# A Ten-Year Strategic Plan for Economic Development in Pennsylvania

2024-2033

PENNSYLVANIA
GETS IT DONE

# PENNSYLVANIA GETS IT DONE.



### **GOVERNOR JOSH SHAPIRO**

Fellow Pennsylvanians,

You've heard me say it time and again: I'm competitive as hell, and I am ready to see Pennsylvania win.

What does winning look like? It means being a leader in economic development, innovation, and job creation. It means building on our strong and resilient economy and Pennsylvania's unique strengths to help us weather tough times and get ahead in good times. It's a Commonwealth where every Pennsylvanian — no matter what you look like, where you come from, who you love, or who you pray to — can find opportunity to thrive, has the freedom to chart their own course, and where Pennsylvania businesses are leading our nation forward.

For too long, our neighboring states have invested and focused on economic development while Pennsylvania has lacked a thoughtful, targeted game plan and serious investment. With this plan, for the first time in nearly two decades, Pennsylvania will have an economic development strategy that unites leaders in the public, private, nonprofit, and academic sectors behind common goals. Together, we must invest and collaborate to create meaningful and long-term growth that will benefit our Commonwealth today and for decades into the future.

In my first year as Governor, I'm proud to say our economic outlook has improved. In 2023, we added over 100,000 new jobs,¹ economic output has increased,² and unemployment has dropped.³ My Administration is changing how we do business in Pennsylvania — and we've hit the ground running; securing \$1.2 billion in private sector investment, significantly cutting down business licensing time, and rethinking the way government can work at the speed of business.

I'm proud of that progress, but there's a lot more to do. Over the next few years, my Administration will keep working to get stuff done — doubling down on site development to bring more commercial and industrial sites online, investing in innovation and leveraging our regional and economic diversity, and giving every Pennsylvanian the opportunity to succeed.

We will continue improvements already underway to how state agencies handle permitting and regulations and provide the best possible customer experience for companies looking to expand in our Commonwealth. We will streamline our business incentives and increase funding for the most effective programs so that when companies invest in Pennsylvania, Pennsylvania has the resources to invest in them. And we will work with all regions and local leaders to build up our cities, counties, and municipalities. There's a lot to do, and with this targeted plan to succeed, Pennsylvania is ready for the challenge.

Let's get it done.

Josh Shapiro

Governor, Commonwealth of Pennsylvania





# **Table of Contents**

Executive Summary	1
Introduction	5
Starting Point	9
Priority Industry Sectors	17
Strategic Initiatives	27
Conclusion	39
Acknowledgments	41
References	43

# PENNSYLVANIA GETS IT DONE.

A Ten-Year Strategic Plan for Economic Development in Pennsylvania (2024-2033)

The maps and graphics in this document are for planning purposes only.

They are not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis.

Prepared by the PA Department of Community & Economic Development on behalf of the Commonwealth of Pennsylvania Commonwealth Keystone Building 400 North Street, 4th Floor Harrisburg, PA 17120-0225

dced.pa.gov | PAGetsItDone.com





# **Executive Summary**

Pennsylvania gets it done. As we navigate our opportunities in the modern global economy, it is critical that the Commonwealth maintain and advance our economic competitiveness and deliver real results for the 13 million people and 1.2 million businesses that call Pennsylvania home.<sup>4</sup>

The goal of this economic development strategy is to do just that – to provide Pennsylvania, its people, and its businesses with a roadmap to compete and win regionally, nationally, and globally. The priority industries and strategic initiatives contained within this strategy collectively advance Pennsylvania's vision of becoming a premier state to work, innovate, and do business.

### **STARTING POINT**

Pennsylvania's people, places, and innovators are highly regarded throughout the United States and across the world. Our proximity to major U.S. markets and low cost of doing business position us as a major economic hub, home to more than a million small businesses and twenty-three Fortune 500 companies. 5 Pennsylvania is a national center for workforce development, with our colleges and universities producing over 190,000 skilled graduates each year.<sup>6</sup> Those same colleges and universities invest \$5 billion into research and development annually, making Pennsylvania the 4th ranking state for academic research and development.<sup>7</sup> The Commonwealth's diversity of place includes sprawling cities, rural communities, and everything in between, and our regions are blessed with an abundance of natural resources that enhance our economic and cultural competitiveness.

But there is still much work to do. Even as Pennsylvania's strengths enable economic growth throughout the state, we're falling behind our neighbor states in key measures of economic competitiveness and resiliency. Compared to neighbor states, the Commonwealth is being outspent on economic development incentives,

with states like New York and Ohio leveraging as much as 16 times our total incentive spend.<sup>8</sup> We're facing a widening labor gap with a need for better-targeted workforce training programs and transformational change in our higher education systems. And while our academic institutions are making significant investments in research and development, those investments are too often not translating to the commercialization of new technologies and innovations.

For Pennsylvania to maintain and advance our economic competitiveness, we must double down on our strengths while investing in those areas where we need to grow. This strategy seeks to do just that. By leveraging Pennsylvania's strengths: our outstanding workforce; our diverse and interconnected industry clusters; our hubs of innovation; our geographic proximity to major U.S. markets; and much more, policymakers will align our economic development activities across five strategic goals with a focus on five priority industry sectors to become a premier state to do business – and build a stronger Pennsylvania that works for all residents, workers, businesses, and entrepreneurs that call our Commonwealth home.

### **Goals and Strategic Initiatives**



### Invest in Our Economic Growth to Compete.

We want our Commonwealth to be a place where we prioritize economic development investments, and where those investments result in real opportunities for our businesses, communities, and residents.

- Boost state investment in site development, preparedness, and marketing
- Expand support for small businesses with a focus on historically disadvantaged businesses and workers
- Streamline programs and increase funding for Pennsylvania's economic development toolkit
- Invest in tourism and recreational asset development to drive economic growth



### Make Government Work at the Speed of Business.

We want our Commonwealth to be a place where all companies find an attractive business environment to innovate and thrive.

- Cut through red tape and foster collaboration across state agencies
- Reform state permitting processes with a focus on customer experience
- Reinvent and Invest in the PA Department of Community and Economic Development



### **Open Doors of Opportunity for All Pennsylvanians.**

We want our Commonwealth to be a place where every Pennsylvanian can secure a family-sustaining job and a meaningful career.

- Keep Pennsylvanians in Pennsylvania through internships, apprenticeships, and experiential learning opportunities
- Double down on workforce training and pre-apprenticeship and registered apprenticeship programs
- Realign Pennsylvania's higher education system to meet our workforce needs
- · Provide second chances and grow our workforce



### Innovate to Win.

We want our Commonwealth to be a place where innovators become entrepreneurs and new discoveries enable our people and companies to succeed.

- Accelerate investments in priority industry sectors & entrepreneurial ecosystems through a newly established Pennsylvania Innovation Fund
- Launch Pennsylvania Problem Solvers startup competitions to find entrepreneurial solutions to our pressing challenges
- Establish industry & higher education innovation councils to provide government with real world counsel from business and thought leaders
- Start Buy Pennsylvania Initiative to align supply chain network and boost in-state collaboration



### **Build Vibrant and Resilient Regions.**

We want our Commonwealth to be a place where every community flourishes and provides for the needs of all their residents and businesses.

- Launch the Pennsylvania Regional Challenge to incentivize regional growth
- Support communities by investing in downtowns and main streets
- Compete for federal funding to improve infrastructure and support businesses and workers
- Expand availability of housing



While many of these strategic initiatives relate to government action, the Commonwealth cannot fully realize these economic development goals without meaningful partnership from the private sector, the economic development community, local government, labor, and the non-profit sector. State government cannot do it alone – and the most successful states and regions recognize that growth is only achieved through meaningful and intentional partnership.

### **PRIORITY INDUSTRIES**

Pennsylvania's historic approach to economic development has been unfocused. Without targeted industries to attract, cultivate, and grow, Pennsylvania's limited economic development dollars have been spread across industries without focus or attention to those industry segments where we either maintain a competitive advantage or can create one. That changes with this strategy. Taking a data-based approach to our efforts, we have identified five key industry sectors where we should target resources and maximize opportunities for growth:

- Agriculture
- Energy
- Life Sciences
- Manufacturing
- Robotics and Technology

Focusing on these sectors will enable us to build out industry clusters in high-growth, high-value industry segments, and to double down in industries of historic and economic significance to Pennsylvania. Recognizing that individual regions may have priority industries that differ from this list, Pennsylvania will continue to work with partners to promote regional strategies tailored to the needs of our diverse communities.

Armed with its first roadmap for economic success in nearly two decades, Pennsylvania will align our economic development efforts to achieve sustainable, inclusive, and equitable growth throughout the Commonwealth. By implementing this generational plan for success, we will position ourself to win as a premier state to live, work, play, and innovate.





## Introduction

For nearly twenty years, Pennsylvania has operated without a statewide economic development strategy. During that time, our economic development efforts have often lacked coordination and focus, and economic conditions across the state have varied widely. And while many of Pennsylvania's industries and communities continue to grow and thrive, we need a strategy to compete globally — a plan as aggressive and bold as our residents and businesses, and a plan that sets a clear vision of what we want our economy to look like ten years from today. That vision must be grounded in concrete goals, measured by metrics that we can track, and supported by strategic initiatives to get us from where we are today to where we want to be tomorrow.

### **VISION 2033**

By 2033, Pennsylvania will be a premier state to do business, where we adopt and innovate the next generation of breakthroughs in a diverse mix of industry clusters, where we cultivate a resilient economy, and where we invest in our people and our communities to build a stronger Pennsylvania that works for all the residents, workers, businesses, and entrepreneurs that call our Commonwealth home.

### **GOALS**

Through deep engagement with Pennsylvania stakeholders and economic analysis, we have identified five goals to achieve our vision:

### 1. Invest in Our Economic Growth to Compete

We want our Commonwealth to be a place where we prioritize economic development investments, and where those investments result in real opportunities for our businesses, communities, and residents.

We will reignite Pennsylvania's economy by investing the resources needed to attract and retain businesses, support expansion efforts, and position the Commonwealth as a national leader in economic development.

### 2. Make Government Work at the Speed of Business

We want our Commonwealth to be a place where all companies find an attractive business environment to innovate and thrive.

We will re-imagine government to deliver a best-inclass consumer experience by fostering collaboration across state government agencies, reforming state permitting processes, and improving the economic development delivery model.

### 3. Open Doors of Opportunity for All Pennsylvanians

We want our Commonwealth to be a place where every Pennsylvanian can secure a family sustaining job and have a meaningful career.

We will support all residents in charting their own path to join, rejoin, and excel in the labor force

through employee-centric, employer-powered workforce training and placement programs that leverage our exceptional educational assets and labor organizations.

### 4. Innovate to Win

We want our Commonwealth to be a place where innovators become entrepreneurs and new discoveries enable our people and companies to succeed.

We will build on our strength in research and development by investing in cutting-edge companies and commercializing new and emerging innovations, all while strengthening the resiliency and interconnectivity of our supply chains and promoting innovation as a job creator across all regions in the Commonwealth.

### 5. Build Vibrant and Resilient Regions

We want our Commonwealth to be a place where every community flourishes and where our diverse regions have the resources they need to carry out their own local economic visions.

We will champion and promote all Pennsylvania regions by supporting tailored, flexible, and locally informed regional strategies, investing in downtowns and main streets, and building local leadership capacity to make Pennsylvania a top state to live, work, play, and innovate.

These are ambitious goals. To achieve them, we must aggressively pursue a competitive economic agenda to grow and strengthen our economy. But state government cannot do it alone. Pennsylvania's public, private, labor, nonprofit, and academic sectors must work together. And we have to collaborate more closely with our partners across the state, including the local economic development network, workforce development organizations, and government at all levels. Collaboration and teamwork are required to transform how Pennsylvania approaches economic growth and competitiveness, and to ensure we sustain our progress into the future.

### **Measuring Progress**

The following metrics for success — organized by the goals above — are a bold declaration of what Pennsylvania can achieve in the next ten years. They include traditional economic development metrics of job creation and wage growth, and modern, qualitative outcomes that focus on cultivating a robust entrepreneurial ecosystem and an inclusive and equitable economy for all Pennsylvanians.



### Invest In Our Economic Growth To Compete.

Accelerate Pennsylvania's job growth rate, becoming a top 15 state in job creation. (currently 41st)<sup>9</sup>



### Make Government Work at the Speed of Business.

Become a Top 10 State for Business. (currently 15th)10



### Open Doors of Opportunity for all Pennsylvanians.

Become a Top 10 State in Median Wage Growth. (currently 35th)<sup>11</sup>



### Innovate to Win

Increase the number of startups in high growth industries by 1,100 over ten years, bringing our share of startups up from 6.6% to 10% in these industries, and becoming a leader among peer states for entrepreneurial growth.<sup>12</sup>



### **Build Vibrant And Resilient Regions.**

Achieve equitable regional growth, and increase job creation, wages, and labor force participation in every region of the Commonwealth.

The Strategic Initiatives laid out later in this document aim to help achieve these outcomes by 2033.

### WHY NOW?

Pennsylvania's economy is at a crossroads on a global, national, and local scale. We face an increasingly complex global economy, influenced by changes in technology, an evolving future of work, and neighboring states increasing their focus on economic development. Our decisions and actions over the next decade will have implications for long-term economic competitiveness, climate and sustainability, and quality of life for Pennsylvanians.

### **HOW DID WE DEVELOP THE STRATEGY?**

This strategy is the product of an intensive, collaborative effort to gather input and perspective from hundreds of stakeholders in Pennsylvania's public, private, nonprofit, labor, and academic sectors. We invited top site selection and real estate professionals from across the country to educate state leaders on where the Commonwealth stacks up against our peers and ways to improve our efforts. We held community roundtables, surveys, and virtual gatherings to ensure feedback from all 67 Pennsylvania counties. We reviewed case studies about economic development best practices. And we gathered and analyzed a wide range of economic and workforce data about Pennsylvania, our peer states, and the global economy. The result is a vision, goals, priority industries, and strategic initiatives identified collectively by Pennsylvania's stakeholders.

With these elements in mind, working groups with leaders and staff from the Pennsylvania Department of Community & Economic Development, the Governor's Office of Transformation and Opportunity, the Governor's Office of Policy and Planning, and the Governor's Budget Office focused on creating the following strategic initiatives and proposals to help supercharge Pennsylvania's economy.

# How Should You Read this Document?



This strategy is divided into three parts:

- Our **Starting Point** offers a current snapshot in time that helped shape our priorities for the next decade.
- Our **Priority Industries** represent real opportunities for the Commonwealth to both accelerate the expansion of high-growth industries and sustain its competitive advantage in sectors where Pennsylvania has historically outperformed its peers.
- Our **Strategic Initiatives** are broad and inclusive proposals with concrete actions to support and empower all parts of our economy as we drive toward a better future for all Pennsylvanians.

With this plan as an important roadmap for the coming ten years, we are energized and excited about where Pennsylvania is headed.

Throughout this document, you can learn about our strategic initiatives to see where we are making investments and moving policies forward. As a stakeholder and partner, we invite you to consult this strategy as you make your own plans for future investments, programs, and activities, and we encourage you to align your own efforts with this guiding strategy.

There is much work to do. The change we seek will not happen overnight. But together, we can make meaningful, sustainable changes to solidify our economic competitiveness for decades to come.

To everyone reading this, welcome to the team.





# **Starting Point**

To develop a bold and aggressive ten-year strategy that reflects the ambitions of Pennsylvania's residents and businesses, we must have a clear understanding of our starting point. Over the last year, we have conducted extensive research, analyzed data, and met with stakeholders to catalogue a comprehensive set of assets to build on and understand the challenges we must overcome.

Pennsylvania has the assets to compete. We marry an industrial and agricultural heritage with the most cutting-edge robotics, life sciences, and energy research in the world, powered by one of the best educational systems in the country. We form the heart of the Mid-Atlantic region and a bridge from the East Coast to the Midwest for people and products. Our small boroughs and townships, big cities, forests, farms, rivers, history, and culture attract millions of visitors to the Commonwealth every year and give over 13 million people a place to call home.

But there are real challenges ahead. We must address prevailing demographic headwinds, intense competition for business, and projected slowdowns in industries integral to regional economies within the Commonwealth. We must invest more in our economic development programs to counter decades of underinvestment. And we need to address outmigration trends and make it easier for companies to do business in Pennsylvania.









# From proximity to major U.S. markets to a low cost of doing business, Pennsylvania has critical assets needed to compete and win in today's economy.

Pennsylvania connects America. The Keystone State is located within 500 miles of nearly 40% of the American population and over half of the Canadian population, with 25% of the U.S. population located only five hours from the Pennsylvania border. Our three major ports offer access to the Atlantic Ocean, the Gulf of Mexico, and the Great Lakes, and our six international airports combine to move over 600,000 tons of material and 35 million people each year by land, air, and sea. Pennsylvania is a short distance to major domestic and global markets and can quickly transport products and innovations to national and international population cores.

In addition to our location, Pennsylvania has a lower cost of doing business compared to many of our neighboring states. Low electricity costs coupled with a competitive natural gas price tag makes us a strong fit for advanced manufacturing and technology industries.

# But to fully capitalize on our economic assets, we must improve the scale and focus of our economic development investments.

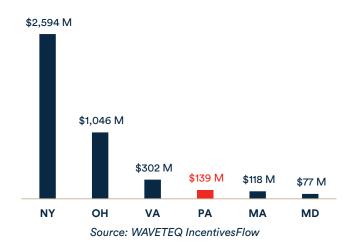
From 2018 to 2022, Pennsylvania was outspent on economic development incentives by neighboring states in both total incentive spending and average deal size. Over the same period, neighboring states also outspent Pennsylvania on discretionary economic development funding and on site development funding. This resulted in our neighboring states winning more deals, attracting more private capital investment, and successfully bringing online more commercial and industrial sites than Pennsylvania. Our shortage of highly competitive sites and deal-closing incentives has placed us at a distinct disadvantage when working to support existing companies' growth and to attract major new investment.

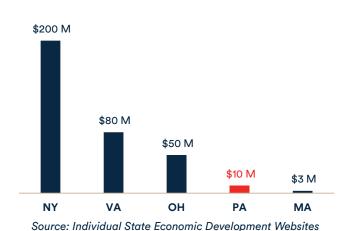




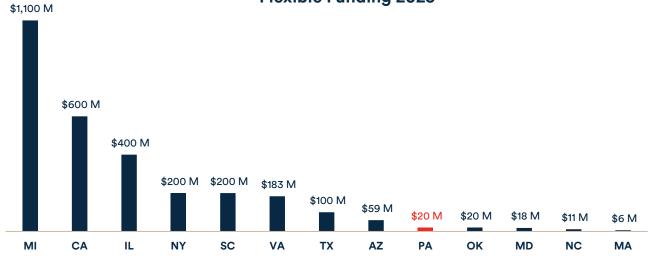
# Incentive Deals, 2018-2022 Annual Average Incentives

# Site Development Incentives Annual Funding





### Flexible Funding 2023



Source: Individual State Economic Development Websites



# Pennsylvania boasts an extraordinarily rich and diverse business base that includes more than a million small businesses and twenty-three Fortune 500 companies.

Our industry mix is diverse and varied with economic clusters ranging from life sciences to technology hubs, to centers of manufacturing and agriculture spread throughout the state's heartland. The success of these economic clusters depends on individual entrepreneurs as well as multibillion dollar corporations, a diversity of interests that positions Pennsylvania's economy to respond to both national and international economic trends.

# But we face challenges in ease of doing business, ranking 31<sup>st</sup> in overall business friendliness.

Pennsylvania struggles compared to peers in the complexity of business licensing requirements and fees as well as permit wait times. Applicants describe both processes as cumbersome and lengthy. Maintaining the status quo is not a viable path forward for our economy, businesses, and residents. The chronic lack of investment has led to our Commonwealth playing catch-up in many critical categories.



## New Business Registration Satisfaction Rate

46%

41%

38%

35%

34%

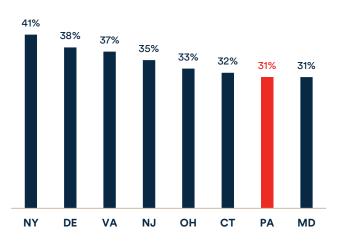
29%

NY PA NJ DE VA OH MD CT

Source: 2022 State of the States Survey

### **Economic Development Services**

Satisfaction Rate



Source: 2022 State of the States Survey



# Pennsylvania offers a highly skilled labor force with the state's universities, community colleges, and career and technical training programs.

The Commonwealth serves as a national center for workforce development. Our top-ranking academic institutions and exceptional pre-Apprenticeship and Registered Apprenticeship programs produce thousands of ready, able, and eager graduates each year, including the second highest total number of STEM graduates nationally.<sup>14</sup>

### Top Out-of-State Destinations for PA Graduates

Destination of job seekers with an online profile who completed a degree program at PA universities



### Source: Lightcast™

# But we face a widening labor gap with labor shortages projected across industries.

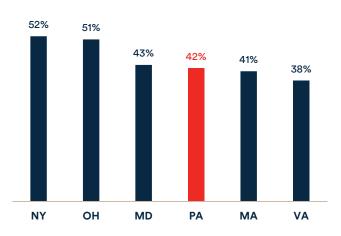
Based on demographic and economic trends from retirements to increasing labor demand and net migration, the disparity between job openings and available workers is projected to significantly increase by 2033, with labor shortages anticipated to occur across many industry sectors.

And while Pennsylvania is rich with higher education institutions that could address these labor shortages, we have one of the most decentralized and underfunded public postsecondary ecosystems in the country. There is little alignment between the Commonwealth's current and long-term workforce and economic development needs. And our colleges and universities receive little direction and few rewards for working together to address Pennsylvania's large and growing talent gaps.



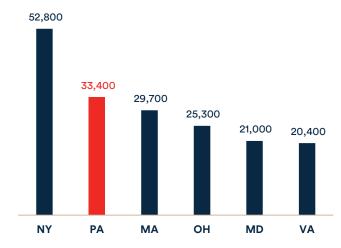
### **Graduate Retention Rate**

% of Profiles



Source: Lightcast™

### **STEM Graduates 2021**



Source: National Center for Education Statistics (NCES) Integrated Postsecondary Education Data Systems (IPEDS)



# Pennsylvania is a burgeoning hub of research activity which advances and catalyzes the innovations of tomorrow.

Our leading academic institutions collectively account for the fourth largest academic research and development spend in the nation. That \$5 billion annual investment in research and development has driven innovations ranging from advanced mRNA technologies and the synthesis of insulin to the next generation of lunar landers and autonomous vehicles.

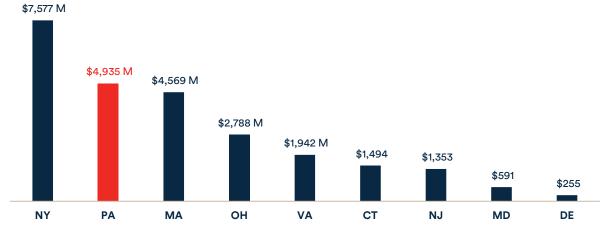
The human talent and intellectual property generated by this research activity is valued at a premium by top companies. Supported by a pipeline of 33,000 new STEM graduates entering the workforce every year and sustained through the research activities taking place at top-ranking academic institutions, Pennsylvania's natural aptitude for innovation has the potential to further accelerate the growth of our economy. Pennsylvania is, and should continue to be, an innovation capital of the United States.

But to truly transform into a national center for innovation, we must strengthen our support for entrepreneurs and create better pipelines for commercializing innovation.

While we rank fourth in the nation in academic research and development spending, our entrepreneurs and innovators have limited access to early-stage capital. Additionally, we have lacked success in commercializing technology and cultivating a dynamic entrepreneurial ecosystem across the Commonwealth.



### **Total Higher Education R&D Spend 2021**



Source: National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2021



# Pennsylvania's communities are incredibly diverse, with different regions of the state offering a vibrant mix of local strengths and opportunities for growth.



One of our major strengths is our diversity of place. Our range of geographies — including rural, suburban, and urban communities — enhances our economic and cultural competitiveness. We are blessed with an abundance of natural resources including freshwater, preserved farmland, forests, and a four-season climate. The Commonwealth regularly tops national surveys on quality of life and attracts more than 175 million tourists annually to explore Pennsylvania.<sup>15</sup>

### But each region faces unique local challenges ranging from population decline in rural counties to growing commercial vacancy rates in urban cores and a lack of affordable housing throughout Pennsylvania.

Although we greatly benefit from our broad range of communities and regions, diversity of place brings a diversity of challenges. Outside of the Southeast, Lehigh Valley, and South Central regions of the state, the majority of the Commonwealth's counties are facing either stagnant population growth or outright decline, while our urban cores are combatting high vacancy rates in their downtown districts. In Philadelphia and Pittsburgh, for example, commercial vacancy rates in Center City and the Golden Triangle exceeded 20% in the first quarter of 2023.<sup>16</sup>





# **Priority Industry Sectors**

Pennsylvania boasts a diverse set of industry sectors with distinct competitive advantages — a result of the dynamic businesses and entrepreneurs that have invested across the Commonwealth over many decades.

But to compete in today's global marketplace, we must focus and amplify our investment in high-growth, highvalue sectors where we have both a deep competitive advantage and where we expect significant potential for growth in the next ten years — especially in higher-wage, family sustaining jobs. Through careful analysis of prevailing economic trends and with attention to the five overarching goals presented earlier in this document, we identified five specific industries that meet these criteria. These target sectors offer Pennsylvania the best ability to achieve its goals and present broad opportunity for all regions of the state:











**Agriculture** 

Energy

Life Sciences Manufacturing

**Robotics** and Technology

Life sciences and robotics and technology are high-growth areas where we can harness existing assets and where we can accelerate the growth of our economy through selective and targeted investments. Manufacturing, agriculture, and energy are areas where we can leverage historic economic strengths, existing skills, and expertise to protect our built-in advantage. The quality of these jobs matters, and by focusing on these industries we will position Pennsylvania to compete for high-wage, family-sustaining jobs in all regions of the Commonwealth. Importantly, while we will invest in and focus on these industries at the state level, we must continue to work closely with Pennsylvania's regions to support economic opportunity in more geographically focused industry clusters as well.

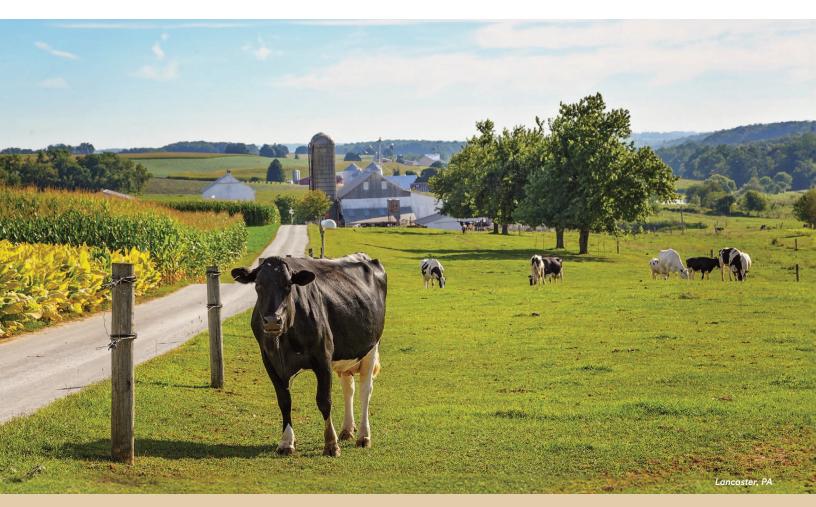
### **Strengthening Connections Across Sectors and Regions**

There are important connections between the five identified priority sectors. For example, manufacturing is both a standalone industry as well as a critical component for the life sciences, robotics, energy, and agriculture industries. By investing in Pennsylvania's manufacturing capabilities, we are strengthening the supply chain of every other priority sector. By investing in robotics and technology, we are capitalizing on current automation and artificial intelligence trends throughout the manufacturing, agriculture, energy, and life sciences sectors. Leveraging these cross-regional assets to support our priority industry sectors and strengthen the resilience of our in-state supply chain will pay dividends for Pennsylvania's economy. Additionally, we will work to connect not only businesses across different priority industry sectors but will connect their innovations to all Pennsylvanians.

### What Does it Mean to Prioritize These Sectors?

While we as state policymakers will continue to work across our regions to incentivize and promote industries of regional significance, we will place a statewide emphasis on projects and initiatives related to the five identified priority industry sectors. This means developing sites that are attractive to priority industries. It means updating Pennsylvania's economic development toolkit to provide flexible incentives that work well for industries like life sciences and robotics and technology. And it means creating workforce development programs that train Pennsylvania's next generation of manufacturing, agriculture, and energy workers.

Being deliberate and focused on these targeted sectors will help drive the best return on investment of public resources and position Pennsylvania for the future.



### A cornerstone of our efforts to support the agriculture industry

is the annual investment of \$13.8 million Pennsylvania Farm Bill, which has contributed \$120 million to Pennsylvania farmers, businesses, and organizations since its inception in 2019.<sup>22</sup> PA Farm Bill programs work to build and sustain the state's agricultural labor force, invest in food processing infrastructure, and remove barriers to entering the agriculture industry. Strong state investment has helped family farms grow and diversify as well as attract high-growth sectors like controlled environment agriculture operations and organic food production. Combined with funding for the State Food Purchase Program, the newly created Organic Center of Excellence, and the Center for Plant Excellence, Pennsylvania is aggressively pursuing agricultural opportunity for all its farms, businesses, and residents in the agriculture sector.



- Contributes \$132.5 billion annually to Pennsylvania's economy<sup>17</sup>
- 4<sup>th</sup> largest producer of food products<sup>18</sup>
- \$13.8 million in Pennsylvania Farm Bill investments<sup>19</sup>
- Proximity to major U.S. markets and ports for international trade
- National leader in direct-to-consumer sales, farmland preservation, and beginning farmers

### **COMPETITIVE SPECIALIZATIONS**

- Forestry Products Manufacturing
- Dairy Production
- Food and Beverage Manufacturing
- Livestock and Poultry Production and Processing
- Organic Food Production
- Growing Prominence of Controlled-Environment Agriculture

### **CASE FOR PRIORITIZATION**

- With 16.62 million acres of forestland, Pennsylvania has the most abundant hardwood forest in the United States and accounts for \$21.8 billion in direct and \$36 billion in indirect impacts on the state's economy.<sup>20</sup>
- Pennsylvania is a national leader in several key commodity areas including dairy, fruit production, specialty crops, livestock, and poultry production.
- Pennsylvania is a leader in organic agriculture ranking 1<sup>st</sup> in the nation in organic poultry production, 1<sup>st</sup> in the nation in organic mushroom production and 3<sup>rd</sup> in the nation in overall organic sales.<sup>21</sup>
- Proximity to major markets and strong transportation infrastructure makes Pennsylvania a key location for agricultural producers to efficiently distribute their products.

### As one of our legacy industries, agriculture's economic impact is prevalent across the state:

- Livestock and poultry production and processing in South Central, Lehigh Valley, and Southeast regions.
- Dairy production in the Northwest, South Central, and Northern Tier regions.
- Animal food manufacturing across the state, with hubs in the Central, Lehigh Valley, Northern Tier, Northwest, and South Central regions.
- Snack food, beverage, and confectionery product manufacturing with hubs in South Central, Central, Northeast, and Lehigh Valley regions.
- Forest product manufacturing in the Northern Tier, Northwest, and North Central regions.
- Mushroom manufacturing in South Central and the Southeast regions.

Pennsylvania, like many agricultural regions, stands at the intersection of tradition and innovation, facing the pressing need for the integration of cutting-edge modern technology into agriculture, known informally as AgTech. AgTech will help farmers continue to innovate to optimize yields, reduce environmental impacts through precision agriculture, and reduce energy consumption. Our embrace of AgTech helps ensure food security and economic stability while also signifying a commitment to sustainability, offering a path to a more resilient and efficient agricultural future.



- 1,180 energy-related companies<sup>23</sup>
- 2<sup>nd</sup> largest net supplier of energy in the U.S.<sup>24</sup>
- Robust transmission infrastructure
- 2<sup>nd</sup> largest producer of electricity from nuclear power<sup>25</sup>
- National leader in companies in the nuclear supply chain

#### **COMPETITIVE SPECIALIZATIONS**

- Natural Gas Production and Deployment
- Hydrogen Development
- Hydro Turbine Manufacturing
- Nuclear Power Development, Prototyping, and Commercial Deployment
- Workforce skilled in Building and Maintaining Complicated Energy Infrastructure

### **CASE FOR PRIORITIZATION**

- Pennsylvania's abundance of energy resources and how we choose to utilize them is the vehicle by which we can proudly call ourselves an industrial powerhouse. As the 2<sup>nd</sup> largest energy supplier in the United States, the impact of the energy economy shows up in all of our priority industry sectors.
- Critically, energy production, transmission, and distribution are a key enablers of our entire economy. Each are especially important for energy-intensive industries, like additive and advanced manufacturing.
- Our diverse energy resources position us well to innovate across the energy space. We can leverage our
  formidable electric grid to deploy next generation power technologies and deliver businesses the energy
  needed to manufacture the products that will help the world decarbonize.
- New energy industries can serve as lynchpins to developing a clean energy economy to combat climate change. Investments through the Bipartisan Infrastructure Law and Inflation Reduction Act can help spur Pennsylvania's low carbon economic growth over the next decade.

### With its wealth of natural resources, the energy industry is abundant across Pennsylvania:

- Oil and gas extraction in the North Central, Northern Tier, Northwest, and Southwest regions.
- Pipeline transportation in the Lehigh Valley, Southern Alleghenies, and the Southwest regions.
- **Petroleum and coal product manufacturing** in the Lehigh Valley, North Central, Northwest, and Southwest regions.
- Robust electric grid infrastructure serves as the backbone of power production and transmission for all our neighboring states and beyond, allowing for the continued deployment of zero emissions carbon power generating technologies such as wind and solar.

While the benefits derived from Pennsylvania's energy resources occur across the value chain, the biggest value-add is when we use those resources to protect and grow jobs in Pennsylvania. This means focusing our efforts on the opportunities where energy and job growth intersect, such as additive and advanced manufacturing. Our low-cost and abundant supply of electricity and natural gas remains the envy of much of the world and sustainably delivering these necessary energy inputs to commercial and industrial businesses will enable our success in this space.



We also want to lean heavily into innovative new technologies to ensure that the state's energy industry continues leading the nation for decades to come. Pennsylvania is the only state in the nation to receive two major investments in the U.S. Department of Energy's Regional Clean Hydrogen Hubs program. The Mid-Atlantic Clean Hydrogen Hub (MACH2) and the Appalachian Regional Clean Hydrogen Hub (ARCH2) are poised to collectively receive \$1.7 billion in federal infrastructure and workforce development investment and create over 40,000 family sustaining jobs.<sup>26</sup> Combining the impact of these hydrogen hubs with both Pennsylvania's vast natural gas reserves and the state's goals to leverage the renewable energy incentives contained within the federal Inflation Reduction Act, we are positioned to take an all-ofthe-above approach to energy production, protecting and creating energy jobs while taking real action to address climate change and ensuring reliable and affordable power for Pennsylvania's energy consumers.

Pennsylvania's energy legacy has led to a tapestry of highly specialized and heavily concentrated energy clusters in communities across the entire state, but we cannot ignore the complex economic and environmental legacy left behind by previously booming energy industries. This is part of our shared history and has left its mark in the form of underutilized energy infrastructure and brownfield sites in areas of the state now in need of new investment and economic opportunities. The sooner we begin to invest in site redevelopment and new infrastructure to assist in achieving community leaders' vision of economic success, the sooner we can show the nation what it means to lead in an equitable and sustainable energy transition.

- 3,081 life sciences firms<sup>27</sup>
- Strong economic multipliers
- 3% annual growth rate (vs. U.S. avg. of 2.6%)<sup>28</sup>
- \$120,000 average wage<sup>29</sup>

### **COMPETITIVE SPECIALIZATIONS**

- Precision Medicine
- Medical Equipment Manufacturing
- Pharmaceutical & Chemical Manufacturing
- Biomanufacturing

#### CASE FOR PRIORITIZATION

- Growth in the life sciences field is anticipated to create more than 6,500 net new jobs in Pennsylvania from 2022 to 2032 with nearly 60% of that growth concentrated in research and development (R&D).<sup>30</sup>
- Pennsylvania has the 4th highest academic research and development expenditures in the nation at \$5 billion in annual R&D spending.
- 63% of Pennsylvania's academic R&D activities are related to life sciences.<sup>31</sup>
- Pennsylvania boasts a robust healthcare industry supported by world-renowned academic medical centers contributing to over 1,200 clinical trials in 2021.<sup>32</sup>

### We are fortunate to have clusters of life sciences activities located throughout the state:

- Scientific research and development are strong in the Southeast region, where Philadelphia is a globally recognized hub for cell and gene therapy and mRNA technology.
- Pharmaceuticals and chemical manufacturing are strong in the Northeast region where we see 2.5 times the national average employment share.<sup>33</sup>
- **Biomanufacturing, healthcare information technology, and clinical research** in the Southwest is anchored by two major hospital systems and two research universities located within the same square mile.

Over the past ten years, we have seen significant growth in life sciences with GDP growth outpacing the national average. Additionally, for every job created in the industry approximately six indirect jobs are generated, and the average wage of life science positions exceeds Pennsylvania's average wage.<sup>34</sup> These trends coupled with our strengths in research and development make it an area of focus and an industry in which Pennsylvania can become a true leader.



- 11,584 manufacturing companies<sup>35</sup>
- Accounts for more than
   \$116 billion in Gross State Product<sup>36</sup>
- Robust network of labor unions helping build workforce
- Geographic proximity to major transportation corridors and markets

### **COMPETITIVE SPECIALIZATIONS**

- Plastics Product Manufacturing
- Metallurgy and Metal Manufacturing
- Strong and innovative defense industrial base
- Critical to supply chains in energy,
   life sciences, and robotics and technology

#### CASE FOR PRIORITIZATION

- Every region in Pennsylvania specializes in different and diverse segments of manufacturing.
- Manufacturing boasts exceptional employment multipliers, with seven indirect jobs created to support every one new job in the sector.
- Our strategic location and transportation network allows manufacturers to distribute their products to nearly 40% of the U.S. population and 60% of the Canadian population in a day's drive.

In some cases, regional specializations are closely aligned with other Pennsylvania priority industries, enabling cross-sector industry collaboration across regions.

- Plastics product manufacturing in the Central, Northeast, Northern Tier, and Northwest regions of the state enable seamless economic integration with the plastics-intensive life sciences industry.
- **Paper product manufacturing** is especially strong in the Central, Northeast, Northern Tier, South Central, and Southern Alleghenies region.
- **Metallurgy and metal manufacturing** across Pennsylvania strengthen the state's metal-intensive robotics, technology, and energy industries.

These cross-sector synergies have the potential to further accelerate our economic competitiveness. For example, with proper coordination and investment, the innovations stemming from the research institutions of our urban cores can be manufactured in the factories in our rural and suburban communities — strengthening each type of community simultaneously.

From industrial advanced manufacturing giants to regional mainstays, the impacts of the manufacturing industry can be felt across every community in the Commonwealth. Nationally, manufacturing is once again on the rise with prevailing economic forces and changes in federal policy pushing more companies to onshore their manufacturing facilities. In addition to the evolving macroeconomic landscape, new innovations in robotics and automation are enabling more efficient and sustainable manufacturing processes — especially for small- and medium-sized firms.

- 15,221 robotics & technology firms<sup>37</sup>
- Federally designated technology hubs for robotics and AI, precision medicine and pressed materials
- Two top-10 universities for robotics & technology<sup>38</sup>

### **COMPETITIVE SPECIALIZATIONS**

- Electrical Equipment Manufacturing
- Navigational Instrument Manufacturing
- Technology Hardware Manufacturing
- Semiconductor Supply Chain
- Autonomous systems

### **CASE FOR PRIORITIZATION**

- Billions in new federal funding is available to reshore technology manufacturing (CHIPS Act, Bipartisan Infrastructure Law, and Inflation Reduction Act).
- With a projected ~17,000 net new jobs created across the robotics and technology sectors over the next decade, Pennsylvania is primed to become a leader in these high-growth industries.<sup>39</sup>

Companies engaged in the robotics and technology industries can be found across every region in Pennsylvania. We have substantial strengths in:

- **Electrical equipment manufacturing** throughout the Southwest, Northwest, North Central, and Lehigh Valley regions, bolstered by the robotics facilities of Pittsburgh.
- Navigational instrument manufacturing in the Southern Alleghenies, North Central, and Central regions.
- **Technology hardware manufacturing** in the South Central and Southern Alleghenies regions, amplified by strong defense clusters throughout these regions.

Our innovation pipeline is anchored by two top-10 robotics and technology universities and augmented by technology talent from elite Pennsylvania academic institutions. This pipeline has attracted global leaders while also spinning out high-growth technology startups. These successes in robotics and technology commercialization — amplified by substantial federal investment to create technology hubs in the Pittsburgh, North Central, and Philadelphia regions — make it a key target for focused investment.

### **An Important Note**

We highlight these five sectors today and recognize that the economic landscape is constantly evolving. Economic conditions may shift over the next 10 years and require us to alter our sectors of focus. We will continually review macroeconomic trends, assess our competitive advantages, and engage with regional partners to ensure the priority industry sectors remain relevant and provide Pennsylvania with the greatest opportunities to grow and succeed.















# **Strategic Initiatives**

For Pennsylvania to fully recognize our economic potential and meet the vision and goals set forth in this document, policymakers must deploy a bold set of high-impact initiatives. The following strategic initiatives are the initial actions we will take to achieve our goals — broad, inclusive actions designed to transcend political administrations and to meet the economic needs of Pennsylvania over the coming decade. By 2033, through the implementation of these initiatives, we will deliver real results and create real opportunity for all residents, businesses, and entrepreneurs that call the Commonwealth home.

While specific initiatives are segmented by our goals, the success of each initiative advances the implementation of the full strategy and allows us to turn this vision into reality. For example, accelerating Pennsylvania's innovation economy improves the quality of life of Pennsylvania's people, and streamlining and scaling up the state's economic development toolkit brings real results to our regional geographies.





### Invest in Our Economic Growth to Compete.

### Goal

We want our Commonwealth to be a place where we prioritize economic development investments, and where those investments result in real opportunities for our businesses, communities, and residents.

### STRATEGIC INITIATIVES

# Boost State Investment in Site Development, Preparedness, and Marketing

Ramp up existing site development programs to support site readiness and prepare shovel ready locations across all Pennsylvania regions.

Pennsylvania's neighboring states are investing hundreds of millions of dollars in site development programs every year. As they have made those investments, our site inventory continues to decline, placing Pennsylvania at a distinct disadvantage in competing for business deals. To restore our economic competitiveness, state government must:

- Fully capitalize the Pennsylvania Strategic Investments to Enhance Sites (PA SITES) program and provide local communities and private developers with the resources necessary to build out new sites for sustained business investment. Many of Pennsylvania's economic development partners and community stakeholders continue to emphasize the need for mixed-use and residential site development. In addition to funding for industrial sites, state government will evaluate the potential of using PA SITES to help support non-industrial site development.
- Launch a Pennsylvania Certified Shovel
  Ready Sites program, providing site selectors
  and businesses with state-guaranteed sites to
  meet their business needs. Similar site
  certification programs are common in other
  states (including our top competitors like
  Tennessee, Virginia, and North Carolina).
  These kinds of certified sites programs give
  businesses an attractive shortlist of sites that
  have already been confirmed to meet shovel
  ready criteria.

Expand Support for Pennsylvania's Small Businesses with a Focus on Historically Disadvantaged Businesses and Workers Increase assistance for small, disadvantaged, and minority businesses, entrepreneurs, and workers.

Pennsylvania's state government has been working hard to close equity gaps in our economy, particularly through programs that serve and support small businesses with a focus on historically disadvantaged businesses and workers.

Moving forward, state government will seek to:

- Expand access to funding. With \$40 million in federal and state funding for historically disadvantaged businesses appropriated as of 2023, state government will continue working with local partners to help these businesses gain access to both low-cost capital through Community Development Financial Institutions (CDFIs) and technical support through Small Business Development Centers (SBDCs). Additionally, we will introduce improvements to the Pennsylvania Minority Business Development Authority ensuring that historically disadvantaged businesses have equitable access to capital.
- Overhaul internal procurement policies and processes to provide more small businesses with the opportunity to become a supplier to state government. As a major statewide procurer of goods and services, Pennsylvania state government must leverage its \$44.9 billion annual budget to directly support small businesses that want to compete for public contracts. We will also work with our partners in the private sector, higher education, organized labor, and nonprofit organizations to further promote investment into small businesses through partner procurement processes.

# Simplify and Increase Funding for Pennsylvania's Economic Development Toolkit

Update and grow Pennsylvania's economic development incentives to make programs more flexible, faster, and relevant to today's businesses.

Pennsylvania's existing economic development incentives are outdated and underfunded. To access business assistance programs, businesses currently must navigate a complex, narrowly tailored set of incentive programs, many of which regularly face outsized demand compared to financial resources. For example, the PA First program is significantly underfunded when compared to similar flagship business attraction programs found in peer states. Pennsylvania's state tax credit programs exclude entire core industries from taking advantage of their financial benefits. And many programs are overly prescriptive, industry specific, and lack flexibility that many businesses need.

To regain our competitive advantage, state government needs to significantly overhaul and streamline our economic development toolkit while simultaneously scaling up those tools to become a true contender with neighboring states. This means making real investments in tools that work, eliminating outdated and underutilized programs, and creating additional, flexible funding mechanisms to provide both large corporations and small businesses with more opportunities to succeed and grow in Pennsylvania. We will also target incentives to the priority industries identified in this strategy, with additional funding and programmatic support available for projects aligned with priority growth sectors.

### Invest in Tourism and Recreation Asset Development to Drive Economic Growth

Renew focus on tourism and outdoor recreation to strengthen regional economies, create and enhance quality of life for Pennsylvania residents.

As one of the largest industries in Pennsylvania, tourism generates over \$66 billion per year in total economic impact and accounts for more than 450,000 jobs across the Commonwealth.<sup>40</sup> The industry includes subsectors like hospitality, transportation, regional attractions and entertainment, and travel tours and serves as a powerful economic engine in every corner of Pennsylvania. With minority populations making up roughly 50% of workers employed in the tourism industry and small businesses making up 80% of tourism-based businesses, increased investment in the tourism industry will assist in bridging equity divides and help to lift up all Pennsylvanians.<sup>41</sup>

To realize the full potential of Pennsylvania's tourism industry, the state government will adopt a new and modern model of destination marketing through stakeholder engagement, distributed marketing, and catalytic destination development. With Pennsylvania's outdoor industry accounting for 1.8% of state gross domestic product and building on the success of the Office of Outdoor Recreation, we will continue to make significant investments in the outdoor economy to both amplify its economic output and enhance the quality of life for Pennsylvania residents. With increased funding and a refreshed focus, we will create and implement a new tourism strategy that adapts to modern times to help the industry and those employed within it to thrive for years to come.



### Make Government Work at the Speed of Business.

### Goal

We want our Commonwealth to be a place where all companies find an attractive business environment to innovate and thrive.

### STRATEGIC INITIATIVES

# **Cut Through Red Tape and Foster Collaboration Across State Agencies**

Ensure state government delivers a best-in-class customer service experience for those seeking to do business in Pennsylvania.

Effective economic development work requires partnership and collaboration across multiple state agencies, but interagency cooperation in Pennsylvania has historically been inconsistent and ad hoc. To address this issue, we will take a whole-of-government approach to economic development and convene an economic strategy group comprised of the secretaries of the Department of Community and Economic Development, the Department of Labor & Industry, the Department of Transportation, the Department of Education, the Department of Environmental Protection, and the Department of Agriculture. This group will be empowered to identify challenges, solve problems, and continue to improve Pennsylvania's business environment.

Critical to the success of this strategy will be the ability to deliver a best-in-class customer service experience to those seeking to do business in the Commonwealth. Lengthy bureaucratic processes and a lack of coordinated services have often been cited by business leaders as common points of friction and barriers to growth in Pennsylvania. In response, we are implementing project management systems to streamline internal channels of communication and help businesses secure permits, grants, and other supports to take projects from idea formation through to completion. The Office of Transformation and Opportunity is working to reimagine how state government interacts with the business community by providing a clear, centralized channel for engagement with companies, ensuring information is readily available in accessible formats, and that the speed and urgency at which we assist the business community is reflective of the fast-paced, dynamic industries in which these firms operate.

# Reform State Permitting Process with a Focus on Customer Experience

Improve government process for obtaining permits with an end-to-end focus on transparency, efficiency, and customer experience.

A consumer-focused permitting process serves as a key indicator of a positive business climate, and we are committed to improving our competitive position by providing businesses and entrepreneurs with predictability, transparency, and certainty that their permit applications are being processed in a consistent and timely manner. Reform efforts in 2023 have already resulted in a 33% reduction in time to register a new business. And the PAyback initiative now provides an unprecedented level of transparency and accountability through the refunding of permit application fees if state government fails to meet clearly stated processing deadlines.

These reform efforts don't stop here. The Office of Transformation and Opportunity is helping lead a multi-pronged approach to optimize the permitting processes that significantly impact economic development activity throughout the Commonwealth. This consists of working in tandem with agency staff to re-engineer inefficient, antiquated workflows, identifying opportunities to responsibly reduce regulatory burden, and incorporating new technologies and modernizing permitting platforms where appropriate. With progress already underway, the Office of Transformation and Opportunity will continue to implement changes that will make the Commonwealth's permitting experience more efficient and effective for both internal and external stakeholders alike.

In addition to state permitting processes, we recognize the integral role that local governments play in supporting and improving Pennsylvania's business climate. State officials will work collaboratively with the legislature, local communities, and other stakeholders to remove barriers and improve the local permitting process.



## Reinvent and Invest in the PA Department of Community & Economic Development

Adapt the PA Department of Community & Economic Development's structure and processes to build a top tier economic development delivery system.

For Pennsylvania to regain our competitive position, both our catalog of financial incentives and our inhouse economic development team must be fully built out to help aggressively attract, retain, and grow businesses in every community. As the lead economic development agency in state government, the PA Department of Community and Economic Development will:

 Build an agency to reflect the new ambition this plan represents and focus on speed and excellence at every stage of the deal process, from business development and lead generation for new and existing businesses, to project management, to business analytics.

- Increase focus on an aggressive marketing effort to attract, retain, and grow businesses.
- Recognize an increasingly interconnected global economy, aggressively court international investment, and provide expertise and assistance to Pennsylvania companies looking to access foreign markets.
- Build collaborative, consistent processes for interaction with local and regional economic partners, as well as state government agencies with critical economic development roles.



#### Open Doors of Opportunity for All Pennsylvanians.

#### Goal

We want our Commonwealth to be a place where every Pennsylvanian can secure a family-sustaining job and a meaningful career.

#### STRATEGIC INITIATIVES

Keep Pennsylvanians in Pennsylvania through Internships, Pre-Apprenticeships and Registered Apprenticeships, and Experiential Learning Opportunities

Connect Pennsylvania students, graduates, and workers with Pennsylvania jobs through internships, pre-Apprenticeships and Registered Apprenticeships, and experiential education.

Pennsylvania is home to an exceptionally talented workforce and world-renowned academic institutions and pre-Apprenticeship and Registered Apprenticeship programs. To compete in the global race for talent, we must ensure that those individuals seeking education and training in Pennsylvania can stay in Pennsylvania and identify family-sustaining job opportunities right here.

To address this issue, state government will work with Pennsylvania higher education, labor unions, and private sector partners to launch a statewide effort to match students, new graduates, and workers with in-state employers for internships, preapprenticeships, registered apprenticeships, and experiential education opportunities. This initiative will build on existing regional efforts and empower Pennsylvania's next generation of talent to find success here and provide a means to fill our growing labor gap with our own homegrown talent.

## Double Down on Workforce Training and Pre-Apprenticeship and Registered Apprenticeship Programs

Address barriers to employment and reform our workforce delivery model for the 21st century economy.

In a coordinated effort between the Pennsylvania Department of Labor & Industry, the Department of Human Services, Pennsylvania Department of Education and the Department of Community and Economic Development, we will prioritize:

- Addressing barriers to employment. With the lowest labor force participation rate amongst neighboring states, we must work with our partners, businesses, and labor organizations to address barriers to employment such as childcare, transportation, accessibility, and housing. There are currently a variety of state and local programs aimed at addressing barriers, but we need a more effective and comprehensive method of addressing these complex obstacles. We will continue to focus on implementing equitable access to high-speed internet, explore new approaches to reduce biases in recruiting and hiring, and invest in regional strategies that address both individual and community-wide barriers to employment.
- Improving the workforce delivery model.
   Our workforce delivery system must be more responsive to the needs of employers and workers across the state. This includes creating reverse referral programs for employers, structuring industry partnership programs with labor unions and private sector companies, realizing rapid returns on our investments in customizable pre-apprenticeship and registered apprenticeship programs, and ensuring innovative workforce solutions are scalable and replicable.

Fully integrating workforce development into economic development efforts.
 State government will work to fully integrate workforce development capabilities directly into economic development activities, including assisting existing and new companies with workforce funding and customized solutions that meet the needs of Pennsylvania businesses. Through a renewed focus on workforce training and workforce partnership, we will maintain a competitive labor pool that can adapt to changing economic conditions.

#### Realign Pennsylvania's Higher Education System to Meet Our Workforce Needs

Transform higher education to focus on economic and workforce development needs.

Pennsylvania needs a postsecondary system that serves as an engine for our economic and workforce development needs—one that will equip our residents with the skills and credentials needed to attract and retain living wage jobs, provide a high standard of living, and ensure a prosperous Pennsylvania for all. To meet this goal, state government will:

- Build the Foundation for a Strong, Effective, and Efficient System of Higher Education.
   We need a tighter, better coordinated higher education system that aligns to our state goals and provides the transparency and accountability we need to ensure good stewardship of taxpayer dollars.
- Responsibly and effectively re-invest in higher education. A strong foundation of common-sense coordination and oversight sets the table for responsible and effective reinvestment in our colleges and universities. This means:
  - Aligning state dollars with the programs and credentials that students and employers want;

- Creating incentives and rewards for getting students across the finish line quickly and equitably; and
- Giving our colleges and universities the resources they need to meet these goals and then holding them responsible for doing just that.
- Make college more affordable for all Pennsylvanians. We can build the best higher education system in the world. But unless it's accessible and affordable to all Pennsylvanians, we will fall far short of our goals.

### Provide Second Chances and Grow Our Workforce

In Pennsylvania, we believe in second chances and those second chances should represent a real opportunity to start over and succeed. We also believe that successful reentry from incarceration must include meaningful employment for returning citizens in order to improve the safety of our communities. Through a commonsense legislative package signed by Governor Shapiro in December 2023, Pennsylvania is making real progress towards removing barriers by expanding criminal record expungement, reducing recidivism with comprehensive probation reform, and providing opportunities to secure family sustaining jobs and meaningful careers.

Through educational, vocational, and training opportunities for incarcerated populations, Pennsylvania is establishing a strong workforce by engaging a source of employees who are highly qualified, skilled, and committed to succeed. Second chance employment benefits employers, improves the economy, builds strong communities and enables all families to thrive. Pennsylvania is committed to breaking down systemic barriers for returning citizens and offering fair and inclusive employment opportunities for all our residents.

#### Goal

We want our Commonwealth to be a place where innovators become entrepreneurs and new discoveries enable our people and companies to succeed.

#### STRATEGIC INITIATIVES

# Accelerate Investments in Priority Industry Sectors & Entrepreneurial Ecosystems through a newly established Pennsylvania Innovation Fund

Create a flexible and large-scale innovation fund to leverage Pennsylvania's best-in-class research and development assets.

The Pennsylvania Innovation Fund will be state government's premier tool to support innovators' most promising ideas, build collaboration amongst key partners, and make meaningful investments in our entrepreneurial ecosystem. Examples of investments from the fund include:

- Expanded Support in Existing Innovation Infrastructure to grow, refine, and align our partner network to drive innovation outcomes;
- Matching funds for communities and companies to pursue federal grant opportunities;
- Financial support for innovative Pennsylvania startup companies, including grants, tax credits, low-interest financing, and equity investments;
- Structured incentives to attract, retain, and develop top global research and development clusters and human talent aligned with Pennsylvania's priority industries; and
- Technical assistance to support startup companies with commercializing their innovations, raising capital, and scaling their business

This fund will incentivize the deployment of additional private venture capital throughout Pennsylvania, positioning us as a national center for innovation. At the same time, the fund will proactively make investments in entrepreneurs who have historically lacked access to venture capital funding, including women, minorities, and socially disadvantaged individuals. This will ensure that as we unleash the innovation economy, that economy works equitably for all Pennsylvanians.

#### Launch Pennsylvania Problem Solvers Startup Competitions to Find Entrepreneurial Solutions to Our Pressing Challenges

Establish industry-focused startup competitions to source, support, and scale entrepreneurial solutions to pressing challenges facing Pennsylvania industries and governments.

The Pennsylvania Problem Solvers competition will target complex and persistent problems facing both government and the private sector and offer award funding to startup firms with technologies and approaches to solve them. Additional resources for participating businesses can be provided through access to workspace and laboratories, business-to-business coaching, and connections to investors.

These competitions offer the opportunity to provide early-stage capital to Pennsylvania startups and can help new entrepreneurs identify their first major customer, in turn allowing them to scale up and grow their business. These high-profile efforts can also be highlighted to boost the culture of entrepreneurship across Pennsylvania, and market the Commonwealth globally as a home of world-leading innovations.

# Establish Industry & Higher Education Innovation Councils to Provide Government with Real World Counsel from Business and Thought Leaders

Convene Pennsylvania industry leaders and higher education partners to better inform economic policies, retain and attract companies, and promote the creation of new businesses and startups.

An effective economic development strategy must be consistently informed by outside expertise at the leading edge. Doubling down in industry sectors where Pennsylvania has both a right-to-win and a historic economic advantage, state government will lead in coordinating five Industry Innovation Councils for life sciences, robotics and technology, manufacturing, agriculture, and energy. Comprised of leaders across the private sector, state government, academic institutions, organized labor, utilities, and economic development partners, these innovation councils will work collaboratively to create and implement programs and policies that advance the growth and success of those target industries across Pennsylvania.

We are also calling on Pennsylvania's higher education institutions to play a stronger role in helping us achieve our economic development goals. To accomplish this, state government will activate one of our great assets — our colleges and universities — and convene a Higher Education Innovation Council. This group will include college and university leaders from public and private institutions across Pennsylvania and work to assist entrepreneurs in taking their innovations to market, attract, and retain high-quality talent, and pursue other initiatives to support the goals of this economic development plan.

## Start Buy Pennsylvania Initiative to Align Supply Chain Network and Boost In-State Collaboration

Create a centralized database and matchmaking capability that assists Commonwealth businesses with identifying in-state supply chain connections and encouraging our businesses to "Buy Pennsylvania."

The Commonwealth has an incredibly diverse economy, from a wide range of manufacturing capacity to distribution and logistics operations. We have specializations in powdered metals and plastics, as well as drug discovery and robotics R&D. But without an intentional focus, we risk an outcome where every region of the state does not see the benefit from these centers of innovation.

In a coordinated public-private effort, state government will dedicate resources to mapping supply chains in our priority industry sectors, identifying the goods and services needed, and assessing potential opportunities for priority industry businesses to partner with local suppliers. Then, we will create a centralized database to help increase visibility between Pennsylvania suppliers and purchasers. In addition to data analysis and mapping, *Buy Pennsylvania* will provide technical assistance supporting networking events and providing procurement assistance.

The Buy Pennsylvania initiative will broaden the impact of our high-growth sectors like life sciences and robotics and technology by connecting these industries with suppliers and manufacturers from across the Commonwealth. Additionally, it will serve as an important business development tool for DCED by providing companies with certainty across their supply chain networks.

#### Goal

We want our Commonwealth to be a place where every community flourishes and provides for the needs of all their residents and businesses.

#### STRATEGIC INITIATIVES

## Launch the Pennsylvania Regional Challenge to Incentivize Regional Growth

Create a regional economic competitiveness challenge to provide funding and capacity-building support for local partners, rejuvenating and strengthening regional communities while cultivating place-based innovation and commercial hubs.

Pennsylvania is an incredibly diverse state.

Understanding that each region is unique in both its opportunities and the problems it faces, state government will launch a Regional Hubs Challenge to provide our different geographic regions with the resources they need to plan and implement localized strategies. By backing well planned regional strategies, we will combine local vision and regional expertise with state resources to provide a bottomup approach to statewide economic development that meets the individual needs of each of our diverse regions.

Taking inspiration from competitions like the federal Build Back Better Regional Challenge, Pennsylvania's Regional Hubs Challenge will both incentivize the development of regional plans and strategies, and fund those plans at scale on a competitive basis.

Just as we scale regional resources, we must invest in capacity building to ensure that every community has the skills and talent to effectively access state and federal economic development programs. State government will resource and launch an economic development training program to provide both the technical assistance and the networking opportunities necessary for local partners to be successful in economic development and community revitalization efforts.

### **Support Communities by Investing in Downtowns and Main Streets**

Revitalize communities by providing resources for downtowns and main streets.

Pennsylvania's state government has long underinvested in regional community development support. The state's flagship downtown development program only contains \$6 million in competitive funding for main street reinvestment in the 2023 fiscal year, and its historic preservation tax credit is capped at \$5 million per year in 2023. These programs offer minimal flexible funding opportunities for communities to invest in their own regional strategies.

To create inclusive public spaces, we must invest further in strong downtowns and main streets. Pennsylvania's downtowns are the places where communities gather, and its main streets form the economic nexus of their regions. From rising commercial vacancy rates to outdated public infrastructure, commercial cores in downtowns and main streets require significant reinvestment to enhance and build back their status as regional drivers of economic activity. Funding the development of downtown and main street projects, as well as investing in the public spaces that bring these community hubs to life, will strengthen not only our core commercial districts, but also the regions surrounding them and the residents that call those regions home.

We will also work to expand funding for main street organizations who do the everyday work of downtown development. Many communities lack the resources necessary to onboard and train professional main street specialists, and we will step up to assist our communities and ensure that every town and every city is able to take advantage of the full suite of downtown and main street development programs.

#### Compete for Federal Funding to Improve Pennsylvania's Infrastructure and Support Businesses and Workers

Modernize, expand, and rebuild Pennsylvania's transportation, water and sewage, high-speed internet, and energy infrastructure.

This is an unprecedented moment in history for federal infrastructure funding. Fueled by the Infrastructure Investment and Jobs Act, the Inflation Reduction Act, and the CHIPS and Science Act, the federal government is deploying trillions of dollars into America's infrastructure with competitive and non-competitive funding programs targeting everything from highways, rail, and airports to renewable energy and high-speed internet.

Pennsylvania has secured \$8.1 billion for roads and bridges, \$1.2 billion for high-speed internet, and \$657 million for safe and clean drinking water as of 2023.43 Working with current and future federal funds, we will build out a modern infrastructure grid and continue to augment federal funds with state appropriations for roads and bridges, water and sewers, high-speed internet, and clean energy infrastructure. This effort includes partnering with local government, labor unions, and private industry to maximize the amount of funds flowing from Washington, D.C. back to Pennsylvania residents and regions.

#### **Expand Availability of Housing**

Increase Pennsylvania's housing inventory.

Workers and recent graduates both cite a lack of available housing as a key reason they leave Pennsylvania for other states, and companies frequently cite a lack of available housing as a barrier to expanding or locating in a community.

To address this important issue, state government will partner with residential developers to construct and rehabilitate new and existing housing stock across the Commonwealth. Leveraging existing state and federal programs such as the Weatherization Assistance Program and working to capitalize new state funding opportunities for residential development, we will respond to the existing shortage of market rate housing by taking a wholeof-government approach to the problem and partnering with the private sector, partner organizations, and organized labor to ensure that every Pennsylvanian has access to high quality housing. We will also launch a market rate housing task force to study and advise efforts to expand our inventory of market rate housing, combining the resources of state government with the experiences of private industry to collaboratively create housing strategies that meet this moment.

#### **PA's High-Speed Internet Efforts**

Access to high-speed, reliable internet is just as critical as access to electricity or water. This economic and social imperative is undeniable, and state government is urgently working to expand access to reliable and affordable internet for every resident and business in Pennsylvania. Using our federal allocation of American Rescue Plan Act funding, the Pennsylvania General Assembly appropriated \$279 million to the Pennsylvania Broadband Development Authority (PBDA) as a down payment for broadband internet deployment efforts. The pilot programs structured by this funding are informing the state's plan to deploy \$1.162 billion in additional funding through the federal government's Broadband Equity, Access, and Deployment program.

Armed with over \$1.4 billion in total at the state level and supplemented with additional funding from counties, municipalities, and internet providers, the PBDA is working together with both the Administration and the legislature to ensure affordable internet is available for every resident and business across the Commonwealth by 2030. Recognizing that the needs and challenges associated with equitable high-speed internet deployment will vary from Pennsylvania's rural farmlands to its downtown cores, the PBDA is working to create programs and provide funding streams that can flexibly target unserved and underserved residents and businesses in urban, suburban, and rural environments alike.





## Conclusion

#### This strategy is just the beginning of our work.

It represents more than just a government approach; it's a call to action for Pennsylvania's public, private, nonprofit, and academic sectors to rally around a shared vision for the Commonwealth's economy over the next 10 years. With new, energized state leadership, as well as unprecedented federal funding opportunities, we stand at a unique moment in time to reassert Pennsylvania's leadership in the global economy.

To start, we must focus the Commonwealth's resources on rebuilding our economic development capabilities including comprehensive site development efforts, streamlining our toolkit, and modernizing the Department of Community and Economic Development to execute on this innovative and aggressive strategy. We have made significant progress improving the way government operates and now we must invest the resources to grow. With a strong foundation we can aggressively pursue robust investments in innovation, meaningful regional support, and a vigorous workforce development agenda.

As we grow the government's own capabilities, we will focus on driving innovation across the Commonwealth by making transformational investments in our entrepreneurial ecosystem, fostering startup formation, attracting private

investment, and building cross-sector partnerships to support supply chain collaboration. Harnessing our talented academic institutions, sector expertise, and research and development efforts, we will set a new tone in Pennsylvania—one where we cultivate and celebrate innovation and entrepreneurship, and where we provide real opportunities for Pennsylvania's future.

Competition among states and countries is fiercer than ever and Pennsylvania is ready to compete to win. Over the next decade we will undertake this aggressive plan, but we can't do it alone. Now is the time for action, and we need your help and support. We are committed to working with our partners to move this important work ahead, and to signal to the national and global community that *Pennsylvania gets it done*.





## **Acknowledgments**

During 2023, we heard from businesses and individuals from all of Pennsylvania's 67 counties about their vision for economic development. We conducted six in-person regional townhalls and dozens of remote listening sessions, reviewed survey responses and policy papers, and collaborated with hundreds of partners who provided invaluable feedback and helped us shape and build this strategy into what it is today. We thank all our stakeholders for their dedication and partnership and look forward to continuing this work in the future.

Ben Franklin Technology Partners of Pennsylvania

Certified Economic Development Organizations

Community Colleges of Pennsylvania

County Commissioners Association of Pennsylvania

**Industrial Resource Centers** 

Life Science Greenhouses

**Local Development Districts** 

Partnerships for Regional Economic Performance

Pennsylvania AFL-CIO

Pennsylvania Association of Township Supervisors

Pennsylvania Building & Construction Trades Council

Pennsylvania Chamber of Business & Industry

Pennsylvania Downtown Center Network

Pennsylvania Economic Development Association

Pennsylvania's Federal Delegation

Pennsylvania's Higher Education System

Pennsylvania House of Representatives

Pennsylvania Minority Business Chambers

Pennsylvania Municipal League

Pennsylvania Regional Business Chambers

Pennsylvania Restaurant & Lodging Association

Pennsylvania Senate

Pennsylvania State Planning Board

Pennsylvania State System of Higher Education

Regional Export Network

**Small Business Development Centers** 

Team Pennsylvania Foundation

We also would like to thank all of our state government colleagues whose expertise and input over the last year were critical to the development of this strategy.

Pennsylvania Department of Community & Economic Development

Pennsylvania Office of Transformation & Opportunity

Pennsylvania Department of Labor & Industry

Pennsylvania Department of Education

Pennsylvania Department of Transportation

Pennsylvania Department of Agriculture

Office of the Governor





### References

- Pennsylvania Department of Labor and Industry, Pennsylvania Nonagricultural Wage and Salary Employment, 2023
- U.S. Bureau of Economic Analysis, 2023
- <sup>3</sup> Pennsylvania Department of Labor and Industry, Current Labor Force Statistics, December 2023
- U.S. Census Bureau; Annual Estimates of the Population for the U.S. and States, and for Puerto Rico; U.S. Small Business Administration Office of Advocacy, Pennsylvania 2022 Small Business Profile
- <sup>5</sup> Fortune 500; 2023
- National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS), 2021
- National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, 2021
- 8 WAVETEQ IncentivesFlow
- 9 Lightcast<sup>TM</sup>
- <sup>10</sup> CNBC, America's Top States for Business 2023: The full rankings (cnbc.com)
- <sup>11</sup> U.S. Census Bureau, American Community Survey, 1-year estimates
- <sup>12</sup> U.S. Census Bureau, Business Dynamics Statistics
- <sup>13</sup> Pennsylvania Department of Community & Economic Development
- <sup>14</sup> National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS)
- <sup>15</sup> Tourism Economics, PA Tourism Economic Impact 2021 (visitPA.com)
- <sup>16</sup> Allegheny Institute for Public Policy
- Pennsylvania Department of Agriculture and Team Pennsylvania, The Economic Impact of Agriculture in Pennsylvania: 2021 Update
- <sup>18</sup> America's Heartland (americasheartland.org)
- <sup>19</sup> Pennsylvania Department of Agriculture
- Pennsylvania Hardwoods Development Council, State of the Forest Products Industry in Pennsylvania 2020 (pa.gov)
- <sup>21</sup> U.S. Department of Agriculture
- <sup>22</sup> Pennsylvania Department of Agriculture

- <sup>23</sup> Lightcast<sup>TM</sup>
- <sup>24</sup> U.S. Energy Information Administration
- <sup>25</sup> U.S. Energy Information Administration
- <sup>26</sup> U.S. Department of Energy
- <sup>27</sup> Lightcast™
- <sup>28</sup> Lightcast<sup>TM</sup>
- <sup>29</sup> Lightcast<sup>™</sup>
- 30 Lightcast™
- National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, 2021
- <sup>32</sup> Life Sciences PA, Economic Impact Report, 2022
- 33 Lightcast™
- <sup>34</sup> Lightcast™
- 35 Lightcast™
- <sup>36</sup> Pennsylvania Manufacturing Advisory Council
- 37 Lightcast™
- 38 EduRank, North America's 100+ best Robotics universities [Rankings] (edurank.org)
- <sup>39</sup> Lightcast™
- <sup>40</sup> Tourism Economics, PA Tourism Economic Impact 2021 (visitPA.com)
- <sup>41</sup> World Travel & Tourism Council, Travel & Tourism Economic Impact 2022 U.S. Bureau of Labor Statistics
- <sup>42</sup> U.S. Bureau of Economic Analysis, Outdoor Recreation Satellite Account, 2022
- <sup>43</sup> The White House, November 2023

# PENNSYLVANIA GETS IT DONE.

