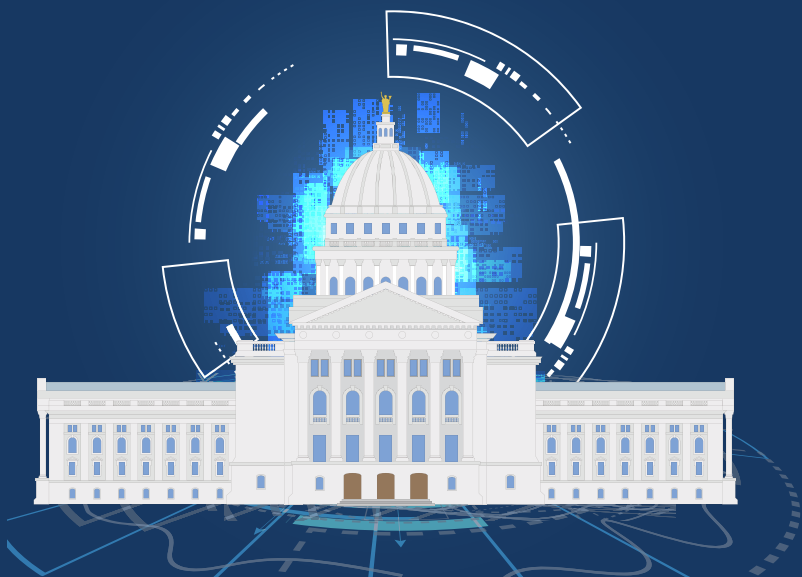
Governor's Task Force on Workforce and Artificial Intelligence

Advisory Action Plan

July 2024

Summary of Policy Proposals

- Education Principles and Policy Proposals
- Government Policy Proposals
- Workforce Development Policy Proposals
- Economic Development Policy Proposals



SEC-19662-P (R.07/2024)

Whereas artificial intelligence technology has the potential to reshape labor markets, and Wisconsin is well-positioned to ensure this transition is an opportunity for all Wisconsin workers, employers, and job seekers...

Whereas artificial intelligence systems, the next generation of technology being produced, can learn from data without being explicitly programmed, create new content, and predict future outcomes...

Whereas due to the novelty of the technology that is being developed and implemented, Wisconsin must identify potential impacts of artificial intelligence across sectors, industries, occupations, and skillsets with an eye towards greater equity and economic opportunity...

Whereas establishing this task force will serve as a crucial mechanism to understand, adapt, and capitalize on the transformations generative artificial intelligence will bring...

Now therefore, I, Tony Evers, Governor of the State of Wisconsin…hereby create the Governor's Task Force on Workforce and Artificial Intelligence…

Governor Tony Evers
Excerpts from Executive Order #211

Governor's Task Force on Workforce and Artificial Intelligence

2024

In addition to the task force members, DWD wishes to acknowledge the following contributors to the Advisory Action Plan and task force operations. Listed in alphabetical order, these supporters and contributors included: Stephanie Brady Koleda, Johannes Britz, Joe Brockman, Michele Carter, Cara Connors, John Dipko, Kathy Divine, Stephanie Elmer, Arielle Exner, Dane Fjelstad, Corey Goodrich, Julia Halopka, Ellie Hartman, Tyler Horton, Bryan Huebsch, Katie Jaeger, Lynda Jarstad, John Keckhaver, Alaina Knief, Neeraj Kulkarni, Patrick Lonergan, Ryan Long, Megan Martin, Colleen McCabe, Kathleen McCann, Pamela McGillivray, Mike Mosher, David Polk, Linda Preysz, Cory Rammer, John Roos, Lee Sensenbrenner, Jennifer Sereno, Ben Szymanski, Alex Verink, Heidi Walters, Grant Westfall, Dennis Winters, Beng Yeap.

ACKNOWLEDGMENT

Governor's Task Force on Workforce and Artificial Intelligence

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July 8, 2024

EXECUTIVE SUMMARY

Artificial Intelligence (AI) technologies are profoundly shaping the nature of work, altering the skills workers need for success, changing the competitive landscape for employers, and forcing educational and workforce development systems to overhaul their offerings to sustain a thriving Wisconsin economy. AI technologies are evolving rapidly, simulating human intelligence in computer systems, and enabling them to perform a wide range of tasks, from simple to complex. Already, Wisconsin employers and educational institutions are implementing AI applications in fields ranging from manufacturing and health care to transportation, agriculture, and the sciences. Moreover, a recent U.S. Census survey ranks Wisconsin first among all states in terms of the employment-weighted share of businesses using AI.

Given these trends, Wisconsin is uniquely positioned to tap the potential of generative AI to advance equity and economic opportunity for people and communities statewide. To help harness these technologies and strengthen Wisconsin's workforce for the 21st century and beyond, Gov. Tony Evers signed Executive Order #211, creating the Governor's Task Force on Workforce and Artificial Intelligence.

The rise of generative AI offers the potential to advance equity and economic opportunity. Achieving these outcomes will require a strategic approach.

The work of the task force occurred against the backdrop of the state's record-setting labor market performance, as Gov. Evers deployed a historic $158 million in American Rescue Plan Act funds to help connect workers with jobs by removing employment barriers and providing additional workforce training. Lessons learned from the success of these efforts factored into the work of the task force as its members considered the importance of workforce training in avoiding potential AI driven labor market disruptions and overcoming digital inequities.

Administered by the Wisconsin Department of Workforce Development (DWD) in coordination with the Wisconsin Department of Administration (DOA) and Wisconsin Economic Development Corporation (WEDC), the task force met six times over 10 months, bringing together private and public sector leaders to identify policies and investments that will continue to advance Wisconsin workers, employers, and job seekers through this technological transformation.

The Governor's Task Force on Workforce and Artificial Intelligence met with diverse stakeholders, heard from industry and labor leaders, tracked on the success of early AI adopters, gathered and analyzed labor market data, and produced the following advisory action plan for the governor. The plan:

- Identifies the current state of generative AI's impact on Wisconsin's labor market,
- Offers informed predictions regarding opportunities and impact for the near term and into the future,
- Identifies how these workforce opportunities and impacts may touch Wisconsin's key industries, occupations, and foundational skillsets,
- Explores initiatives to advance equity and economic opportunity in the face of these changes, and
- Based on these findings, recommends policy directions and investments related to education, government, workforce development and economic development systems to capitalize on the AI transformation.

The following plan also identifies guiding principles to support implementation of AI technologies as part of an economy that works for everyone. These overarching principles are meant to promote ethical decision making related to AI and the workforce; advance equitable access to AI technology and training; and ensure that workers are represented in AI investments to strengthen Wisconsin's competitive edge.

Finally, the plan offers specific policy proposals based on the collaborative work of the task force and the expertise of leaders from education, government, workforce development, economic development, and the business community. Among these themes, the policy proposals reflect the need to expand digital literacy; develop more flexible training and credentialing; continue efforts to remove employment barriers and connect underutilized talent pools with AI skills; improve government service delivery through strategic deployment of AI tools; and incent industry adoption of AI tools to enhance competitiveness and create high quality jobs.

CONTENTS

ESTABLISHMENT OF THE GOVERNOR'S TASK FORCE ON WORKFORCE AND ARTIFICIAL INTELLIGENCE

In August 2023, Gov. Tony Evers signed Executive Order #211, creating the Governor's Task Force on Workforce and Artificial Intelligence. Envisioned as a mechanism to adapt and equip a workforce capable of capitalizing on the generative AI transformation, creation of the Governor's task force set in motion a comprehensive effort to help harness the evolving technologies and strengthen Wisconsin's workforce for the 21st century and beyond.

The work of the task force took place against the backdrop of record-setting labor market performance in the state. Wisconsin achieved record high total employment of 3,048,000 in May 2024 while total nonfarm jobs reached a record high of 3,047,900 in February 2024. At the same time, the seasonally adjusted unemployment rate hovered at 2.9%, up slightly from the record low of 2.6% set in the prior year.

The strong labor market performance was accompanied by a worker quantity challenge resulting from decades-long demographic trends and the lingering effects of the COVID-19 pandemic. The aging and retirement of Baby Boomers, lower birth rates among younger generations, limited migration into the state, and the gradual rise of employment barriers such as lack of access to childcare and affordable housing for workers left many employers scrambling for solutions to hire and retain talent.

Gov. Tony Evers' historic investment of $158 million in American Rescue Plan Act funds into innovative workforce solutions resulted in significant employment gains and important lessons about the benefits of targeted training and efforts to remove employment barriers. New and returning workers helped contribute to a labor force participation rate of 65.7% in February 2024, more than 3 percentage points above the national average. Efforts to promote Registered Apprenticeship, Youth Apprenticeship, and employment for people with disabilities also contributed to record results.

The success of these efforts factored into the work of the task force as its members considered the importance of workforce training in avoiding potential labor market disruptions from AI and overcoming digital inequities. In developing the policy recommendations found in this plan, task force members considered the context of urban and rural communities, the experiences of people from historically marginalized groups, the unique relationship with Wisconsin's 11 federally recognized tribes, the challenges of equipping underutilized talent pools with AI and other in-demand skills, and the need to invest in the literacy and digital literacy of Wisconsin's future workforce.

The Governor's Task Force on Workforce and Artificial Intelligence convened for its inaugural meeting on Oct. 30, 2023.

SHARON VANORNY PHOTOS

TASK FORCE MEMBERSHIP

The task force was chaired by Department of Workforce Development Secretary **Amy Pechacek** with additional leadership from Department of Administration Secretary **Kathy Blumenfeld** and Wisconsin Economic Development Corporation Secretary and CEO **Missy Hughes**.

Task force members appointed by the governor include:

- **Amy Pechacek**, Secretary, DWD;
- **Kathy Blumenfeld**, Secretary, DOA;
- **Missy Hughes**, Secretary and CEO, WEDC;
- **Dr. Jill Underly**, State Superintendent, Wisconsin Department of Public Instruction;
- **Jay Rothman**, President, Universities of Wisconsin
- **Dr. Morna Foy**, President, Wisconsin Technical College System;
- **Troy Streckenbach**, County Executive of Brown County;
- **Trina Zanow**, Chief IT Officer, DOA;
- **Dr. Charles Lee Isbell Jr.**, Provost, UW-Madison;
- **Greg Cisewski**, Dean, School of Agricultural Sciences, Utilities & Transportation, Northcentral Technical College;
- **Dr. Gholamreza Dehnavi**, Department Chair, Department of Electrical and Computer Engineering, UW-Platteville;
- **Dr. Kaushal Chari**, Dean of Sheldon B. Lubar College of Business, UW-Milwaukee;
- **Dr. Xuedong (David) Ding**, Associate Dean for the College of Science, Technology, Engineering, Mathematics and Management, Director for School of Engineering, UW-Stout;
- **Jeffrey Morin**, President, Milwaukee Institute of Art & Design;
- **Stephanie Bloomingdale**, President, Wisconsin State AFL-CIO;
- **Jack Salzwedel**, Board Chair, American Family Mutual Insurance Company;
- **Jeff Yabuki**, Chairman, Motive Partners;
- **Nadiyah Johnson**, CEO, Milky Way Tech Hub;
- **Karl Reichenberger**, Chief Intellectual Property and Information Technology Counsel, Johnson Controls;
- **Mark Tyler**, Chairman, OEM Fabricators Inc.;
- **Ann Franz**, Executive Director, NEW Manufacturing Alliance;
- **Levi Felling**, Chief Technology Officer, Elite EXTRA;
- **Jeri Koester**, Chief Information and Digital Officer, Marshfield Clinic Health System;
- **Israel Squires**, Managing Partner, Midpoint Ventures;
- **Chris Hein**, Director of Customer Engineering, Google Public Sector;
- **Dr. Keyanna Conner**, Managing Director, Deloitte Consulting;
- **Tim Fiocchi**, Senior Director of Governmental Affairs, Wisconsin Farm Bureau Federation;
- **Dave Mickelson**, Member of Wisconsin Farmers Union;
- **Brian Foster**, Chief Operating Officer, Jeff Foster Trucking Inc.; and
- **Tyler Clark**, U.S. Government Affairs Industry Director, Microsoft.

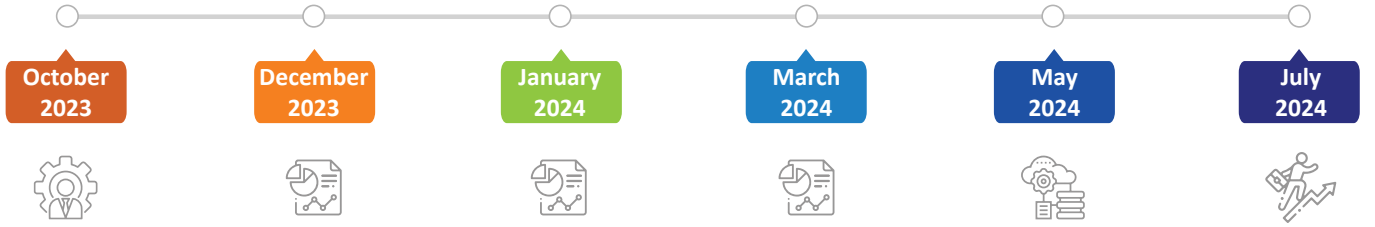
Task Force members gather for a group photo. Back row (left to right): Karl Reichenberger, Kaushal Chari, Jack Salzwedel, Tyler Clark, Trina Zanow, Charles Isbell, Morna Foy, Israel Squires, Dave Mickelson, Tim Fiocchi, Keyanna Conner. Front row (left to right): Ann Franz, Nadiyah Johnson, Stephanie Bloomingdale, Missy Hughes, Amy Pechacek, Kathy Blumenfeld, Jeri Koester. SHARON VANORNY PHOTO

PUBLIC MEETINGS AND OPPORTUNITIES FOR INPUT

While the following action plan focuses on potential policies and investments for the coming three to five years, the strategic directions it establishes may have far-reaching implications for workers, employers, job seekers, and economic development. To assure that Wisconsin communities continue to thrive – with an economy that works for everyone – the task force provided significant opportunities for public engagement and input as its work progressed.

Starting with the kickoff meeting in October 2023, the full task force met six times at locations statewide.

TIMELINE



Dates, locations, featured speakers, and topics covered at the full task force meetings included:

- October 30, 2023, Madison Concourse Hotel and Governor's Club, Madison. Speakers included:
  - **Dennis Winters**, DWD chief labor market economist, Wisconsin Labor Market Overview.
  - **Caroline Yap**, managing director, Google Global AI Business, Accelerating Workforce and Business Transformation Responsibly with AI.
  - **Emily Rose McRae**, senior director analyst, Gartner, The Future of Work and Workforce Transformation with AI.
  - **Tyler Clark**, U.S. Government affairs industry director, Microsoft, State of the States: Strategic Workforce and Policy Directions with AI,
- Dec. 4, 2023, Milwaukee Area Technical College. Speakers included:
  - **Eric Baumgartner**, executive vice president of academics at Milwaukee School of Engineering (MSOE), MSOE Tech Training Effort.
  - **Dennis Winters**, DWD chief labor market economist, Industries, Occupations, and Underutilized Talent in the Age of AI.
  - **Edward Van Buren**, principal, Deloitte Consulting LLP, and AI strategic growth leader, Deloitte's Government and Public Services, Presidential Executive Order on AI Safety and Security.
- Jan. 22, 2024, virtual meeting. Speakers included:
  - **Stephanie Wright**, chief operating officer, U.S. Center for Advanced Manufacturing, The Importance of a Human Centric Approach to AI and the Workforce.
  - **Stacey Weismiller**, initiative and community lead, Center for Advanced Manufacturing and Supply Chains, USA, World Economic Forum, World Perspectives on AI and the Workforce.
- March 4, 2024, Oshkosh Corp. Headquarters, Oshkosh. Speakers included:
  - **Anupam Khare**, senior vice president and chief information officer, Oshkosh Corp., Artificial Intelligence: Automation's Next Frontier.
  - **Amanda Ballantyne**, executive director of the AFL-CIO Technology Institute, AI Insights from the AFL-CIO.
- May 6, 2024, Northcentral Technical College, Wausau. Speakers included:
  - **Greg Cisewski**, dean, School of Agricultural Sciences, Utilities, and Transportation, Northcentral Technical College.
  - **Troy Runge**, associate dean for research, UW–Madison College of Agricultural and Life Sciences.
  - **Shawn Conley**, state soybean and small grains specialist, UW– Madison.
  - **Melissa Heise**, corporate marketing and Human resources director, Swiderski Equipment.
- July 22, 2024, Madison College.

TASK FORCE OBJECTIVES

The task force prioritized its efforts to advance policy ideas, partnerships, educational opportunities, and investments to harness the potential of AI so that workers, employers, job seekers, and communities will continue to thrive. Consistent with the charge of Gov. Evers' Executive Order, the following action plan:

Identifies the current state of generative AI's impact on Wisconsin's labor market,

ASSESS IMPACT

Offers informed predictions regarding AI opportunities and impact for the near term and into the future,

MAKE PREDICTIONS

Identifies how these workforce opportunities and impacts may touch Wisconsin's key industries, occupations, and foundational skillsets,

IDENTIFY AI-INFLUENCES

Explores initiatives to advance equity and economic opportunity in the face of these changes, and

EQUAL OPPORTUNITY

Based on these findings, recommends policy directions and investments related to workforce development and educational systems to capitalize on the AI transformation.

ACTION PLAN

BACKGROUND

What are we talking about when we talk about AI? Artificial Intelligence is a very broad term that is used to refer to any technology that enables computers to perform activities commonly associated with human intelligence such as reasoning, problem solving, decision making, language processing, perception, and learning.

Modern AI systems emerged from the fields of statistics and computer programming. Whereas these fields have traditionally relied on analysts and developers explicitly setting up the way their models and software function, advancements in machine learning have enabled computers to learn relationships through example with much less explicit instruction from their operators. Instead of explicitly specifying the relationship between inputs and outputs, operators can now provide the computer with a set of inputs and outputs and the computer can determine how they are related.

Technologies such as artificial neural networks and other forms of "deep learning" have increased the power of machines to learn by allowing computers to more efficiently model highly complex relationships. These technologies are now being used in applications such as voice assistants, medical diagnostics, quality control, financial forecasting, machine translation and targeted advertising.

To provide an example of machine learning, consider the case of email spam. To identify which emails are spam, a programmer could specify a set of criteria (e.g. a list of domains or keywords) that indicate a message is likely spam. Using machine learning, however, a programmer can provide a large set of examples of spam messages and non-spam messages and a machine learning algorithm can "learn" which keywords or domains most effectively differentiate the spam messages from the others. Similarly, to program a factory robot, an operator could explicitly program in the various movements needed to complete specific tasks (as in computer numerical controlled machining), or the operator could guide the robot through the task manually many times and let the computer create a routine that replicates a general approximation of the manual process. In many cases, especially in highly repetitive tasks where there are many examples to train on, machine learning can take less manual time to program and can provide greater accuracy.

Generative AI models build on the fundamentals of machine learning and neural networks, using these technologies to enable computers to generate novel content in response to user-supplied input. By ingesting massive quantities of text, image, audio, and video content that has been uploaded to the internet, machines have been taught how to reproduce similar content. For example, by training on a large quantity of pictures and associated descriptions found online, generative AI models such as DALL-E or MidJourney can produce new pictures from user-supplied descriptions. Similarly, by training on large amounts of text from websites, journal articles, patents, books, and other sources, large language models can generate novel text outputs.

While machine learning and generative AI appear to be powerful tools with some clear advantages over traditional software, they are not without drawbacks. Training AI models can require a large amount of data and computing resources to implement. As a result, organizations such as large software companies which already have large troves of user-generated data and ample access to computing power have a natural advantage in building AI systems. That said, advances in AI methods and the increase in widely available computing power have made AI systems increasingly practical for smaller organizations with less resource investment.

Other challenges with AI are not so easily addressed. Because machine learning models operate on relationships that are learned from data rather than programmed explicitly by a person, it can be difficult or impossible to determine why a particular output was generated. AI can behave unexpectedly, especially when confronting a situation outside of the bounds of data that was trained on. Furthermore, any biases that are implicit in the training data can carry through to the model. Because large language models are trained to simply predict the next sequence of words given some preceding sequence, they may end up creating sentences that are not factually correct (referred to as "hallucinating"). Researchers and software developers are working on new ways to reduce the data and computational power required to train their models and develop new methods to reduce issues like implicit bias and hallucination, but in the meantime, organizations will have to exercise caution before deploying AI tools.

Examples of the potentially large impact of Generative AI models abound. ChatGPT, a breakthrough large language model launched in 2022 by OpenAI, has had widespread adoption, reportedly surpassing 1 million users in just five days.[i] Competing large language models have proliferated and have been incorporated into many existing software applications, as with Google's Gemini and Microsoft's Copilot. Given how widely varied online content is, as well as the ease of issuing commands in natural language (as opposed to computer code), generative AI models promise to serve as a general-purpose tool.[ii] Existing applications of generative AI include automating customer service through chat-bot interfaces, generating text documents, summarizing data, producing artwork, and writing code.

TASK FORCE PROGRESS AND PROCESS

To better understand the implications of emerging AI technologies and begin the policy development process, the task force began its work by organizing into three subcommittees:

- **Industries, Occupations, and Skills:** This subcommittee commenced its work in collaboration with DWD's labor market economists to identify the industries, occupations, and functional skillsets most likely to benefit or experience disruption from AI. Based on this understanding, and a review of existing training and other programs, the group focused its efforts on identifying opportunities to advance workers, employers, job seekers, and a thriving Wisconsin economy. Both employee and employer needs were considered.
- **Equity and Economic Opportunity:** The rise of generative AI offers the potential to advance equity and economic opportunity. This committee was tasked with exploring existing programs designed to connect underutilized talent pools with in-demand skills, identify gaps, and propose solutions that lead to career advancement in these new fields. The subcommittee focused its work on advancing equity and economic opportunity as part of the AI transformation.
- **Workforce Development and Educational Solutions:** Based on the work of the previous two groups as well as research by DWD labor market economists and others, this subcommittee is identifying policy, educational, and budget solutions to prepare Wisconsin's workforce, drive economic development, and sustain thriving communities.

As the work of these project teams progressed, several things became evident. First, many of the items that emerged from the subcommittee discussions reflected shared values and guiding principles rather than specific policy or program ideas.

Second, the groups hit on similar policy and program ideas, reflecting information gained from the various speakers, site visits, and data provided by DWD's labor market economists and staff researchers.

Third, task force leaders recognized that, to move the actionable ideas forward, more specific policy and program expertise would be needed as well as alignment with the key organizations that would be charged with implementation. Task force organizers also recognized that additional help would be needed from the subject matter experts within these organizations to integrate some of the guiding principles into realistic policies and investment plans.

The four topic areas of Education, Government, Workforce Development, and Economic Development coincided with the organizations that will ultimately bear responsibility for implementing any initiatives. Based on input and priorities identified by the full task force, policy and subject matter experts from these organizations then drafted policy proposals.

As part of their work, task force members acknowledged the state's unique relationship with Wisconsin's 11 federally recognized tribes. As the proposed policies and investments undergo review and implementation, agency-level tribal engagement will continue.

Guiding Principles

Members of the Governor's Task Force on Workforce and Artificial Intelligence articulated a shared sense of optimism regarding the potential for AI to contribute to a thriving economy characterized by greater equity and opportunity. At the same time, task force members emphasized the need for future policies and investments to be guided by over-arching values to protect against AI's potential for worker dislocation, diminished job quality, erosion of worker rights, widening of the digital divide, and reduced economic competitiveness over time.

To address these concerns, task force members recommended consideration of the following guiding principles in the development and implementation of policy and investment proposals:

- Promote ethical decision making around best practices in AI development and apply this framework across education, government, workforce development, and economic development, including ethical decision making, risk assessments, and policy/laws governing social impacts.
- Ensure that workers have a seat at the table in decisions about leveraging AI to strengthen Wisconsin's competitive edge through investments in training and high-quality jobs. Similar guiding principles have been identified by the U.S. Department of Labor as part of the Biden-Harris Administration's efforts to create a roadmap for employers and developers to harness AI technologies for their businesses while ensuring workers benefit from new opportunities created by AI and are protected from its potential harms.[iii]

Deloitte Consulting Managing Director Dr. Keyanna Conner takes notes at the inaugural meeting of the Governor's Task Force on Workforce and Artificial Intelligence on Oct. 30, 2023. SHARON VANORNY PHOTO

SUMMARY OF POLICY PROPOSALS

Reflecting their leadership and unique perspectives gained from experience in industry, government, education, nonprofit, workforce development, and economic development, task force members initially identified a broad array of ideas and interests for the group's consideration. Through the work of the subcommittees, topic groups, and lead staff from the affected institutions, these ideas were then distilled into the policy ideas found in Appendices A. Education; B. Government; C. Workforce Development; and D. Economic Development.

Following is a brief summary of the proposed policies and concepts. In some cases, the topic groups also proposed principles to guide further initiatives in these topic areas.

Education

The advancement of AI technologies appears likely to alter the skill landscape for workers in the state, including in Wisconsin's 11 federally recognized tribes, increasing demand for some skills and reducing the demand for others. To respond to these shifting needs, the task force recommends increased support for education and technical training for students in K-12 through higher education.

Education Principles

Task force members identified the following principles that should be considered in developing and implementing policies and investments related to AI and education:

- "Kidstart" the workforce of the future through the K-12 experience with equitable access and fresh initiatives that boost digital literacy, technological and human-centered skills at every grade level and integrated within all academic areas.
- Balance prioritizing development of technological skills and human-centered skills as the latter will become increasingly more valuable due to automation.
- Foster an innovation mindset and create a culture of lifelong learning.
- Engage students with new technologies across all higher education programs and majors while increasing opportunities for students to specialize in AI and other digital skills. This principle recognizes that Wisconsin's higher educational institutions, including Tribal colleges, are critical to developing a workforce that can productively use the latest technologies, develop next generation technologies, and discern and thwart sophisticated misinformation and disinformation efforts.
- Establish key points of collaboration and instill consistent communication across Wisconsin's educational institutions to combine resources, share best practices, and ensure synergy in these efforts to best prepare the workforce of tomorrow.
- Establish key points of collaboration and instill consistent communication with Wisconsin's educational institutions and the government's public communication and educational initiatives as well as industries and workforce development partners to combine resources, share best practices, and ensure synergy in these efforts to best prepare the workforce of tomorrow.

Wisconsin Department of Workforce Development Legislative Liaison Arielle Exner shares an update from the Education subgroup during the Governor's Task Force on Workforce and Artificial Intelligence meeting on March 4, 2024.

K-12 Education Efforts

The responsible, ethical, and safe use of AI in K-12 teaching and school operations statewide is essential to the Department of Public Instruction's (DPI) commitment to innovation and enhancement of educational pathways across Wisconsin's schools, libraries, and communities.

To kickstart these efforts, DPI released its first iteration of Empowering Lifelong Learning: AI Guidance for Enhancing K-12 and Library Education in June 2024. This evolving document seeks to guide K-12 educators, librarians, students, and administrators in effectively integrating AI technologies within all educational settings.

Key goals outlined in this guidance document include:

- Supporting districts in their work toward developing policies for ethical AI use, enhancing data privacy, and adopting a human-centered approach to AI application;
- Understanding AI formats such as Machine Learning (ML) and Generative AI (GenAI), including tools such as ChatGPT and DALL-E; and
- Providing regular updates to ensure that partners have access to the most current information regarding this rapidly evolving technology, including changes in state and federal policies.

This guidance addresses concerns such as equity, ethical use, data privacy, and advocating for responsible AI integration. It outlines strategies for engaging diverse partners, including educational sessions and continuous communication to foster an inclusive approach to AI. Additionally, it highlights the need for infrastructure upgrades and professional development to support effective AI use in education.

Empowering Lifelong Learning: AI Guidance for Enhancing K-12 and Library Education

"Kidstart" the workforce of the future through the K-12 experience with equitable access and fresh initiatives that boost digital literacy, technological and human-centered skills at every grade level and integrated within all academic areas.

Education Policy Proposals

Following is a summary of the education policy proposals. More details about these proposals can be found in Appendix A.

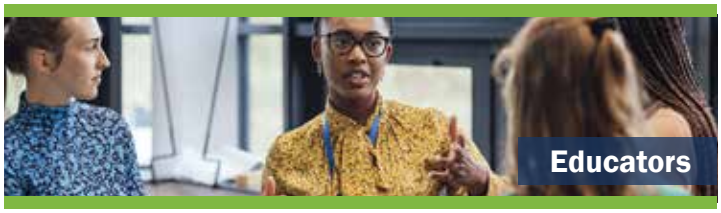
Universities of Wisconsin

- Proposed Policy Name: **Investments in AI Research**
  - This proposal would support faculty and student AI research efforts across traditional AI fields (e.g., computer science, data science, engineering) as well as fields in ethics, psychology, sociology, and other social and behavioral fields.
- Proposed Policy Name: **Curricular Development and Pedagogical Enhancements for Improved Teaching and Learning**
  - This proposal would support foundational efforts to integrate AI in curricular development, teaching methods, and student learning. The project would include innovations in AI adaptive learning technologies.
- Proposed Policy Name: **EAB Navigate – Advising Toward Student Success**
  - EAB Navigate is a software suite that consists of communication tools for professional support staff and students that is combined with analytics to provide actionable intelligence to improve student outcomes. The Universities of Wisconsin invested in EAB Navigate in the late 2010s, and it currently is used by 12 UWs (all but Madison). To continue to improve student outcomes, and to meet Wisconsin's workforce needs, the Universities of Wisconsin seek funding to develop and/or implement new AI technologies built off EAB Navigate.
- Proposed Policy Name: **Faculty Recruitment and Retention in AI Fields**
  - To keep pace and have an impact in fast-moving AI related fields, the Universities of Wisconsin is seeking support to hire and retain faculty in multiple fields, including in part: computer science, data science, mathematics and statistics, engineering and robotics, machine learning, natural language processing, computer vision, and cognitive science.

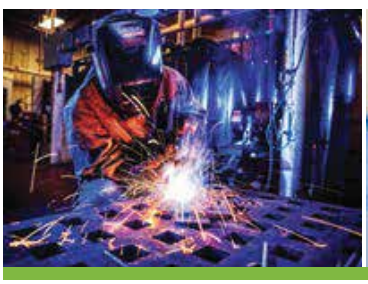
Education Policy Proposals (Cont.)

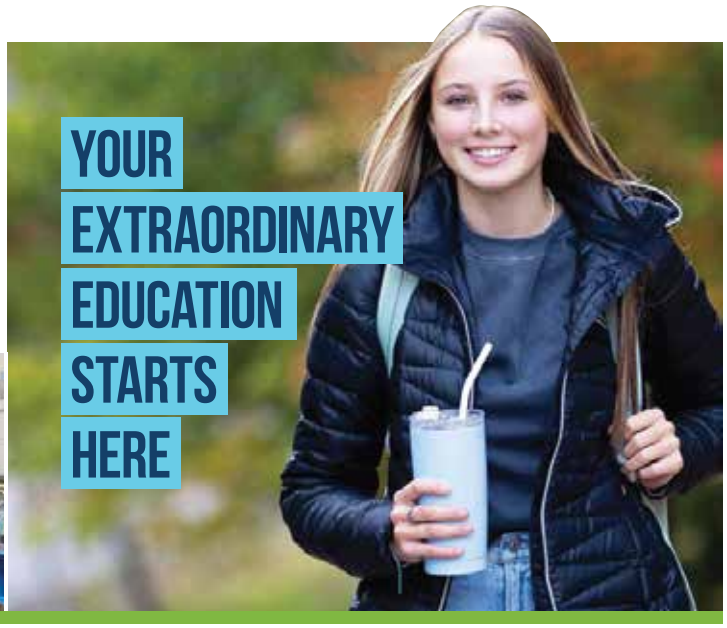
Wisconsin Technical College System

- Proposed Policy Name: **Curriculum and Resource Development and Enhancement**
  - WTCS recognizes the necessity of incorporating AI tools throughout Wisconsinites' educational careers to improve individuals' lives and the economic future of Wisconsin. This proposal seeks to enhance curriculum development and facilitate development of a common set of AI-related terminology for adoption in partnership with all state educational institutions.
- Proposed Policy Name: **Educator Recruitment, Retention, and Upskilling Efforts**
  - This proposal aims to increase instructional capacity and advance educators' professional development in AI curriculum through educator recruitment, retention and skill building efforts.
- Proposed Policy Name: **Stackable Credentials Development**
  - From digital badging to AI micro-credentials to doctoral degrees, this collaborative effort would involve leaders from WTCS, K-12, Universities of Wisconsin, the Wisconsin Association of Independent Colleges and Universities, and industry to define ideal structures for stackable credentials. These credentials may include certificates, program completion awards, and degrees that build on prior learning and boost employability.
- Proposed Policy Name: **AI Infrastructure Development**
  - Under this proposal, WTCS would identify responsible generative AI tools across educational sectors and implement, maintain, and upgrade the necessary hardware and software over time.



WISCONSIN TECHNICAL COLLEGE SYSTEM





Government

The emergence of AI technologies presents opportunities to help government work more efficiently and effectively to serve the people of Wisconsin. At the same time, developments in AI make the management and application of data within the state even more critical for the basic functions of government and productivity of the public sector workforce. Moreover, state, and local governments bear critical responsibility for managing and protecting sensitive personal data, critical infrastructure, and systems essential to maintain our democracy. Securing public trust in the face of AI-driven technological change must be a priority. Government also plays a critical role in providing workers a seat at the table, promoting technologies that enhance rather than replace workers, and securing protections for workers and their families with an economy that works for everyone.

Government Policy Proposals

Following is a summary of the government policy proposals. More details can be found in Appendix B.

Department of Administration

- Proposed Policy Name: **Incentivizing the Implementation of AI Solutions and Infrastructure to Increase Effectiveness, Efficiency, and Workforce Opportunities**
  - This proposal seeks to modernize state government infrastructure and adopt AI and other digital solutions to increase workforce opportunities, effectiveness, efficiency, and service facilitation. AI infrastructure should be considered for daily operations across all agencies in addition to public projects such as energy management, traffic control, wastewater treatment, etc.
- Proposed Policy Name: **Broadband Expansion and Accessibility**
  - Members of the Governor's Task Force on Workforce and Artificial Intelligence have highlighted the importance of prioritizing equitable and affordable access to high-speed broadband in all areas of the state. Specifically, the task force has focused on the importance of providing sufficiently strong wired and wireless connection to underserved and unserved areas in the state.
  - This proposal recommends supporting the digital equity initiatives of the Public Service Commission of Wisconsin, the work of the Wisconsin Digital Equity and Inclusion Stakeholder Group, and the Wisconsin Broadband Office grant programs and outreach.
- Proposed Policy Name: **Office of Data and Privacy**
  - This recommendation covers establishment of a work unit within the Department of Administration to develop an enterprise-wide data governance framework. The work unit would support compliance and data privacy through the creation of relevant training to ensure that data gathered and applications of that data, particularly when AI is involved, are appropriate.
- Proposed Policy Name: **Interagency Technology Governance Work Group**
  - The successful adoption of AI by state government requires input from many stakeholders including multiple agencies and business areas within state government (IT, HR, finance, legal, business, procurement, etc.). This interagency group would foster AI implementation across state government, and manage governance, innovation, and education related to AI.

Wisconsin Department of Administration Secretary Kathy Blumenfeld addresses members at the inaugural meeting of the Governor's Task Force on Workforce and Artificial Intelligence on Oct. 30, 2023

SHARON VANORNY PHOTO

Workforce Development

Wisconsin's workforce development system encompasses public, private, and nonprofit partners that draw funding from a variety of federal and state resources to build and strengthen a labor force capable of tackling today's challenges while anticipating the opportunities of tomorrow. The advent of AI requires innovative approaches to remove barriers to employment and training, provide support for dislocated workers, expand access to training opportunities, and maintain a robust labor market data collection system. In devising and implementing strategies that advance workers, employers, and job seekers, it is critical for all partners to have a seat at the table and for workers to share in the benefits of the AI transformation. More details about the workforce development policy proposals may be found in Appendix C.

Workforce Development Policy Proposals

Following is a summary of the workforce development policy proposals. More details can be found in Appendix C.

Wisconsin Department of Workforce Development

- Proposed Policy Name: **Enhanced Apprenticeship Infrastructure to Account for Technological Advancements, Including AI, in Trades and Industry**
  - AI may increase demand for apprenticeships for workers and/or job seekers affected by the new technologies. Training for many apprenticeship pathways also may need to account for increased use of AI on the job. This proposal would increase the number of industry and job seeker outreach representatives in apprenticeship programs.
- Proposed Policy Name: **Worker Connection to Increase Access to Training for Workers Displaced or Otherwise Affected by AI in the Workplace**
  - To increase access to training for workers displaced or otherwise affected by AI in the workplace, this proposal would extend the successful Worker Connection program to focus on AI training and/or education in human-centered skills that will not be supplanted by AI to help provide equitable access to good jobs and career advancement opportunities. Training also may cover AI tools that extend or augment worker capabilities. The program would target displaced workers and underutilized talent pools while supporting people who are unemployed, underemployed, and not in the labor force but who would be with the right supports. This may include low-income individuals, individuals with disabilities, justice-involved individuals, veterans, tribal nations, and youth and young adults.
- Proposed Policy Name: **Wisconsin Fast Forward AI Expansion Funds for Employer-Led Worker Training; Workforce Retention; Community Tech Hub Training, and K-12 Technology and Training**
  - This proposal would expand the Wisconsin Fast Forward program to fund competitive grants for employers who train their employees in AI technology to reduce layoffs and meet business needs. Beyond the employer-led AI training, other elements of the Wisconsin Fast Forward program could be updated to include school technology grants to support AI related training and community tech hub technology and training.
- Proposed Policy Name: **Artificial Intelligence Layoff Aversion Program**
  - Task force members identified a need for ongoing support to workers negatively impacted by the increased use of AI in occupations across all industries. This includes workers who may become dislocated as certain occupations are supplanted by AI, workers who need to increase their skillset to better interface with or otherwise support AI in the workplace, and/or workers who need to gain and/or increase their human-centered skills to retain or transition to occupations AI cannot do. Establishment of a layoff aversion program would help mitigate negative impacts of the AI technology transformation.
- Proposed Policy Name: **AI Workforce Talent Pipeline**
  - This proposal focuses on the need to develop a pipeline of skilled workers with interest and aptitude in interfacing with AI in the workplace. This includes individuals at all levels of experience (entry-level through expert) with the knowledge, skills, and abilities to use, install, program, troubleshoot, and maintain AI systems. This also includes a network of individuals with human-centered skills that cannot be supplanted by AI. The proposal would establish an "AI Workforce Talent Pipeline" program to help raise awareness of, allow career exploration in, and provide training and worker upskilling in AI-related occupations, with an emphasis on recruitment and talent from underrepresented populations.
- Proposed Policy Name: **AI Digital Literacy Campaign**
  - The task force identified a need to develop the general digital literacy of Wisconsin's population more fully as it pertains to the use of AI in the workforce and beyond. The proposal envisions the establishment of a broad-reaching digital literacy campaign that leverages new and established partnerships to increase overall digital literacy throughout the state.
- Proposed Policy Name: **Enhanced Statewide Data Infrastructure to Answer AI and Workforce Related Questions**
  - This proposal would utilize DWD's existing Workforce Data Integration System and other data-related programs to enhance DWD's capacity to collect and share data at scale to provide information regarding AI's impact on the workforce. The proposal also would support implementation of AI tools to collect, analyze, and share these data. The work would include development of metrics to assess the influence of AI on the workforce over time.

Economic Development

A thriving economy benefits workers, employers, job seekers, and the sustainability of the communities in which they live and work. To this end, strategic measures to modernize key economic sectors including manufacturing, agriculture, and emerging technology sectors will help promote Wisconsin's economic competitiveness.

Economic Development Policy Proposals

Following is a summary of the economic development policy proposals. More details can be found in Appendix D.

Wisconsin Economic Development Corporation

- Proposed Policy Name: **AI Supports for Wisconsin Businesses**
  - Wisconsin businesses, especially small businesses, that are ready to invest in deeper AI capabilities may find themselves facing significant financial barriers that prevent them from pursuing their identified opportunities. By providing assistance and potential seed funding specifically targeted to businesses facing such barriers, Wisconsin businesses can support their workers while seeing reduced risk in making investments that will increase their productivity and competitiveness.
- Proposed Policy Name: **AI Innovation Hubs**
  - Creating welcoming spaces for AI innovation is critical to the success of the Wisconsin economy. By incubating and supporting entrepreneurs and start-ups in artificial intelligence, particularly in AI solutions for manufacturing and agriculture, Wisconsin can become a premier space for the next generation of start-ups.
- Proposed Policy Name: **AI Roadmap for Wisconsin Businesses**
  - Wisconsin businesses need to have the opportunity to explore and discover the transformational world of AI. In order to do that, Wisconsin needs to create forums where business and community leaders can learn about AI and share their experiences with technological change. These forums might take the shape of cohorts of businesses going through an educational program together, regional summits, or other offerings throughout the state.

Wisconsin Economic Development Corporation Secretary and CEO Missy Hughes addresses members at the inaugural meeting of the Governor's Task Force on Workforce and Artificial Intelligence on Oct. 30, 2023.

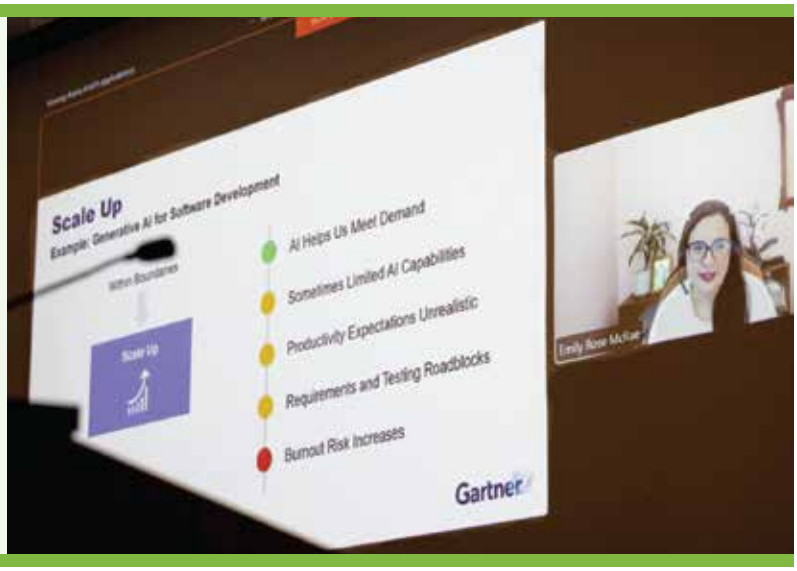
SHARON VANORNY PHOTO

OVERVIEW OF ARTIFICIAL INTELLIGENCE AND WISCONSIN'S LABOR MARKET

Recent developments in artificial intelligence (AI) technologies have raised the prospect of large-scale changes in the way Wisconsinites work. Large language models, which enable computers to generate large volumes of text based on natural language input, seem poised to fundamentally change the way people interact with machines. Other forms of AI are also rapidly advancing, including speech recognition, machine vision, robotic control systems and predictive analytics, all of which are dramatically expanding the types of tasks that can be automated with reduced human input.

As these AI tools become more powerful and organizations develop ways of incorporating more forms of automation into their workflows, new questions arise about the roles and responsibilities of workforce development systems, educational institutions, government, and the employers themselves. What changes will AI bring to the types of skills needed by Wisconsin workers? How will workers obtain these skills? Which occupations and industries are most likely to be affected?

Because of the relatively recent emergence of these technologies and the rapidly changing nature of the field, there is a great deal of uncertainty about how the labor market may be affected. The following sections of the action plan provide a short introduction to modern AI systems and summarize recent work being done to understand the impacts that AI technologies are currently having on the workforce as well as the likely impacts in the near- and medium-term future. Going forward, the effects of AI will depend on the choices that are made by workers, employers, and the educational, government, and workforce development entities that serve them.



Gartner Senior Director Analyst Emily Rose McRae presents on AI and the future of work at the inaugural meeting of the Governor's Task Force on Workforce and Artificial Intelligence on Oct. 30, 2023.

SHARON VANORNY PHOTO

Today's AI-powered Tools Throughout Wisconsin Industries

- text generation
- speech recognition
- machine vision
- robotic control systems
- predictive analytics

As these **AI tools** become more powerful and organizations develop ways of incorporating more forms of automation into their workflows, new questions arise about the roles and responsibilities of workforce development systems, educational institutions, government, and the employers themselves.

AI'S PROJECTED IMPACT ON KEY WISCONSIN INDUSTRIES, SKILLS, AND OCCUPATIONS

To identify the occupations most likely to be affected by AI, Department of Workforce Development labor market researchers tracked recent economic studies estimating the overlap between AI capabilities and worker tasks, referred to as "AI exposure." The labor market economists used data from four recent papers where data was available at the occupation level. All four papers rely on descriptions of the tasks being performed and abilities used by American workers as enumerated in the U.S. Department of Labor's O*NET database.[iv] To link these tasks to the capabilities of AI, two papers rely on manual evaluation of O*NET characteristics (Brynolfsson et al., 2018[v]; Felten et al., 2018[vi]), while two papers rely on natural language processing to link task descriptions to the text descriptions of AI-related patents (Webb, 2019[vii]; Meindl et al. 2021[viii]).

DWD's labor market economists constructed a combined AI Exposure measure, calculated as the median value across all four paper's measures after normalizing each to have the same mean and variance. A positive value of AI Exposure indicates placement in the top 50% of occupations for AI exposure, with higher values indicating greater exposure to AI. Conversely, negative numbers indicate exposure in the bottom 50%. DWD's occupational level AI Exposure measure ranges from a low of -2.4 for Slaughterers and Meat Packers, to a high of 1.9 for Bookkeeping, Accounting and Auditing Clerks as well as Data Entry Keyers.

It is important to note that AI Exposure does not correspond to percentages of labor augmented or replaced. AI Exposure only indicates the degree of overlap between occupational tasks and nominal AI capabilities. Actualized labor market impacts will depend on many factors beyond the scope of these estimates, an overview of which can be found in the preceding section of this report. It is also worth noting that these estimates are at the occupation-level and rely on occupation-level task descriptions. As such, they do not reflect differences across workplaces or between individual workers who may specialize in tasks which are less susceptible to AI applications compared with the standard occupation description.[ix]

To get a sense of the scale of AI exposure in Wisconsin, the labor market economists incorporated employment information for Wisconsin employment from the U.S. Bureau of Labor Statistics (BLS) Occupational Employment and Wage Statistics (OEWS) data as of May 2023.[x] **Table 1** shows the highest-exposed occupations with more than 100 employees in Wisconsin. The occupations that appear on this list primarily involve paperwork, computer programming and customer service, domains that largely involve work done on computers and thus tend to be susceptible to AI augmentation or automation. While many of these individuals will experience augmentation from AI, using their skills and domain knowledge to work with and oversee AI applications, some may experience automation-driven layoffs over the coming years. It is likely that many working in these fields have already started to work with AI for at least some of their tasks, and no doubt companies who employ large numbers of these employees are currently exploring ways to increase operational efficiency by deploying new AI applications.

Table 1. Highest Exposed Occupations and Number Employed in Wisconsin

Occupation	AI Exposure	Employment
Bookkeeping, Accounting, & Auditing Clerks	1.9	33,300
Data Entry Keyers	1.9	3,000
Credit Analysts	1.6	1,600
Insurance Claims & Policy Processing Clerks	1.6	5,600
Actuaries	1.5	800
Computer Network Architects	1.5	2,300
Statisticians	1.5	200
Billing & Posting Clerks	1.5	6,800
New Accounts Clerks	1.5	1,100
Computer Programmers	1.5	2,600
Tax Preparers	1.5	1,000
Tellers	1.4	9,900
Insurance Sales Agents	1.4	6,700
Travel Agents	1.4	500
File Clerks	1.4	1,800

Highest exposed occupations with over 100 employees in Wisconsin. Higher values of AI Exposure indicate a greater degree of overlap between AI capabilities and occupational task requirements as described in the text. Employment data comes from OEWS and is rounded to the nearest 100.

Table 2 shows the top 10 occupations by employment in Wisconsin. All of these occupations have middling levels of AI Exposure, ranging from -1 to 1. The highest exposed occupations on this list involve some of the same types of computer work as in **Table 1**, while the lowest exposure occupations tend to involve more manual labor.

It is worth a brief discussion of a few of the occupations that appear toward the middle of this list. Two occupations shown here involve healthcare work, which involve a great deal of manual care labor but which also tend to involve significant paperwork. It seems likely that as AI continues to be deployed in the healthcare industry, these occupations may see their share of paperwork fall which may free up employees to focus more on personal care. Truck Drivers also appear near the middle of the AI Exposure distribution. While there has been ample coverage of the development of self-driving cars, with a potential to automate away careers that involve driving, technical and legal limitations have prevented the widespread deployment of self-driving vehicles. Furthermore, the work of truck drivers also involves tasks unrelated to driving itself, including handling cargo and vehicle maintenance. Stockers and Order Fillers also appear at the middle of the AI Exposure distribution. While traditionally this work has required significant manual labor, advancements in robotics and machine vision have already started to automate some of this work.[xi]

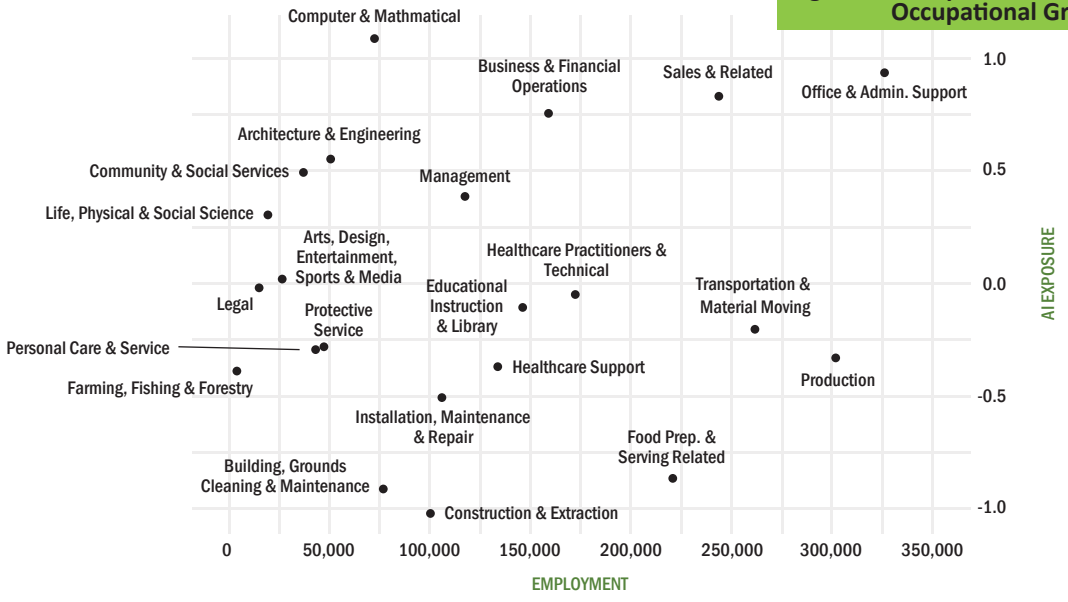
Table 2. AI Exposure for Wisconsin's 10 Most Common Occupations

Occupation	AI Exposure	Employment
General Office Clerks	1.0	49,000
Cashiers	0.9	67,000
Customer Service Representatives	0.8	57,000
Retail Salespersons	0.4	62,000
Registered Nurses	0.0	61,000
Stockers & Order Fillers	0.0	50,000
Heavy & Tractor-Trailer Truck Drivers	-0.1	48,000
Home Health & Personal Care Aides	-0.6	74,000
Hand Laborers & Freight, Stock, & Material Movers	-0.8	64,000
Fast Food & Counter Workers	-1.0	55,000

Ten occupations with the greatest number of employees in Wisconsin. Higher values of AI Exposure indicate a greater degree of overlap between AI capabilities and occupational task requirements as described in the text. Employment data comes from OEWS and is rounded to the nearest 1,000.

In broad terms, DWD's AI exposure measure suggests that occupations heavily reliant on computer-based tasks tend to be more exposed, while those requiring significant manual labor are less so, in line with our prior expectations. The relationship between AI exposure and employment in Wisconsin is shown in **Figure 1**. This figure illustrates the extent of exposure of various occupation groups to AI alongside their respective employment levels. It's important to note that the data presented here is aggregated to the group level, necessitating a weighted average calculation of the AI exposure score based on each occupation's employment. Notably, the figure highlights that office and administrative support occupations, which includes bookkeeping, accounting, and auditing clerks, exhibit both high exposure to AI and represent a substantial portion of the state's employment. Computer and Mathematical occupations have the highest exposure of any occupational group but represent a relatively small share of Wisconsin's employment.

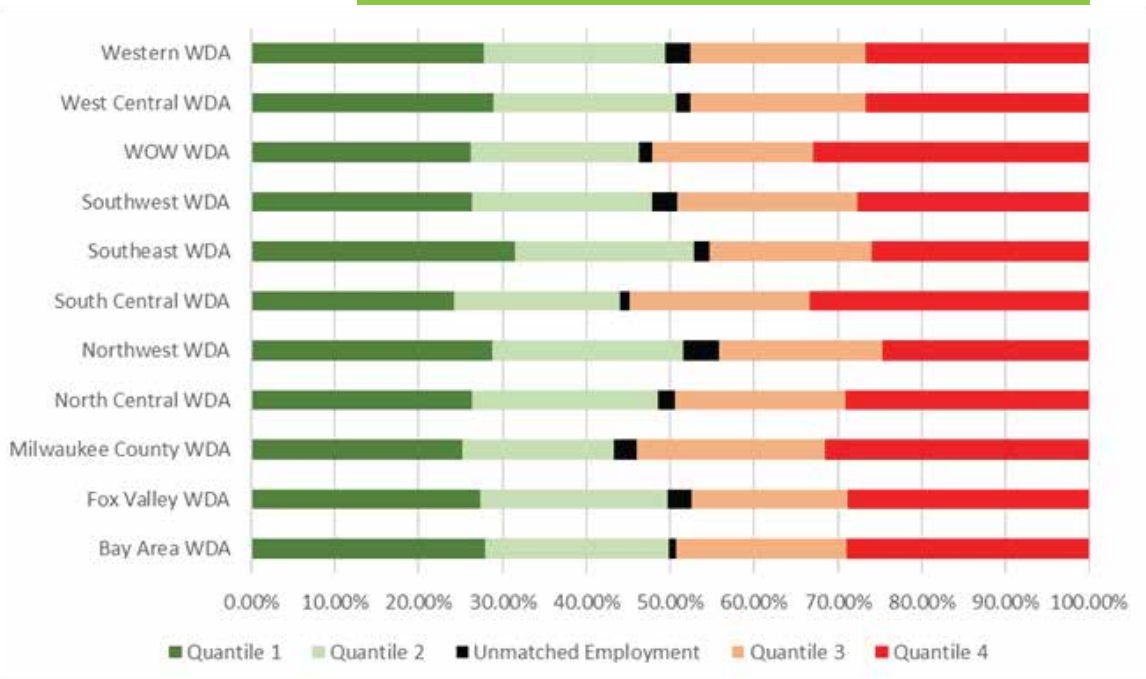
Figure 1. AI Exposure and Employment by Occupational Group in Wisconsin



To understand the potential geographic distribution of AI impacts, the labor market economists analyzed the proportion of employment categorized under high and low exposure to AI by Workforce Development Area (WDA). To visualize AI Exposure in each WDA, the team split occupations into quartiles based on their estimated AI Exposure. Quartile 4 represents the 25% most exposed occupations and quartile 1 represents the 25% least exposed occupations. We illustrate these distributions across each WDA in **Figure 2**. Note that some individuals could not be linked with occupational that we have exposure estimates for and appear as "Unmatched Employment" in the figure.

Figure 2 shows a generally consistent distribution of AI Exposure in employment across WDAs, reflecting the diversified nature of most regions' economies. While AI Exposure is fairly evenly distributed across WDAs, there are some notable variations. The more urban regions of Milwaukee and Madison (in the Milwaukee WDA and South Central WDA respectively) have somewhat higher proportions of employment in high-exposed occupations. Given that computer-based occupations tend to cluster in urban centers, this spatial concentration of high-exposed occupations is expected.

Figure 2. Share of Employment by WDA by AI Exposure Quartile



To examine the potential impact of AI on industries in Wisconsin the team used the same underlying measure of AI Exposure for occupations and use the BLS Industry-Occupation Matrix along with the BLS industry employment statistics for Wisconsin.[xii] Industry-group level AI Exposure and the number employed in the state is shown in **Figure 3**. The industries with the greatest share of employment in Wisconsin, namely Manufacturing, Health care and Social Assistance as well as Retail Trade, all have middling levels of AI Exposure. The highest exposed occupation is Finance and Insurance which employes about 125,000 individuals in the state.

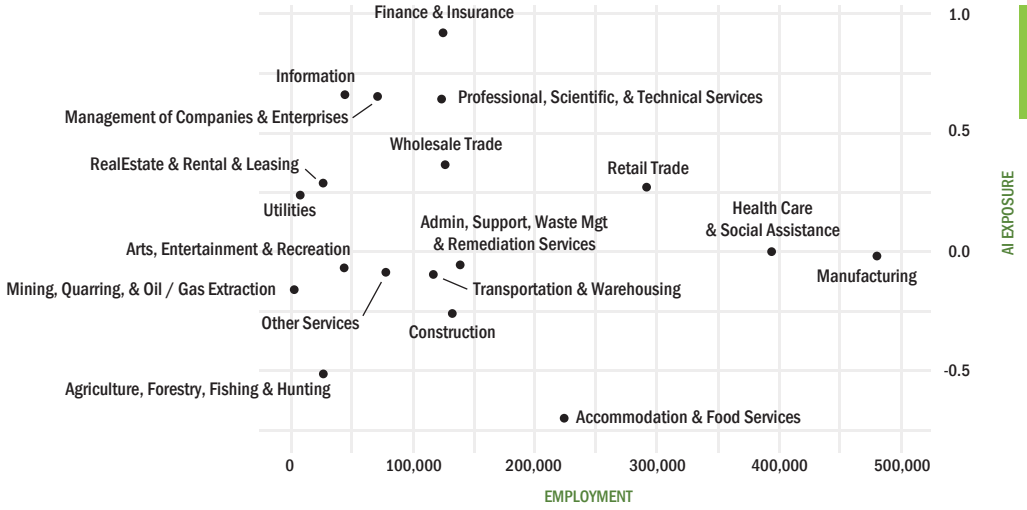


Figure 3: AI Exposure and Employment by Industry Group in Wisconsin

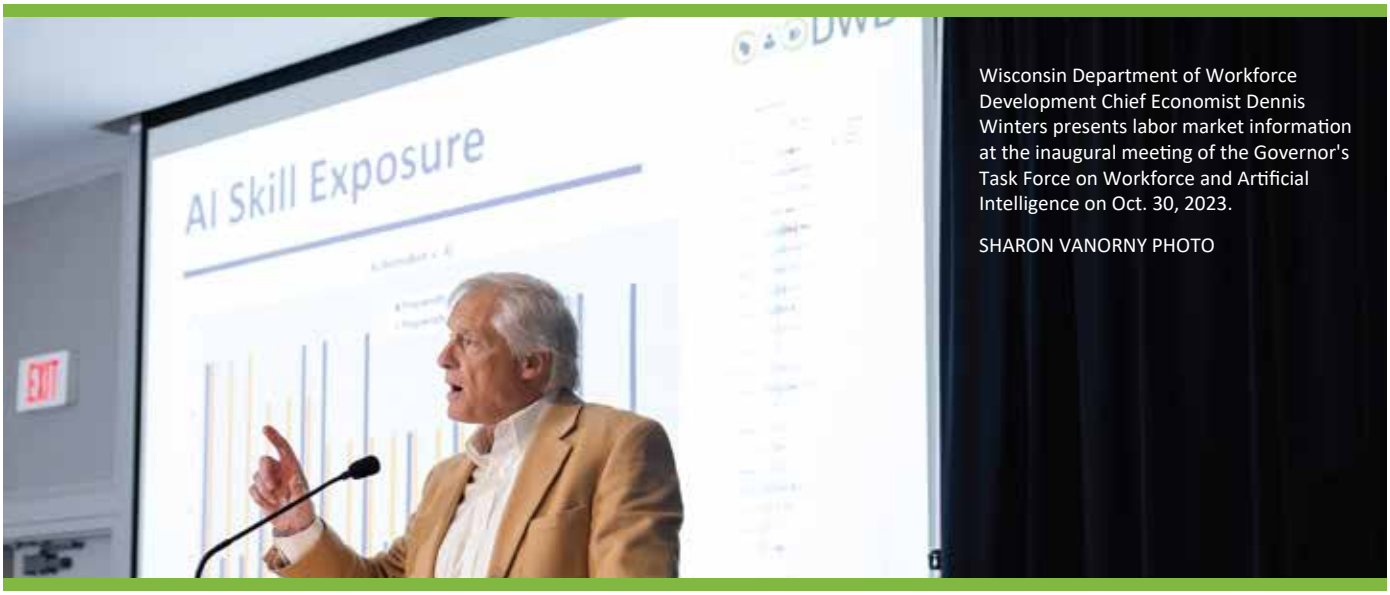
More research is needed to identify the way that AI may impact the particular skillsets which may be impacted by AI in Wisconsin. However, studies of the impact of AI on skills suggest some broad trends.

The development and deployment of AI models can be labor intensive processes. Building AI models requires skills in computer programming, statistics, data engineering, and IT operations alongside specialized knowledge of AI tools and methods. A study from the Organisation for Economic Co-operation and Development (OECD) found that the demand for specialized AI skills in online job postings in the U.S. quadrupled between 2010 and 2019.[xiii] Job postings specifically related to AI tend to involve both high-level cognitive skills along with social and managerial skills.[xiv]

Applying AI models to new fields will require individuals to have deep knowledge of the subject matter involved as well as an ability to translate that knowledge into a data-centric perspective. Individuals who find themselves working with AI will need to use their existing skillsets to perform the non-automated components of their work while also needing to understand how to interface and manage AI tools. Workers may take on more tasks that involve overseeing and checking AI outputs. Meanwhile repetitive or dangerous tasks may be the most likely to be automated. Surveys of employers who have seen AI deployed in their workplaces suggest that AI has made it more important to have employees that are highly educated and have strong human-centric skills such as creativity and communication.[xv]

In addition to affecting the constellation of skills demanded by employers, AI may also impact the relationship between worker skill and output, potentially evening the playing field between low- and high-skilled workers in some occupations. A study of the impact of ChatGPT use by customer service agents found that productivity was improved for newer and lower-skilled workers, but higher-skilled workers saw little impact on productivity.[xvi]

As noted in the task force objectives, beyond identifying generative AI's impact on Wisconsin's labor market, Gov. Evers charged the task force with making informed predictions regarding AI opportunities and impact for the near term and into the future. This included initiatives to advance equity and economic opportunity in the face of these changes, and recommendations for policies and investments to build an economy that works for everyone while capitalizing on the AI transformation.



Wisconsin Department of Workforce Development Chief Economist Dennis Winters presents labor market information at the inaugural meeting of the Governor's Task Force on Workforce and Artificial Intelligence on Oct. 30, 2023.

SHARON VANORNY PHOTO

Building AI models requires skills in computer programming, statistics, data engineering, and IT operations alongside specialized knowledge of AI tools and methods.

Demand for specialized AI skills in online job postings in the U.S. quadrupled.

AI and the Workforce

The deployment of powerful and increasingly available AI technologies is already changing the way some people work. Many people have started using large language models to aid in writing emails and reports, summarizing text documents and writing software. Predictive machine learning algorithms are commonly used for applications such as product recommendations, fraud detection, supply chain management, and demand-forecasting. Many organizations have started using AI-powered chatbots to provide first-line customer support. As businesses seek to innovate and adopt these new technologies, some workers will have to learn to incorporate new tools into their workflows.

Many people are concerned about the potential for job losses due to AI automation. A recent CNBC Poll found that about one in four workers are worried that AI will make their jobs obsolete. This fear is greater among workers of color, younger workers, lower-paid workers, and workers in industries such as advertising and business support.[xvii] A recent study found that exposing undergraduate students to information about ChatGPT negatively impacted their career expectations, an effect that was more pronounced among non-STEM students.[xviii] Where previous waves of automation have largely impacted low-wage workers performing routine tasks, the new generation of AI has the potential to automate non-routine tasks and disrupt high-skill segments of the labor force not previously at risk of automation.[xix]

These fears of job displacement are in part supported by recent quantitative studies that attempt to predict job displacement from AI. One early study on this question by researchers at Oxford from 2013 used job descriptions from the Department of Labor's O*NET database to link the capabilities of automation technologies to the tasks currently being done by workers and found that 47% of U.S. employment was at a high risk of automation by AI and robotics in "perhaps a decade or two."[xx] Since that initial study, many researchers have used and debated different methods to link AI capabilities to enumerated jobs and arrived at different numbers of workers impacted and the occupational distribution of those workers. Studies of this type are proliferating, and to date, no scholarly consensus has yet emerged.[xxi]

Two recent studies in this vein have focused exclusively on generative AI. A report published by Goldman Sachs in March of 2023 grabbed headlines with its prediction that as many as 300 million full-time jobs globally could be exposed to disruption by generative AI. Within the U.S. and European context, that study concluded that "roughly two-thirds of current jobs are exposed to some degree of automation."[xxii] Another study released in the same month by researchers at OpenAI and University of Pennsylvania found that about 80% of the US workforce could have at least 10% of the work tasks impacted by large language models.[xxiii]

While these studies predict that most workers will have some "exposure" to automation, exposure does not imply job loss. To make that connection, the Goldman Sachs report assumed that jobs where more than 50% of tasks are automatable will be made obsolete and found 7% of US workers at risk of being made redundant. Using that same 50% benchmark, the OpenAI study would suggest 19% of workers could see their jobs displaced. While these estimates are alarming, these numbers should be taken for what they are – estimates produced under varying assumptions of technology adoption.

Financial, logistical, and business considerations will influence adoption of AI in the foreseeable future. A recent study examining the cost-effectiveness of automating tasks that require computer vision found that only 23% of such tasks would make financial sense to automate given the cost of AI-implementation relative to worker wages.[xxiv] Adoption will likely be spearheaded by larger organizations with greater resources to deploy and that will benefit from implementation amplified by scale.[xxv] This is supported by a survey of businesses conducted by the U.S. Census Bureau between December 2023 and February 2024 which found that AI use was most common among businesses with more than 250 employees, although businesses with under four employees also showed relatively high rates of use.[xxvi]

Not all firms will adopt AI technologies and not all workers will be affected the same way. AI tools may be deployed to augment workers, complementing worker skills and improving their productivity. Some AI applications may require a "human-in-the-loop" to manage and check the work of the AI, while others will serve as one of a set of tools that a worker can use as they go about their labor. Other AI constructs may be deployed to substitute for workers and reduce employment. This augmentation vs. substitution dynamic has played out in previous waves of automation. A study examining the impact of patents for new technologies on workers catalogued in the US Census from 1940 to 2018 found that technologies that augment worker power tend to boost demand for labor, while technologies that substitute for workers depress labor demand.[xxvii]

What has experience shown based on the current adoption of AI? A study looking at job posting data over the period of 2010 to 2018 found that firms were increasingly looking to hire workers with AI-related skills in AI-exposed occupations and that those firms were reducing hiring in non-AI related positions.[xxviii]

The recent U.S. Census survey of businesses found that there were roughly equal portions of AI-adopting firms that intended to increase their workforce as decrease it, although most firms (87.4%) did not anticipate any changes.[xxix] Overall, the survey found that only about 5% of businesses currently report using AI, while an additional 3% anticipate using AI within the next six months. Among the reasons given for not adopting AI were a lack of knowledge about the technology, concerns over privacy, security and bias, expense, and the lack of an appropriately skilled workforce.

Notably, when looking at the employment-weighted share of businesses using AI, Wisconsin ranked at the top of all U.S. states, with an estimated 15% of employees in Wisconsin companies working for businesses that currently report using AI, with an additional 5% working for businesses that anticipate adopting AI within six months.[xxx]

AI has the potential to have economic impacts beyond shaping the types of activities workers are tasked with and the hiring decisions that employers make. At a firm level, AI has the potential to offer large gains in productivity from increasing output per worker. Such gains could benefit the workers who continue to be employed by AI-adopting firms and have positive downstream effects on the local economies that support those workers. Firms slow to adopt AI may see themselves out-competed by their more-productive competitors and lose revenue as a result, with downstream impacts on their workers and local economy. Current empirical studies on the productivity effects of AI vary in their findings. One recent review of the effect of AI on firm sales per worker found estimates ranging between no effect to a 6.8% increase.[xxxi]

APPENDIX A: **EDUCATION**

Universities of Wisconsin

Proposed Policy Name: **Investments in AI Research**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Jay O. Rothman, President, Universities of Wisconsin

Background:

Artificial Intelligence technologies have the potential to transform individual wellbeing, the workforce and society. Funding for AI research is vital to support highly trained faculty in their efforts to develop, implement, and analyze impacts of AI technologies.

Recommendation:

The Universities of Wisconsin seeks funding to support faculty and student AI research efforts across traditional AI fields (e.g., computer science, data science, engineering) as well as fields in ethics, psychology, sociology, and other social and behavioral fields. The funding will focus on enhancing existing research areas, providing seed–funding for new collaborative and interdisciplinary research endeavors, and providing funding for cutting–edge AI innovations and technologies.

Proposed Policy Name: **Curricular Development and Pedagogical Enhancements for Improved Teaching and Learning**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Jay O. Rothman, President, Universities of Wisconsin

Background:

Fundamental to the education enterprise is quality teaching and learning. In addition to developing curriculum with AI literacy integrated (already actively pursued across all UWs), AI technologies have the potential to improve curriculum development, allow for timely updating of curriculum based on current research, assist in the development of tools for enhancing student learning (AI-enhanced tutoring), provide feedback to instructors about classroom dynamics and student engagement, and help in the development and identification of student skills and competencies through interactive and dynamic assessments and skill development.

Since AI's potential impacts will be felt across all industries, all academic disciplines will need to consider what is important for learners and students' future workforce success. In effect, curricular development and pedagogical enhancements for improved teaching and learning may have different solutions and technology needs in different fields.

1. UW seeks funding to support foundational efforts for AI integration in curricular development and pedagogical enhancements, including:
   - Embedding AI literacy and use throughout the curriculum to cultivate essential skills and knowledge;
   - Develop and provide AI training for faculty and staff through comprehensive professional development initiatives; and,
   - Develop credit or non-credit curricula for continuing education workforce training.
2. UW seeks funding to encourage and support AI innovations in pedagogy and student learning, particularly for nascent AI adaptive–learning technologies utilized in the classroom or tutoring environment. UW will develop a proposal vetting process for seed-funding incentives for individual instructors, departments, or disciplinary fields to create and deploy adaptive–learning technologies.

APPENDIX A: **EDUCATION** (Continued)

Universities of Wisconsin

Proposed Policy Name: **EAB Navigate – Advising Toward Student Success**

Lead Staff and Contact Information:

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  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Jay O. Rothman, President, Universities of Wisconsin

Background:

EAB Navigate is a software suite that consists of communication tools for professional support staff and students that is combined with analytics to provide actionable intelligence to improve student outcomes. This helps institutions monitor, promote, and analyze student success. The Universities of Wisconsin invested in EAB Navigate in the late 2010s, and it currently is used by 12 UWs (all but Madison). Navigate and the data it produces are used by instructors, academic advisors, success coaches, institutional researchers, and others. In conjunction with Canvas, the UWs learning management system, Navigate is increasingly relied upon to improve course–completion rates, close equity gaps, and help students graduate.

Recommendation:

To continue to improve student outcomes, and to meet WI's workforce needs, the Universities of Wisconsin seeks funding to develop and/or implement new AI technologies built off EAB Navigate. These AI technologies might include automated processes (or chatbots) designed to act as virtual academic advisors, a system to automatically notify and prompt students to complete an assignment or seek additional help, to generate reports that provide insights for instructors, departments or institutions to assist in data–driven decision making, or to personalize recommendations for courses or fields of study based on students' past performance. Even in cases where these technologies exist and can be purchased, implementation and training on these technologies require dedicated personnel to customize to an institution or area of study. Funding seeks to cover both technology and personnel costs.

Proposed Policy Name: **Faculty Recruitment and Retention in AI Fields**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Jay O. Rothman, President, Universities of Wisconsin

Background and Recommendation:

Development and implementation of artificial intelligence technologies depend on highly trained educators, researchers, and innovators across a range of fields. To keep pace and have an impact in this fast-moving area, the Universities of Wisconsin seeks funding to hire and retain faculty in multiple fields, including in part: computer science, data science, mathematics and statistics, engineering and robotics, machine learning, natural language processing, computer vision, and cognitive science.

Several UWs have existing AI expertise in these areas. The funding will focus on enhancing and retaining faculty in these areas at these institutions, as well as funding growth at other UWs with defined need and expertise.

Milwaukee Area Technical College Robotics Lab, Dec. 4, 2023

APPENDIX A: **EDUCATION** (Continued)

Wisconsin Technical College System

Proposed Policy Name: **Curriculum and Resource Development and Enhancement**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Dr. Morna Foy, President, Wisconsin Technical College System

Background and Recommendation:

WTCS recognizes the necessity of incorporating AI tools throughout Wisconsinites' educational careers to improve individuals' lives and the economic future of Wisconsin. For this reason, WTCS requests sustained investment in curriculum enhancement and development across disciplines to best match the workforce needs of today and tomorrow.

Additionally, WTCS requests the development of a common glossary of AI-related terminology and the definition of the following human-centered learning skillsets deemed essential by the task force: critical thinking, civic engagement, communication, creative thinking, digital literacy, ethical reasoning, information literacy, integrative learning, inquiry and analysis, and problem solving. Developing these resources in partnership with all of Wisconsin's educational institutions will establish a common language and points of reference, facilitating collaboration during this time of rapid technological advancement.

Proposed Policy Name: **Educator Recruitment, Retention, and Upskilling Efforts**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Dr. Morna Foy, President, Wisconsin Technical College System

Background:

WTCS, like many educational institutions in Wisconsin and across the country, is currently experiencing an instructional workforce shortage across disciplines, and needs expertise in AI, data science, and related fields. This workforce shortage, coupled with the demand in these emerging fields, is likely to exacerbate instructional workforce challenges if no action is taken.

Recommendation:

To address these challenges, WTCS requests sustained investment in educator recruitment and retention efforts to increase instructional capacity and to advance educators' professional development in AI curriculum areas and essential learning assessment.

Recruitment efforts include:

- Implementing strategies to attract individuals with expertise in the intersection of AI, data science, and related fields;
- Collaborating with universities, industry partners, and community organizations to identify potential candidates;
- Developing "Scholars in Training" public-private partnerships to incentivize engagement;
- Creating a 'Leaders in AI' scholarship/award to recognize and reward educators contributing significantly to AI curriculum development and student success.

Retention and upskilling efforts include:

- Incentivizing the current instructional workforce's engagement in externship opportunities with regional and local business as well as K-12, and two- and four-year higher educational institutions;
- Developing specialized training programs for educators to enhance their knowledge of AI concepts, tools, and applications including hands-on experiences, workshops, online courses, and on-demand modules; and
- Incentivizing creative problem solving of local issues through school, institutional or discipline related projects.

APPENDIX A: **EDUCATION** (Continued)

Wisconsin Technical College System

Proposed Policy Name: **Stackable Credentials Development**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Dr. Morna Foy, President, Wisconsin Technical College System

Background and Recommendation:

To ensure Wisconsin's education institutions best keep pace with rapidly evolving technology and the state's current workforce needs, WTCS requests sustained investment in defining ideal structures for stackable credentials. As defined by the US Department of Labor, a credential is considered stackable when it is part of a sequence of credentials that can be accumulated over time to build up an individual's qualifications and help them to move along a career pathway or career ladder to different and potentially higher-paying jobs. This work would need to be collaborative across the education sector and industry leaders. WTCS proposes developing the following credentials with relevant partners:

- AI Digital Badging - K-12, WTCS, industry
- AI Micro-Credentials - Dual enrollment, WTCS, UW, WAICU, industry
- AI Associate Degrees - WTCS
- Advanced Technical Certificates - WTCS
- Bachelor Degrees - UW/WAICU
- Master Degrees - UW/WAICU
- Doctoral Degrees - UW/WAICU

Resources and Examples:

- Use of the Beyond Access to Success STEM Pathways model of pathway creation and transfer the cross-sector work on the HHMI two- to four-year STEM Transfer Initiative.

Examples of Industry Provided Credentials:

- Microsoft Certified - Azure AI Fundamentals
- SACA - Smart Automation Certification Alliance

Proposed Policy Name: **AI Infrastructure Development**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Dr. Morna Foy, President, Wisconsin Technical College System

Background and Recommendation:

WTCS is at the ready to support the schools' responsible use of AI tools in education to best guide students. WTCS requests sustained investment to identify responsible generative AI tools across the education sector for all students. WTCS is also requesting sustained investment to use and upgrade these tools regularly, including necessary hardware and software.

Greg Cisewski, dean of the School of Agricultural Sciences, Utilities and Transportation at Northcentral Technical College, leads a tour of the college's Agriculture Center of Excellence. The center is a 110-acre working farm that features a variety of advanced technology ranging from robotic milking and data-driven feeding systems to remote controlled equipment and GPS linked nutrient application technology.

The cows' yellow ear tags help track herd health, nutrition, and milk production at Northcentral Technical College's Agriculture Center of Excellence near Wausau. The cows move freely throughout the barn and eat when they are hungry. Robotic sweepers collect the manure.

APPENDIX B: **GOVERNMENT**

Proposed Policy Name: **Broadband Expansion and Accessibility**

Lead Entity: **PSC**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Public Service Commission of Wisconsin

Background:

AI requires both high-speed wired (fiber) connections that can support the bandwidth needed to enable AI and wireless networks to support data and information collection needed to provide a foundation for AI.

Members of the Governor's Task Force on Workforce and Artificial Intelligence have highlighted the importance of prioritizing equitable and affordable access to high-speed broadband in all areas of the state. Specifically, the task force has focused on the importance of providing sufficiently strong wired and wireless connection to underserved and unserved areas in the state.

The Wisconsin Public Service Commission (PSC) is responsible for managing state broadband expansion efforts. Expansion efforts are the responsibility of the Bureau of Broadband, Digital and Telecommunications Access, also known as the Wisconsin Broadband Office, within the Division of Digital Access, Consumer and Environmental Affairs. The office administers programs to advance the availability, affordability, and use of broadband technology.

The Wisconsin Broadband Office currently engages in various activities to support digital equity in Wisconsin including:

- Serving as an outreach partner for the Affordable Connectivity Program.
- Coordinating Wisconsin's Digital Equity and Inclusion Stakeholder Group.
- Sharing best practices for increasing affordability, devices, internet adoption and digital skills training.
- Hosting the Internet Discount Finder Tool.
- Maintaining the Internet and Phone Helpline at (608) 267-3595.

The task force recommends supporting these digital equity initiatives, the work of the Wisconsin Digital Equity and Inclusion Stakeholder Group, and the Wisconsin Broadband Office grant programs and outreach.

Key Considerations:

Most recently, Gov. Tony Evers signed 2023 Wisconsin Act 77 which made modifications to the broadband expansion grant program administered by the Public Service Commission (PSC).

Prior law directed the PSC to administer the program to provide grants to construct broadband infrastructure in "underserved" areas, which was defined to mean areas of the state served by fewer than two broadband service providers. Act 77 changed the purpose of the program to provide grants to construct broadband infrastructure in "unserved" areas, which the act defines to mean an area of this state that is not served by an internet service provider (ISP) offering internet service that is all of the following:

- Fixed wireless service or wired service.
- Provided at actual download speeds of 100 megabits per second (mbps) or greater and upload speeds of 20 mbps or greater.
- Available and reliable.

Act 77 also provides that, beginning on July 1, 2026, and on July 1 of each successive odd-numbered year thereafter, the PSC may, by rule, adjust the above threshold speeds for "unserved" areas if, upon review, it determines there is good cause to do so in order to align with changes in technology and actual market conditions. The PSC must publicize any speed threshold adjustments on its website.

Further, on July 14, 2020, Gov. Tony Evers signed Executive Order #80 (Accessible Version) creating the Governor's Task Force on Broadband Access. The task force will advise the Governor and Wisconsin State Legislature on broadband actions and policy, including strategies for successfully expanding high speed internet access to every residence, business, and institution in the state; initiatives for digital inclusion; and pathways to unlocking and optimizing the benefits of statewide, affordable access to broadband for all communities in Wisconsin.

APPENDIX B: **GOVERNMENT** (Continued)

Recommendation:

- Support PSC initiatives to implement equitable broadband expansion to rural and urban areas, specifically uplifting concepts outlined in the Wisconsin Digital Equity Plan and the Five-Year Action Plan to eliminate the digital divide in the state.
- Support PSC in pursuing recommendations from the Governor's Task Force on Broadband Access.
- Support PSC initiatives to provide greater bandwidth and higher performance for wired and wireless connections that can sustain and support AI infrastructure.
- Support increased and ongoing funding for PSC Broadband grant programs.
- Support the PSC's work in expanding:
  - Mobile broadband to improve access to cellular services, broadband while moving (in cars, precision agriculture, and
  - Increased affordability and accessibility to devices that can fully realize the benefits of AI
- Promote existing Wisconsin Broadband Office resources, such as the Internet Discount Finder Tool, Broadband Maps, and other information.

Proposed Policy Name: **Incentivizing the Implementation of AI Solutions and Infrastructure to Increase Effectiveness, Efficiency, and Workforce Opportunities**

Lead Entity: **DOA/DWD**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Cara Connors, DOA Legislative Advisor

Key Considerations:

Modernizing government through AI technology solutions and worker training will support more effective government services, more efficient service delivery, and improved workforce opportunities.

Other initiatives may include compiling research about AI tools adapted for government operations and best practices for the equitable implementation of AI infrastructure and other data solutions. The necessary research could be conducted under the purview of the chief data and privacy officer and span across all state agencies.

Recommendation:

Create an ongoing GPR appropriation to sustain the necessary research and modernization of the state's AI infrastructure across the enterprise. Recommend implementing a policy that would provide funding for state government to implement AI infrastructure and tools across the enterprise.

The goal of the policy would be to modernize state government infrastructure and upskill workers to adopt AI and other digital solutions that increase workforce opportunities, effectiveness, efficiencies, and service facilitation. AI infrastructure should be considered for daily operations across all agencies, in addition to public projects such as energy management, traffic control, wastewater treatment, etc.

The Governor's Task Force on Workforce and Artificial Intelligence convened for its inaugural meeting on Oct. 30, 2023.

SHARON VANORNY PHOTOS

APPENDIX B: **GOVERNMENT** (Continued)

Proposed Policy Name: **Office of Data and Privacy**

Lead Entity: **Department of Administration (DOA)**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Cara Connors, DOA Legislative Advisor

Background:

The expansion of AI technology presents opportunities and potential challenges to state government and the people of Wisconsin. In order to form a solid base on which AI technology can be utilized to drive innovation by state government, the state must create and foster a data strategy supportive of AI, involving the connection of data sources across state government and development of a state data catalog. As often discussed by the Governor's Task Force on Workforce and Artificial Intelligence, the products of AI technology are only as good as the data and sources used to create them. On the other side of that coin, the state must develop a data governance framework and supports compliance and ethical use through the creation of relevant training to ensure that data gathered and applications of that data, particularly when AI is involved, are appropriate. Along that line, the state must protect and maintain the privacy and security of the data in its hands, including sensitive personal data.

The following considerations factor into the recommendation for creation of an office that would lead development, implementation, and ongoing work related to an enterprise-wide data strategy and governance structure supportive of AI.

Key Considerations:

Currently, there is no single role, office or division, in state government tasked with the data governance and stewardship. Section 16.971 (specifically cm, e, k) may provide the authority needed, but further analysis is needed.

- Task force members have noted that other states and entities are implementing offices, positions, and strategies of this nature to support AI (as well as good data more broadly).
- Creating a data strategy alone will be no small feat. Data is now siloed across the enterprise and there are numerous security and privacy concerns that need to be taken into consideration to facilitate data sharing.
- Developing a single governance framework for the enterprise will also be a time-intensive task as business needs and data vary widely across and within agencies.
- Similarly, protecting the privacy and use of data across the entire enterprise will require substantial effort.

Recommendation:

Create an Office of Data and Privacy led by a chief data and privacy officer within the Department of Administration to lead development, implementation, and ongoing work related to an enterprise-wide data strategy and governance structure supportive of AI. Provide support staff as appropriate.

The Governor's Task Force on Workforce and Artificial Intelligence convened for its inaugural meeting at the Concourse Hotel in Madison on Monday, Oct. 30, 2023. Left: DWD Assistant Deputy Secretary Jennifer Sereno speaks with Task Force member Charles Isbell. Right: WEDC Secretary and CEO Missy Hughes, DWD Secretary-designee Amy Pechacek, and Wisconsin Technical College System President Morna Foy share notes from the meeting. SHARON VANORNY PHOTOS

APPENDIX B: **GOVERNMENT** (Continued)

Proposed Policy Name: **Interagency Technology Governance Work Group**

Lead Entity: **Department of Administration (DOA)**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- **Lead Entity Staff**
  - Cara Connors, DOA Legislative Advisor

Background:

The successful adoption of AI by state government requires input from many stakeholders including multiple sectors within state government (IT, HR, finance, legal, business, procurement, etc.). Recognizing this, DOA has begun to develop an interagency group to manage governance, innovation, and education related to AI.

Key Considerations

The work group in development will likely be a large group. As such, dedicated staff would help ensure the work group moves forward, especially if the work group is tasked with a broad scope of work. If some form of a Data and Privacy Office was created, that office could be provided staff to support this group. Similarly, protecting the privacy and use of data across the entire Enterprise will require substantial effort.

Recommendation

The state should have a permanent, robust interagency governance work group with additional support staff. Members of the Governor's Task Force on Workforce and Artificial Intelligence recommended the work group should:

- Foster AI implementation across state government.
- Develop guidelines around best practices in AI implementation and use, including ethical and equitable decision making, risk assessments, and policy/laws governing social impacts.
- Maintain AI usage templates and best practices.
- Conduct a broad review of state policies and procedures with an AI lens.
- Pursue opportunities to leverage federal funding to advance AI projects throughout the state.
- Establish awareness of the successful implementation of AI technologies and guardrails within state government.
- Use strategic communications and outreach to foster public trust.

The Workforce Development subgroup convenes at the Governor's Task Force on Workforce and Artificial Intelligence meeting on March 4, 2024.

APPENDIX C: **WORKFORCE DEVELOPMENT**

Proposed Policy Name: **Enhanced Apprenticeship Infrastructure to Account for Technological Advancements, Including AI, in Trades and Industry**

Lead Entity: **Bureau of Apprenticeship Services, Division of Employment and Training, Department of Workforce Development**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
  - David Polk, Registered Apprenticeship (RA); John Keckhaver, Youth Apprenticeship (YA)

Background:

Increased use of AI technology may affect current workers, skills employers are looking for, and training needed to obtain the in-demand skills. Apprenticeship provides an integrated model of classroom and on-the-job training that can easily adapt to evolving skill requirements. For this reason, the demand for apprenticeships is likely to increase. It is important to ensure sufficient infrastructure to respond to the increased demand in pre-apprenticeships, registered apprenticeships, and youth apprenticeships. Improvements to the apprenticeship ecosystem to address the increased demand would include enhanced worker and employer navigation, funding, data infrastructure, and other supports.

Key Considerations:

- AI may increase demand for apprenticeships for workers and/or job seekers affected by the new technologies.
  - Training may need to account for increased use of AI on the job.
  - Training may need to focus on implementing tasks AI cannot do, especially human-centered/customer-focused service tasks.
- Industry drives apprenticeships.
  - Industry may ask for AI focused apprenticeships.
  - Industry also may incorporate AI skills within existing or new apprenticeships (e.g., teach how to use AI tools, AI development within IT related apprenticeships, etc.).
- Outside of trades, Registered Apprenticeship is typically available to incumbent workers.

Recommendation:

Increasing the number of industry and job seeker outreach representatives would boost interest in and understanding of apprenticeships and support navigation of existing and new apprenticeships. Increased staffing would:

- Boost individual outreach.
- Build and grow pre-apprenticeship opportunities to train individuals for registered apprenticeship opportunities.
- Allow for more timely policy and program changes.
- Advance IT process improvements.
- Support replacement of the existing On-the-Job Learning Guide with an interactive interface to provide users with more responsive information.

Proposed Policy Name: **Worker Connection to Increase Access to Training for Workers Displaced or Otherwise Affected by AI in the Workplace**

Lead Entity: **Department of Workforce Development (DWD) Division of Employment and Training (DET)**

Lead Staff and Contact Information:

DWD Staff

- Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
- Michele Carter, DET Administrator, michele.carter1@dwd.wisconsin.gov

Background:

The rise of generative AI offers the potential to advance economic opportunity and avoid a digital divide. This can be done by connecting underutilized talent pools with in-demand skills, identifying gaps, and proposing solutions that lead to career advancement and a thriving economy through the AI transformation.

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

To increase access to training for workers displaced or otherwise affected by AI in the workplace, funding needs will extend beyond skills training to include supports for housing, food, transportation, childcare, and technology access. Funding should also include outreach and services with a focus on underutilized talent pools (e.g., low-income individuals, individuals with disabilities, justice-involved individuals, veterans, tribal nations, and youth and young adults) as well as workers dislocated because of AI.

In addition to training in AI skills that support or extend worker capabilities, training should include education for human-centered skills that will not be supplanted by AI to help provide access to good jobs and career advancement opportunities. Partnerships with employers can help identify needed skills and ensure training, credentials, and skills development to meet current workforce needs and qualifications for jobs. Finally, data should be used to inform targeted outreach, case management, career coaching, service navigation, career pathways, and training supports.

Key Considerations:

- Use evaluation findings and lessons learned from the Worker Connection pilot program, which has proven effective in conducting targeted outreach, career navigation, and WorkAdvance training opportunities to reach these populations.
- Key components of the Worker Connection model include:
  - Implementing targeted outreach to reach underutilized talent pools. Using data to identify individuals who are unemployed, underemployed, and not in the labor force but who would be with the right supports. Using data findings to inform and implement a network with local community-based organizations (CBOs) to better identify and engage with identified underutilized talent pools and workers displaced because of AI.
  - Career navigation. Using person-centered career coaching to identify worker/job seeker's positive profile (interests, skills, abilities, etc.) and conditions of work and match to changing workforce needs. Connecting workers/job seekers to career, training (including work-based training, apprenticeships, and WorkAdvance training), and support services (e.g., housing, food, transportation, childcare, technology access, etc.) that will help them find and maintain good jobs.
  - WorkAdvance training. Fund shorting term trainings that allow for skill advancement that will help underutilized talent pools and workers displaced by AI have the skills needed to find and maintain good jobs.

Recommendation: Implement targeted outreach, career navigation, and WorkAdvance training in all Workforce Development Areas (WDAs).

Key components of the implementation include:

- **Navigational Services**
  - Use Worker Connection staff (career navigators) in each Workforce Development Area (WDA) based on current job center staffing population, population demographics, and underutilized talent pools in each area.
  - Ensure the ability for career navigators to travel and meet individuals in person wherever they are in the state including at libraries and community-based organizations (CBOs).
  - Provide funding to incorporate career navigators within CBOs for integrated service delivery. Maintain a local network with CBOs for referrals and engagement.
  - Implement an electronic and warm hand-off referral system.
  - Integrate career navigators into current staffing system with all WIOA titles including sharing training and service delivery style with workforce partners.
  - Integrate with business services to build relationships with employers for direct connection to clients.
  - Conduct community conversations to identify each area's current needs.
  - Hold regular training for Worker Connection staff to include motivational interviewing, trauma informed care, human centered coaching, guided group discovery, personal profiles and conditions of work in order to match with local labor market information, career pathways and training opportunities.
  - Support community engagement based on staff skill/knowledge, specific training on outreach and engagement.
- **Data-Based Decision Making**
  - Conduct data-based targeted outreach and funding to assist with outreach activities.
  - Develop dashboards to assist with data-based decision making, metrics and quality improvement.
  - Incorporate case management into existing electronic case management system (ASSET) to track outreach, enrollment, services, and outcomes.

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

- **WorkAdvance Training**
  - Provide funding for support services and training that leads to good jobs and/or career advancement opportunities for those that are unemployed, underemployed and those not connected with the workforce. Prioritize training based on demands from employers and labor market information in partnership inform the WorkAdvance model.
  - Provide technical assistance to programs to implement WorkAdvance.
- **Administration**
  - Establish regional controls to provide supervision of staff, coordinate local plans and outreach efforts and assist with data-based decision making.

Proposed Policy Names: **Wisconsin Fast Forward AI Expansion Funds for Employer-Led Worker Training; Workforce Retention; Community Tech Hub Training, and K-12 Technology and Training**

Lead Entity: **Department of Workforce Development (DWD) Division of Employment and Training (DET)**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
  - John Roos Director, Office of Skills Development (OSD), Division of Employment and Training (DET), Department of Workforce Development (DWD); john.roos@dwd.wisconsin.gov

Background:

One way to increase access to AI is to incorporate AI technology and training opportunities in schools, community technology hubs, and within local businesses. The Wisconsin Fast Forward (WFF) grant programs currently provides technology grants to schools and funds employer trainings.

The objective of the Wisconsin Fast Forward (WFF) standard grant program is to award funds to businesses from all Wisconsin industry sectors that reimburse the costs of customized occupational training for unemployed, underemployed, and incumbent workers. The customized, business-driven training will qualify workers for full-time employment, higher level employment, or increased wages.

WFF also funds two education grant programs.

- Technical Education Equipment Grant: The purpose of the grant is to reimburse school districts for the purchase and installation costs of technical education equipment used in vocational training and technical education in advanced manufacturing fields, including costs for equipment operation software and instructional materials to train students.
- Teacher Training and Recruitment Grants: Available to nonprofits for activities related to recruiting, training, and licensing of teachers to meet DPI guidelines in low-income and/or urban school districts.

Key Considerations:

Based on the administrative rules, it appears Wisconsin Fast Forward could be used to fund competitive grants for employers who train their employees to reduce layoffs and meet business needs. Adapting the program for these uses would probably require changes to the WFF application, rubric, contractual outcomes, and reporting.

The Wisconsin Fast Forward program saw a significant decrease in funding in the last budget, which has made funding projects competitive and limited. Eligible applicants are limited to employers. Currently, no training providers are allowed as the primary applicant. Training providers could partner with employers to provide the training based on employer training needs, but employers must be the primary applicant. Wisconsin Fast Forward grants to community tech hubs would require changes to the Wisconsin statutes and administrative rules.

Statutory changes also would be necessary for the Wisconsin Fast Forward Expanded Technical Education Equipment program to expand outside of advanced manufacturing field. Additional resources/training to teachers at school districts may also be necessary, to prepare them for instruction related to AI technology/equipment. Funding is limited for the Expanded Wisconsin Fast Forward program and would need to expand to meet statewide needs. DWD would need additional information regarding the demand for AI related training and need a staff member with subject matter expertise in AI.

All options above would require additional data and employer input regarding the demand of AI.

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

Recommendation:

Employer-led AI training

Expand funding to provide a specific Wisconsin Fast Forward grant program announcement focused on AI training, considering AI demand and AI training providers.

- Promote use of Wisconsin Fast Forward funding towards AI training projects, with the limitation of employers as the only applicant.
- Set aside funding for this specific grant program announcement (GPA).
- Alternatively, incorporate AI funding into the existing WFF program and funding. GPA, application, and scoring rubric would probably need to be changed. Note: Requiring worker input as part of WFF funding may reduce business demand for funding.

School technology grants

Develop a specific Expanded Wisconsin Fast Forward grant program announcement focused on purchase of AI technology/equipment for Wisconsin school districts.

- Expand the Expanded Wisconsin Fast Forward Technical Education Equipment grant program to include options to fund AI technology/equipment for training in high schools.
- Provide grant funding to train high school instructors in AI technology/equipment and to purchase AI equipment at Wisconsin school districts.

Community tech hub technology and training

Wisconsin Fast Forward currently does not have the infrastructure to support training through community tech hubs. Changes would be required to Wisconsin statutes and administrative rules. Wisconsin Economic Development Corp. does have programs to provide funding for fab labs, incubators, and other community-based organizations. WEDC has more flexibility to create new programs or modify existing programs because the agency does not have administrative rules to conform to. WEDC could expand upon its current program structure to meet this need.

Milky Way Tech Hub CEO Nadiyah Johnson shares ideas generated by the Equity and Economic Opportunity subcommittee during the inaugural meeting of the Governor's Task Force on Workforce and Artificial Intelligence on Oct. 30, 2023. SHARON VANORNY PHOTO

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

Proposed Policy Name: **Artificial Intelligence Layoff Aversion Program**

Lead Entity: **Department of Workforce Development**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
  - Stephanie Elmer, stephanie.elmer@dwd.wisconsin.gov, (608) 733-3869

Background:

The Governor's Task Force on Workforce and Artificial Intelligence (AI) has identified a need for ongoing support to workers negatively impacted by the increased use of AI in occupations across all industries. This includes workers who may become dislocated as certain occupations are supplanted by AI, workers who need to increase their skillset to better interface with or otherwise support AI in the workplace, and/or workers who need to gain and/or increase their human-centered skills to retain or transition to occupations AI cannot do.

The plans put forth in this document are intended to help businesses avert potential layoffs and maintain a healthy and skilled workforce alongside AI technologies. This program would make funding available to businesses for workers in industries and/or occupations identified as "at-risk" to secure business consulting services to identify opportunities, and fund incumbent worker training or customized training to support skills development.

Key Considerations:

- **Funding:** Establishing a flexible grant program using state resources will be critical to ensuring that direct investment to business occurs.
- **Program Administration:** DWD successfully operates direct grant programs to businesses. This program will allow Wisconsin businesses greater flexibility in enhancing their efficiency while maintaining their workforce. Implementing and administering this program will require sufficient business service staff and infrastructure.
- **Experience:** DWD's Division of Employment and Training has a vast body of research on the topic of layoff aversion, including evaluation and analysis of similar activities being carried out in other states. The AI component would complement other aspects of this strategy.
- **Data Collection:** It will be necessary to determine how performance is evaluated for any resulting projects, and how information will be collected. DWD staff recommend that any participant-serving project be tracked using its ASSET system, or a similar data collection system, from which performance reports and other relevant data can easily be generated. Funding would be required to support any necessary system enhancements to allow for tracking a unique program.

Recommendation:

Develop a program that grants funding directly to impacted businesses, industry groups, or other eligible entities (similar to Wisconsin Fast Forward programming, but on a smaller scale). Allowable activities would include:

- Business consultation (either directly provided, or contracted) to identify business needs and opportunities for improvement;
- Training for incumbent workers to gain the skills needed to interface with AI in the workplace;
- Training for incumbent workers being displaced by AI to gain the skills needed to transition to other skilled positions;
- Training for incumbent workers to gain and/or improve human-centered skills to retain or transition to jobs AI cannot do;
- Other activities aimed at minimizing the negative impacts of AI on the workforce in an industry sector, at a specific business, or within an occupation group based on a local needs assessment.

DWD's Division of Employment and Training would develop policy/guidance that these direct recipients of funding would adhere to and DWD would provide direct oversight of these grantees. Significant staffing resources would be needed to support this model.

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

Proposed Policy Name: **AI Workforce Talent Pipeline**

Lead Entity: **Department of Workforce Development**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
  - Stephanie Elmer, stephanie.elmer@dwd.wisconsin.gov, (608) 733-3869

Background:

The Governor's Task Force on Workforce and Artificial Intelligence has identified a need to develop a pipeline of skilled workers with interest and aptitude in interfacing with AI in the workplace. This includes individuals at all levels of experience (entry-level through expert) with the knowledge, skills, and abilities to use, install, program, troubleshoot, and maintain AI systems. This also includes a network of individuals with human-centered skills that cannot be supplanted by AI.

The Department of Workforce Development's Division of Employment and Training proposes the establishment of an "AI Workforce Talent Pipeline" program to help raise awareness of, allow career exploration in, and provide training and worker upskilling in AI-related occupations. This program would place emphasis on attracting and/or developing talent from underrepresented populations, including youth (especially opportunity youth), and other individuals with barriers to employment. Grants awarded through this program should be flexible enough to support outreach activities and delivery of training and supports.

Key Considerations:

- **Funding:** Extending and expanding the Workforce Innovation Grant Program through GPR appropriation would allow for the greatest flexibility in this program as well as direct support to businesses.
- **Program Administration:** The Workforce Innovation Grant program is a joint effort between DWD and WEDC. Continuation of this program will support the development of long-term, locally based solutions for businesses to locate and train workers in AI, resulting in individuals gaining new skills and higher wages and helping employers address labor shortages.
- **Experience:** DWD's Division of Employment and Training has significant experience in administering outreach, career exploration, and training/support programs related to workforce development. This can be a benefit but can also stifle innovation as it can be challenging for staff to see the possibilities of less restrictive funding.
- **Data Collection:** It will be necessary to determine how performance is evaluated for any resulting projects, and how information will be collected. DWD's Division of Employment and Training recommend that any participant-serving project be tracked using its ASSET system, or a similar data collection system, from which performance reports and other relevant data can easily be generated. Funding would be required to support any necessary system enhancements to allow for tracking a unique program.

Recommendation:

Develop a program that grants funding to entities or consortia of entities that submit successful proposals to address AI-related workforce challenges. This program would allow such entities to identify the workforce challenges related to AI and propose locally driven solutions. Applications would not be limited to WDBs, but could include other entities (to be determined) that may include educational institutions, community-based organizations, business/industry, labor organizations, etc.

There are known benefits to competition in terms of driving innovation and success. However, a project of this nature can be administratively burdensome. Significant front-end work would be required to establish appropriate procurement processes, evaluate proposals and execute awards, provide technical assistance to grantees who may or may not have experience with this type of programming, and establish programmatic guidance and forms.

If pursuing this option, DWD staff strongly recommend building in parameters around which entities may be eligible to receive funding, establishing clear guidance about what constitutes a "workforce impact," and clearly defining the criteria of a successful and responsive proposal.

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

Proposed Policy Name: **AI Digital Literacy Campaign**

Lead Entity: **Department of Workforce Development**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
  - Stephanie Elmer, stephanie.elmer@dwd.wisconsin.gov, (608) 733-3869

Background:

The Governor's Task Force on Workforce and Artificial Intelligence has identified a need to develop the general digital literacy of Wisconsin's population more fully as it pertains to the use of AI in the workforce and beyond. Lack of digital literacy is a known barrier to employment that will be exacerbated by the adoption of AI technologies. Lack of digital literacy also is predicted to disproportionately impact certain populations, including older workers and low-income individuals who may lack access to related hardware and software.

Key Consideration:

Partnerships: The existence of multiple funding sources that can be used for the same activity can result in entities competing for the same customer population. The lack of coordination can result in duplication of services, or conversely, can result in service gaps when partners assume that some other entity is providing the service. Coordinating relevant partners to align these services will create consistency throughout the state, reduce/eliminate duplication, and may help expand current services to unserved/underserved geographies and/or populations.

Recommendation:

The Department of Workforce Development's Division of Employment and Training proposes creating a GPR appropriation to establish a broad-reaching digital literacy campaign.

This project would expand upon existing digital literacy programming and leverage public spaces known to provide free and open access to similar programming, such as American Job Centers, community-based organizations, etc.

Melissa Heise, corporate marketing and human resources director for Swiderski Equipment, shares how remote-controlled equipment can help overcome worker quantity challenges at harvest time. Heise presented at the May task force meeting at Northcentral Technical College in Wausau.

APPENDIX C: **WORKFORCE DEVELOPMENT** (Cont.)

Proposed Policy Name: **Enhanced Statewide Data Infrastructure to Answer AI and Workforce Related Questions**

Lead Entity: **Department of Workforce Development (DWD) – Workforce Data Integration System (WDIS) or Department of Administration (DOA) through the newly established Office of Data and Privacy**

Lead Staff and Contact Information:

- **DWD Staff**
  - Katie Jaeger, DWD Office of Legislative Affairs, Kathryn.Jaeger@dwd.wisconsin.gov, (608) 400-2471
  - Bryan Huebsch, Enterprise Data Steward, Wisconsin Department of Workforce Development

Background:

Understanding Artificial Intelligence's impact requires sufficient data that are trusted, understood, timely, secure, and accessible. Timely education, training, wage, and employment data that is available to workers will enhance their ability to make decisions that maximizes their ability to share in the economic benefits of the AI transformation. Wisconsin State Government must increase and enhance its capacity to collect and share data at scale to provide information about the people and economic conditions to inform state government's equitable responses to AI's impact on the workforce.

Wisconsin state government should enhance statewide data infrastructure to produce more timely, secure, and high-quality data accessible to answer questions that inform equitable decision making around the impact of AI on state workforce.

Key Considerations:

- Utilize DOA's developed Interagency Technology Governance Work Group to help build needed data infrastructure. This provides a specific example of using this infrastructure.
- The policy assumes sufficient capacity provided through state, federal, and nonprofit sources to develop and conduct the activities outlined in a statewide comprehensive research / evaluation agenda will be established.

Each option will build and maintain the data infrastructure to allow for continuous data-based decision-making because the need to use data to understand AI's impact on the workforce will be ongoing. The data infrastructure must comprehensively track workforce, education, employment, income, and demographic information.

Each option will provide charges to the identified capacity to accomplish the following:

- The data collection and governance system will ensure the availability of timely and high-quality labor market data and enhance the analytical capacity to remove bias.
- Administrative datasets will be linked to allow for comprehensive advanced data analysis techniques to understand and inform workforce development activities across education, training, and career programs and resources. The advanced analysis will also connect labor market information to individuals' skills, interests, and abilities with job requirements data that will account for AI skill requirements.
- The data collection and governance system must ensure good data quality through processes to check the data and analytics for biases, data matching and analytics should be conducted in a way that protects personal identifiable information and retains government ownership of the to ensure improved government funded education, training, career, and support services to help Wisconsin citizens reach their career goals.
- The administrative datasets must be sufficient in coverage and data quality to:
  - Track workforce development, education and employment outcomes that identify which training, career, and support services create career pathways that lead to good jobs and career advancement opportunities.
  - Develop metrics to track AI influence on career opportunities and changes in the job market. Facilitate the collection and sharing of timely data that is responsive to the dynamic nature of AI-influenced industry changes such as increases or decreases in job skills needed (e.g., increased need for cybersecurity skills).
  - DWD and DOA staff should identify funding, staffing, and infrastructure changes required to implement this recommendation.
  - Determine partnership with DPI and post-secondary education agencies to link to education and training information with the aim to better track training needs, changes in career pathways, and provide cost-effective training recommendations for students, job seekers, and incumbent workers.

Recommendation:

Enhance data by leveraging administrative datasets from:

- Education (State Longitudinal Data System (SLDS)), higher education post-secondary courses and outcome information,
- Workforce development data systems, and
- Data from other state agencies.

APPENDIX D: **ECONOMIC DEVELOPMENT**

Proposed Policy Name: **AI Supports for Wisconsin Businesses**

Lead Entity: **Wisconsin Economic Development Corp.**

Lead Staff and Contact Information:

- **DWD Staff**
  - Linda Preysz, linda.preysz@dwd.wisconsin.gov
  - Alex Verink, alex.verink@dwd.wisconsin.gov

Lead Entity Staff

- Missy Hughes, Secretary and CEO, Wisconsin Economic Development Corp., missy.hughes@wedc.org

Background:

Wisconsin businesses, especially small businesses, that are ready to invest in deeper AI capabilities may find themselves facing significant financial barriers that prevent them from pursuing their identified opportunities. By providing assistance and potential seed funding specifically targeted to businesses facing such barriers, Wisconsin businesses can support their workers while seeing reduced risk in making investments that will increase their productivity and competitiveness.

Key Considerations:

As noted in the above task force report, Wisconsin small businesses will likely face a high barrier to employing new technologies given the cost. Small businesses make up more than 99 percent of Wisconsin businesses and employ nearly half of Wisconsin workers. Moving forward, we must ensure these businesses retain their workforce, reduce the barrier to employ new technology and maximize their efficiency in order to compete in a global market.

Identifying the highest priority types of investments will be critical for a successful program. Initial investment categories may include capital investments; personnel (i.e., data analysts or engineers), training costs, software, or IT infrastructure. Traditionally, Wisconsin has invested in in hard purchases (equipment, real estate, jobs). Additional research may be needed to understand which types of investments might prove most useful. To scale this effort, additional resources will need to be included in the state budget.

Recommendation:

Create a program in Wisconsin with the goal to assist small businesses in retaining their workforce and modernizing business operations by investing in artificial intelligence technologies that augment the human resources. The program will aim to lower the risk of implementing new technology by offsetting some of the costs. The program should require that a company retain their total number of employees, giving employees opportunities for training as needed, and allowing employees to lead in technology advances. This will allow Wisconsin companies to further invest in business efficiency and maximize workforce capabilities to increase competitiveness in the global market.

Troy Runge, associate dean for research at UW-Madison's College of Agricultural and Life Sciences, explains that AI powered advances in agriculture will be needed to feed the world's growing population. Tools ranging from drones and Global Positioning Systems (GPS) to systems that monitor herd health are being combined with AI to improve efficiency on Wisconsin farms.

APPENDIX D: **ECONOMIC DEVELOPMENT** (Cont.)

Proposed Policy Name: **AI Innovation Hubs**

Lead Entity: **Wisconsin Economic Development Corp.**

Lead Staff and Contact Information:

- **DWD Staff**
  - Linda Preysz, linda.preysz@dwd.wisconsin.gov
  - Alex Verink, alex.verink@dwd.wisconsin.gov

Lead Entity Staff

- Missy Hughes, Secretary and CEO, Wisconsin Economic Development Corp., missy.hughes@wedc.org

Background:

Creating welcoming spaces for AI innovation is critical to the success of the Wisconsin economy. By incubating and supporting entrepreneurs and start-ups in artificial intelligence, particularly in AI solutions for manufacturing and agriculture, Wisconsin can become a premier space for the next generation of start-ups.

Key Considerations:

Partners would be key for this effort and funding would be needed to support AI Innovation Hubs at strategic locations statewide. Partners would include tech colleges, universities, and private sector partners, giving entrepreneurs access to Wisconsin businesses, researchers, and training resources. Additional budget allocation to Wisconsin Economic Development Corp. (WEDC) would support additional resources to facilitate this program.

Recommendation:

Utilize current WEDC programming (Capital Catalyst and Entrepreneur Partner Program) to develop incubation opportunities and leverage dollars in the Wisconsin Innovation Fund for investment in companies.

Proposed Policy Name: **AI Roadmap for Wisconsin Businesses**

Lead Entity: **Wisconsin Economic Development Corp.**

Lead Staff and Contact Information:

- **DWD Staff**
  - Linda Preysz, linda.preysz@dwd.wisconsin.gov
  - Alex Verink, alex.verink@dwd.wisconsin.gov

Lead Entity Staff

- Missy Hughes, Secretary and CEO, Wisconsin Economic Development Corp., missy.hughes@wedc.org

Background:

Wisconsin businesses need to have the opportunity to explore and discover the transformational world of AI. In order to do that, Wisconsin needs to create forums where business and community leaders can learn about AI and share their experiences with technological change. These forums might take the shape of cohorts of businesses going through an educational program together, regional summits, or other offerings throughout the state.

Key Considerations:

This effort would require public, private, university, and tech college involvement.

Recommendation:

WEDC would develop a strategy for bringing together a coalition of Wisconsin businesses interested in exploring AI, together with educators and private sector partners able to develop and implement the training.

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