



I-86 INNOVATION CORRIDOR

Integrated Workforce Development Strategy

April 2018

INTRODUCTION & BACKGROUND

In late 2017, community leaders began the process of developing an **Integrated Workforce Development Strategy** for the I-86 Innovation Corridor, comprised of Chemung, Schuyler, and Steuben Counties in the Southern Tier of Upstate New York. The I-86 Innovation Corridor Initiative is led by a group of regional stakeholders representing the public sector, major employers, education providers, community and economic development organizations, and workforce development partners with the following vision:

The I-86 Innovation Corridor is recognized as a destination business development location, distinguished by its concentration of multi-national anchor companies, advanced infrastructure to support innovation and technology, rich educational and research resources, specialized and skilled workforce and vibrant communities.

The Corridor's four priority areas include: talent attraction and workforce development, business development, vibrant communities, and infrastructure development. This **Integrated Workforce Development Strategy** is an extension of significant planning and discussions in the region driving toward the vision articulated above and specifically aims to address the workforce priority area.

In July 2015, the Corridor completed the **I-86 Innovation Corridor Strategic Action Plan** to "accelerate public/private investment, create job opportunities, advance regional competitiveness, and create the magnetism to draw and keep young, skilled workforce participants." This plan included a Human Capital component that identified several critical workforce needs:

Attract, train, and retain workers, particularly Millennials, to replace a rapidly aging workforce in support of growing manufacturers and other innovative industries;

- Strengthen the coordination between workforce development and economic development;
- Increase engagement between students and industry that inspires and better prepares the next generation to pursue careers in the Corridor;
- Transform the role of the school in high-poverty areas to contribute to a culture shift in perceptions about education and work; and
- Train adult incumbent and unemployed workers in workforce readiness, leadership, and entrepreneurship.

In July 2016, the I-86 Innovation Corridor Workforce Development Workgroup, formed from the Strategic Plan, further identified the Corridor's critical workforce development issues:

- Based on data analysis and employer feedback, the greatest workforce challenges in the Corridor were found in Manufacturing (Manufacturing and Food Processing Production Workers), Transportation and Materials Handling, Healthcare, Education, and Construction. Shortages were less prevalent in the Arts, Entertainment and Recreation and Finance and Insurance sectors.
- Labor shortages primarily stem from a long-term decline in population over several decades as well as an aging population. The Corridor must attract and retain population and provide quality of life factors to do so effectively.
- A survey of employers in early 2016 identified factors contributing to poor labor availability: the lack of required skills, competition from employers for skilled workers, lack of a strong work ethic, drug/alcohol issues, and aging of the workforce.
- Transit, walkability, recreation, and housing also impact labor availability, and the lack of single-family housing in the \$175,000 – \$250,000 range is viewed as a critical factor in the region's ability to attract and retain workers.

- The region must “develop and own” an integrated, holistic, and outcome-driven workforce development system.

In 2017, the Workforce Development Workgroup conducted an additional landscape review of workforce opportunities and challenges with assistance from national consultants. That Project Team reviewed existing documents, collected qualitative data, and engaged 80 community stakeholders representing education, economic development, business and industry, and government.

The scoping verified workforce development and talent attraction to be critical issues for the region, and the consultant’s report recommended moving forward with development of a comprehensive strategic plan to address the need for a strong organizational structure, a workforce pipeline, real-time skills/abilities analytics that go beyond the traditional labor market information, and a set of cross sector strategies and partnerships to optimize the existing workforce.

This project, the **Integrated Workforce Development Strategy**, is the continuation of previous planning activities with the aim to more specifically identify the Supply-side and Demand-side conditions of the local workforce to support the creation of a coordinated regional talent strategy and targeted, high-impact, game-changing programs in workforce development. The Council for Adult and Experiential Learning (CAEL) and its partner Avalanche Consulting were selected to develop this plan.

About the Strategy Development Process

CAEL and Avalanche Consulting conducted a three-phased process which included the following:



Report 1: Talent Supply & Demand Analysis identifies skills the workforce currently has, skills employers need, and how well the educational and training systems deliver graduates into the workforce pipeline. Identifying gaps and potential areas of misalignment informs strategic recommendations and opportunities to reorient the supply pipeline. This analysis includes both a quantitative component—examining historical and present industry trends, future projections, and real-time job posting data—as well as qualitative input from key industry and community leaders gathered through a series of curated focus groups and interviews to develop a complete understanding of the Corridor’s economic picture. The chapter concludes with an assessment of the critical gaps in the workforce pipeline that will hinder labor availability.



Report 2: Education and Training Asset Inventory catalogues and categorizes education and training program offerings at the secondary and post-secondary levels, both credit and non-credit, within key industry sectors. Once supply and demand gaps are identified, it’s important to understand the education and training infrastructure, specifically what offerings are available to residents and employers. This inventory looks at where the programs are available—at what institutions and locally within the three-county I-86 Innovation Corridor or in the greater education drawing area—and at what levels. This analysis also includes a qualitative analysis of assets and resources via interviews and focus groups with members of the education and training community. These discussions identify challenges faced by the educators who aim to supply a skilled workforce for the region’s target sectors, and amplify and scale promising practices that currently exist.



Report 3: Integrated Workforce Development Strategy builds off the information gathered in the gap analysis and education asset map. This strategy provides the region with actionable recommendations to bring labor supply and industry demand in closer alignment, ensuring that the economic future of the region is driven by talent. Chief among the recommendations derived through this study is the creation of a new organizational structure to oversee implementation—this important work cannot be done by fractions of people who have other jobs, but rather requires dedicated leadership and staffing. This strategy also includes implementation recommendations and details for several enabling initiatives that provide the region with evergreen labor market data, streamlined processes, and business leadership at a systems level.

About the Consulting Team



The Council for Adult and Experiential Learning (CAEL) is a national, non-profit organization whose mission is to expand learning opportunities for adults. CAEL works to remove policy and organizational barriers to learning opportunities, identifies and disseminates effective practices, and delivers value-added services.



Avalanche Consulting's mission and passion is to help communities become more vibrant and prosperous. We are a leading national consultancy specializing in strategic planning, workforce analyses, and customized research for economic and workforce development organizations.



About the Steering Committee and Contributors

The consulting team would like to thank the following contributors to the **I-86 Innovation Corridor Integrated Workforce Development Strategy**:

Integrated Workforce Development Strategy Funders

Chemung County	Schuyler County Partnership for Economic Development (SCOPED)
Schuyler County	Southern Tier Economic Growth (STEG)
Steuben County	Steuben County Industrial Development Agency (IDA)
Steuben County	Three Rivers Development Corporation

I-86 Innovation Corridor Steering Committee

Co-Chairs:	Ed Fairbrother and Dan Panosian
County Government:	Tom Santulli, Chemung County; Tim O’Hearn, Schuyler County; Jack Wheeler, Steuben County
Local Government:	Ed Fairbrother, Town of Big Flats and Rita McCarthy, Town of Erwin
Economic Development:	Jamie Johnson, Steuben County Industrial Development Agency; Mike Krusen, STEG (Chemung County); Judy McKinney-Cherry, SCOPED; Betsey Hale, Three Rivers Development Corporation
Private Sector:	Dawn Burlew, Corning Incorporated and Dan Panosian, Arnot Realty

I-86 Workforce Work Group & Planning Advisory Committee

Jamie Johnson, Work Group Chair, Steuben County IDA	Jim Griffin, Hornell Industrial Development Agency	Suzanne Schapira, Corning Incorporated
Judy McKinney-Cherry, Schuyler County Partnership for Economic Development	Betsey Hale, Three Rivers Development Corporation	Mark Vaughn, Corning Incorporated
Kate Douglas, Corning Community College	Don Keddell, GST BOCES	Paul Vervalin, Guthrie Healthcare System
Thomas Douglas, Horseheads School District	Mike Krusen, STEG	Cori Belles, Guthrie Healthcare System
Jeanne Eschbach, Corning Community College	Michael Oshetski, Micatu	Jack Wheeler, Steuben County
James Frame, GST BOCES	Dan Porter, CSS Workforce NY	Kris Yates, Gunlocke
Christopher Goll, Cameron Manufacturing	Dale Ruben, World Kitchen (Corelle Brands)	Ed Fairbrother, Town of Big Flats
	Tony Russo, Southern Tier Provisions	Dan Panosian, Co-chair, I-86 Initiative Steering Committee
	Thomas Santobianco, Bethany Village	Susan Payne, Consultant



Additional Contributors

Alfred State College	Corning-Painted Post Area School District	NY State Department of Labor
Alstom Transit Inc.	CSS Workforce New York	Office of US Congressman Tom Reed
Arnot Health	CVS Caremark	Pathways, Inc.
Arnot Realty Corporation	Dresser-Rand, A Siemens Business	Pleasant Valley Winery
Bath Central School District	Elmira City School District	SCOPED
Bethany Village	Elmira College	Schuyler Hospital
BMS Manufacturing Co., Inc.	Elmira Savings Bank	SEPAC
CAF USA	F.M. Howell	Siemens
Cameron Manufacturing and Design (CAM Fab)	GST BOCES	SITEL
Campbell-Savona Central School District	GST STEM Academy (P-Tech)	STEG
Canisteo	Gunlocke	Southern Tier Provisions
Career Development Council (GST BOCES)	Guthrie Health Care System	St. James Mercy Hospital
Chemung Canal Trust Company	Hardinge	Steuben County
Chemung County Chamber of Commerce	Hilliard Corporation	Steuben County IDA
City of Hornell IDA	Hornell City School District	Three Rivers Development Corporation
Corning Center for Rehabilitation and Healthcare	Horseheads School District	Town of Big Flats
Corning Community College	HP Hood, LLC	Vulcraft
Corning Credit Union	IBEW	Wagner Lumber
Corning Enterprises	Kennedy Valve	Watkins Glen International
Corning Incorporated	Mercury Aircraft	Watkins Glen School District
	Micatu	Welliver
	NUCOR	World Kitchen (Corelle Brands)

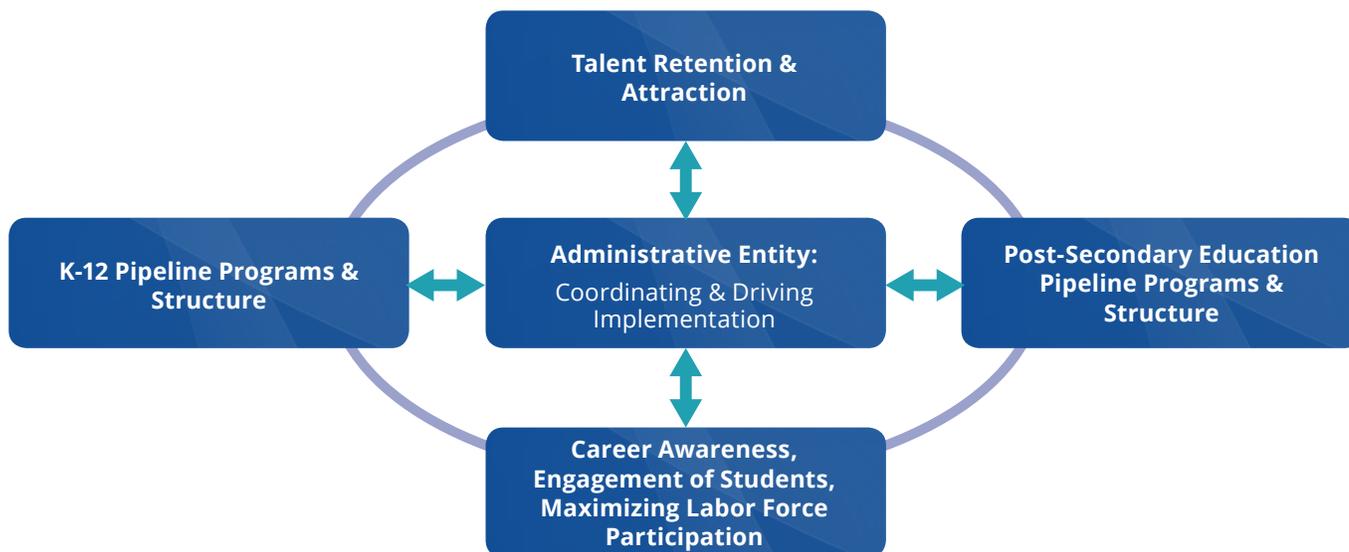
About the I-86 Innovation Corridor

The I-86 Innovation Corridor is comprised of Chemung, Schuyler, and Steuben Counties and boasts the highest concentration of advanced manufacturing and transportation equipment manufacturing companies in New York State’s Southern Tier. Though the Corridor is relatively rural, with a combined three-county population of less than 200,000, it is home to several major and multinational corporations including the corporate headquarters, R&D, and manufacturing operations of Corning Incorporated. In addition to numerous other manufacturing companies—including materials, food, and furniture producers, the region also houses three of the world’s leading rail design and manufacturing firms: Alstom Transportation, Inc., CAF USA, and Bombardier.

The region is peppered with quaint towns and villages and anchored by the cities of Elmira in the east, Corning in the center, and Hornell in the west. Its natural beauty and resources—the local wine country, Watkins Glen State Park, Seneca Lake, Finger Lakes National Forest, and Sugar Hill State Forest draw visitors and prospective residents to the area each year. The Corridor is home to Fortune 500 companies that recruit world-class scientists and engineers and Elmira College, a private liberal arts college that attracts students, faculty, and administrators from other parts of the country to the area. At the same time, the region is seeing growth in lower wage and lower skill hospitality, production, and agriculture occupations and combating concentrated pockets of downtown poverty.

While the Corridor’s population and labor force continue to age and contract, industries such as advanced manufacturing are seeing a significant resurgence and making major investments in the area. The availability of an adequate skilled workforce is chief among factors that will determine the region’s ability to continue to support this growth and future expansion or whether companies look to other communities to make these investments. One thing is certain: a coordinated and aligned approach to regional workforce and economic development is essential to ensure the I-86 Innovation Corridor’s economic future.

INTEGRATED WORKFORCE DEVELOPMENT STRATEGY



Summary of Goals and Strategies



Strategic Goal 1:

Workforce and economic development stakeholder engagement and efforts in the I-86 Innovation Corridor are results-oriented, consistent, aligned, and coordinated by a central entity

(Focused on Capacity, Collaboration, Communication, and Content)

- Strategy 1.1 Create and support an Administrative Entity to coordinate efforts and drive strategy implementation
- Strategy 1.2 Create and maintain a web-based regional dashboard to benchmark and measure progress toward goals
- Strategy 1.3 Develop, implement, and sustain employer-driven Sector Partnerships across the region
- Strategy 1.4 Coordinate data collection and analysis on labor market trends and needs
- Strategy 1.5 Convene and facilitate an annual “State of the Workforce” forum



Strategic Goal 2:

I-86 Innovation Corridor and the Southern Tier region of New York are recognized as an attractive community to live, work, start and grow a business, and learn

(Focused on Talent Retention and Talent Attraction)

- Strategy 2.1 Deploy significant, coordinated, and consistent Talent Retention efforts that leverage existing quality of place (vibrant communities) initiatives
- Strategy 2.2 Build upon the North American Hub for Advanced Transit Manufacturing’s Global Talent Attraction Initiative Strategy to develop a coordinated global Talent Attraction initiative for the region
- Strategy 2.3 Create a career awareness campaign and messaging strategy



Strategic Goal 3:

K-12 students in all school districts are aware of and have access to high-quality education aligned with current and future economic growth opportunities in the I-86 Innovation Corridor

(Focused on the K-12 Pipeline, Programs, and Structure)

- Strategy 3.1 Contextualize curriculum and other learning opportunities to include work-based scenarios
- Strategy 3.2 Enhance advising and provide earlier and consistent interventions focused on career awareness and decision-making
- Strategy 3.3 Support program development and delivery that is in alignment with key industries and promotes entrepreneurship and innovation



Strategic Goal 4:

Post-secondary education institutions and training programs are developed, enhanced, and modified to better align with economic needs and future innovations of the region

(Focused on Post-Secondary Education Pipeline, Programs, and Structure)

- Strategy 4.1 Enhance capacity of post-secondary institutions to serve the region's employers and increase the pipeline for entry to mid-level occupations and beyond
- Strategy 4.2 Support the development of the Corning Community College STEAM Innovation Campus
- Strategy 4.3 Explore the feasibility of expanding Corning Community College's University College model to include a satellite engineering program within the I-86 Innovation Corridor



Strategic Goal 5:

The I-86 Innovation Corridor offers clearly articulated, comprehensive regional career pathways and related training across key industries that are promoted and available to the full spectrum of residents

(Focused on Career Awareness, Engagement of Students, Maximizing Labor Force Participation, and Upskilling)

- Strategy 5.1 Articulate clear career pathways related to target industries to enhance the K-20 (elementary – post-secondary) pipeline in educational paths aligned to key local economic opportunities
- Strategy 5.2 Support career development and upskilling opportunities to create an incumbent workforce that is responsive to rapidly changing technologies and skill needs
- Strategy 5.3 Engage and provide appropriate supports and skill development to discouraged populations to aid in entry or re-entry into the workforce and career progression
- Strategy 5.4 Improve education physical infrastructure and professional development opportunities for educators to support delivery of high-quality, industry-aligned programming
- Strategy 5.5 Promote the value of post-secondary credentials and remove barriers to acquiring them
- Strategy 5.6 Deploy a two-generation career awareness and guidance strategy, targeting both K-12 students and their parents

GOAL AND STRATEGY DETAIL

GOAL 1



Strategic Goal 1:

Workforce and economic development stakeholder engagement and efforts in the I-86 Innovation Corridor are results-oriented, consistent, aligned, and coordinated by a central entity

(Focused on Capacity, Collaboration, Communication, and Content)

Why this is important: The I-86 Innovation Corridor is facing a significant workforce challenge, employers are feeling the strain of the region's declining population and aging labor pool—some even report having to turn business away due to the lack of available workforce. The region has several organizations and a variety of valuable programs, initiatives, and efforts aimed at addressing the challenges of building a high-quality workforce and increasing economic vitality.

However, stakeholders across multiple sectors express concern that there is a lack of sufficient communication and coordination to connect these islands of excellence to effectively scale what's working and reduce the potential for duplication of efforts. The Corridor is small enough to effectively streamline coordination through a single entity to maximize efforts on the ground and reach economies of scale. The region needs organization and leadership to drive implementation of results-oriented, consistent, and aligned strategies and programming.

Strategy 1.1 Create and support an employer-led Administrative Entity to coordinate efforts and drive strategy implementation (see Administrative Entity Concept)

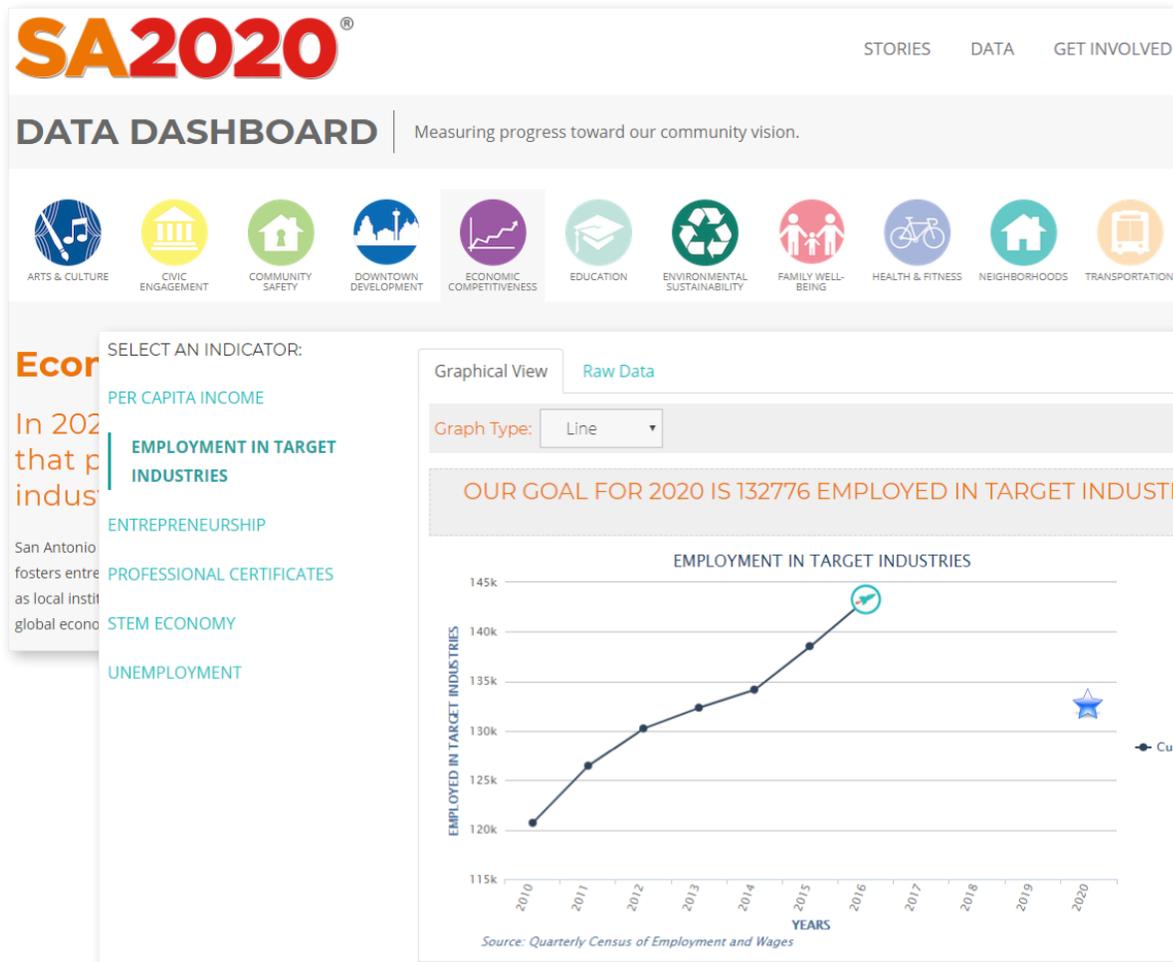
- Create and financially support an Administrative Entity to drive implementation of this strategy and serve as the intermediary—coordinator and conduit between education, workforce development, economic development, and businesses—for workforce, education, and talent initiatives in the region.
- Streamline and coordinate employer activities to increase the economy of scale they can reach related to regional talent development, attraction, and retention efforts.

Strategy 1.2 Create and maintain a (web-based) regional dashboard to benchmark and measure progress toward goals

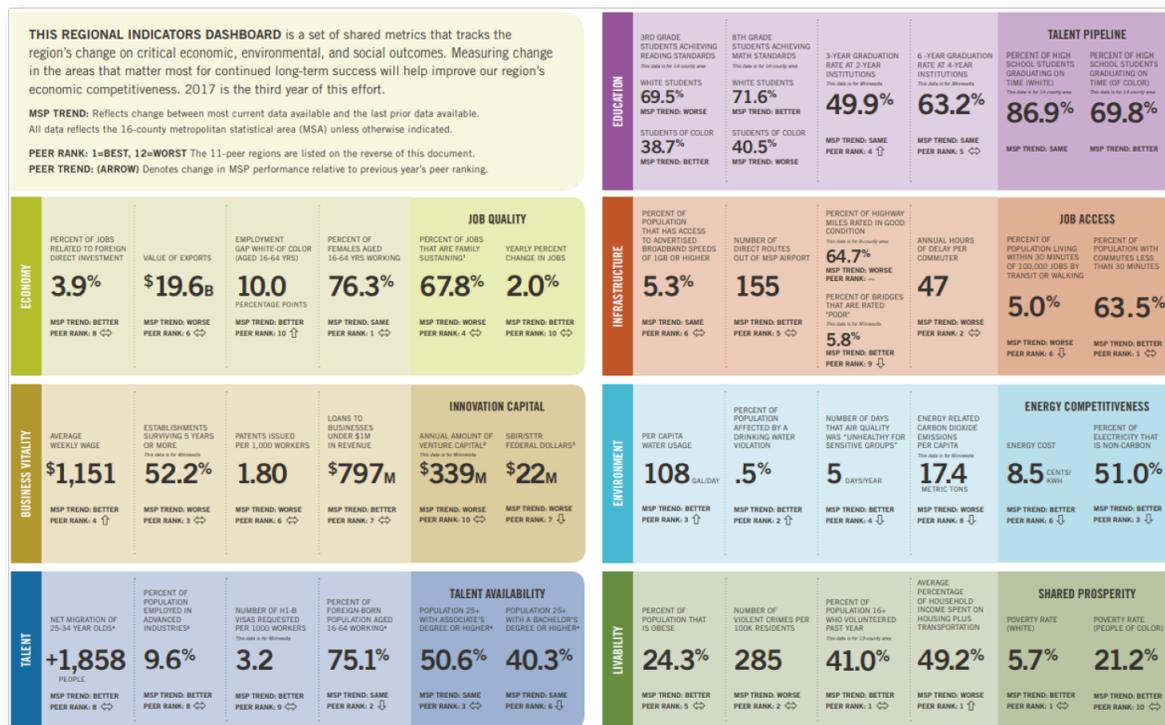
- Create and maintain a regional dashboard of key economic indicators in the I-86 Corridor—focusing, at least initially, on workforce and education indicators related to this strategy.
- Given the region's manageable size in terms of population and number of schools and employers, the Corridor could go beyond traditional data sets (e.g. Bureau of Labor Statistics, U.S. Census Bureau) that can be automatically fed into an API to include measures such as high school CTE output in target industries, industry certifications attained, and results of business satisfaction surveys.

Models to consider:

- SA2020 – San Antonio, TX
 - SA2020’s mission is to drive progress toward a shared vision for a thriving San Antonio. We report on progress, inform and activate the public, and align efforts towards the community’s goals.
 - SA2020 Data Dashboard: <https://www.sa2020.org/progress/>



- Greater MSP Minneapolis Saint Paul Regional Economic Development Partnership – Regional Indicators Dashboard: <https://www.greatersp.org/regional-indicators/>



+ Economy

+ Business Vitality

- Talent



Strategy 1.3 Develop, implement, and sustain employer-driven Sector Partnerships across the region

- Business-led sector partnerships serve as a key vehicle for understanding (e.g. validating labor market data) and addressing industry needs including, but not limited to, workforce; many strategies such as career pathway articulation/ career awareness and education/training program development or curriculum enhancement will involve or be led by sector partnerships.
- Engaging leadership from the Administrative Entity in these partnerships—either as the convener/facilitator or member—will ensure that work across partnerships is coordinated (when and where possible) and aligned with the regional strategy.
- Consider Advanced Manufacturing—including advanced transit manufacturing technology and innovation (NA Hub), Healthcare, and IT as potential initial sectors of focus.

Models to consider:

- Kansas City (GradForce KC & KC Rising) Talent-to-Industry Exchanges: <http://www.marc.org/Data-Economy/Workforce-Development/GradForce-KC/Talent-to-Industry-Exchanges.html>

Talent-to-Industry Exchanges

Talent-to-Industry Exchanges (TIEs) are replicable public/private partnerships that bring industry and education groups together to solve workforce challenges.

GradForce KC introduced the TIE concept in 2016. This strategy was put forward as a KC Rising pilot project to address the alignment of the region's education pipeline with workforce needs in specific industries.



Several elements are critical to the success of TIEs:

- They are industry led.
- They are regional and comprehensive in approach, covering the full K-20 education continuum.
- They are data driven and action oriented.

Each TIE process has three phases:

1. A detailed economic and labor analysis.
2. A workforce action plan.
3. Plan implementation.

- Iowa Sector Partnerships & Pathways – Iowa Department of Education: https://www.educateiowa.gov/adult-career-and-community-college/sector-partnerships#Sector_Partnership_Toolkits_and_Resources



Strategy 1.4 Coordinate data gathering and analysis as related to Labor Market trends and needs (see CAEL’s Actionable LMI Methodology for additional guidance)

- This triangulated data approach combines traditional Labor Market Information (LMI), real-time job posting data, and qualitative input from employers to form a comprehensive understanding of local realities.
- Use this data to inform and reinforce programmatic solutions deployed in the region, set dashboard targets, and seek funding opportunities.

Strategy 1.5 Convene and facilitate an annual “State of the Workforce” forum

- Build on existing models in the region (e.g. Alfred State’s Future Workforce Forum: Closing the Middle Skills STEM Gap) to serve as the transparent and coordinated message about the changing nature of the labor market demand and workforce labor pool.
- Managed by the Administrative Entity to bring to life and communicate information about the region’s progress in developing a robust talent pipeline (updates on strategy implementation)—involves stakeholders from the business community, education, workforce development, economic development, and other community organizations.

GOAL 2



Strategic Goal 2:

I-86 Innovation Corridor and the Southern Tier region of New York are recognized as an attractive community to live, work, and learn

(Focused on Talent Retention and Talent Attraction)

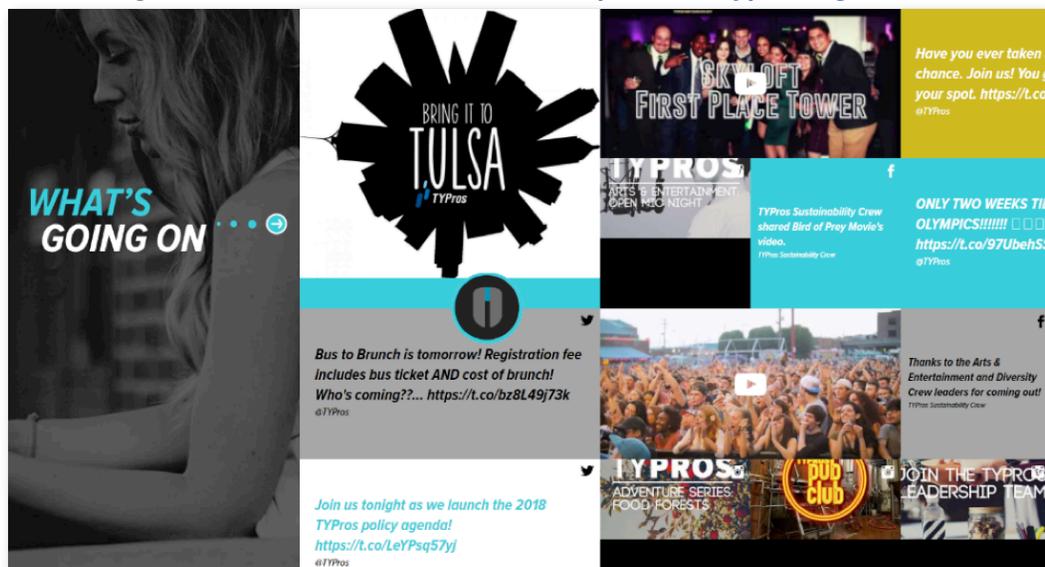
Why this is important: The Corridor’s shrinking and rapidly aging population means that to meet demand, the region will need to greatly increase its ability to attract the right talent, to retain these individuals once they’ve been recruited to the area, and to not only grow talent locally through the K-12 and college pipeline, but to keep those residents and students engaged in the regional workforce. To do so, the I-86 Innovation Corridor will need to invest in quality of place efforts, promote the region’s virtues in a manner capable of reaching a national and even global audience, and showcase the range of career opportunities across the mix of industries and companies.

Strategy 2.1 Deploy significant, coordinated, and consistent Talent Retention efforts that leverage existing quality of place (e.g. Vibrant Communities) initiatives

- Career Awareness – Increased collaboration within the employer base to engage with the students at an earlier stage in their education pathways to show and get them excited about the careers, opportunities, and future of the economy in the I-86 Innovation Corridor.
- Youth Engagement – Create a “Future Innovators” program focused on the K-12 population to inspire a greater connection to the future of the Southern Tier economy. This program would further enforce exposure to the forward movement of the economy and begin to show younger students how critical their contribution is to ensuring forward trajectory of the region and their home.
- Young Professionals Engagement – Create and enhance Young Professional groups focused on the 18+ population in the I-86 Innovation Corridor to keep college level and adult learners already in the community. These groups, modeled after Meet Up groups, can have both a social focus and a specific employment focus where there are sub-groups for core occupational areas such as Manufacturing, Technology, Rail Innovation, and Entrepreneurship. Their objective is to create a social and professional network for the younger demographic thereby reinforcing their connection to and involvement within the community and affecting their desire to stay and grow roots in the region.
- Adult Professionals Engagement Targeting Trailing Spouses – Create and enhance C-Suite and Executive Level Engagement Trailing Spouse programs. Without significant support for trailing spouses and a focus on their employment opportunities the I-86 Innovation Corridor may continue to have challenges recruiting the top level of talent into the region. Many mid-career and executive level workers are not making relocation decisions within a vacuum, they are considering their employment opportunities as well as those of their spouse. Having a sophisticated program within which trailing spouses see where they can fit into the economy and how there are many employment options in the region will greatly enhance successful recruitment strategies.

Models to consider:

- Tulsa Young Professionals (TYPROS) – Tulsa, OK: <https://www.typros.org/>



- SynerG – Greensboro, NC: <http://synerg.org/>

synerG is more than just an organization for Greensboro's young professionals. We're a real, live network dedicated to growing and cultivating Greensboro's under-40 community. We're as diverse as we are passionate about the city we call home and we wholeheartedly believe that by creating opportunities for tomorrow's leaders to grow today, we're helping shape the future of our city for the better.

(Y)our Greensboro

Whether you're new to Greensboro or lived here your whole life – you can find out about all kinds of cool things to do in (y)our city.

Come to an Event

(Y)our source for synerG leadership, social and community events. We've even added events from partners and friends you'll want to know about.

Partnerships

synerG doesn't go it alone. We can connect you to great partners that do great things in (y)our city.

Get Involved

Leadership Training, Community Engagement, Social Networking. We've got you covered.

RECENT NEWS

The National Folk Festival Is Back In North Carolina For One Last Year

Subscribe to Our Newsletter

Strategy 2.2 Build upon the North American Hub for Advanced Transit Manufacturing's Global Talent Attraction Initiative Strategy to develop a coordinated global Talent Attraction initiative for the region

- Support and expand upon stated global talent attraction strategies in the North American Hub for Advanced Transit Manufacturing (NA Hub) plan which include:
 - A branding and messaging strategy
 - The design and implementation of a targeted messaging campaign, including website, videos, all social media platforms
 - Procurement of software for coordination with NA Hub website and links to other NA Hub firms
 - A real-time database to track local, regional, and national job posting activity
- Branding and Messaging Campaign – create a branding and messaging strategy for the Innovation Corridor and potentially the greater Southern Tier region that goes beyond the NA Hub. This messaging should address all aspects of the community: Work, Live, Play and Learn. Collect and curate the content related to career, education, and lifestyle. For example, ask local employers to submit available job opportunities through a web form. Ask partner organizations to share relevant content that has already been developed to populate the website and give their permission to re-publish with attribution.
- Outbound Recruiting – ramp up outbound recruiting to TDL communities: Boston, Houston, Denver, Seattle, Phoenix, Jacksonville through campus recruiting and other public community promotion (not focused just on the student population). Where appropriate, focus messaging on being “on the cutting-edge” of technological innovations, focus on impact environmentally, R & D opportunities, and social and livable communities.
- Messaging about relative affordability advantages the Greater Southern Tier provides over competing regions/larger metros, to the degree this is accurate, would be key to include.
 - Model to consider (specific to affordability): Milwaukee campaign to attract Chicagoans – <https://nextcity.org/daily/entry/wisconsin-is-coming-for-your-citys-millennials>
- Support Full Family Needs – Promote youth and trailing spouse opportunities focused on opportunities and quality of life for the full family and not just the specific worker being recruited.
- Bring Them Home/Boomerang Outreach Strategy – focus on connecting with former I-86 Innovation Corridor residents to bring them back to the community. Highlight career progression opportunities and the potential to contribute to the innovation going on in the region. Promote the range of opportunities for advancement, learning opportunities, programs, networks for all career levels.

Models to consider:

- Imagine Pittsburgh, Pittsburgh, PA: <https://imaginepittsburgh.com/>

- Work in the Triangle, Research Triangle area North Carolina: <http://www.workinthetriangle.com/>

Strategy 2.3 Create Career Awareness Campaign, Messaging Strategy (see also Strategic Goal 5)

- This communications campaign can and should serve dual purposes—to showcase to potential residents the many career opportunities the region offers and to inform current residents (students, workers, parents, etc.) about these as well. Spotlight entry, mid-level and senior-level occupations and the paths that people can take within and across the industry mix in the I-86 Innovation Corridor.
- Use multiple media modalities such as printed collateral, websites, video (for web and/or television spots), and radio as appropriate to highlight the region’s industries, industry growth, and innovation.

GOAL 3



Strategic Goal 3:

K-12 students in all school districts are aware of and have access to high-quality education aligned with current and future economic growth opportunities in the I-86 Innovation Corridor

(Focused on the K-12 Pipeline, Programs, and Structure)

Why this is important: K-12 education plays a critical role in funneling individuals into the talent pipeline. As such, it is imperative that K-12 systems in the Corridor offer programming across key industries, deliver the right mix of skills and experiences within these programs, and ensure that students are provided with career decision-making tools and support based on the realities of the local economy.

Strategy 3.1 Contextualize curriculum and other learning opportunities to include work-based scenarios

- Continue to support and expand P-TECH model; leverage Regional Greater Southern Tier STEM Steering Team and Implementation Team to incorporate P-TECH themes in curriculum design and instruction into traditional high school constructs. Establish cross-curricular teams to embed competencies across subject lines.
- Encourage employers to directly engage with students in teaching and lesson delivery; create a “matchmaking” service for professionals to connect to classrooms.
- Increase job shadowing and internship opportunities, explore opportunities for employers/employees to serve as student mentors.

Strategy 3.2 Enhance advising and provide earlier and consistent interventions focused on career awareness and decision-making

- Create career advising and guidance materials with accurate and consistent content that can be used across all school districts in the region.
- Provide more professional development opportunities focused on the local labor market to those responsible for providing career advisement to students through BOCES/the Career Development Council or similar entity.

Strategy 3.3 Support program development and delivery that is in alignment with key industries and promotes entrepreneurship and innovation

- Focus on programs that support talent pipeline development for key industries and occupations in the region, particularly in areas where there are significant current or projected workforce gaps: manufacturing (e.g. machining, production), construction trades, IT (e.g. software development), healthcare (e.g. allied health).

GOAL 4



Strategic Goal 4:

Post-Secondary Education Institutions and Training Programs are Developed, Enhanced, and Modified to better align with economic needs and future innovations of the region

(Focused on Post-Secondary Education Pipeline, Programs, Structure)

Why this is important: In addition to recruiting talent from outside the region, the Corridor will also need to maximize its ability to produce and retain its own workforce by offering the right set of programs across key industries—with a strong focus on technical skill development—to ensure alignment with critical occupational and industry needs.

Strategy 4.1 Enhance capacity of post-secondary institutions to serve the region’s employers and increase the pipeline for entry to mid-level occupations and beyond

- Increase capacity at of post-secondary institutions to deliver programs aligned with target industry needs. Increase technical programming offerings at the certificate level; ensure that current and new offerings are stackable, aligned to credit-bearing degree pathways (e.g. applied sciences at the associate and baccalaureate levels), and connected to degree completion objectives.
- Focus on educational pathways in two-year intuitions beyond traditional transfer-based articulation models.
- Value prior and work-based learning by assessing knowledge and awarding college-level credit when appropriate—focus on internal employer-provided training not currently connected to college credit-bearing pathways.

Strategy 4.2 Support the development of the Corning Community College STEAM Innovation Campus

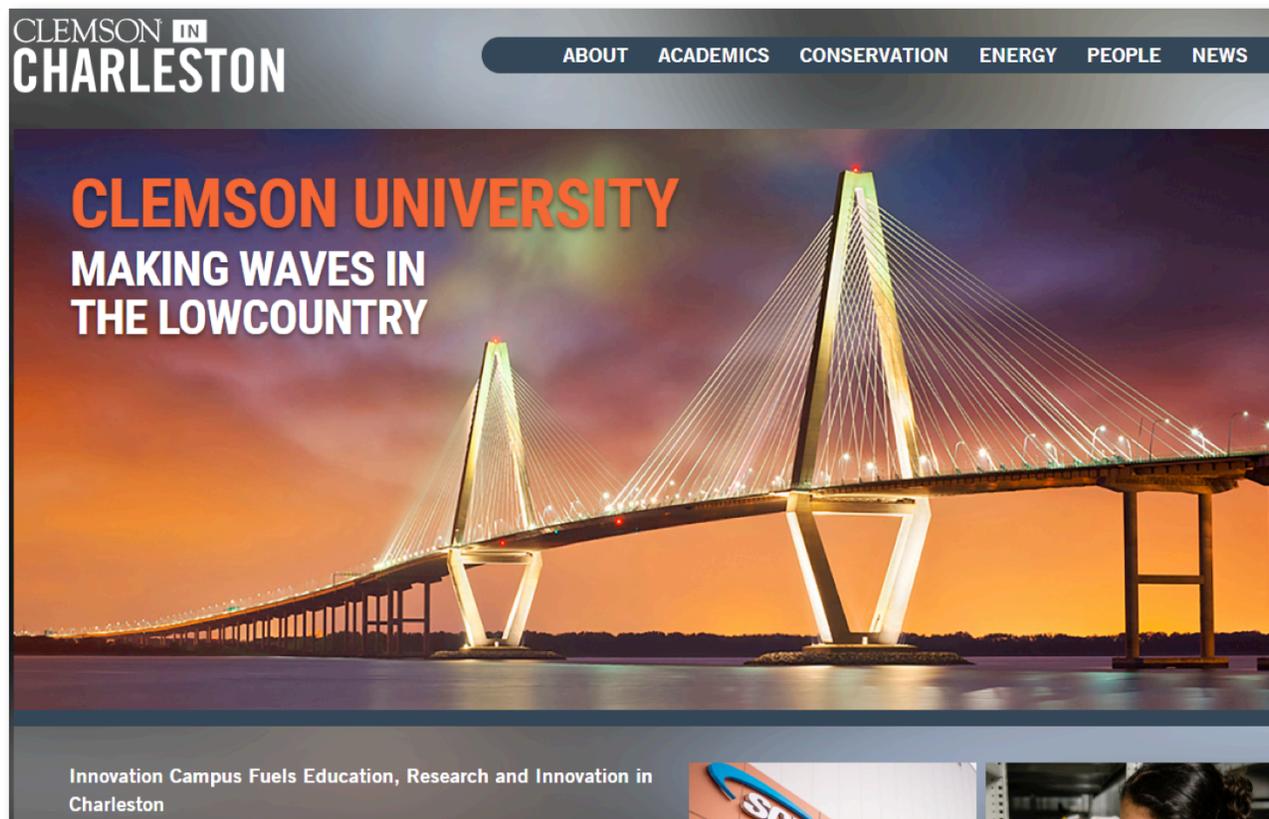
- Support the creation of the CCC STEAM Innovation Campus to enhance the STEM pipeline and not only improve the physical infrastructure of the learning environment, but further foster innovation and the region’s prominence as an innovation hub.

Strategy 4.3 Explore the feasibility of expanding CCC’s University College model to include a satellite engineering program within the I-86 Innovation Corridor

- Explore the feasibility of expanding CCC’s University College model to establish a satellite engineering program within corridor to begin developing local engineering talent in addition to recruiting graduates from other regions. In addition, this would be an opportunity to offer enhanced ongoing professional development for incumbent businesses and employees as technology disruptions continue (i.e. Autonomous vehicle R & D and implementation).
- This could be pursued in partnership with other institutions in the greater Southern Tier or even larger institutions within the state of New York or some combination thereof.

Models to consider:

- Clemson in Charleston – <https://www.clemson.edu/cecas/departments/charleston/>



GOAL 5



Strategic Goal 5:

The I-86 Innovation Corridor offers clearly articulated, comprehensive regional career pathways and related training across key industries that are promoted and available to the full spectrum of residents.

(Focused on Career Awareness, Engagement of Students, Maximizing Labor Force Participation, and Upskilling)

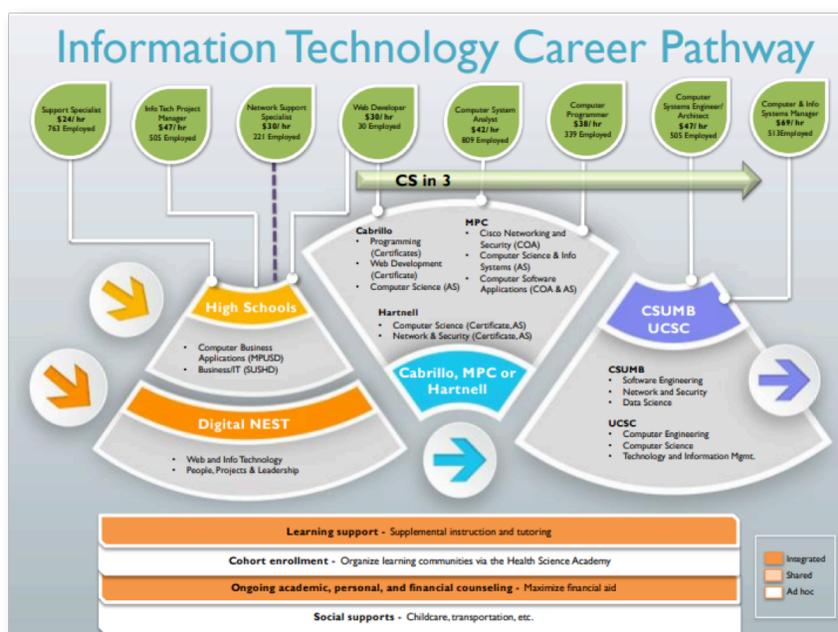
Why this is important: The Corridor will need to maximize labor force participation and skill development across all segments of its population to make progress toward addressing current and projected regional demand—this includes students in the K-12 pipeline, incumbent workers, unemployed and underemployed individuals, as well as those that have dropped out of the labor market entirely.

Strategy 5.1 Articulate clear regional career pathways related to target industries to enhance the K-20 pipeline in educational paths aligned to key local economic opportunities

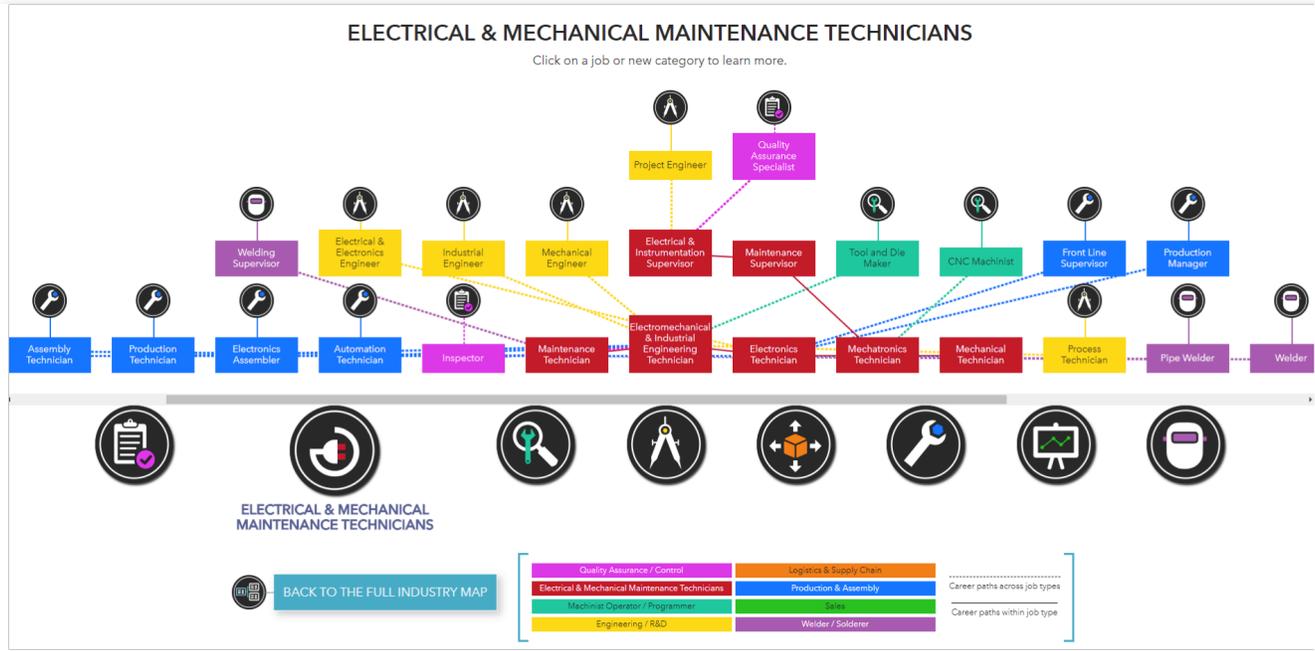
- Articulate and create visualizations of regional career pathways for key industries, focused on in-demand occupations/job opportunities in the region and the associated education and training pathways, any relevant business led programs on skill development (apprenticeship, on the job training, mentorship, internships, cooperatives, etc.) with on and off ramps across the full spectrum of entry- to senior-level occupations.
- Ensure that that K-12 programming links to post-secondary offerings in target industry/skill areas (e.g. through existing and expanded articulation agreements, dual enrollment) between K-12 and Community College/Technical training and traditional 4-year institutions.
- Clear regional messaging will make it easier for residents (youth through adult workers/learners, students, and parents) to understand what career pathways are available in the region and signal them to the proper and aligned education, training and skill development programs that will prepare them for these opportunities.

Models to consider:

- Monterey Bay Regional Pathways – <http://mbep.biz/What-We-Do/What-We-Do/Workforce.aspx>



- Colorado's Advanced Manufacturing Industry (statewide, industry-specific, interactive career mapping tool) – <https://cocareactiontools.com/>



Strategy 5.2 Support career development and upskilling opportunities to create an incumbent workforce that is responsive to rapidly changing technologies and skill needs

- Use the North American Hub for Advanced Transit Manufacturing as a model—an employer-driven partnership with education, workforce development, and economic development—to develop and deploy flexible and best-in-class incumbent worker training (e.g. employer designed, a combination of onsite and virtual) for other industries (see “sector partnerships” in Strategy 1.3).

Strategy 5.3 Engage and provide appropriate supports and skill development to discouraged populations to aid in entry or re-entry into the workforce and career progression

- Create a coordinated process to engage and support disengaged residents including those who are unemployed or underemployed, have dropped out of the labor market, lack a high school diploma or GED, or have some college and no degree.
- Promote tuition assistance best practices among employers in the region to incentivize labor force participation and upskill current workers; put in place or expand employer-driven completion HS/GED models for lower-level workers.
- Coordinate social services/supports and ensure strong partnerships w/ labor market (e.g. strategies being implemented through the Elmira Poverty Reduction Initiative).

Models to consider:

- McDonald’s Archways to Opportunity (national model) – <http://www.archwaystoopportunity.com/about.html>

Since the launch in April 2015, we are proud to report that more than 24,000 restaurant employees in the U.S. have enrolled in a program through Archways to Opportunity. These numbers have exceeded our expectations and we’re aggressively working to do even more!

McDonald’s **Archways to Opportunity** offers educational programs to eligible restaurant employees at participating restaurants.

INCREASED ACCESS TO EDUCATION FOR OVER 24,000 PEOPLE

16,400+ restaurant employees awarded **Tuition Assistance**

MORE THAN 300 U.S. Graduates in the **Career Online High School Program**

6,100+ GRADUATES from **English Under the Arches®** since 2007

\$21 MILLION+ Awarded in High School and College **Tuition Assistance**

Most McDonald’s restaurants are operated by independent franchisees who are independent employers, and set their own employment policies and practices, including pay and benefits for the people working in their restaurants. McDonald’s does not control the independent franchisees’ employment policies and practices and does not employ those working at franchised restaurants.

© 2018 McDonald’s

Strategy 5.4 Improve education physical infrastructure and professional development opportunities for educators to support delivery of high-quality, industry-aligned programming

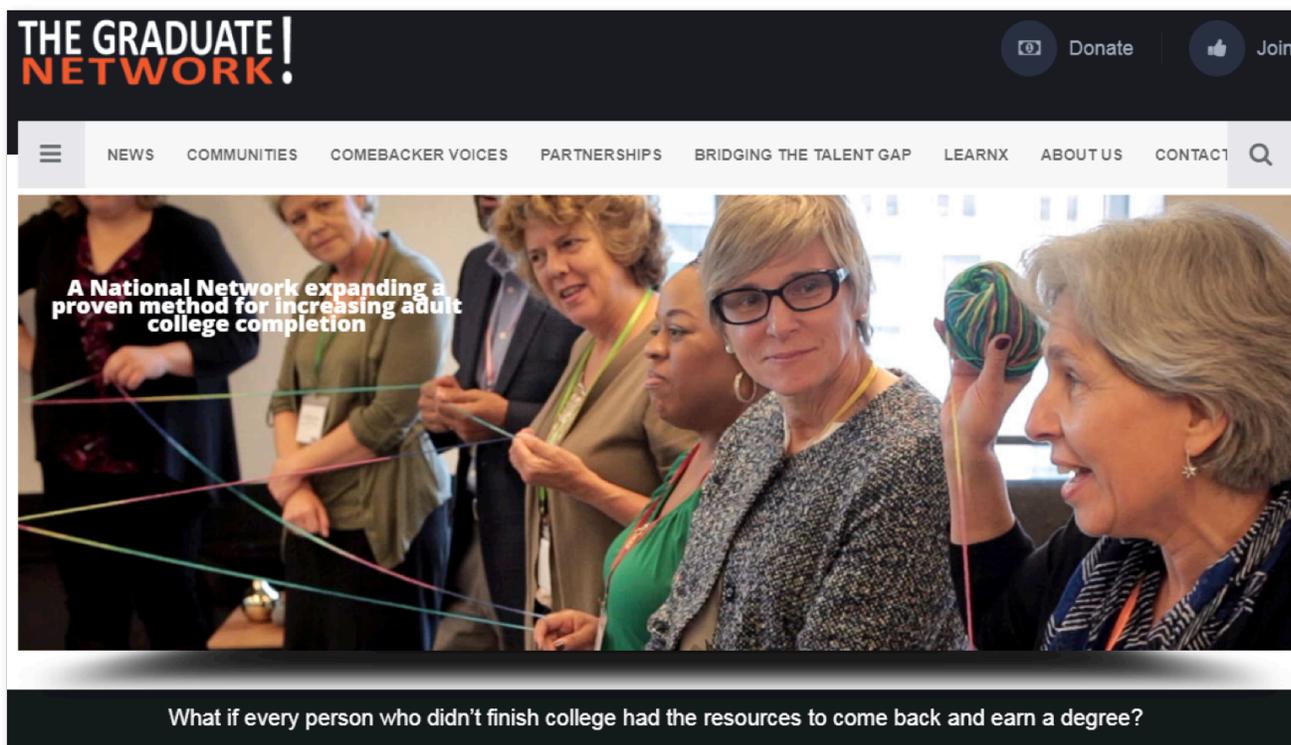
- Leverage state and local dollars to improve school infrastructure and teaching conditions and ensure education environments offer state of the art facilities, equipment, and learning opportunities for all students.
- Support and provide regional educator professional development (e.g. teacher externship programs, exposure to real-life work scenarios) to ensure that teaching materials and educator expertise is on par with current industry needs, technology and offers a clear transferability to the realities of the workplace.

Strategy 5.5 Promote the value of post-secondary credentials and remove barriers to acquiring these credentials

- Create programs to mitigate financial, access, and retention barriers for all residents of the Innovation Corridor; provide financial support for both youth and adults to enter or re-engage on a college pathway.
- Create college access hubs, or static places and times for students and potential students, to engage with a college-going advocate to navigate financial aid resources and applications, enrollment processes and placement testing needs, provide advising on college programs and their alignment to the labor market and career pathways in the Innovation Corridor.

Models to consider:

- The Graduate! Network (national model) – <http://graduate-network.org/>



Strategy 5.6 Deploy a two-generation career awareness and guidance strategy, targeting both K-12 students and their parents

- Build on nationally recognized two-generation approaches—focused on creating opportunities for and addressing needs of both children and the adults in their lives—to develop a career awareness and guidance strategy targeting both students and their parents, improving outcomes for both.
- Focus on target industries and key occupations, specifically in manufacturing and the skilled trades (those that typically do not require a four-year degree and often face perception issues).

Models to consider:

- Aspen Institute 2GEN Approach – <http://ascend.aspeninstitute.org/two-generation/what-is-2gen/>

