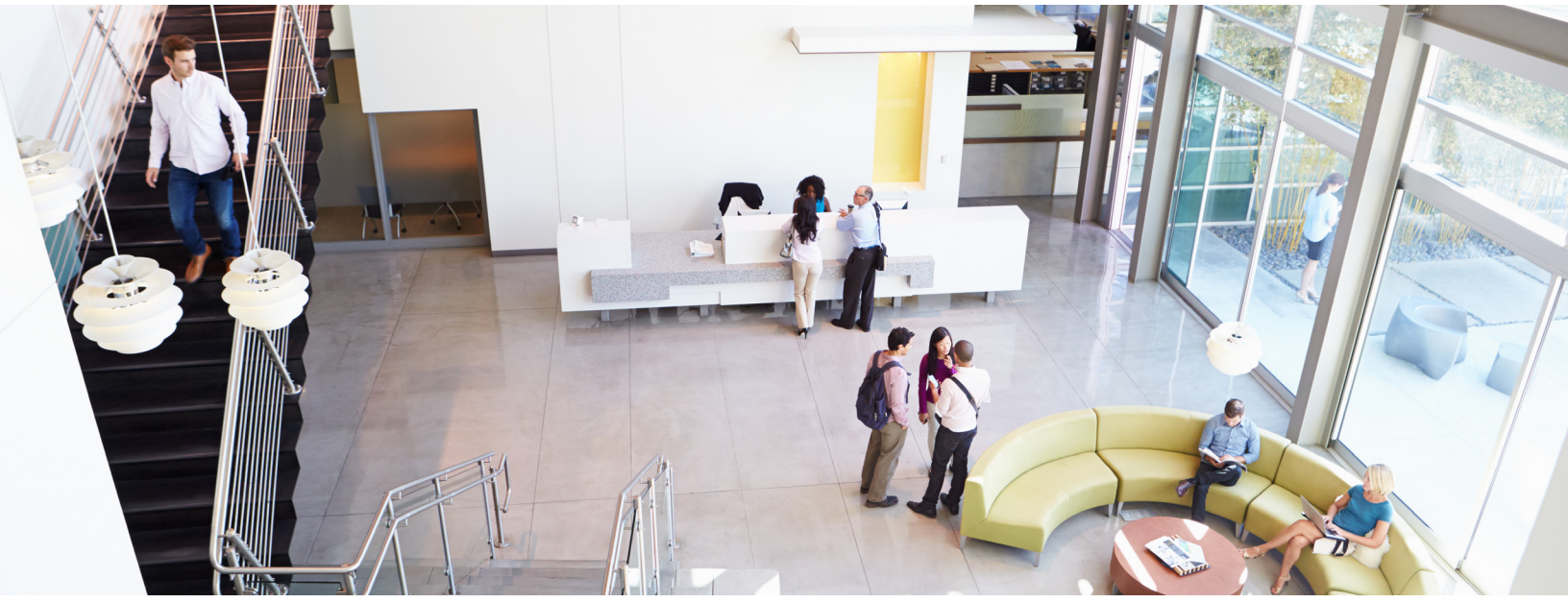
Employers will tell you that a scarcity of "talent" (employees who are qualified for their job openings) is the number one issue that keeps them up at night. Management consulting firm Korn Ferry recently released a report indicating that by 2030, more than 85 million global jobs could go unfilled because there aren't enough skilled people to take them (this shortage is valued at $8.5 trillion).[3] And in today's complicated, global environment, more is required than simply connecting your community's industry to the local workforce. City and economic development leaders must make concerted investments to ensure multiple on-ramps for training and education that provide equitable access for all.

Successful innovation ecosystems consist of multiple "webs" built upon public-private-non-profit and community partnerships. These webs should ideally be centered around local and regional talent development and retention. These ecosystems are successful when the collective vision and greater cause are focused on investing equitably in the youth of the community. Higher education institutions, civic organizations, and public entities are best served when decision-makers and leaders come together in the name of this talent-centric mission and consistently dedicate time, resources and direction, making long-term investments in their citizens (starting very young). Gone are the days where economic development starts and ends with recruiting companies from competing regions. In today's global economy, collaborative leadership, pooling resources and a single-minded focus on nurturing and developing talent offer the best opportunity to position your market for success.

Conversely, it is difficult to overstate the importance of critiquing the "creative class" theory of economic regeneration, and its focus on investing in amenities that will attract rarified talent to relocate there. It shifts a city's planning and investment priorities to people who don't currently live in the community. Its application in larger cities is increasingly viewed as a contributor to gentrification and displacement. For smaller cities dealing with both job and population loss, a more broad-based, community-centered reinvestment approach is essential to long-term success. Fundamentally, diversity, equity and inclusion must lie at the core of talent recruiting, retention and training efforts. Increasingly employers recognize that hiring individuals with different backgrounds and skill sets is the key to building a successful innovation ecosystem.

Middle tier markets have a unique opportunity to promote their community's diverse candidate pool by intentionally investing in equity-based programs that **empower citizens to learn new skills, start or create new jobs, and forge entrepreneurial paths that keep jobs and economic impact in the local economy.**

Creation and invention are not just the things that happen in R1 institutions or in urban markets on the coasts. Middle markets have a unique opportunity to leverage what we know works in innovation ecosystems: less formal learning environments. By fostering a collaborative approach to integrating creation and invention, regional leaders should ensure the involvement of local K12 schools, STEM non-profits, community colleges, public libraries and children's museums, just to name a few. Fostering learning and creativity is at the heart of all successful innovation ecosystems. We're also finding that the more-traditional higher education institutions and corporations are eagerly seeking informal opportunities to interact, even volunteer, to support early STEM learning efforts.



STEP #6

ADVANCE ECONOMIC DEVELOPMENT AS A REGIONAL, TEAM SPORT

You've probably heard this already but it can't be emphasized enough. Economic development is no longer relegated to competing locally. Instead, as a result of the prevailing macroeconomic winds, employers are now looking nationally for talent, seeking pools of technically-skilled talent in smaller markets across the country. Often those markets are surrounded by pools of talent and/or other research or innovation assets. Rochester, Minnesota; Providence, Rhode Island; Durham, NC; and Louisville, Kentucky are just a few of the examples of smaller markets that now grow global companies and thriving entrepreneurial communities.

Ground-up involvement and inclusion are critical to an innovation ecosystem's success. Candidates with diverse backgrounds, histories and skills will fuel an ecosystem's development. The more diverse the talent pool, the more attractive the market is to outside tech companies, developers, researchers, etc.

Innovation ecosystems should not be simplified as real estate transactions or short-term buy-sell agreements. The development of an ecosystem should take into account a community's history, the situation and desires of its citizens and the ability of that community to develop a collaborative, impactful vision. It should also be treated for what it is: a community's long-term investment in its own future.

SUMMARY

There are a number of macroeconomic winds that are playing in mid-markets' favor. Recent policy shifts and aggressive national investments to improve the U.S.' global competitiveness mean Washington is finally looking outside America's largest cities for economic investment and growth. Middle markets have a lot to offer to this end—abundant assets in innovation and invention, a can-do attitude, deep pools of engineering and technical talent, and for some markets, the desire to finally compete with larger markets for the prosperity they enjoyed in earlier eras.

If we ignore the deferred economic development needs of our middle-tier cities, the U.S. stands to fail at redistributing our most valuable assets — research and development, young talent, new and growing companies — and at optimizing our economic growth, prosperity, and ability to compete globally. By intentionally investing in regional markets, but most importantly, giving them the tools to grow, we stand to leverage untapped innovation assets, mobilize unseen and underappreciated segments of our workforce and enjoy a higher "gear" of economic growth.

Sources:

1. Statistica.com — Distribution of Wealth in the United States
2. Detroitmi.gov — Mix Tape Zoning
3. Korn Ferry — The $8.5 Trillion Talent Shortage

HOW WE CAN HELP

Waymaker Group and SmithGroup knows what it takes to evaluate your assets and plan an innovation district that will maximize its potential. Many markets can become thriving destinations for talent, innovation, and capital. We have the leadership, empathy, and expertise to guide you there. Our comprehensive knowledge of building innovation ecosystems guides the growth of your innovation effort in the following ways:

- **Knowledge:** Our pre-development and planning services will help prepare your ecosystem for implementation
- **Partnerships:** We forge public-private alliances that drive your talent development and retention strategies
- **Cluster Development:** Our technology experts advise on emerging cluster opportunities
- **Entrepreneur Engagement:** We program internal and outside resources to attract startup change-makers
- **Connections:** We leverage our unparalleled national network to learn best practices or seek advice

We'll help you take control of your economic destiny and realize your visions for a bright future. With Waymaker and SmithGroup, you'll gain partners with a vested stake in the outcome.

Julie Huls
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WE'D LOVE TO HEAR FROM YOU

We look forward to continuing the conversation with many of you in the coming weeks, months and years and to serving our clients and communities in what we can all agree is a very unprecedented time.

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