

State of California Supporting a GenAl-ready State Workforce

July 2025

Executive summary

Governor Newsom's Executive Order N-12-23 emphasizes the need for responsible implementation of Generative Artificial Intelligence (GenAI) throughout state government and ongoing support to create a GenAI-ready workforce. State entities and their respective leadership will ultimately be responsible for evaluating the outcomes of the GenAI efforts they implement as well as engaging in strategies to introduce GenAI solutions to their teams and both support and reinforce their successful use.

The effective adoption of GenAl solutions requires this evaluation to be robust and to appropriately evaluate the utility of the tool when measured against program objectives and known business needs. It also needs to maintain necessary safeguards to ensure privacy, security, human decision-making oversight by the state workforce, and robust testing for cybersecurity, bias identification and mitigation, and output accuracy. As the state workforce will be directly involved in the use of GenAl solutions as they are deployed, robust communication, change management, and process improvement, as well as competency and skill development are integral to any successful effort.

This document addresses the approach that the Government Operations Agency (GovOps), the Labor and Workforce Development Agency (LWDA), the California Department of Human Resources (CalHR), and the Office of Data and Innovation (ODI) took to 1) build upon the <u>Building a GenAl-Ready State Workforce Report</u> published in July 2024, 2) develop a set of criteria for departments to use to evaluate their GenAl efforts that build on the foundation set by <u>the State of California: Benefits and Risks of Generative Artificial Intelligence Report</u> published in November 2023, the <u>State of California GenAl Guidelines for Public Sector, Procurement, Uses and Training</u> initially published in March 2024, with updated policies and guidelines released in February 2025, and 3) provide recommended strategies to set the existing state workforce up for success in working with GenAl solutions.

Rather than introduce new concepts to departments, this document consistently strives to connect criteria for assessing GenAl outcomes to other structures already embedded in state civil service including strategic planning, workforce planning, and succession management. It also outlines recommended approaches for the continued development of a skilled, innovative, resilient, and responsive state workforce anchored in well-established talent development and organizational development principles. Recommendations are presented in a framework of four key systems within the organization: Strategic Planning & Alignment, Talent Management, Performance Culture, and Evaluation.

Approach

GovOps, LWDA, CalHR, and ODI collaborated to determine the most effective way to support departments in assessing the effectiveness of their GenAl efforts as well as to ensure the state workforce continues to be well-positioned to adapt to changing technological advancements. The criteria were selected for their applicability to all departments and regardless of the scale of the GenAl effort. In parallel efforts to research suggested strategies to accompany each criterion, as well as guidelines to support the state workforce to use GenAl solutions and be responsive to ongoing technological advancements, what became clear was that there was an almost GovOps/LWDA/CalHR/ODI Page 2 of 12

complete overlap. Therefore, those sections are combined in this report for simplicity, and to reinforce that successfully meeting the criteria will additionally result in a well-situated state workforce.

To ensure the state continues to be well-positioned to safely and responsibly leverage GenAl, the team also updated research on what new roles may emerge or how existing roles may adjust due to increased incorporation of GenAl in both the public and private sectors. These roles will continue to provide a workforce development roadmap of associated knowledge and skill sets that align with the current classification plan and CalHR's Core Competency model.

Much like for the development of earlier deliverables related to the GenAl Executive Order, GovOps, LWDA, CalHR, and ODI will maintain an iterative approach to the criteria and guidelines, ensuring that departments have access to cutting-edge guidance and support, and have an opportunity to provide ongoing feedback regarding the use of the solutions.

Outcomes of GenAl for the Workforce

In partnership with CalHR and GovOps, ODI researched existing and emerging trends in building a GenAl-ready state workforce.

Top roles for GenAl

As part of a previous deliverable in response to Governor Newsom's Executive Order N-12-23, <u>Building a GenAl-Ready Workforce</u>, ODI conducted a two-month research project to study the prevalence of certain role types in private industry and post-secondary internships. Upon completion of the initial research, ODI mapped the knowledge and skills for each position across entry-level, mid-career, and senior levels. This was framed as emerging knowledge and skills, refined knowledge and skills, and mastery of knowledge and skills. A matrix was developed for each role.

- **Emerging knowledge** and skills are gained by relevant training or work experience in an entry-level role.
- **Refined knowledge** and skills are built by working as an independent practitioner with a specific GenAl use case or tool.
- **Mastery knowledge** and skills build on refined knowledge and skills with additional education, scale of product or program, leadership experience, or work experience.

New findings

After publishing the original research for top roles for GenAl product development and management, ODI has two additional research findings as of the publication of this report:

- ODI is supporting the GenAl Proof of Concept (POC) process in California. This work has
 highlighted the need for dedicated, permanent Product Teams for GenAl use cases, led by a
 GenAl Program Lead and a GenAl User Research Lead. In early research work, the user
 research category for top roles was embedded under the Program Lead, but its importance
 to the workforce and efficacy of GenAl indicates it should stand alone in the top roles matrix.
 The POC workstream has validated this.
- Research has also highlighted the need for upskilling and expertise in trust and safety around GenAl. While trust and safety fall within the scope of the previously identified Technical and

Security Lead role, successfully ensuring GenAl technology is trustworthy is the responsibility of everyone working with GenAl. In the public sector, GenAl-enabled tools should provide accurate information to end users when they need it. This builds confidence and trust in the delivery of services.

a. CalHR offers training on GenAl that addresses trust and safety. All employees would benefit from taking the <u>Responsible Al for Public Professionals</u> general workforce GenAl training on CalLearns. Training the entire state workforce to use emerging technology correctly will directly contribute to positive trust and safety outcomes, such as bias mitigation and data privacy. Transparency in articulating a strategic objective for the GenAl use case and having a fully articulated data plan will support trust and safety goals. CalHR also offers <u>Responsible Al: Scaling Al in Your Organization</u> training for business leaders for more in-depth guidance on topics related to managing a GenAl solution deployment.

Ongoing skills-based training

Research also identified several foundational skills to prioritize for training the entire state workforce working with GenAl. This includes all of <u>CalHR's core competencies</u>, particularly Collaboration and an Innovative Mindset. Additionally, innovation skills such as critical thinking, data analysis, data literacy, GenAl ethics, and governance will be important areas for ongoing training.

- Employees: The state workforce will need to be flexible, collaborative, growth-oriented, and skilled in data analysis to effectively deploy GenAl or any emerging technology.
- Leaders: Managers, supervisors, and leaders supervising this workforce will want to be creative, responsive, and encourage the upskilling of all state employees.
- Departments will benefit from a workforce that is focused on continuous learning and improvement to provide the strategic basis for the technology of the future.

Benefits and risks of GenAl applied to workforce

In November 2023, the <u>State of California: Benefits and Risks of Generative Artificial Intelligence</u> <u>Report</u> was published. It identified broad categories of beneficial use cases for GenAI, including:

- Improve the performance, capacity, and efficiency of ongoing work, research, and analysis through summarization and classification.
- Personalize and customize work products to California's diversity of people with the potential to improve access to services and outcomes for all.
- Improve language and communications access in multiple languages and formats.
- Optimize software coding and explain and categorize unfamiliar code.
- Find insights and predict key outcomes in complex datasets to empower and support decision-makers.
- Optimize workloads for environmental sustainability.

Each of these use cases benefits an engaged, skilled, and motivated workforce. Specifically, research shows that beneficial use cases can:

- Increase workflow efficiency and provide labor support, leading to additional work time for employees to focus on strategic improvements, upskilling, and other higher order tasks from their duty statements.
- Encourage critical thinking, creativity, and innovation in teams, branches, divisions, and departments.
- Provide solutions and systems for increased collaboration among teams, branches, divisions,

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- and departments.
- Provide increased accessibility and equity in task assignment, due to an increase in accessibility tools.
- Provide improved data analysis tools, decision-making, trust and safety, and risk management.

This report also identified broad categories of risk for GenAl, including risks related to:

- 1. Validity & Reliability
- 2. Safety
- 3. Accountability & Transparency
- 4. Security & Resiliency
- 5. Explainability & Interpretability
- 6. Privacy
- 7. Fairness
- 8. Workforce & Labor Impacts

troduce many cl nd tasks, but also	enAl technologies into the economy and workforce will hanges that will support workers in their daily responsibilities will change or modify parts of their existing workflows. d the following risks when analyzing the use of GenAl:	
Type of Risk	Description of GenAl Risks	
Shared risks	Ethical considerations for AI annotation work within the training process and ensuring safe, fair working conditions.	
	Workers may require training programs to effectively use Al tools to facilitate their existing workloads.	
Amplified risks	Certain industries may experience job displacement from AI, equiring proactive and comprehensive re-skilling programs to upport workers through employment transitions.	

Research validates these potential risks will need to be addressed by workforce plans in each department. Specifically, departments should consult the criteria and guidelines below as part of any GenAl POC or procurement, whether intentional or incidental, to ensure they adequately support and train the state workforce.

Criteria for evaluating GenAl deployment and guidelines for implementation

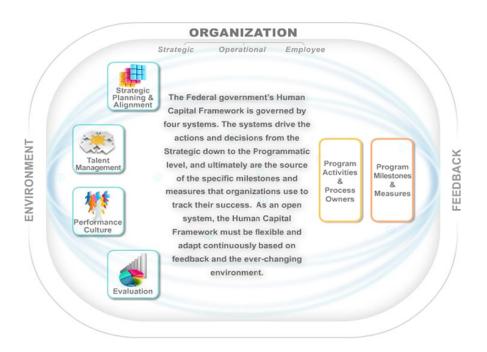
GenAl technology is best paired with a well-qualified and diverse workforce as a tool to enhance current and future business processes and the ways the state workforce serves all Californians. As with any significant technological advancement, the use of GenAl will produce the most robust results when departments leverage it as part of their strategic planning, workforce planning, and succession management processes to ensure the workforce is prepared to perform as effectively and efficiently as possible in the areas most critical to meet

the department's mission. In other words, GenAl tools will enable state government to improve and enhance service delivery, rather than supplant human workers. In addition to collaborating directly with the department workforce in evaluating and planning for GenAl tools, once GenAl solutions are deployed in an organization it is important for leaders to assess how that change has affected the organization and its workforce, as well as continue to reinforce the ways the state workforce can successfully engage with the newly deployed GenAl solutions.

In every proof of concept or GenAl use case plan, leaders should consider using <u>human-centered design practices</u>, and collecting ongoing user research when considering and engaging with a GenAl use case. These practices help leaders understand the effects on the workforce throughout the deployment process and inform actions to take as a result.

In addition to ensuring leaders are well-skilled in human-centered design practices, organizations can systematically review the effects of GenAl solution deployment on different key aspects using the criteria below. Engaging in a thorough, high-level review such as this allows leaders to see a holistic picture of the effects of deployment on the organization as a whole and focus on identifying and prioritizing actions that will continue to support the workforce and achieve the organization's objectives. The strategies that result from this review can help sustain the positive effects of the project and identify opportunities for continuous improvement.

One public sector tool that leaders can use for organizational assessment criteria is the Office of Personnel Management Human Capital Framework (shown below). This framework invites teams to focus on four key systems within the organization and dive into the effects of the change on each. These aspects include Strategic Planning & Alignment, Talent Management, Performance Culture, and Evaluation. No one aspect has greater importance than another, and all are interdependent and interrelated to allow the organization to operate. By reviewing each system in turn, leaders can identify areas of opportunity and take effective action.



Source: https://www.opm.gov/policy-data-oversight/human-capital-framework

Leaders can use the following question to guide their review using the Human Capital Framework:

To what extent has the GenAl solution deployment affected the following aspects of the organization?

Each part of the framework is described in detail for the State of California GenAl solution deployment along with guidelines leaders may implement to support state government employees to use these solutions effectively and respond to these technological advancements. The guidelines provided in each are designed to connect leaders to existing resources and suggested steps for implementation.

Strategic Planning & Alignment

Strategic Planning & Alignment ensures human capital programs are aligned with the organization's mission, goals, and objectives through analysis, planning, investment, and measurement. Strategic planning refers to the organization's direction and ability to efficiently and effectively deliver on commitments, including the business outcomes of GenAl system deployment. An organization's strategy is usually defined in a strategic plan or similar guiding document that explains the organization's mission, values, objectives, and priorities in a specific timeframe. All the organization's operations and resources should be aligned with and support the organization's strategy. The underlying business needs and the effects of GenAl system deployment should be tied back to the organization's strategy.

In addition to reviewing the effect on the organization's strategy, leaders should also consider

the effects on all the mechanisms underlying the way the organization functions including the organization's policies, processes, procedures, and decision-making norms as well as any data privacy and management practices. With regards to risk management, departments are encouraged to leverage the "State of California: Benefits and Risks of Generative Artificial Intelligence" report as well as related resources named at the end of this document. Leaders should review if there are any updates needed to any of the organization's strategic and other levels of business planning based on the effects of the deployment and decide how they will communicate and equip the organization to make those changes.

Guidelines to assess Strategic Planning & Alignment and to support the state workforce regarding related GenAl solutions and technological advancements include:

- Consider how adoption of GenAl within the organization will align with strategic and
 operational goals, <u>risk management</u>, <u>workforce planning and succession management</u> as
 well as current governance structures, performance metrics, and the organization's culture
 around topics such as learning, innovation, continuous improvement, etc.
- Ensure feedback loops from any project plans or charters are complete and establish any
 needed pathways for ongoing communication between teams involved in labor relations,
 procurement, data management, human resources, information security, communications,
 equity outcomes, learning and development, employee engagement, and other key areas
 within your organization.
- Ensure work processes are sufficiently documented and consider an organization-wide approach to documentation to increase consistency and understanding of common terms, approaches, and expectations.
- Establish or reinforce opportunities for transparent and two-way communication with employees regarding how the organization identified and addressed strategic planning and alignment changes.
- Update relevant policies, processes, procedures, duty statements, communications, etc.
- Conduct an organizational assessment, using an assessment model that aligns with your organization's culture as well as the project's goals, resources, and timeline.

Talent Management

Talent Management includes the ways an organization promotes a high-performing workforce, identifies and closes skills gaps, and implements and maintains programs to attract, acquire, develop, promote, and retain quality and diverse talent.

Ensuring employees have the skills required to be successful in their roles is a key aspect of Talent Management. Leaders should establish a specific learning and development strategy and identify competencies required for employees to be successful in their roles in the change, including any training and upskilling efforts for GenAl system deployment. Leaders should review the effectiveness of learning and development efforts before, during, and after the deployment and identify any opportunities or lessons learned. Using data from sources such as user-feedback, training evaluations, manager feedback, and productivity metrics can help identify any skill gaps or anticipate learning needs resulting from the deployment. The <u>Building a GenAl-Ready State</u> <u>Workforce Report</u> describes the top roles in state service related to GenAl along with a detailed

tiered learning strategy, including robust technical on ensuring data privacy, managing cybersecurity risks, and more.

In addition to skills and competencies, leaders should also consider the other important aspects of Talent Management such as employee retention, upskilling, and career development opportunities, including during and after GenAl system deployment, to prepare employees for current and future roles. Beyond technical training, leaders should review how employee knowledge is being captured more broadly, how employees are being developed on the job, the level of employee engagement and morale, and other factors that affect the longer-term sustainability of the workforce and enhance the lasting success of GenAl system deployment.

Guidelines to assess Talent Management and to support the state workforce regarding related GenAl solutions and technological advancements include:

- Update current <u>annual training plans</u> where there may be a nexus to GenAl projects or efforts.
- Adopt a Learning and Development (L&D) model that aligns with your organization's culture
 as well as the project's goals, resources, and timeline. This model should support current
 required training plans and may include approaches such as on the job training and/or formal
 training to build necessary skills.
- Explore training options for GenAl that reflect a <u>tiered learning strategy</u> for your organization.
- Engage the workforce to create individual training plans and update Individual Development Plans or other <u>career development</u> plans.
- Consider various learning modalities such as <u>training</u>, <u>knowledge transfer</u>, <u>mentoring</u> and/or informal job shadowing as skill development strategies, and ensure they are resulting in the desired learning outcomes.
- Develop a structured approach for coaching and providing ongoing feedback, using a coaching model that aligns with your organization's culture as well as the project's goals, resources, and timeline.
- Ensure feedback loops from any project plans or charters are complete, and any needed
 pathways for ongoing communication between teams involved in labor relations,
 procurement, data management, human resources, information security, communications,
 equity outcomes, learning and development, employee engagement, and other key areas
 within your organization are established.
- Establish or reinforce opportunities for transparent and two-way communication with employees regarding talent management efforts.
- Align with and/or update the organization's <u>workforce and succession management plans</u> based on emerging and anticipated needs.

Performance Culture

Performance Culture refers to the holistic approach in which leaders may foster a culture of engagement and collaboration in the organization. This can be demonstrated by management communication and leadership styles and interaction with employees, including during GenAl system deployment. Leaders should reflect on the ways they used timely feedback, continuous learning, employee engagement, inclusion, and accountability strategies during the deployment, and which strategies were most effective in supporting employees through the change and

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sustaining new norms. This is an opportunity for leaders to build self-awareness around their own management and communication styles and how to lead their teams effectively going forward.

Leaders should assess the organization's culture and norms, including during GenAl deployment and after GenAl deployment. Organizational culture is a broad concept that encompasses attitudes and behaviors at all levels of the organization. Change such as GenAl system deployment can be an opportunity to reinforce and strengthen the organization's shared values and use positive and constructive aspects of the organization's culture to support employees' success. Change can also be an opportunity to see the organization's culture in a new light and may allow leaders to consider opportunities to continue to improve the work environment for all.

Guidelines to assess Performance Culture and to support the state workforce regarding related GenAl solutions and technological advancements include:

- Consider a human-centered design approach to adopting GenAl into the organization. As a
 method of developing products and services that puts customer needs first, human-centered
 design begins with the needs and experiences of customers, both internal and external, to
 increase buy-in and equity.
 - o Include a variety of feedback opportunities that are accessible and encourage input from underrepresented workforce groups.
 - Review the <u>Guidelines for Evaluating Impacts of Generative AI on Vulnerable and</u>
 Marginalized Communities.
 - Align with accessibility needs, ensure the workforce is aware of and knows how to mitigate bias and fairness issues with GenAI, and address any digital or technology gaps when training the workforce.
- Develop a structured approach for coaching and providing ongoing feedback using a coaching model that aligns with your organization's culture as well as the project's goals, resources, and timeline.
 - Ensure employees are engaged and have a clear understanding of the goals,
 objectives, and expected outcomes of the department and their office.
- Use self-assessment solutions to discover and reflect on management communication and leadership styles.
- Establish or reinforce opportunities for transparent and two-way communication with employees via engagement and/or pulse surveys, focus groups or similar regarding performance culture changes.
- Implement an organizational change management (OCM) strategy, using an OCM model that aligns with your organization's culture as well as the project's goals, resources, and timeline.
 - See the California Department of Technology's <u>California Organizational Change</u> <u>Management Framework</u> for resources and an <u>Organizational Change Management</u> Readiness Guide.

Evaluation

Evaluation includes all the ways an organization is monitoring and evaluating outcomes of its strategies, policies, programs, and activities. Leaders can assess the way work is organized and GovOps/LWDA/CalHR/ODI Page 10 of 12

distributed, including governance structures during GenAl system deployment. At a basic level, this is captured in documents such as project charters, governance functions, or workflows that identify roles and responsibilities. Leaders should review how GenAl system deployment has changed the way work gets done in the organization, how people are collaborating to complete tasks, and if any adjustments may be needed to the organization's structure in response to that change.

Guidelines to assess Evaluation and to support the state workforce regarding related GenAl solutions and technological advancements include:

- Conduct ongoing monitoring and organizational assessments (e.g., structured project evaluation), using a model that aligns with your organization's culture as well as the project's goals, resources, and timeline.
- Establish or reinforce opportunities for transparent and two-way communication with employees regarding lessons learned for potential application to future deployments or related efforts.
- Consider what processes may be impacted and implement a Process Improvement (PI) strategy model that aligns with your organization's PI readiness as well as the project's goals, resources, and timeline.

Resources

California GenAl Website

Benefits and Risks of Generative Artificial Intelligence Report

Executive Order N-12-23

White House's Blueprint for an Al Bill of Rights

National Institute for Standards & Technology's Al Risk Management Framework

Office of Personnel Management Human Capital Framework

GovOps GenAl in California

<u>CalHR Core and Leadership Competency Model</u>

Building a GenAl-Ready State Workforce

CalHR Foundations of GenAl

Responsible AI for Public Professionals

Responsible AI: Scaling AI in Your Organization

<u>Human Centered Design Course</u>

Document History

Revision Number	Revision Date	Summary of Changes	Author
1	July 1,2025	Presentation of initial report	California Department of Human Resources, Office of Data Innovation