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REPORT

TO: The Senate Committee on Government Operations, The House Committee on Government Operations, The House Committee on Commerce and Economic Development, and Denise Reilly-Hughes, Secretary, Agency of Digital Services (ADS)
FROM: The Vermont Council on Artificial Intelligence and the ADS Division of Artificial Intelligence.
DATE: January 25, 2024
SUBJECT: Automated Decision System/Artificial Intelligence (AI) Use & Data Management Policy Recommendations

Overview: This document provides a framework for various topics related to the implementation of Automated Decision Systems, including Artificial Intelligence implementations. Apart from the section on Workforce Development, which is broadly applicable to Vermont businesses and educational institutions, these recommendations are intended to be applied within the Executive Branch of the State of Vermont, and are recommended as generally applicable to the other branches of State Government.

Definitions
All terms used below follow definitions laid out in 3 V.S.A. § 3305 and the Vermont AI Code of Ethics. Key terms and synonyms are listed here for clarity.

“Automated decision system” means any algorithm, including one incorporating machine learning or other artificial intelligence techniques, that uses data-based analytics to make or support government decisions, judgments, or conclusions. Throughout this document “system” and “AI” are used as synonyms.

“Automated final decision system” means an automated decision system that makes final decisions, judgments, or conclusions without human intervention.

“Automated support decision system” means an automated decision system that provides information to inform the final decision, judgment, or conclusion of a human decision maker. Throughout this document “recommendation system” is used as a synonym.
“Direct Impact Artificial Intelligence System” means an automated decision system that makes decisions directly impacting the provision of services or the freedoms of Vermonters.

I. Requirements for Automated Decision Systems

All deployments of automated decision systems should be approved by the ADS Division of Artificial Intelligence, subject to the AI Code of Ethics and additional guidance of the AI Council.

A. General Requirements

The following requirements should be applicable to automated decision systems, whether they are Final Decision Systems or Support Decision Systems.

1. Auditability

The actions taken by any automated decision system should be audited on a routine basis to confirm decision quality, impact, and outcomes are meeting expectations. The audit must also include subpopulation analysis to confirm there are no negative impacts on any protected group. Automated decision systems must provide this audit capability and the audit must be performed on a regular basis. The Agency of Digital Services should work with the Office of Racial Equity to develop a standard template for these assessments.

2. Testing and Monitoring Procedure

Testing protocols should be required for each automated decision system to reduce the risk of unexpected outcomes, especially in sensitive areas. There are multiple methods for deploying AI systems, each with unique requirements for testing.

- Online Learning Systems continuously evolve based on inputs and their environment.
- Batch Learning Systems are trained and released through a controlled release process.
- Hybrid Learning Systems employ some combination of these methods, often with major releases based on new training data and continual fine tuning based on conditions.

For Online and Hybrid systems, there is additional risk that the system could evolve in unexpected ways. These systems require regular smoke testing to ensure the system continues to behave as designed in sensitive cases and that performance is generally stable or improves over time.

A Two-pronged Approach to Testing. For all systems, prior to implementation and at regular points in the system lifecycle a Comprehensive Test Suite should be run. This test suite will include both Technical Testing for correctness and accuracy and an Impact Assessment to confirm the system meets the intended outcome endpoints.

Technical Testing. The Technical Testing phase of the Comprehensive Test Suite should ensure that the system produces expected outputs for general and known edge cases and previously identified failure modes. To the extent possible, these tests should be automated so that they can be repeated frequently. Technical testing should include test suites to ensure that the output is free from bias or
disparate impacts when decisions are made about different populations. As industry standard datasets and bias test protocols become available, these should be adopted and included in test suites.

Impact Assessment. The Impact Assessment phase of the Comprehensive Test Suite should review the outputs, system design, process design, and desired outcomes of implementing the new system. The impact assessment will include a review of metrics used to determine whether the outcomes are being met, and take a community-focused approach to ensure that systems are implemented in ways that benefit Vermonters and are implemented to monitor for and avoid harms. The output of this assessment will create an implementation-specific checklist for use in routine audits as described in the Auditability section above.

Testing Frequency. Testing should occur at major releases for Batch and Hybrid Learning Systems, and at annual or more frequent intervals for Online Learning Systems. For systems that are not operated continuously, e.g. a system for year-end reporting, testing should happen prior to each operational cycle, or once per year, whichever is less frequent.

3. Special Considerations for Public Facing Systems

Public-facing systems are automated decision systems that are intended to be used directly by members of the public or individuals who will not receive specialized training in the use of the system. These systems have some additional requirements. This section refers to public facing systems, but the guidance is also applicable to systems designed for use without specialized training. These requirements are not intended to cover systems used by a trained operator to process data taken in from the public.

Implementation Considerations. Public-facing AI systems should be applied to use cases where they can serve as an optional enhancement to the task someone is doing. The task would still be possible without the assistance of the AI tool. Additionally, such systems should only be applied in cases where the impact of an incorrect answer would be low.

System Design Considerations. Systems intended for public use must be easy to use, with user experience designed so that the systems work as expected for users with no training and can be used successfully without reading documentation. A “Report an Issue” function should be built into the system to ensure issues are quickly escalated and resolved.

System Outputs. The outputs of the system should be clearly labelled as being produced by or with the assistance of AI, following the guidance for Notice of Use, Explainability, and Citation as described in later sections. The outputs also must be designed so that their accuracy and applicability can be easily confirmed. Outputs should be logged and monitored continuously and reviewed frequently to ensure they are of the expected quality. The AI Council recommends that a monthly cadence is applicable in most cases.
4. Changes or Expansions in Systems

When an AI system is put in place, it is expected that it will be reused or the process it supports will evolve. The following are some special considerations for expanding or evolving existing implementations, in general they are intended to be less rigorous than for new systems.

1. The groups using the system expand. Example: A system is built for Agency of Human Services staff and is subsequently made available to the Designated Agencies. In such cases, consideration must be given to the following points and these should be included in an updated Impact Assessment.

   • Testing. Are there changes to the type or quality of input expected to the system? Has the testing protocol been updated to account for that?
   • Training. Do the new users need additional training (e.g., in domain-specific knowledge) that the original group possessed? Has the training been completed?
   • Pilot Phase. The new users need to run a closely-monitored pilot to ensure the inputs and outputs are of the expected quality.
   • Additional Risk. How does the new group of users expand the risks to the system, process, or outcomes? Consider whether the new group needs the same output at the same level of detail – does the output still meet the requirements for a minimum level of privilege and need to know?
   • Fit for purpose. Validate that the purpose isn’t expanding or evolving. If so, refer to the next section.
   • Consent. Training data may have been collected under a consent vehicle that is no longer applicable to the new users.

2. The purpose of the system expands or a system is repurposed. Example: a recommendation system developed for connecting Vermonters to AHS programs is cloned and repurposed to help business owners connect to community resources. In addition to the points above, consider the following:

   • Community Impacts. Are there new impacts to the community? Ensure that the new scope is thoroughly reviewed and the expected outcomes are captured.
   • Fit for purpose. Do the system design constraints allow the system to perform this function?
     o Is the data used to train the original AI model relevant to the new purposes.
     o Should the new purpose have access to the data in the model the same way as the original?
     o Would the impact an attack on the system become worse if the system has access/was trained on two data sources?

B. Automated Final Decision Systems

Automated Final Decision Systems may be used in situations where a fully automated decision and action process demonstrates a benefit to safety, security, or outcomes. If the only outcome to be improved is efficiency, the system will need to demonstrate that any potential negative impacts are negligible.

Some examples of potentially acceptable cases to use automated final decision systems:
- Cybersecurity applications, such as forcing a password reset when a user account is flagged.
- Automatic approval of benefits applications meeting certain criteria

Automated Final Decision Systems must have the following characteristics:
- Reversibility. Actions taken by Automated Final Decision Systems must be non-destructive and quickly reversible.
- Legality. Actions taken by Automated Final Decision Systems must be constrained to legal actions in compliance with established law and policy. This means that AI outputs will generally be constrained based on certain hard rules.
- Transience. Any impact of an action resulting from an incorrect decision taken by an Automated Final Decision System must have a small impact and that impact must be transient.

Systems that cannot meet those criteria cannot have automated final decisions but may make use of automated support decision systems.

**C. Automated Support Decision Systems**

Automated Support Decision Systems can be used in a broad range of applications. Systems must be implemented in a way that recommendations provided to users are subject to a meaningful level of review by a skilled operator. Decisions cannot be “rubber stamped” or accepted *en masse*; an appropriate level of friction needs to be designed into the system to ensure the recommendations are treated with adequate skepticism based on the system’s performance in similar cases.

**D. Systems Out of Compliance**

As documented by the National Institute of Standards and Technology (NIST) and other policy-making bodies, AI systems can behave problematically in ways other than biased outputs, and those issues can stem not only from the AI itself but also from its implementation and usage. The Council recommends a suite of potential remediation measures depending on the nature and impact of the issue identified. The most appropriate type of remediation will vary depending on the complexity of the process the AI supports, the impact of the issue, and the frequency with which the issue occurs.

1. **Process changes upstream of the AI System**

Some issues can be remediated by injecting controls into the process the AI system supports before the steps performed by the AI system. These could include adjustments to data input into the system or diversion of cases with certain characteristics to a different system.

Example: If an AI is showing unexpected behavior based on counties with small populations, set county to “Rest of Vermont” for cases where the county is not Chittenden.

Example: If an AI is showing unexpected behavior on cases for families with more than 4 children, divert those cases to a manual review system.
2. Process changes downstream of the AI System

Some issues can be remediated by adding controls downstream of the AI system. Generally, issues that appear infrequently are better suited to downstream process changes. Depending on the nature of the impact, automated review to detect known problematic patterns could be sufficient. In other cases, selecting cases known to be at higher risk of issues for additional employee review could be a good option. Other times creating an easy appeal process might be the most appropriate solution. In some cases, a system could be converted from a decision-making system to a recommendation system.

Example: If an AI is showing infrequent unexpected behavior on cases for families with more than 4 children, have an employee review those determinations before providing the information to the case worker.

Example: If an AI is showing infrequent unexpected behavior on cases for families with more than 4 children, have a quick appeal process for the caseworker to flag cases where the reason for the determination does not align with the case history.

3. Changes to the AI System

In some cases, the AI may need to be retrained or fine-tuned. This is especially likely if the input or process has evolved from the original design. In some cases, prompt engineering or adding some training examples may be sufficient, in other cases the model may need more extensive redesign.

In cases where continued use of the AI system would have significant adverse effects or erode trust in Government institutions, the most appropriate course may be to decommission the AI system completely.

E. Procurement Standards

The Agency of Digital Services should work with the Agency of Administration to expand or create new terms and requirements for contracts using AI to ensure compliance with all State of Vermont standards and alignment with State objectives. ADS should also develop standard templates for these and scoring criteria using these requirements. The AI Council has several recommendations for required deliverables for AI systems that should be included in procurement bid responses.

1. A Description of the System

This deliverable should overview the system itself, including the following:

- The elements required in the AI Inventory defined in 3 V.S.A. § 3305
- Intended context for the capabilities of the system, including assumptions about the inputs and how the outputs should be used, and any safeguards in place to ensure that the inputs are appropriate and the outputs are fair and reasonable
- Intended level of human review and how this is implemented
- Data sources used in training, either specific sources or if proprietary a description of the sources including how they were acquired
- A description of the system suitable for use under the Notice of AI Usage section below
2. Data Use Protocol
The data use protocol should include the data lifecycle, security protocols, and how it is used. Specifically at a minimum this should include a plain language description, understandable to a layman, of what data is used to make the decision. Additionally, it should describe how State data is used, whether it is used to train AI models for others, and limit the use of state data to those necessary to perform the contact.

This protocol does not currently make recommendations about appropriate policies, but the AI Council recommends gathering this information to help shape future policy recommendations.

The AI Council is explicitly not making recommendations on any of the following, but will review them in future recommendations:

- Data Privacy and AI broadly
- Differential Privacy, and other privacy preservation techniques in the context of AI
- AI model and system security techniques
- The Right to be Forgotten, and techniques for implementing this in AI systems

3. Release, Testing, and Monitoring Plan
The Release, Testing, and Monitoring Plan supports the Testing and Monitoring Procedure section above, and should include the following:

- A description of how updates to the model or system are distributed, on what frequency, and the notification process;
- A description of testing already performed to ensure the system operates as intended. Include a description of bias testing performed;
- A description of what testing will be performed with each release, and the State’s responsibility in testing the systems;
- A description of what monitoring is in place, how and when it is reviewed by the implementor and/or State, how it is exposed to the State for review; and
- A Defect Reporting Protocol:
  - How the Vendor and State will be communicate when tests fail
  - How Security events are reported to the state
  - How the State will be notified of bad behaviors in the AI system, including those identified in other entities using the same or similar models.

4. Certification of Compliance with these Guidelines and the Vermont AI Code of Ethics
Implementors of systems must provide a certification of their compliance with all State and Federal law, and the Code of Ethics.
II. Notice of AI Usage

Direct Impact Artificial Intelligence Systems, defined in the Vermont AI Code of Ethics as “systems that make decisions directly impacting the provision of services or the freedoms of Vermonters” should provide a clear notice including an explanation of the reason for the decision. Note that most Direct Impact Artificial Intelligence Systems are required to function as a recommendation system as they may recommend negative or adverse outcomes for Vermonters, which require human review as described above.

The explanation of how an automated decision or recommendation was selected will be provided in terms understandable to a layperson, following this standard format, and provided adjacent to the decision (either on the same webpage or in the same communication).

- Decision
- Reason. Summary of the reason the decision was made.
- What information was used in making the decision. Include all inputs, including both the data provided directly by the user and any data assembled from other sources. This general language should be provided as a part of the Data Use Protocol, above.
- How we made the decision. Summarize of the decision-making approach, including, if necessary, a link to more comprehensive documentation. The summary should be explicit about how the process was applied in this case. Include the role of human oversight in the decision-making process. Optionally include a link to a site that provides more information about the process and technology.
- Appeal process. Directions on how to appeal the decision. Appeal processes should be designed to be as accessible as possible, including support for other languages.
- The vendor’s name and system name may be included on the communication or could be reported in a linked website.

In some cases, to preserve the integrity of the process, the detailed explanation may be omitted, e.g. if the decision involved an investigation of fraud.
A hypothetical example of how the Notice of AI Usage should be implemented is included below. Example: a hypothetical program that offers reduced cost driver’s license renewal based on income eligibility and driving a green car.

### Notice of Denial for your Application for Reduced Cost License

Your application was denied because your 1997 Ford Windstar does not meet the program criteria. Your license renewal has been processed at the full cost.

For details on how to appeal this decision, see below. If your appeal is completed you will be refunded the difference between the full price license renewal and the reduced price renewal.

### Explanation of Automated Decision on Your Eligibility for Reduced Cost License Program

<table>
<thead>
<tr>
<th>Decision</th>
<th>Your application for this program was <strong>Denied</strong>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason</td>
<td>Your vehicle does not meet the program criteria.</td>
</tr>
<tr>
<td>What information we used in making this decision</td>
<td>Your current and previous applications for a license, and details about your vehicle. You can learn more about the process at <a href="https://vermont.gov/reduced-cost-license/program-guide">https://vermont.gov/reduced-cost-license/program-guide</a></td>
</tr>
<tr>
<td>How we made the decision</td>
<td>An automated process reviewed your vehicle, a 1997 Ford Windstar, and found that the vehicle did not meet the criteria of getting at least 45 mpg. A staff person reviewed the results and confirmed that your vehicle is ineligible.</td>
</tr>
<tr>
<td>Appeal process</td>
<td>If the information above is incorrect or you wish to appeal for any other reason, please do so online at <a href="https://vermont.gov/reduced-cost-license/appeals">https://vermont.gov/reduced-cost-license/appeals</a> or call your local DMV branch.</td>
</tr>
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### III. Workforce Development

The AI Council recognizes that the use of Artificial Intelligence represents a significant potential change for Vermont Employers, Vermonters, and State Employees. To prepare the workforce to effectively navigate the change and reduce the risk associated with it, the AI Council recommends work in the following areas.

Numerous studies of the impact of AI and automation on various roles and industries have been produced. The AI Council has identified four trends we expect to have pervasive impact on the workforce.
1. Increased human/machine collaboration
2. A general shift in human work toward reacting to complex situations or work that requires flexibility, creativity, and critical thinking
3. Access to broader information and specialized expertise for humans, increasing their ability, creativity, and efficiency
4. A decrease in the number of rote decisions made by humans, allowing them to focus on non-standard decisions

**A. General AI Training**

**1. Base level expectations for AI-ready workforce.**

Over the next five years, Artificial Intelligence will drive significant evolution in work in many fields. Vermont’s workforce needs to be prepared for effective human/machine collaboration, and the evolution of tasks to a shared workload model. This is already in evidence today. Self-checkouts at grocery stores use AI to reduce the need for human cashiers, shifting that role toward loss prevention and support of shoppers who need extra assistance. Similar evolution will take place across industries, with machines taking on a larger share of tasks and enabling additional self-service capabilities, shifting humans into work that requires the ability to respond to complex, changing circumstances.

Training in effective human/machine collaboration should focus on the following areas:

- Expectations of employees in the context of human/machine collaboration, such as responsibility for outputs, customer service outcomes, etc. (Responsibility)
- Identifying and defining the roles of the human and the machine (Agency)
- Developing critical thinking and problem solving to complement the artificial intelligence systems including identifying limitations and correcting malfunctions or issues in the output of the machine, especially areas of systemic weakness
- Understanding the standard control patterns for AI-enabled machines used in their field
- Privacy and Security considerations of AI use

**2. Incorporation of AI into higher education curricula**

In the context of postsecondary education, AI training should focus on applying artificial intelligence within general domains and their specific field. The pervasive use of AI will cause a dramatic increase in the need for data-related skillsets in applied fields beyond information technology.

Every student should have experience with AI productivity tools such as generative AI, and understand how and when to cite their use. Application of AI systems require understanding the limitations of the tool and how to ensure delivery of a quality work product within the constraints of the work set before them. AI should be embraced throughout the education process, which will require adjustments in student assessment practices.

The topics covered in general workforce readiness should be explored in detail for all students. This should happen both at a general level in the undergraduate program by incorporating the use of AI tools (such as generative AI) into assignments early on, and as students specialize into their fields and
learn to use tools specific to their domain. Understanding of how these systems are constructed along with strengths and weaknesses should be understood by all students. Appropriate use and application should be included as tools are introduced. Students should also be provided with conceptual guidance on topics such as Ethics of Artificial Intelligence within their field. An interdisciplinary approach that includes introduction of tools and techniques for discovery, analysis, and presentation will prepare the students for the changing nature of work.

AI is being used in the creative process as well as technical areas, and students should develop a coherent and authentic expression with the assistance of technology.

3. Incorporation of AI into K-12 Education

The federal Department of Education has released guidance on the use of AI within the education system. This helpful resource is available online: https://tech.ed.gov/ai/. To coordinate with Vermont’s workforce goals, the following considerations are relevant for K-12 programs.

At all levels, educators can make use of AI in tasks such as the development of lesson plans, assignments tailored to the interests and capabilities of their students, and creating variations on successful activities.

a) Incorporation of AI into high school curricula

At the high school level, students should be exposed to all the topics in the section “Base level expectations for AI-ready workforce” above and develop applied skills in working collaboratively with AI tools. Students at this level should understand both capabilities and limitations of current generation AI tools, through:

- Understanding of the basic concepts of the elements of artificial intelligence systems focusing on hands-on or experiential education across the curriculum.
- Introduction to ethical considerations of appropriate use and citing work.
- Students should be introduced to the changing nature of work supported by these systems and the future of human machine collaboration.

Generative AI is to language what the calculator is for mathematics and should be handled similarly. While learning arithmetic, calculators can be unhelpful and prevent the full understanding of core concepts. Once students move into algebra and higher math, calculators have become a standard tool for accelerating rote work and focusing the student on the logic and principles behind the applied work they are doing. Generative AI should be treated similarly. Each student should experience some assignments designed to require the use of AI tools. This will require evolution in student assessment practices.

b) Incorporation of AI into middle school curricula

At the middle school level students can begin to develop independence using AI tools. They will already be developing a mental model of how AI works from interacting with AI-powered characters through popular games. AI education can build on and supplement these experiences in relevant ways.
Middle school students should also begin building skills in digital citizenship and online norms, including interaction with AI tools and identifying the use of AI content in online platforms.

c) **Incorporation of AI into elementary school curricula**

In early stages of education, AI-related skills significantly overlap with general technical literacy. AI specific skills should focus on using AI in group tasks like image creation, brainstorming, and problem solving.

**B. Creation and Expansion of Roles to Support Use of the New Technology**

AI usage by companies requires the expansion of data and user experience roles, including:

- AI Training and Engineering
- AI Oversight and Monitoring
- Security and Privacy Protection
- Data Management and Stewardship
- Process Engineering and Improvement
- User Experience Design
- Community Impact Assessment

Many of these roles will be required by both private and public entities, including the State of Vermont. The State of Vermont should work to develop these roles for State-operated AI systems and coordinate with higher education, training, and reskilling programs to develop those roles.

**C. Upskilling Roles that will be Empowered by AI**

The State of Vermont envisions responsible AI being used as a power tool for information workers. Many roles will be made more effective or efficient through the use of AI. Workers should be trained both in the use of standard AI tool patterns (for example, the use of prompts in chat-based interfaces), and in the use of AI-powered tools specific to certain job duties. All AI implementations should incorporate user training in their roll out plans and ensure that operators are clear on the capabilities and limitations of the system.

**D. Refocusing Roles that will Shrink or Change due to AI**

While many roles will see job duty and focus shift due to the adoption of AI, some sectors and roles will be disproportionately impacted in reduced need for workers in some roles. This is already being experienced in roles like that of medical transcriptionist – stronger speech to text and summarization capabilities have largely replaced that role.

For roles that can be largely automated by AI tools, there is generally a segment of the work that continues to rely on a human. This may result in a reduced number of people required to accomplish the same amount of work, a change in the required capabilities, and a shift in the focus of the role. In some cases, employees can specialize in the parts of the role where a human is more effective than a machine, for example, where human interaction and empathy is valued above efficiency. Employees
can often be shifted to focus on adjacent roles where their domain and process knowledge remains relevant as duties and tasks change. In all cases, as roles are disrupted or redesigned, focus should be placed on ensuring that human work remains good work – avoiding scenarios where the people executing a task lose autonomy and the quality of the work diminishes.

**E. Industry and Employer Preparedness**

Industries and employers can take concrete steps to position themselves and their employees effectively for the next several years of AI-powered disruption:

- Develop new roles to ensure AI can be used effectively while maintaining trust and great user experiences. User experience-focused roles will be critical to ensuring that the impact of AI rollout is for the good of both employees and customers. Experience and Process Designers will need to ensure that human jobs are good jobs to retain employees and that AI-powered delivery provides customers with better experiences. Other expanded and newly-created AI roles that should be considered are listed above. The need for each will vary depending on how the industry or employer wants to approach AI.

- Prepare the workforce. Employers can prepare staff to excel in new AI-powered roles through a training program that covers the topics listed in “Base level expectations for AI-ready workforce.” above. Additionally, employers should consider what roles are currently difficult to hire or retain workers and consider how AI can improve those roles by reducing the qualifications required, domain knowledge requirements, or making candidates more successful or fulfilled in their role through automation or augmentation.

- Implement AI Standards. Industries and individual companies should think about their values and brand to ensure that AI is used in ways that further their mission and culture. Much like the State of Vermont did in drafting its Code of Ethics, industries and employers should ensure that foundational work is done to ensure that a thoughtful approach leads technology, rather than technology solutions driving the approach. Rather than slowing the adoption of AI applications, foundational work can accelerate the safe, effective application of AI tools that will be most impactful. Standards, norms, and guidelines should seek to achieve balance between medium and long term good for society and short term improvement in key metrics.

**IV. Acceptable Use of Generative AI for State Employees**

Throughout 2023, ADS and the AI Council collaborated to develop and issue regular updates to guidance on the use of Generative AI. The guidance currently reads as follows. The latest version can always be found at [https://digitalservices.vermont.gov/ai](https://digitalservices.vermont.gov/ai).

Vermont State employees may use Generative AI for official duties subject to certain limitations described below. ADS will update the guidelines as technologies evolve, and Departments or Agencies may issue more restrictive guidelines in their discretion.

**A. Generative AI Capabilities**

Generative AI tools offer assistance in research, generating text and visual content, creating and editing documents, correspondence, and a host of other applications in response to queries input by the user. Many currently available Generative AI tools use a chat interface.
These tools can be powerful in a document/correspondence heavy organization like ours. People around the State are using Generative AI tools for drafting policy and correspondence, summarizing documents, generating and debugging code, creating bespoke stock imagery, and editing written materials. Generative AI tools change the content generation process to focus the user on coming up with ideas and editing content, rather than the mechanics of writing. This can result in better quality content, often with lower overall effort.

1. **Generative AI Usage Guidelines:** Employees must use Generative AI tools like ChatGPT, Bard, Bing Chat, and LLaMA in accordance with State Personnel Policy 11.7, the AI Code of Ethics, and these guidelines.

2. Employees must get supervisory approval before using Generative AI for official state business. Supervisors may consult with the Director of AI or their ADS IT Lead to help them decide whether a use is acceptable.

3. Employees may not input non-public information into publicly available Generative AI tools. All information put into public Generative AI tools becomes public. The following is a non-exhaustive list of information that may not be used:
   a. Confidential or privileged information or communications
   b. Personally identifying information (PII)
   c. Protected health information (PHI)
   d. Code containing passwords/secrets
   e. Information that has the potential to erode trust in Vermont’s institutions

4. This policy only enables employees to use Generative AI tools that are available free of charge. Employees may not pay for a Generative AI service or sign up for services requiring payment. Any purchase of such products must go through the mandated state procurement processes.

5. Employees must ensure the accuracy of the information obtained from Generative AI tools. Generative AI tools may generate content that is incorrect or fictitious. This content may seem reasonable and not be readily distinguishable from factual information. Employees using Generative AI must review all information obtained from the Generative AI for accuracy, veracity, and completeness, as with any other source of information.

6. Employees using Generative AI tools are responsible for their work product, regardless of what portion of it is produced by the Generative AI, and must be willing to sign their name to it. Generative AI tools have demonstrated biases which can negatively impact groups or individuals and are not in keeping with Vermont’s values. The user must review all content for accuracy, completeness, and alignment with Vermont’s values. It is not acceptable to blame any deficiencies on the AI.

7. Employees using a Generative AI tool for official state business must log in and create an account using their state email address only. Official business may not be conducted using an account established with a personal email address.

8. Do not use Generative AI tools in a way that could cause reputational harm to the state if it were known.
9. While it is acceptable to use Generative AI tools to perform official job duties, it is not acceptable to rely on them to perform those duties. If there is an opportunity to make Generative AI a part of a standard work process ADS and the AI Director will assist with procuring and implementing a robust AI-powered solution. Employees should not develop reliance on free Generative AI tools to accomplish their official duties, as they have significant down times. Treat it as an optional enhancement.

10. Employees may not use Generative AI tools in any way that infringes on the intellectual property rights of others.

B. Acceptable use of Generative AI; Citation

The following table is intended to help employees identify when they need to cite generative AI and what depth of use is acceptable. If there are questions about where a particular use case falls, supervisors and employees can review with their IT Lead or the AI Director. To maintain trust in state government and meet the requirements of transparency set forth in the Code of Ethics, it is important to appropriately cite the use of AI where required below.

Standard Citation Format:
This content was [drafted, edited] with the assistance of a generative artificial intelligence, [Bard, ChatGPT, LLaMA]. The content has been reviewed and verified to be accurate and complete, and represents the intent of [office, department, the State, or a person's name].
Key for the table below:

- **✓** No citation needed, use case needs approval by supervisor.
- **cite** Use one of the citation templates below, use case needs approval by supervisor.
- **✗** Use is not acceptable

Table 1. Acceptable Use and Citation Guidelines for use of Generative AI.

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<thead>
<tr>
<th>Breadth of Distribution</th>
<th>Proofreading, Grammar</th>
<th>Brainstorming, First Draft, &lt;25% AI</th>
<th>Collaborative Writing, About 50% AI</th>
<th>Human Edited, &gt;75% AI</th>
<th>100% AI Content</th>
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V. Automated Translations

The industry standard approach to Automated Translations is through Artificial Intelligence. These translations can offer faster response in emergencies and reduce the cost of translations, however at this time the Council finds they are not an adequate substitute for a professional translator. The Council recommends the following approach to translation:

Public content and template communications should be translated using automated translation tools recommended by ADS. These should then be reviewed by a professional translator for accuracy. Once the review is complete, the following message should be provided next to the translation.

This content was translated with the assistance of a generative artificial intelligence tool, [tool name]. The content has been reviewed and verified to be accurate and complete, and represents the intent of [office, department, the State, or a person's name].

During emergencies content may be created quickly to support life and safety response. In this case, messages may be disseminated without prior translator review with the following warning. A translator should review the content as soon as possible. We recommend establishing the expectation that review will occur within 24 hours, at which time the accompanying message can be changed to the one above.

This content was translated with the assistance of a generative artificial intelligence [tool name]. The content has NOT YET been reviewed and verified but will be as soon as possible. This notice will be updated once the review is complete. For any questions about this content or to report confusing or conflicting text, please contact [office-email@vermont.gov].