AI AS A TOOL FOR ECONOMIC DEVELOPMENT DISTRICTS: CONSIDERATIONS AND BEST PRACTICES

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Executive Summary

Artificial intelligence (AI) is a powerful tool being used to increase the output of workers and automate tasks across the economy. Economic Development Districts (EDDs) could benefit from the use of AI tools if they are properly integrated into the organizational workflows. There is currently no federal standard for the use of AI in grant application or government contract work, leaving EDDs and other organizations to establish their own policies governing how they will use AI. EDDs should create written policies to guide their organizational use of AI to ensure it coincides with organizational values, industry best practices, and does not risk the informational assets of the organization.

When writing these policies, EDDs should consider the quality and accuracy of AI output, rules for disclosing the use of AI, and the environmental impact of AI. Policies should also be written with iteration in mind to keep up with the evolving landscape of AI. Well written policies that spur the adoption of organizational norms will allow EDDs to benefit from the use of AI tools while mitigating risks. This paper will address the use of AI as an internal tool for EDDs and will not address the wider role that AI is playing in reshaping regional economies. Future resources on that topic will be produced by NADO in the future.

Key Takeaways

- There is not a unified set of guidelines from EDA on the use of AI in the Comprehensive Economic Development Strategy (CEDS) or in federal grant opportunities. Each organization can decide for itself how it will use AI. Organizations should always check with grant or program supervisors if guidance is unclear.
- Anything generated by an AI tool needs to be checked by a human for both quality or writing and accuracy of information.
- The environmental and intellectual property concerns surrounding AI present ground for ethical consideration on the part of EDDs that choose to use AI.
- The ever-changing nature of AI requires an iterative process that can be updated regularly.
- If used properly, AI can serve as a tool to automate tasks and strengthen the output of EDDs.

Introduction

Artificial intelligence (AI) is everywhere. It is impacting our economy at the local, national, and international levels and all evidence indicates that this impact is only going to grow in the coming years. Economic Development Districts (EDDs) are beginning to include the impact of AI in their Comprehensive Economic Development Strategies (CEDS) and other planning documents, either noting the challenging effects that AI is having on the workforce in their regions and regional water and electrical infrastructure or looking at the positive impact of data centers and AI empowered additive manufacturing. AI is also beginning to impact EDDs directly, with leadership and staff employing it in the writing of internal and external documents as well as the training of internal AI programs to assist with administrative tasks.

This paper will be looking at the use of AI as an internal tool for EDDs. Future NADO resources will discuss the impact of AI on the wider economy and how EDDs can respond to these changes effectively. AI can be a powerful force multiplier, working with existing employees to strengthen work products and increase organizational capacity when used correctly. This is leading many to consider enacting internal AI policies to ensure that AI remains a tool to increase organizational output rather than a drag on productivity. This document includes key technical constraints and organizational considerations to keep in mind as EDDs begin the process of writing a formal AI policy or adopting informal organizational norms for AI use.

AI: A Brief Background

Before diving in, it is important to define what is meant by the term "AI." Like the ".com" boom of the late 1990s and early 2000s, the term AI is being applied to so many tools, programs, and products that it can be difficult to nail down exactly what makes any particular piece of technology "AI."

The Defense Authorization Act of 2019 provides a series of tasks or behaviors a technical system could undertake to become AI. These include solving tasks that require human-like abilities, engaging in machine learning, decision-making, reasoning, or performing tasks "under varying and unpredictable circumstances without significant human oversight." Though AI often seems new, if not futuristic, it has actually been developing alongside computers from the very beginning. Researchers Michael Haenlein and Andreas Kaplan, writing for the University of California Berkley Haas School of Business, point to a 1956 research project at Dartmouth College as the beginning of the Age of AI. The goal of this project was to bring together researchers from various computer science disciplines and

research backgrounds to produce theories and practices that would lead to the creation of AI. In the decades since, AI systems have grown in complexity and capability but remained primarily industrial or academic projects with their primary function being to process large amounts of data and make calculations. Breakthroughs in AI over the years interacted primarily with the public when AI was able to beat humans at things like chess or Jeopardy!, both feats accomplished by IBM designed systems. As breakthroughs in AI and computing grew over the years we have entered an age of consumer level AI.

A key breakthrough that has led to the "AI Boom" and widespread use of consumer AI is the advancement of generative AI and use of the Large Language Model (LLM) machine learning method. The first generative AI was the ELIZA program developed by MIT Professor Joseph Weizenbaum in 1967 and is a precursor to modern AI programs. Generative AI differs from previous AI programs because it is able to use existing data to create new information rather than interpret existing information and running calculations based off it. Programmers design LLMs by collecting large data sets of written material and passing these datasets through a program in order to "train it" to mimic written language. After this training is completed, users are able to enter prompts into the AI program that can be interpreted and answered. The more data that an AI is trained on, the sharper its conclusions can become and in general the more complex tasks an AI will be capable of.

For example, Open AI used a dataset containing 45 terabytes of data to train the ChatGPT 3.5 program and 1 petabyte of data to train ChatGPT 4. AI programs that use the LLM method do not require such vast quantities of data, particularly if they are being designed to perform more specialized tasks, but the larger the data set the more of a generalist that a given AI program can be. Though this kind of AI program is the most applicable to the work of EDDs, there are other machine learning models that allow different AI programs to learn different tasks like designing 3D-printable shapes, creating movement programs for robots, or generating digital images. AI is also augmenting existing technology, like Google's AI generated "featured snippets" function or the Meta AI assistant.

AI is expected to become even more powerful in the coming years with some predicting the largest AI programs being 30 times as powerful as current programs by as early as 2027. As the use of AI grows, this basic understanding of how AI works can guide decision-making on how to implement it as a tool in the work of EDDs. AI is already being used by EDDs to complete sections of CEDS, write grant applications, and some EDDs are even training their own LLMs to assist with internal administrative tasks. As AI becomes more powerful, its uses will become more varied and its application more widespread.

Grant Writing and CEDS Guidance

Writing and editing are tasks that current AI programs are being used for throughout the network of EDDs. AI programs are able to summarize other written material, create entirely new material, and edit existing material significantly faster than humans can. This can be particularly useful when writing planning documents like the CEDS. Users are also able to provide constraints to AI programs that can be particularly useful when writing grant applications or reports that need to come in under certain word counts or cover specific topic areas. AI tools can at times provide more constructive editing feedback than traditional spelling and grammar check programs that are able to identify specific misspellings or grammar mistakes but not provide broader contextualized edits.

The rules for using AI to assist with writing grant applications or reports can vary based on the agency managing the grant and other factors. If guidelines are unclear, EDD staff should always reach out to the grant manager at the agency to confirm any rules around AI usage in relation to a grant. Broad federal AI guidance use is provided by Executive Order 13960 *Promoting the Use of Trustworthy Artificial Intelligence in the United States* which was released on December 8, 2020. This order encourages the use of AI as a tool within the federal government and provides a series of principles that should guide its use. These principles include ensuring that AI is providing accurate information for decision makers, the use of AI maintains the safety and security of protected assets, and the risks that come from using AI are balanced with the benefits of these tools.

Other Executive Orders like Executive Order 14319 *Preventing Woke AI in the Federal Government*, published on July 28, 2025, provide further guidance on federal usage of AI. The National Institute of Standards and Technology (NIST), an agency in the Department of Commerce, provides broader guidance for the use of AI across all industries. One such guidance is the Artificial Intelligence Risk Management Framework 1.0 which offers a methodology for firms to manage risk associated with AI including privacy concerns, bias built into AI systems, and the reliability of AI answers to prompts.

In summary, there is currently no single rule or framework that organizations can use to judge the use of AI in grant applications, grant reports, or the writing of CEDS. AI can also be a powerful tool for interpreting data and creating statistical models. Without any guidance explicitly encouraging, discouraging, or banning the use of AI tools, it remains up to each individual EDD to create an internal use policy or set of norms to guide staff use of AI tools. When considering this policy or the behavior of individual staff members there are a variety

of practical and ethical considerations to make around the use of AI. As with the adoption of any technology, it is better to make a deliberate choice than to fall into a behavior without thinking.

Internal AI Usage

Beyond assistance with EDD specific tasks like working on the CEDS or grant applications, AI assistants can help with a variety of other tasks that any office environment would have. A key role of AI in a modern office environment is to unload repetitive and tedious tasks from the human workforce so that they have more time and energy to focus on tasks that require the creativity and intellect that only a human could provide.

There are a variety of AI tools and applications that could fit well into the needs of an organization. AI programs can assist with scheduling both to track internal project timelines and to create automatic reminders about grant due dates (The *New York Times Wirecutter* column has reviewed nine AI scheduling apps to evaluate their effectiveness). There are also AI tools that perform a note taking function during meetings to track task assignments and automatically provide reports to those not in attendance (PC Mag has a list of recommended AI note taking programs). When looking into AI programs to purchase or integrate into the organization, EDDs should take an inventory of tasks they would like to unload onto an AI program and the hours in a week that it would free up for other work. This can provide a guide on the level of investment the organization should be willing to make in an AI tool and help prioritize which AI tools to invest in.

When using Generative AI programs that require text prompts, it is important that staff have a basic understanding of how to effectively write prompts. Harvard University published an article providing guidance on how to properly formulate an AI prompt. Amongst this guidance is to make a specific request, provide details on how the output should be formatted, and provide feedback to guide future outputs. Google has also published a much larger guidebook on how to engineer AI prompts. AI prompting is a skill like any other and can be learned through practice and experience. As EDDs integrate AI into their operations they should include guides for using AI and outlines on the functionality of any AI programs the organization has invested in. This will ensure optimal usage by staff. The International Economic Development Council (IEDC) report *Leading and Managing Next-Level EDOs: Leveraging Technology* outlines impacts and uses for AI in the economic development field that can also be incorporated by EDDs.

AI Writing Quality and Authorship

As AI use has become more common in written material, an "AI writing style" has been identified. This style is categorized by researchers as being made up of short paragraphs containing on average of three sentences of between 16-18 words, written primarily in the imperative mood and based around the second person pronoun when asked to create non-academic writing. When asked to write academically, AI will produce slightly longer responses with paragraphs of three to four sentences and 16-19 words per sentence. The style has been characterized by Wordrake as "often bland and forgettable—but it's also wordy and choppy." Another characteristic of AI writing that has been identified is the increased use of the em dash (–) punctuation. The ability of readers to identify AI written material is dependent upon both the reader themselves and the complexity of the AI model that generated the writing. Researchers have found that readers can detect AI writing between 45.1% and 70% of the time.

The use of AI either to completely generate new writing or edit existing writing prompts has led to questions over authorship and crediting that are being debated by academics and ethicists. Research focused on the perception of AI use in academic writing has found difference in perceptions over when it was appropriate to report the use of an AI tool. Most felt AI use did not need to be reported if the AI tool was used primarily for the purpose of spelling or grammar checking but there was disagreement over the reporting of the use of AI to rewrite report sections. This lack of clear standards can lead to an obfuscation of piece authorship. Additional standards could help to clarify when a piece is written by a human author, written with AI assistance, or completely written by AI.

An additional ethical consideration around the use of AI tools is the sourcing of AI datasets and the role that human authors have played in creating the works that are used to train AI programs. In September 2023, the Authors Guild and some of its members including George RR Martin and John Grisham opened legal proceedings against OpenAI for the unlicensed use of copywritten work to train the ChatGPT program. This suit and others like it have sparked a conversation around the use of content created by humans that is used to train AI programs. There is concern around lack of credit and payment for human authors, as well as a larger concern around using the work of existing creators to automate the work of creators. The 2023 Writers Guild of America Strike and the 2023 Screen Actors Guild and American Federation of Television and radio Artists strikes were in part about the use of AI in filmmaking and the desire to put guardrails on the use of AI in creative fields.

Legal challenges around the way copywritten materials can be used to train AI are ongoing. Some have claimed that training an AI with a copywritten material is covered under the fair use exemption to copyright and therefore does not need to be compensated. Organizations looking to create an AI policy or establish internal norms around the use of AI should consider both the makeup of datasets being put into AI programs to create them and the quality of writing programs are producing. The ethical debate and legal proceedings are still ongoing so organizations should also remain flexible and be willing to reassess policies as the societal relationship with AI evolves.

When EDD staff consider the usage of AI they should keep the quality of AI writing and these ethical considerations in mind. Due to the distinctive nature of AI writing and the often negative associations that style of writing has, EDDs should be cautious about having large parts of reports or grant applications written by AI. EDDs should also create a policy around disclosing the use of AI in writing. If AI is used as a tool for editing, a disclosure may not be necessary. If sections of writing were generated entirely by AI, organizations may want to credit the AI program they used. EDDs that use AI should remain informed on the way industry standards for AI disclosure evolve to remain in line with established best practices.

AI Hallucinations and Bias

As with any tool, AI has flaws and bugs that users need to be aware of to ensure they can use it effectively. Two flaws to be aware of are AI hallucinations and bias. An AI hallucination is anytime an AI program produces a response that is wrong or misleading. AIs are machines and do not "know" that any given response is "right" or "wrong." AIs use their datasets to create a predictive model of what the proper response to a given prompt will be and then produce that response. Sometimes they get it wrong. That is a hallucination. Data suggests that AI programs hallucinate between 0.7% and 29.9% of the time depending on the AI program in question. The hallucinations take the shape of AI leaving out pertinent information to a question that is posed to it or making up information entirely. This is particularly common when AI is asked to create a piece of writing that has sources attached to it. Because of the way most LLMs are trained, AI training datasets might not be able to produce up to date information on fast-changing events. The probability-based models of AI help to explain why AI hallucinates, but bias also plays a role in AI hallucinations.

Bias is another thing to be aware of when using an AI program. Bias comes into an AI through a dataset that is either missing data, has overrepresented data, or has erroneous data. The computing power limits the size of dataset that an AI program can parse and train

on. This requires AI researchers to limit what they include in a dataset and prioritize certain information and exclude other information. This human element to the process can also lead to a biased AI program that has taken on the bias of the programmers who made it. This creates blind spots in an AI's model that will lead to hallucinations and bias.

As with any tool, there are use cases where AI is very well suited to the task and other use cases where AI is not well suited. As time goes on, the use cases for AI may rise but users will always need to make a judgement call if they are better asking an AI assistant or doing research themselves to ensure accuracy. The existence of hallucinations and bias in AI does not make them useless any more than errors and bias in human reason makes humans useless. It is, however, important to keep any weaknesses of a tool in mind when creating a policy around its use.

EDDs should keep hallucinations and bias in mind when using AI tools. Staff should always review anything that an AI produces to ensure the accuracy of information. Any AI policy should ensure that AI is used as a tool to support human staff that will have the final say over the publication of any writing. AI research assistance can be incredibly valuable and greatly reduce the time spent on tasks. However, the work of an AI must always be checked by a human. In its 1979 training manual, IBM established the principle "A computer can never be held accountable, therefore a computer must never make a management decision." This principle should guide EDDs when using AI. Any errors that negatively impact an organization, even if they can be traced back to an AI, will remain with an organization.

Privacy Concerns

Staff and member privacy as well as the management of protected assets is always a priority for EDDs and other organizations. Organizations that handle protected assets of any kind should already have policies to govern their storage, use, and responsible disposal. AI represents another technology that should be included in these policies. Vast amounts of public data are already in AI datasets creating privacy concerns. Part of the way AI programs are trained is the continual incorporation of user queries and interactions into AI models. This helps to improve AI performance but also means that anything entered into an AI can be incorporated into the AI dataset and used to create new predictive models. Things like social security numbers, bank information, and medical records can be incorporated into the AI model and be used in the future. As a rule, protected or personal assets of any kind should not be put into a public AI program and great caution should be used before loading any of these assets into a private AI program.

Even if explicitly protected assets are not loaded into an AI program, the collection of public information can still present a privacy concern. Through the collection of large amounts of data AI risks "predictive harm" or the use of a collection of public data to generate a prediction of private data, like being able to access a person's bank account by tracking birthdays, family or pet names, and other information typically used for security challenge questions. These and other privacy concerns are leading to both academic and legislative proposals to regulate the way AI uses protected and non-protected data.

If they do not already exist, EDDs should establish policies that label and define proper use of protected assets, whether that be internal employee records or external financial information. These policies should include a restriction on how this information can interact with an AI program to ensure data security is maintained. Though the regulatory environment may evolve in the coming years to provide greater transparency and privacy protection within AI programs, the best defense against data leakage starts with users. Personal and organizational information is a valuable asset and needs to be protected both by internal policy guidance and established behavioral norms.

Environmental Impacts

A significant consideration for many around the use of AI is the environmental impact that AI has. The training of AI and the generation of responses to user prompts require large amounts of electricity. A single ChatGPT query uses almost 10 times the electricity that a Google search uses. Though it is difficult to determine the precise energy use of AI alone, the data centers that house AI programs consumed 4.4% of energy produced in the United States in 2023 and that number is expected to rise in the coming years. AI also increases the water use in some datacenters as a coolant that prevents servers from overheating. In 2023 US data centers used over 17.4 billion gallons of water. Firms are taking steps to limit the impact of increased AI use on the power grid and environment. There is an effort underway to explore ways to both increase the energy efficiency of AI programs and apply the computing power of AI to solve environmental challenges. AI and other tech firms are also looking into nuclear power as a way to offset the increased energy consumption of data centers.

If EDDs have existing policies or norms related to environmental commitments, the energy and water use of AI programs should be considered when AI policies are adopted. As with all AI issues, policies of all kinds will need to be reassessed as technology updates and as norms in the industry evolve.

Sample AI Policies

A number of organizations have produced sample AI policies that EDDs can use as the basis of their own. The organization HR Source has produced an AI policy template that can be used to outline permitted AI tools and the tasks those AI tools should be used for. NFPS.ai has also published an AI policy template that EDDs might find useful. Both of these policies are brief outlines of possible AI policies that organizations could adopt after fitting them to their particular circumstances. Their brevity makes them easy to add to existing Employee Handbooks or other existing governance documents. The AI Governance Library has a more extensive AI policy document that provides a wider range issues to consider. This policy is based on the NIST AI Risk Management Framework and the International Standards Organization/International Electrotechnical Commission 42001 AI management system. This more involved policy may be helpful for an organization seeking to more fully integrate AI into the day-to-day operations of their EDD or is looking to completely automate certain tasks with an AI program.

EDDs should use these and any other AI policy templates or recommendations as starting points. It is important that any policy that an organization adopts is made with its particular circumstances in mind. These documents should also be created as part of an iterative process. As industry standards for AI evolve with the technology, policies need to be updated to keep pace. As with any set of standards adopted by an organization, a policy is only as good as its enactment. It is important that the prescriptions and recommendations of an EDD's AI policy become behavioral norms within the organization. This is particularly important when dealing with protected assets and AI use disclosure as errors in these areas can undercut organizational credibility or compromise organizational initiatives.

Conclusion and Recommendations

AI is a powerful tool that is impacting the manufacturing, service, and non-profit sectors of our economies that are leading some to label it as the new dawn of a fourth industrial revolution. Understanding the capabilities and limitations of AI can help EDDs and others to create policies that allow them to take advantage of this new technology. When it comes to developing any policy or organizational norm around a process, the first and most important thing is intentionality. A decision backed by research, incorporating organizational values, made with group input, and done in a transparent way will always be better than a habit fallen into haphazardly. Whatever way an organization chooses to incorporate or not incorporate AI tools into its work should be done consciously.

When creating an AI policy, EDDs should keep in mind that though some day AI may be able to perform tasks without human intervention and guidance, we are not there yet. The writing quality of AI programs and the propensity for AI hallucinations make it necessary to check the output of any AI program with a human supervisor. At this stage, AI is best used as a tool to assist human workers rather than as a replacement or augmentation for human effort. Even as AI is able to accomplish more complex tasks with less human input, the bias and limitations that exist within AI programs will mean that they can never act independently of human interaction. The topic of how and when to disclose the use of AI in written materials is ongoing. Internal AI policies should include guidance on when to include an AI notification on materials.

AI policy should also take particular note of data privacy concerns. Any protected asset, either related to employee records or organizational operations, should be explicitly labeled, and a policy for the creation, handling, and disposal of this protected information should be outlined. If an EDD already has policies related to protected assets, it should refresh these policies to take particular note of new AI tools. Protected information should never be published, and that includes putting that information into an AI system that could incorporate that data into a model that would be public. EDDs should also keep existing environmental commitments and concerns in mind when they use AI and incorporate these concerns into their policies.

The AI space is a particularly fast-moving area with changes in technology, regulation, and industry norms coming almost daily. Any sort of policy that is established to regulate an EDD's use of AI should be written with iteration in mind. Policies should be permitted to change and evolve as the situation does. The future of AI is full of opportunities and challenges. With proper planning, EDDs will be prepared to overcome the challenges and take advantage of the opportunities.

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