Attachment VI to UIPL No. 11-23

IT Modernization Grants – Categories and Outcome Metrics

States may receive up to \$11.25 million each²⁴ to implement project(s) within at least one of the Unemployment Insurance (UI) IT Modernization categories described below. Refer to Section 4.d. of this UIPL.

Category #1: Cloud Migration.

<u>Description</u>: State migration from legacy platforms, such as mainframes, to cloud-based technology that will measurably improve the flexibility and security of IT systems compared to existing metrics or conditions.

The objective of a cloud-based migration is not only to move data securely from mainframes to a cloud-based system (e.g., "lift and shift"), but to use that transformation to improve the architecture of the data so that systems are ultimately more resilient and responsive to changing needs.

<u>Examples of Desired Outcome Metrics</u>. More easily scale resources to meet changing demands and/or more quickly deploy new IT applications or enhancements such as:

- 1. **Reduction in hardware and infrastructure costs**: States can evaluate the cost savings resulting from reduced hardware and infrastructure costs associated with the migration to cloud-based technology. This can be measured by comparing the cost of maintaining legacy platforms with the cost of using cloud-based technology.
- 2. **Improved system performance**: States can measure the improvement in system performance resulting from the migration to cloud-based technology. This can be evaluated through metrics such as system uptime, response time, and user satisfaction.
- 3. **Faster deployment of new applications**: States can measure the time it takes to deploy new applications, enhancements, and or more easily respond to new federal program requirements after the migration to cloud-based technology. This can be evaluated by comparing the time it takes to deploy applications using legacy platforms with the time it takes using cloud-based technology.
- 4. **Increased system availability**: States can measure the increased system availability resulting from the migration to cloud-based technology. This can be evaluated by comparing the downtime of legacy platforms with the downtime of cloud-based technology.
- 5. **Improved scalability**: States can measure the improved scalability resulting from the migration to cloud-based technology. This can be evaluated by comparing the ability of

²⁴ Funds will be awarded to states that submit complete and responsive applications in the order received by the Department, as long as funding remains available.

legacy platforms to scale resources to meet changing demands with the ability of cloudbased technology to scale resources.

Category #2: Modular and Application Programming Interface (API)-driven Approaches.

<u>Description</u>: Improve the flexibility of IT systems by breaking down complex "monolithic" systems into smaller, more manageable components.

Monolithic refers to a legacy software design pattern where all (or many) components are *tightly integrated and dependent* on each other, making even simple IT changes costly, time-intensive, and risky. Instead, a *modular* approach allows for changes to be made to a single component more easily than if those same changes were applied to the system as a whole.

In addition, the use of *API-driven* approaches can further enhance flexibility by promoting greater interoperability between systems, including vendor solutions, by enabling these systems to communicate and exchange data more easily.

Overall, a modular approach provides many benefits, including easier maintenance, testing, scaling, and/or modification of the IT system, by allowing more targeted software changes and enabling modules to be replaced more easily.

Examples of Desired Outcome Metrics.

1. **Time and cost savings**: Measure the time and cost savings achieved by implementing a modular approach and compare it with the time and costs required to make similar changes and or maintain legacy system components.

System uptime & performance: Measure the system uptime and performance after implementing a modular approach to determine if the system is more reliable and stable, especially during periods of peak workload or demand. System uptime refers to the period during which a computer system, application, or service is operational and available for use by its intended users and is an indicator of overall system reliability and performance. Similarly, a more performant system can scale to meet new demands, such as an increased volume of transactions without sacrificing availability or incurring significant new costs.

- 2. **Improved adoption of agile software development practices**: Show how a modular approach allows for the adoption of agile software development methodologies and related practices, like DevOps and Continuous Integration/Continuous Deployment (CI/CD), enable teams to deliver working software in shorter development cycles and with fewer defects compared to baseline approaches.
- 3. **System performance**: Measure the performance of the new modular system compared to the legacy system to determine if the system is more efficient and scalable.

Category #3: Measurably Improving the Customer Experience (CX).

<u>Description</u>: Establish baseline metrics for the CX for any website or portal where customers can access information, services, or resources related to state programs and services and engage in activities that will measurably improve at least one of those metrics.

In December 2021, the President's Executive Order on Transforming Customer Experience and Service Delivery²⁵ directed federal agencies, as well as federal programs administered at a state or local level, to improve the CX associated with how those services are delivered. The Department recognizes that effective CX for the UI program spans both online and in-person channels and defines an "effective digital experience" as one that enables workers to complete tasks, like filing a claim, quickly, accurately, and with minimal intervention from state staff.

Additionally, strong customer experiences can result in greater self-service opportunities for individuals and lower call center volume, more accurate and complete filings, and greater efficiency for state workforce agencies. In working to measurably improve customer experiences, it is important that states show how they will center technology choices around the actual needs of individuals and employers and leverage an agile, or iterative, approach to shape and validate solutions based on user feedback.

Examples of Desired Outcome Metrics.

- 1. **Time and accuracy of task completion**: Measure the average median time it takes for individuals to complete specific tasks on the portal, such as filing a new claim or submitting weekly certifications and how better experiences can improve accuracy, drive faster payments, and reduce improper payments.
- 2. **Abandonment rate**: Measure the percentage of individuals who start a task on the portal but abandon it before completing it. This can indicate that the task is too complex, or which specific aspects of the experience are difficult to complete and why.
- 3. **Click-through rate**: Measure the percentage of users who click on links or buttons on the portal that lead to other pages or tasks. A low click-through rate may indicate that the design or layout of the portal is confusing or difficult to navigate.
- 4. **Error rate**: Measure the percentage of users who encounter errors while using the portal, such as system downtime or technical errors. This can indicate areas for improvement in the portal's infrastructure.
- 5. **Ease of use**: Conduct surveys or collect feedback from individuals about their experience using the portal. Ask about their overall satisfaction, ease of use, and any suggestions for improvement.

²⁵ Executive Order 14058, *Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government*, issued December 13, 2021, <u>https://www.federalregister.gov/documents/2021/12/16/2021-</u>27380/transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government.