Date: March 22, 2024
To: Honorable Chairman Oliver G. Gilbert, III and Members, Board of County Commissioners
From: Daniella Levine Cava Mayor

Executive Summary
This report is in response to Resolution No. R-659-23, sponsored by Commissioner Eileen Higgins, and adopted by the Board of County Commissioners (Board) on July 6, 2023. The Resolution directed the County Mayor or the County Mayor’s designee to develop guiding principles for the use of Artificial Intelligence by County Departments and employees; conduct a thorough Artificial Intelligence study; assess the extent to which the advent of Artificial Intelligence will create additional staffing requirements; and publish regular written reports to the board. The Board requested an initial report to be developed in 180 days of the effective date of the resolution, and subsequent reports to be published every year thereafter.

Report
Miami-Dade County residents have come to expect accessible and efficient County services. As such, to meet those expectations the County should explore new service and technology models that are both modern and integrated. Artificial Intelligence (AI) solutions simulate human intelligence, enabling them to learn, solve problems, perceive, and make decisions, thereby holding immense potential for improving various aspects of public services and governance.

Upon Board Approval of Resolution No. R-659-23, the Information Technology Department (ITD) diligently began to work on developing the guiding principles for the use of AI within County government. The report was compiled after conducting various methods of research including surveys, interviews with partners, and thorough reviews of government policies, and industry publications to establish a clear and thorough framework for integrating and using AI technologies in Miami-Dade County. It reflects our commitment to using AI for the benefit of our residents, while maintaining ethical principles, transparency, and accountability. The document outlines principles, objectives, and strategies that adhere to County values, ensure fairness, and maintain the highest standards of data privacy and security. It is a guide to navigate the complexities of AI, aiming to use these technologies to enhance County operations, services, and governance, while ensuring responsible public service.

On January 1, 2021, The National AI Initiative Act of 2020 became law, providing for a coordinated program across the entire Federal government to accelerate AI research and application for the Nation’s economic prosperity and national security. This legislation ensured continued U.S. leadership in the research and development of trustworthy AI in public and private sectors and prepare the present and future U.S. workforce for the integration of AI systems across all sectors of the economy and society.

On October 30, 2023, President Joseph R. Biden issued an Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence. Based on the guidance of the White House,
ITD further enhanced the report for alignment to federal guidelines. Many governments are still in the
discovery stages and Miami-Dade County will be among the few that will lead in the charge by developing
a robust framework for AI technology that incorporates workforce AI literacy and training.

In the coming year, ITD plans to complete activities that will include an Organizational Assessment and
Study report establishing a Community of AI Practice; the development of a data governance model and
documented inventories; rollout of security guidelines and employee AI usage metrics; and
recommendations for departmental AI projects, considering the impact on the County workforce. ITD
will continue to evaluate the guidelines, impact for future implementation, and address potential risk and
security concerns. In addition, the County will launch various opportunities for upskilling the workforce
leveraging local public academic partners. This work will encompass the first annual report that will be
presented to the Board of County Commissioners in the first scheduled Board meeting in January 2025.

This report will be placed on the next available Board Agenda pursuant to rule 5.06(j) of the Board’s Rules
of Procedure. Should you need further information, please contact Margaret Brisbane, Director, ITD, at 305-596-8320.

Attachments

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Artificial Intelligence Report: Policies, Principles & Guidelines
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Executive Summary

In response to the Miami-Dade Board of County Commissioners Resolution R-659-23 adopted July 6, 2023, this document outlines Miami-Dade County's Artificial Intelligence (AI) Policy and Guidelines aimed at responsibly harnessing the potential of AI to augment the County's daily operations. The document outlines a strategic approach to ensure a secure, ethical, transparent, and effective deployment of AI technologies across County government.

Artificial Intelligence is rapidly transforming the business landscape and the expectations of the customers that engage with our services. This report - through sound policies, rules, and guidance for County employees, departments, and vendors - serves as a transparent framework for responsibly leveraging AI to enhance County services and governance.

As the use of AI in government continues to grow and change, we are committed to a balanced, people-centric approach that prioritizes fairness, data privacy, security, and opportunities for the County's workforce. The document serves as the first step on a roadmap for innovative, responsible AI use, improving operations and governance, while ensuring integrity and public service in the evolving AI landscape.

Key Objectives

Our AI Policy and Guidelines address the following objectives:

1. **Ethical AI**: We commit to developing and deploying AI systems that are fair and inclusive, with regular audits to ensure ethical use throughout all stages of development and implementation. These measures will guide every stage of software procurement, and AI development in current systems as well as employee use of tools such as ChatGPT.

2. **Transparency and Accountability**: The County will ensure transparency in AI decision-making processes through existing procurement guidelines. In addition, with augmented system development, residents and stakeholders should understand how County AI systems arrive at conclusions, fostering accountability and public trust.

3. **Data Privacy and Security**: AI applications must adhere to data privacy standards and undergo regular security assessments as managed by the IT department Cybersecurity division.

4. **Data Integrity**: The County will prioritize the governance, preparation, and intake of datasets needed to ensure AI solutions are fueled by the highest quality data.

5. **Collaboration and Multidisciplinary Teams**: Our approach involves collaboration with experts, specialists, and community partners for enriched AI design and implementation.

6. **Beta Testing and Continuous Evaluation**: We advocate for small-scale beta projects as test beds of AI applications before full-scale deployment. Continuous evaluation will ensure ongoing performance, accuracy, and alignment with objectives.

7. **Human-AI Collaboration**: The County will center the integration of AI technologies to benefit the employee and end user experience focusing on AI that enhances human work, not replaces it. For example, the use of ChatGPT can enable County employees to enhance the quality and efficiency of County services – this will require strict adherence to the County Administrative Order seen on Appendix B.
What is Artificial Intelligence?

Artificial Intelligence (AI) refers to the development of computer systems capable of performing tasks that typically require human intelligence, such as learning, reasoning, problem-solving, perception, and understanding languages, symbols, images, and more. AI systems can be designed to learn and adapt through a variety of experiences including the analysis of data, recognizing patterns, and making decisions. AI is made up of a broad range of technologies, from rule-based and logic systems to more sophisticated machine learning (ML) algorithms. This allows AI applications to interpret events, support and automate decisions, deliver experiences, and take actions (Gartner Artificial Intelligence Primer 2023).

Generative AI, like ChatGPT, is a specific type of AI technology that can create new and original content, such as images, text, music, or even ideas, by learning from patterns and information in existing data. Instead of just following rules, it uses its understanding of patterns to come up with new things that seem like they were made by a person. Generative AI is trained on large amounts of data and can predict outcomes based on given inputs or prompts.

It is important to understand that Generative AI systems store all the content and data that a user enters. Sensitive County data is prohibited in the use of public tools such as ChatGPT, Grammarly and QuillBot.

Yet, as with any other technology that streamlines an employee’s work, the integration of AI in County work has many use cases and great potential. Therefore, we encourage responsible experimentation that follows the policies and guidelines set forth in this document.

Policy Framework and Guiding Principles

Vision and Mission

Our vision is to leverage the use AI technology to transform government operations and improve services for our customers, while maintaining high security and ethical standards. Our mission is to implement AI responsibly, focusing on fairness, accountability, and openness in all our AI initiatives.

Implementation Framework

The Office of Mayor Daniella Levine Cava and the Information Technology Department (ITD) are spearheading the implementation. This involves forming diverse teams, assessing impacts, training staff, and working with external partners. We aim to understand and solve real problems with AI, ensuring responsible use of data and technology. We’re committed to a balanced use of generative AI, recognizing its potential and the need for careful oversight and ethical considerations. By providing clear guidelines, fostering collaboration, and engaging in continuous evaluation, we can harness Generative AI’s capabilities for the betterment of Miami-Dade County.

Guiding Principles

The County Administrative Order (see Appendix B) and this report are guided by the following principles:

1. Human-Centric Approach: AI should be developed and utilized to enhance County employee work, not replace it.
2. Fairness and Equity: AI systems must be evaluated to ensure systems and applications treat residents equally, regardless of background.
3. **Transparency**: The inner workings of AI systems must be understandable and explainable to residents, fostering trust and accountability.

4. **Data Protection**: Data must be handled responsibly, with strict adherence to data protection regulations to maintain privacy, integrity, and security, and in accordance with industry standards and applicable laws.

5. **Ethical Decision-Making**: AI systems must be evaluated to make decisions that align with County ethical standards.

**Countywide Oversight**

As the technology provider for the County’s departments, ITD is developing its strategy to integrate AI in County digital services. As such, in the coming months we are preparing the following:

- **Create** documentation that outlines benefits, risks, and a deployment plan for County-wide use.
- **Promote** responsible AI practices to support ethical and safe use of AI tools.
- **Collaborate** with the Communications and Customer Experience Department to enhance the online experience, and user interactions with AI solutions.
- **Assemble** a cross-county and cross-functional team to monitor industry developments, support integration of AI solutions including oversight, experimentation, and engagement.
- **Educate** employees about AI and provide upskilling opportunities.

**Measuring Success**

Understanding the impact of AI requires department partnerships to identify data and metrics critical to their service delivery. The potential of AI is still to be determined. Below are a series of quantitative and qualitative assessment methods that County teams could apply to evaluate various aspects of AI implementation, its outcomes, and its alignment with strategic objectives.

1. **Objectives**: Define specific objectives such as enhancing citizen services, improving efficiency, reducing costs, increasing transparency, and tracking innovation.

2. **Key Performance Indicators (KPIs)**: Identify measurable KPIs that align with objectives.
   - **Efficiency improvements**: Reduced processing time, increased automation rates.
   - **Service quality**: User satisfaction ratings, response times.
   - **Cost savings**: Decreased operational costs, optimized resource allocation.
   - **Transparency and accountability**: Increased data accessibility, reduced corruption.
   - **Innovation**: Number of successful AI-driven projects, adoption rate of new technologies.

3. **Data Collection and Analysis**: Clean data collection and well documented data are fundamental to understanding impact. This data could come from various sources including open data, department databases, spreadsheets, surveys, and system logs.

4. **User Feedback**: Gather feedback from residents, employees, and other stakeholders about their experiences with AI-powered services the County deploys.

5. **Cost-Benefit Analysis**: Evaluate the costs associated with AI against the benefits accrued.

6. **Documentation and Continuous Evaluation**: Monitor the extent to which AI adoption leads to knowledge sharing, collaboration, and innovation within County departments. In addition, we will regularly revisit measurement framework to assess the ongoing impact of AI initiatives.
By combining multiple approaches, the IT Department working with the Office of Management and Budget will incorporate these measures into the County’s scorecard to track operational efficiency gains.

Organizational Assessment and Study

Building on our security measures and guiding principles, this assessment and study explores key questions about AI in government: How is AI adopted, implemented, and managed? What risks and benefits does it bring, and how can we ensure its use is fair and responsible? This report is a collective effort from various experts, providing a comprehensive view of AI use in both public and private sectors.

Discovery

To develop a thorough report, policies, and procedures, ITD consulted with leading AI partners. This included extensive research across key sources, discussions with peer governments, academic institutions, and several private sector partners including the following:

- **Governments & Organizations**: Boston, Washington, D.C., Chicago, National Association of Counties (NACo)
- **Technology Partners**: Amazon Web Services, Gartner, Microsoft, Google
- **Academic Institutions**: Miami Dade College, Florida International University, University of Miami, Nova Southeastern University, Florida Memorial University, Barry University

County Leaders, and Gartner CIO and IT Leaders Survey

ITD surveyed over 280 County employees both leadership and IT staff, with a 40% response rate. The results show that while AI use is still in its early stages, there’s a growing recognition of its potential to enhance government operations and processes. In addition, Gartner surveyed 200 CIOs and IT Leaders across the US, Europe, Asia, Australia and Africa (59% of respondents were from North America.)

![Generative AI adoption levels vary; the top use case among adopters is data analysis and prediction](image)

**Key Insights**

Across all meetings and instances of discovery, actionable recommendations were captured. Below is a list of insights summarized using OpenAI’s ChatGPT and validated by the team who drafted this report:
1. **Formation of a Working Group**: To guide technical and policy decisions.

2. **Identifying the Primary Audience**: Determine who will primarily use the AI - employees, vendors, or residents.

3. **Defining AI Operationally**: Clarify what AI means for our organization and how it will be used.

4. **Promoting Responsible Experimentation**: Encourage the skilled and thoughtful use of AI.

5. **User Responsibility**: Emphasize that users are accountable for how they use AI tools.

6. **Workshops and Training Programs**: Organize sessions to share ideas, establish best practices, and address any concerns about AI.

7. **Practical and Enforceable Actions**: Focus on realistic and manageable policies.

8. **Different Strategies for Different Users**: Tailor AI tools and use cases to specific groups.

9. **Staying Current**: Regularly update policies to keep up with AI advancements.

10. **Centralizing AI Resources**: Avoid scattered usage of different AI tools across departments.

11. **Working with Vendors**: Utilize vendors to quickly implement AI services.

### Business Goals

According to the research and analyst recommendations, County AI strategy supports three primary business goals and will be impacted by key disruptions outlined in the Gartner image below:

1. **Improved Customer Satisfaction**: Using AI chatbots and sentiment analysis.

2. **Workforce Productivity**: AI for code generation, content creation, and data analysis automation.

3. **Cost Reduction**: Employing AI for efficient procurement process and contract analysis.

#### Key Generative AI Disruptions

<table>
<thead>
<tr>
<th>Current State</th>
<th>Generative AI</th>
</tr>
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<tbody>
<tr>
<td><strong>Content Consumption</strong></td>
<td>Specialized skills required to consume data and knowledge</td>
</tr>
<tr>
<td><strong>Content Generation</strong></td>
<td>AI used for predictive analytics, automating tasks, classification and prediction</td>
</tr>
<tr>
<td><strong>Technology Creation</strong></td>
<td>Concentrated in a few specialized resources</td>
</tr>
</tbody>
</table>

![Gartner Image](707246_C)

### Use Cases

AI offers a unique opportunity for Miami-Dade County to improve services for both residents and employees. Using AI can streamline administrative tasks, enhance service delivery, and make interactions with the County more efficient. It also helps employees by automating routine jobs, allowing
them to focus on strategic work, increasing productivity, and making the County more responsive. In line with the County leadership survey, below are initial AI use cases in key areas to improve processes, efficiency, and cost savings. With every application of AI to streamline daily work, human review and input will be required as suggested in the guidelines listed on page 11.

Examples of AI applications aligned with County priorities include:

1. **Document Automation**: Generative AI can be used to automatically draft and format documents, such as contracts, reports, and regulatory filings.

2. **Automated Compliance Reporting**: Generative AI can generate compliance reports by extracting and analyzing data from various sources, ensuring that County departments and agencies reduce the administrative burden in meeting regulatory requirements.

3. **Fleet Management Optimization**: AI-driven predictive models can generate optimal routes and maintenance schedules for County fleets, reducing fuel consumption, maintenance costs, and improving service delivery.

4. **Smart Resource Allocation**: Generative AI can analyze historical data and generate recommendations for cost-effective resource distribution and improved service delivery.

5. **Intelligent Procurement**: AI can assist in generating procurement recommendations by analyzing market data, contract proposals, vendor performance, and budget constraints, leading to cost-effective purchasing decisions and streamlined procurement processes.

6. **Energy Consumption Forecasting for Building Management**: AI can generate forecasts for energy consumption patterns, allowing County departments and ISD to adjust energy usage during peak hours, thus reducing energy costs.

7. **Customer Service Chatbots**: Deploying AI-powered chatbots for resident services can streamline the handling of routine inquiries, reducing call center costs and improving resident satisfaction. (Project underway with 311 and miamidade.gov)

8. **Automated Data Entry and Verification**: Generative AI can be used to extract data from documents and automatically populate databases, reducing manual data entry efforts and minimizing errors.

9. **Predictive Maintenance for Infrastructure**: AI-generated predictions for infrastructure maintenance can help County departments proactively address issues, reducing repair costs and minimizing downtime.

10. **Automated Employee Support**: AI-powered search capabilities for employee self-service to reduce repetitive inquiries and tasks including internal knowledge management topics like County Policies, union, ethics, payroll, INFORMS and other general HR questions.

11. **Contract Management**: AI streamlines contract management by automating contract creation and review, enhancing efficiency and accuracy. It aids in risk assessment and compliance monitoring and integrates with business systems for better decision-making, while providing automated reminders for contract milestones and deadlines.

**Cybersecurity and Privacy**

County employees using AI or implementing AI solutions must prioritize the security of County system, data, and the privacy of its customers.
AI applications should be aligned with the County's security principles. Key steps include:

1. **Collaborating with Cybersecurity Teams**: Vetting AI solutions for countywide implementation.
2. **Sharing Testing and Safety Results**: Vendors must share AI safety test results with IT.
3. **AI-Enabled Deception Safeguards**: Continuously updating standards against AI deception.
4. **Enhanced Cybersecurity**: Developing AI tools for advanced cybersecurity.
5. **Regular Training and Vendor Assessments**: Educating employees about AI and carefully selecting vendor solutions.

The following are general Security guidelines for employees. Detailed security policies are outlined in Appendix B.

- **Data Privacy and Confidentiality**: Avoid using sensitive or confidential data as input for external tools, especially if the data includes personally identifiable information (PII).
- **Phishing and Social Engineering**: Attackers will use generative AI to create convincing phishing emails or messages. Verify the authenticity of unusual emails and texts, even if they appear to come from known sources.
- **Assess Vendor Solutions**: County Departments implementing vendor supported AI solutions must work closely with ITD to assess the vendor's capabilities, security, and privacy practices before integrating their tools.

**Risk Mitigation**

ITD will support teams in managing the risks of AI which involves several strategies, such as ensuring data accuracy, implementing security measures, and training staff.

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigation Strategy</th>
</tr>
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<tbody>
<tr>
<td>Intellectual Property and Vendor Oversight</td>
<td>Support departments in establishing governance, prompt creation support, support in avoiding the intake of proprietary information, and support in engaging in vendor agreements for AI services.</td>
</tr>
<tr>
<td>Security</td>
<td>Implement strong data protection and guardrails for cybersecurity attacks using AI. Ensure employees are well trained for resisting cyber-attacks.</td>
</tr>
<tr>
<td>Misuse</td>
<td>Enforce access control and approval process; deploy business intelligence tools to monitor use and establish use trends in accordance with County policy.</td>
</tr>
<tr>
<td>Workforce Impact</td>
<td>Coordinate with the Human Resource Department on skills retraining, map career paths, augment job descriptions, and support employees who are concerned about the impact of AI on their jobs.</td>
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<tr>
<td></td>
<td>In partnership with local academic partners, the County will provide training and awareness programs for employees to educate them about the capabilities, regulatory considerations, and limitations of AI.</td>
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Artificial Intelligence and Miami-Dade County’s Workforce

Overview

A 2023 McKinsey & Company report highlights that the advancement of AI, particularly in technical automation, could lead to significant changes in the workforce. It’s estimated that by 2045, up to half of today’s jobs could be automated, which is about ten years earlier than previously thought.

Miami-Dade County is planning ahead to prepare for these changes. The Mayor’s Office, Human Resources, and the Office of Management and Budget are collaborating with internal departments to review and adapt our hiring and training processes, ensuring we’re ready for the future impact of AI.

Staffing Considerations & Guidelines

Based on the Federal Executive Order released on October 30, 2023, AI's influence on jobs and workplaces in America brings both opportunities and challenges. Miami-Dade County is committed to creating guidance and principles that will:

- **Preventing Job Displacement**: Ensuring AI doesn’t lead to job losses.
- **Maintaining Labor Standards**: Upholding existing labor policies and regulations.
- **Workplace Fairness and Safety**: Prioritizing fairness, health, and safety in AI implementation.
- **Responsible Data Management**: Handling data collection with care.

County leaders and HR professionals must consider AI’s impact on staffing and productivity, emphasizing:

1. **Augmentation Over Replacement**: AI will boost employee productivity, not replace jobs. This technology is powerful but requires considerable human input to be effective and accurate.
2. **Leadership in AI Adoption**: Managers and supervisors will guide AI use, focusing on understanding, accuracy, and effective application.
3. **Redefining Jobs and Skills**: Adapting job descriptions to include AI-related skills like AI ethics and adaptability. As our workforce adapts to this new technology, skills like AI ethics, prompt-writing, and adaptability will be critical to consider when crafting future job descriptions. Managers and leaders should leverage their deep understanding of their departments and teams’ responsibilities and skills as they consider what AI-related skills will be important to consider when workforce planning.

To ensure AI is responsibly deployed across County government and ITD will:

- Form a cross-functional team of County business and technology experts to support and advise on the implementation of AI technologies.
- Update AI usage guidelines and policies regularly.
- Streamline AI product and service procurement.
- Recruit AI specialists, reimagine existing job descriptions with AI skills, and develop AI training and provide to County employees.
Core Skills and Competencies

To effectively engage with and harness the potential of AI within our organization, it is imperative to equip our workforce with some essential skills. These skills will empower County employees to contribute to AI research, development, and implementation, ensuring that we remain at the forefront of innovation and responsible AI deployment.

Countywide Workforce Skills and Competencies

- **Ethics Awareness**: An awareness of ethical considerations in AI, including bias mitigation, fairness, transparency, and privacy preservation, is critical for developing AI use cases that streamline County services and workday productivity.

- **Problem-Solving and Critical Thinking**: Proficiency in analyzing complex problems, breaking them down into solvable components, and devising innovative AI-based solutions is essential for addressing real-world challenges and day-to-day operations.

- **Collaboration and Communication**: Effective collaboration and communication skills are key for working in cross-functional teams, translating AI concepts to non-technical stakeholders, and fostering positive employee morale.

- **Continuous Learning and Adaptability**: Given the rapid evolution of AI, a commitment to continuous learning is essential for staying updated with the latest advancements.

- **Data Analysis**: The ability to clean and analyze data is vital for generating meaningful insights.

- **Business Expertise**: An understanding of the specific department or related business expertise facilitates the development of tailored and effective AI solutions.

IT-specific Workforce Skills and Competencies

- **Natural Language Processing (NLP)**: Developing language-related AI solutions.

- **Computer Vision**: Working with AI in image and video recognition.

- **Programming Skills**: Translating AI concepts into applications.

- **Machine Learning and Deep Learning**: Creating and training AI models.

- **Software Development Best Practices**: Ensuring AI system robustness.

- **Cloud Computing**: Managing AI models on cloud platforms.

Incorporating these core skills and competencies into our workforce will position the County workforce to explore, experiment, and leverage the potential of AI in a responsible and impactful manner. The County will invest in upskill and reskill programs to ensure that all employees have pathways to grow with the evolving technology landscape.
General Guidelines for County Employees

These guidelines align with Miami-Dade County’s Administrative Order on the use of Artificial Intelligence (AI) and provide clear instructions for employees:

- **Fact Check All AI Content**
  
  **Rule:** County employees using generative AI solutions must review and validate the output of generative AI before sharing or using it to make decisions. Do not blindly trust the AI-generated content.

  It is critical to establish and rely on trustworthy sources relevant to your work that can confirm that the facts and details in the AI-generated content are accurate. Trustworthy sources include:
  
  - Supervisors and colleagues in your department
  - Official County documents and content (MiamiDade.gov)
  - Sources of County Data (Trusted Data Platform)

- **Don’t Share Sensitive Information**
  
  **Rule:** Avoid sharing information with Generative AI tools that is sensitive in nature or restricted. Be cautious when sharing generated content that might inadvertently reveal sensitive information.

  Generative AI tools, particularly those available broadly to consumers, rely on the intake of content and their continued use to improve the model. As such, these tools will intake and retain the data you provide.

- **Cite Use of Generative AI Tools**
  
  **Rule:** Employees must cite the use of these tools in documents, presentations, and other content as a footnote or endnote. Include Name of Generative AI tool used and confirmation that the information was fact-checked.

  Example: “This document was drafted with support from ChatGPT. The content was edited and fact-checked by County staff. Sources for facts and figures are provided as they appear” (City of San Jose Generative AI Guidelines, 2023)

- **Follow Rules for Public Records Compliance**
  
  **Rule:** All AI tool usage related to County work, including prompts and outputs, is subject to public records laws and must comply with retention policies.

  See Florida public records statute Section 119.011 (12).

  Do not use any prompts that may include sensitive information, protected information, or information not meant for public release.

- **Create an Account Specific for County Usage**
  
  **Rule:** Because usage is subject to public records requests, use a separate Miami-Dade County email address for all work-related AI tool use. Avoid using these accounts for personal purposes.

  Employees should use a unique password for the service. Like any other account which uses a County email address, the password should not be the same password used to log into any County services or devices (City of San Jose Generative AI Guidelines, 2023).
• **Existing Guidelines for Content Creation**

**Rule:** County employees should verify AI generated content through Department-level review processes, and adhere to policies and standards set by the County’s Communications and Customer Experience Department – [Public Information Guide](#).

• **Intellectual Property**

**Rule:** County employees should perform due diligence to ensure that no copyrighted material is published by the County without proper attribution or without obtaining proper rights.

Content produced by generative AI systems may include copyrighted material. AI systems may be “trained” using data (text, images, etc.) that has been sourced from the internet without regard for copyright or licensing.

**Workforce Upskilling and Talent Pipeline**

Talent pipelines begin in the classrooms, training centers, and anywhere someone takes their first step on the journey of learning a new skill. Foundational to the success of this program are the partnerships between ITD and Miami-Dade County’s key educational and workforce organizations.

ITD’s workforce strategy for AI adoption includes internal talent pathways through these partners. Departments should incorporate emerging technology, like artificial intelligence, into their business planning and long-term planning to better prepare staff through training or other upskilling activities.

**AI Opportunities for Miami-Dade County Employees**

Miami-Dade County’s academic institutions are ready to serve our community and employees to learn new skills and technologies.

• [Miami Dade College School of Engineering & Technology (EnTec)](#), through its LevelUP partnership with Miami-Dade County and the [Javier Coto Scholarship](#), connects Miami-Dade residents and employees with no-cost college credit certifications and courses across several major emerging technology areas, including the following artificial intelligence courses:

  o CAI 1001C - Artificial Intelligence Thinking
  o CAI 2100C - Machine Learning Foundations
  o CAI 2840C - Introduction to Computer Vision
  o CAI 2300C - Introduction to Natural Language
  o GEB 1432 - Applied AI in Business
  o PHI 2680 - AI & Ethics

• [Florida International University's Knight Foundation School of Computing and Information Sciences](#) is incorporating artificial intelligence across all its existing degree programs in Information Technology, Computer Science, Cybersecurity, and Data Science.

• [The University of Miami’s Institute for Data Science & Computing](#) is integrating the use of AI into its vast curriculum. In addition to its established degree programs in Computer Science, Interactive Media, and Data Analysis, UM also provides continuous education programs around AI for both the public and customized programs for organizations.
Conclusion and Next Steps

This AI Report is a starting point and serves to respond to the Miami-Dade Board of County Commissioners Resolution R-659-23 adopted July 6, 2023. In the coming year, ITD plans to complete activities that will include an Organizational Assessment and Study report establishing a Community of AI Practice; the development of a data governance model and documented inventories; rollout of security guidelines and employee AI usage metrics; and recommendations for departmental AI projects, considering the impact on the County workforce. In addition, the County will launch various opportunities for upskilling the workforce leveraging local public academic partners. This work will encompass the first annual report that will be presented to the Board of County Commissioners in the first scheduled Board meeting in January 2025.

The report has been carefully crafted to fulfill its overarching purpose: to provide a robust and transparent framework for the responsible integration and utilization of AI technologies within our County. We understand the transformative potential of AI and the pivotal role it plays in enhancing our services, governance, and overall engagement with our constituents. Our commitment to this transformative journey rests firmly on the pillars of workforce growth, transparency, and accountability.

Looking ahead, AI is becoming increasingly prominent in government operations across the U.S. We are eager to embrace the advantages of AI, but we are also focused on a thoughtful, people-first strategy. The guidelines set the stage for sensible AI use, helping us steer through the complex world of AI while addressing potential challenges. Therefore, this document positions our County to enhance operations, provide better services, and govern more efficiently, all while staying true to our commitment to responsible management and public service. We are dedicated to serving our community with integrity and innovative solutions in this ever-changing AI landscape.
Appendices

Appendix A: References

Below is a list of some popular mainstream Generative AI tools currently available to consumers today with many more launching to consumers daily. These tools retain data and inputs from users to continually improve. Do not share sensitive or protected information with these tools. These tools were used to synthesize large amounts of content into summarized sections in this report.

- Open AI ChatGPT; Google Bard; Microsoft Bing Chat; Anthropic Claude 2

Below are published policies, peer-reviewed articles, and other media used to inform sections of this report. This document was developed using various references, websites, and generative AI tools.

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<thead>
<tr>
<th>Government Sources</th>
<th>Source</th>
<th>Title &amp; Link</th>
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<tr>
<td>City of Boston</td>
<td>City of Boston Interim Guidelines for the Using Generative AI</td>
<td>May 2023</td>
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<tr>
<td>State of Kansas</td>
<td>Kansas Generative Artificial Intelligence Policy</td>
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<td>City of San Jose</td>
<td>San Jose Generative AI Guidelines</td>
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<td>City of Seattle</td>
<td>Use of Generative Artificial Intelligence in City of Seattle</td>
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<td>U.S. GSA</td>
<td>AI Guide for Government</td>
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<td>U.S. White House</td>
<td>FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence</td>
<td>Oct 2023</td>
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<td>National Institute of Standards &amp; Technology</td>
<td>Trustworthy &amp; Responsible AI Resource Center</td>
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<td>Amazon WebServices</td>
<td>Ethical AI</td>
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<td>Evanta</td>
<td>CIO Community Pulse on AI &amp; Your Business</td>
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<td>Gartner</td>
<td>A Comparison of Generative AI Platform Offerings</td>
<td>2023</td>
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<td>Artificial Intelligence Primer for 2023</td>
<td>Feb 2023</td>
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<td>Generative AI: 4 Decisions to Make When Creating a Policy</td>
<td>June 2023</td>
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<td>Executive Pulse: The AI Spotlight Shines on Workforce Improvements</td>
<td>August 2023</td>
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<td>Generative AI and ChatGPT: Adoption and Use</td>
<td>August 2023</td>
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<td>McKinsey</td>
<td>Technology’s generational moment with generative AI: A CIO and CTO guide</td>
<td>July 2023</td>
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<td>The economic potential of generative AI: The next productivity frontier</td>
<td>June 2023</td>
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Administrative Order

Administrative Order No.:

Title: EMPLOYEE USE OF ARTIFICIAL INTELLIGENCE (AI)

Ordered:  Effective:

AUTHORITY: Section 5.02 of the Miami-Dade County Home Rule Amendment and Charter.

SCOPE: This Administrative Order applies to County employees under the purview of the Mayor.

PURPOSE:

The purpose of this Administrative Order (AO) is to guide Miami-Dade County employees in the responsible and ethical use of artificial intelligence (AI), including tools like ChatGPT. The objective is to utilize AI technologies in a manner that maximizes efficiency and security while adhering to the ethical standards and legal requirements specific to our County. The policy outlines key directives to:

1. Comply with Miami-Dade County’s public records policies and retention rules.
2. Ensure transparent use of AI in creating work products relevant to employee responsibilities.
3. Set protocols for handling County data, including maintaining security and confidentiality.

The County’s priority is to ensure the safety of all employees and residents, while maintaining openness, flexibility, and productivity. By setting forth guiding principles, objectives, and actionable strategies, this document establishes a foundation that safeguards County values, ensures fairness, and upholds the highest standards of data privacy, integrity, and security. Through this policy, the administration seeks to navigate the evolving landscape of AI with a human-centric approach, fostering innovation while minimizing risks and challenges associated with security breaches, and other potential unintended consequences.

This AO is subject to modification based on further adjustments to, or the development of, other County policies or procedures on these matters. Failure of any employee to acknowledge receipt of this AO does not prevent its enforcement. Non-compliance with this policy will be addressed per Miami-Dade County HR policies. The responsible use of AI is a shared responsibility among all employees, and accountability will be enforced.

This policy has been provided in advance to the collective bargaining agents for the applicable County employees. This AO is not intended to contradict the express terms of the applicable collective bargaining agreement without written consent from the applicable collective bargaining agent.

More information can be found in the Miami-Dade County Artificial Intelligence Report that is posted at: https://www.miamidade.gov/global/technology/home.page
POLICY:
The County administration recognizes the significant potential of AI in enhancing operational efficiency and service quality. Committed to ethical AI use, County employees are expected to use AI tools and deploy AI solutions to improve public services, promote equity, protect data privacy, and comply to all County ethics, ADA, and Florida public record standards. The Human Resources (HR) and Information Technology (ITD) Departments will provide guidance to Department Leadership and County Department HR Personnel to ensure that County employees receive necessary training, oversight, and safeguards that ensures the responsible integration of AI.

Guidelines:
1. **Training**: Employees utilizing AI will receive training on ethical AI usage, focusing on bias recognition, privacy concerns, and responsible data management. Miami-Dade County's educational partners will offer no-cost AI technology training to enhance employee skills.
2. **Risk Assessment**: Prior to AI implementation in County operations, comprehensive risk assessments will be conducted to identify and mitigate potential issues.
3. **Security**: Regular audits of AI algorithms will be conducted to ensure secure networks and solutions.
4. **Data Privacy**: Strict protocols will govern employee handling of sensitive County data.
5. **Community Engagement**: The County will actively involve residents and stakeholders in discussions about AI deployment, addressing ethical and transparency concerns.

CONFIDENTIALITY AND INFORMATION SECURITY:
Miami-Dade County ITD is tasked with maintaining a robust framework for data security and ethical AI use managing a comprehensive security framework that safeguards government data, networks, and systems. Responsibilities include:
- Overseeing AI system procurement, deployment, and maintenance.
- Managing and maintaining AI systems to ensure their security and reliability.
- Tracking AI projects, employee activities and toolsets across the enterprise.
- Conducting regular audits and assessments to identify potential security vulnerabilities.

Principles:
1. **Data Security**: The County’s Security team and all Department leaders are committed to maintaining the highest standards of data security, ensuring that AI systems do not compromise the confidentiality, integrity, or availability of sensitive County data.
2. **Ethical Use**: The County organization is dedicated to upholding ethical standards in the deployment of AI, which includes fairness, transparency, accountability, and respect for resident privacy.
3. **Compliance**: The County and all its employees will adhere to all relevant laws, regulations, and ethical guidelines governing the use of AI in County government operations.
4. **Access Control**: The County’s Security team will implement robust access controls to ensure proper access to County deployed AI systems and data to authorized personnel only to protect sensitive data.
Information Technology and Customer Protection Guidelines:

1. **Data Governance**: County data will be classified based on its sensitivity, and appropriate security measures will be implemented accordingly.

2. **Vendor Assessment**: County employees and departments implementing vendor supported generative AI solutions must work closely with the ITD to assess the vendor's capabilities, security, and privacy practices before integrating their tools.

3. **Data Encryption**: Sensitive data used or generated by AI systems will be encrypted to protect against unauthorized access.

4. **Responsible, Ethical and ADA Considerations in AI Use**: AI initiatives will undergo proper assessments to ensure that they align with our organization's rules and standards for accessibility.

5. **Phishing and Social Engineering**: Using AI-generated content for communication will be monitored as cybersecurity attackers now use generative AI to create convincing phishing emails or messages. Employee training will include recognizing AI-generated cybersecurity threats.

6. **Data Retention and Disposal**: Data used by AI systems will be retained only as long as necessary by public record rules and disposed of securely when no longer required. ([Section 119.011 (12)](https://www.flsenate.gov/History/Statutes/text/2021-22/12/119011), Florida Statutes)

ROLES AND RESPONSIBILITIES:

The successful and ethical integration of artificial intelligence within the County requires clear delineation of responsibilities among Departments, directors, supervisors, and employees.

**Responsibilities of the Information Technology Department (ITD)**

1. **Strategic Procurement**: ITD is responsible for overseeing the entire process of AI tool procurement, including vendor evaluation, security and risk assessment, technical review, and compliance verification. County departments are required to collaborate with the IT department and adhere to established procedures for acquiring and using AI tools.

2. **Monitoring and Evaluation**: ITD will monitor the performance and usage of AI tools, collecting feedback and data to assess their impact on operational efficiency, service delivery, and outcomes. Regular evaluations will be conducted to identify areas for improvement and optimization of AI applications, informing future procurement decisions and governance enhancements.

3. **Documentation and Reporting**: ITD will maintain comprehensive documentation of all AI-related procurement activities, including vendor evaluations, risk assessments, testing results, compliance records, and deployment reports. Regular reports and updates will be provided to senior management and oversight bodies to communicate the status, progress, and outcomes of AI initiatives, ensuring transparency and accountability.
Responsibilities of Directors and Senior Executive Staff:

1. **Strategic Oversight**: Define AI strategic direction, aligning with the County’s mission and strategic plan (*Miami-Dade County Strategic Plan*).
2. **Resource Allocation**: Ensure adequate resources for AI projects within their Department.
3. **Ethical Leadership**: Promote a culture of innovation and responsible AI use.

Responsibilities of Supervisors:

1. **Project Management**: Oversee AI project implementation and documentation.
2. **Training and Development**: Ensure team training in AI technologies.
3. **Ethical Guidance**: Promote adherence to ethical AI principles and County policies.
4. **Compliance Reporting**: Report any ethical or policy violations.

Responsibilities of Employees:

1. **Responsible Use**: Employees are responsible for using AI technologies in a manner that aligns with their job responsibilities and daily work.
   a) Employees are to exercise good judgment and ethical considerations when utilizing AI tools as outlined in the County Administrative Order and ethics training.
   b) Employees must not use sensitive or confidential data as input for external and consumer-facing generative AI models, especially if the data includes personally identifiable information (PII).
   c) Employees should be cautious when sharing generated content that might inadvertently reveal sensitive information.
2. **Content Accuracy**: Employees are responsible for verifying the accuracy and revising of AI-generated information before making decisions based on it for County use.
3. **Ongoing Training**: Employees are responsible for participating in AI training programs provided by Miami-Dade County to ensure new skills are developed and to maintain competence and stay informed about ethical AI use.
4. **Public Records and Retention**: Employees are responsible for adhering to public records law and are open to public inspection. As such, employees must retain any content generated through AI for their County work.
5. **Compliance**: Employees are required to comply with County policies, Administrative Orders, and ethical rules. Non-compliance may result in disciplinary actions.

CONTINUOUS IMPROVEMENT:

This Administrative Order will evolve with the advancement of AI technologies and changing ethical considerations. Regular assessments and updates will be conducted to ensure alignment with emerging
technical standards and best practices on an annual basis by the Information Technology Department and reported to the Board of County Commissioners as outlined in Resolution R-659-23.

The County approach to innovation and exploration of new technologies requires cross-departmental participation and support. The IT Department is responsible for AI tracking, implementation activities and procurement. County Departments and Agencies are recommended to examine current processes and identify use cases where AI can improve their business and services.

Continuous improvement of County AI programs involves:

1. **Multidisciplinary Teams**: ITD will develop a Community of Practice AI group that will involve collaboration among AI experts, subject matter specialists, policymakers, community partners, and stakeholders.

2. **Beta Testing**: The County Administration advocates for small-scale test projects before full-scale deployment.

3. **Human-AI Synergy**: The County will focus the integration of AI technologies around enhancing employee work. This will enable employees to improve the quality and efficiency of County services.

Updates to the County AI Report as well as resources for employees will be provided online at the IT Department website ([https://www.miamidade.gov/global/technology/home.page](https://www.miamidade.gov/global/technology/home.page)).

Approved by the County Attorney as to form and legal sufficiency _____