A secure, elastic Unemployment Benefits claims system for Pandemic Unemployment Assistance

**Background**
Working with the Rhode Island Department of Labor and Training, Research Improving People’s Lives (RIPL)* built, tested and deployed a system for delivering Pandemic Unemployment Assistance (PUA) to the gig workers, contract workers, self-employed individuals and small business owners of Rhode Island. The system is cloud-based, secure, elastic with demand, and packaged with a how-to quick start guide. It is easily deployable in other states, and can be set up in one week. Depending on a state’s existing benefits system, minor modifications may be needed.

**Approach**
The goal of setting up the Pandemic Unemployment Assistance benefits system is to get everyday Americans (specifically gig workers, contract workers, self-employed individuals and small business owners) their unemployment benefits as quickly as possible. The strategy is to take as much work off state mainframe systems as possible so that they can do what they do well — which is accept clean data and process payments. We do this in three simple steps:

1. **Establish a secure, cloud-based, FedRAMP approved system on AWS called a Research Data Lake.** The Research Data Lake is a secure cloud environment that ingests administrative data, anonymizes it, and puts it into derived tables that are optimized for scientific analysis, reporting, and creating dashboards in moments.

2. **Set up a standalone secure web form to reliably collect a high volume of UI claims.** All of the coding for the form is in the secure cloud environment. The form collects everything a state needs to process a claim. Data go directly into the secure system. This allows us to quickly and efficiently spin up a mini server which can surge with demand only as needed. It has been tested at 17K claims per minute without crashing or slowing down.

3. **Write a script that takes the claim data each night and runs a batch process** which the Cobalt AS 400 will accept (this step may vary based on the mainframe system each state uses). Claim payments are then made based on the Cobalt mainframe system. Claims that are not eligible for PUA benefits are automatically separated and placed in files that state labor departments can process using standard regulations.

**Available to states looking for a solution to deliver PUA benefits**
For states that would like to use this approach, we will provide:
- An AWS Quick Start to set up the cloud formation environment,
- A “how to” guide on deploying the website out of the cloud system;
• The completed survey form (application) which collects all the required information to process a PUA claim and can be branded based on state guidelines;
• A volunteer engineer provided by USDR to work with your team to work directly with states to customize the front end, configure the scripts that transfer data to the mainframe, configure scripts that address errors that would otherwise require manual correction, and organize and prioritize the remaining errors for faster processing.

As PUA benefits applications are processed, states can handle errors through the normal processes because the files that come in would be considered clean in the normal process and/or throw an error in the normal process. **However, the new system has controls on the front end to get clean data from applicants, which can be processed through the AS 400 with minimal errors.**

Some configuration details will be based on how states decide to implement the PUA policy guidance (for example, how to validate wages). Our team will work with states to customize these features to ensure they match a state’s preferred process, thus reducing workload for staff and call centers and increasing the efficiency of benefit distribution.

Because the system is built in a secure cloud system, States can use it to analyze data from the benefits applications and receipt joined to other administrative data on earnings, employment and public assistance to understand how impacted communities are affected, help state leaders make decisions about economic recovery efforts and connect impacted populations to government support systems and training programs. RIPL has developed a set of analysis with Rhode Island data to help states learn about the economic impact of COVID, PUA benefits, so that they can prepare and plan for economic recovery with data and facts to guide them.

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*Research Improving People’s Lives (RIPL) is a non-profit social impact tech organization that works with governments to bring together research, science and policy. We provide powerful, scientific-grade insights at the speed of policy directly to policy makers. We solve the problems of slow research that is detached from policy and policy that is uniformed by rigorous research. We do this by adapting the best existing data and science methodologies for the government environment and enlisting the help of academic researchers to apply their skills and insights to solving policy problems. To learn more about RIPL visit [www.ripl.org](http://www.ripl.org) or contact [stmayer@ripl.org](mailto:stmayer@ripl.org).*