# AI translation assistants for unemployment insurance benefits

No-code language resources for plain English & Spanish

Released: v1 December 5, 2024



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# **Background**

Accurately translating complex public benefits information into plain language is an ongoing challenge for government agencies. Drawing from New Jersey's groundbreaking work in unemployment insurance modernization, this toolkit offers a proven framework for combining human expertise with generative AI to create accurate, accessible, and culturally relevant translations at scale.

Through a partnership between the New Jersey Department of Labor and Workforce Development (NJDOL) and U.S. Digital Response (USDR), this toolkit provides practical resources for implementing a human-centered approach to language access, including guidance on leveraging generative AI to accelerate translation while maintaining quality. The methods outlined have demonstrated remarkable results in New Jersey, reducing application times by 80% and achieving parity in completion rates between English and Spanish speakers.

Whether you're modernizing an existing benefits system or building new services, this toolkit offers a blueprint for creating truly accessible public services that work for everyone.



## Meet the team

This work was made possible through support from Google.org and the dedication of Google.org Fellows, who worked alongside USDR's Spanish bilingual content experts to develop and validate this innovative approach to language access.

The Fellows' technical expertise in large language models, combined with USDR's human-centered design experience and NJDOL's deep understanding of public benefits, created a powerful collaboration that helped bring this toolkit from concept to reality.

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# What is this toolkit?



## **Overview**

This toolkit helps unemployment insurance (UI) agencies use generative AI to create clear, accessible content in English and Spanish—making it easier for all workers seeking unemployment benefits. Using these resources, agency staff can create a custom AI translation assistant without coding expertise, using readily available AI tools like ChatGPT or Claude.

#### What's included:

- 1. Research and testing results that validate this approach
- 2. <u>Step-by-step instructions</u> for for creating your AI translation assistant
- 3. Reference materials for "training" the assistant, including:
  - Plain English-Spanish Glossary of Unemployment Insurance Terms
  - USDR Spanish Translation Guide for Unemployment Insurance
- 4. <u>Custom prompts</u> (pre-written instructions) that tell the AI how to translate complex UI terminology into clear, everyday language
- 5. <u>USDR Translation Evaluator</u> for measuring translation quality
- 6. Example workflows and use cases
- 7. Privacy and security best practices



# **Creating Better Outcomes for Workers and Agencies**

Clear, accessible language benefits both workers and agencies. When people can understand and complete forms correctly, everyone saves time and frustration. Here are our key goals for improving the unemployment insurance experience:

### For workers

- Reduce amount of time it takes to **fill out**forms
- Reduce amount of time it takes to receive benefits
- ☐ Increase **trust** in public services

### For agencies

- Decrease # of cases requiring manual review
- Decrease call center load
- Decrease # of instances of fraud and overpayments



# Why use this toolkit?



"No sé si viste lo que es llenar un formulario en los Estados Unidos. La verdad es que prefiero que me pase un tren por arriba. No puedo leerlo, es tanto que te marean".

"I don't know if you've seen what it's like to fill out a form in the USA. The truth is that I prefer to be ran over by a train. I can't read it, it's so much that they make you dizzy."

New Jersey worker from Colombia



# Workers with limited English proficiency struggle accessing benefits

Research shows that workers with limited English proficiency (LEP) face significant challenges when accessing unemployment benefits. They are:

- 50% less likely to receive UI benefits than workers who speak English as their primary language
- More likely to work in non-traditional jobs that complicate the application process
- At higher risk of being targets for UI fraud schemes

# 20 million workers

in the U.S. have limited English proficiency
(15% of workforce)



# Pain points

for workers with LEP

- Confusion about program requirements and processes
- Delayed benefits due to language barriers and limited access to bilingual support
- Missing essential information and deadlines
- Anxiety about making mistakes on forms
- Feeling excluded when information isn't available in their language



"He notado que muchas personas hispanas usan agencias para que otras compañías les ayuden a llenar estas solicitudes (...) están pagando a agencias de terceros cuando pueden hacer esto por su cuenta de forma gratuita en línea".

"I noticed a lot of the Hispanics go to agencies to have these claims filed by third party companies (...) they're paying a third party agency to do this when they can do it free themselves online."

NJDOL Call Center Agents



# Governments often lack capacity to provide meaningful translation services

### **Resource and capacity limitations:**

- Lack of dedicated translation staff and expertise
- Overwhelming volume of documents needing translation
- Disconnected processes across departments
- Complex terminology that often do not have direct translations
- Understaffed and overworked teams
- Growing backlog of translation requests

### **System limitations:**

- Costly translation vendors lack government expertise and plain language skills
- Automated translation tools miss important context and meaning
- Legacy systems make updates difficult and costly
- Translation technology is expensive and hard to implement
- Federal regulations add layers of compliance requirements



# Pain points

for front line staff & administrators

- Lack of access to bilingual staff, translation tools, and training
- Excessive time spent repeating and clarifying information that could be addressed through translated materials
- Difficulty maintaining consistent terminology across departments
- Unable to track, validate, and improve translation quality and outcomes
- Pressure to balance service quality and speed, leading to stress and increased processing times for non-English applications



Les explico paso a paso, lo más simple que puedo...a veces lleva un poco más tiempo, pero vale la pena".

"I explain to them step by step, as simple as I can... sometimes it takes a little bit longer, but it's worth it."

NJDOL Call Center Agents



# New Jersey UI Modernization: Principles for effective language access

Understanding these challenges, USDR worked with NJDOL and Nava to launch a user-friendly unemployment insurance (UI) intake form in both English and Spanish in April 2024. The team developed these key principles, inspired by real user experiences, to guide their approach:

## Co-create content with subject matter experts

Early and ongoing collaboration with UI policy experts and bilingual front line staff, including call center agents and IT, is a shortcut to accuracy and promotes alignment across teams.

## Validate translations through user research

Testing translations with a diverse pool of residents/workers that represent your jurisdiction's demographics ensures readability and effectiveness of content.

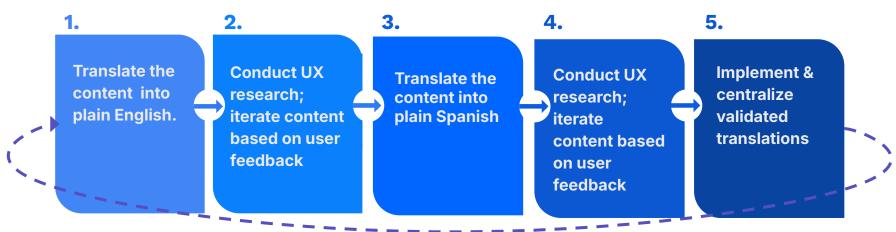
# Staff team with native language speakers

Assigning native speakers of the language to lead content development and research goes a long way with **establishing connection and building trust** with bilingual staff, community-based orgs, and residents with LEP.



# New Jersey UI Modernization: Streamlined process

With these principles in mind, the following steps were developed to ensure content is simplified and also validated by native speakers with experience going through the UI application process. It's important to note that the entire process, including the first step of translating content into plain English, can be supported by generative AI. We'll cover how to apply this approach in the upcoming sections.



\* Validated content can then be used as reference material to continue training and refining your custom LLM.



# New Jersey UI Modernization: Key outcomes

As of September 2024, NJDOL's modernization efforts have led to remarkable outcomes:

- Average application time reduced from 4 hours to under 30 minutes
- Call center wait time decreased from 40 minutes to 2 minutes
- Claims requiring manual review reduced by 14%

The addition of the **Spanish-language UI intake form** has led to:

- Parity in average completion time between English and Spanish form users
- 20% increase in follow-through to the next correct step after initial application in both languages



# **Piloting** generative AI for language access in unemployment insurance

To build on these efforts and outcomes, USDR and NJDOL explored generative AI as a simple, no-code solution to help improve and expand the agency's language access efforts.

Supported by Google.org, USDR deployed a team of Fellows and bilingual Spanish content experts to pilot a generative Al approach for creating a plain English and Spanish UI glossary.

### Key findings:

- Large language models (LLMs) are pretty good at translating UI content to Spanish!
- Human oversight remains crucial to maximize value.
- Agencies can implement this approach immediately using off-the-shelf Al tools.





To understand how generative AI could support government translation efforts, we conducted pilot studies with NJDOL. We wanted to test whether AI could help accelerate the translation process while maintaining the high quality and cultural relevance achieved through our human-centered approach. The results exceeded our expectations, demonstrating that AI could be a powerful tool for scaling language access when combined with human expertise.

Complex content translated to plain English & Spanish

3x faster Al translations closely matched expert human quality standards

>90%
accuracy rating

# Al translations prove effective for claimants

11 Spanish-speakers representing 6 countries found very little difference between AI translations and expert human translations.



# What is an AI translation assistant?



# Creating AI translation assistants with off-the-shelf large language models (LLMs)

#### What is an Al translation assistant?

Think of an AI translation assistant as a customized digital translator that specializes in a specific field, like unemployment benefits. We start with an existing Al tool (like ChatGPT or Claude), which is powered by a large language model - essentially a highly advanced computer program trained on massive amounts of text to understand and generate human language. We then teach it to understand specific terms and contexts by giving it examples and guidelines. For instance, we can train it to understand unemployment insurance vocabulary and how to explain complex benefits terms in plain language. This helps the Al provide more accurate and helpful translations for government services.

Examples of off-the-shelf LLMs include:





# Creating AI translation assistants with off-the-shelf large language models (LLMs)

## How does an Al translation assistant make translations better?

The Al assistant becomes a powerful translation tool because we train it with real government materials like forms, glossaries, and frequently asked questions. This helps it understand specific terms and local context - for example, how benefits are described in your state or region.

### **Key benefits:**

- Provides accurate translations by understanding your specific programs, policies, and local language preferences
- Speeds up translation workflow by converting technical language into plain language across multiple languages
- Saves time and money by reducing dependence on outside translation services and specialized software

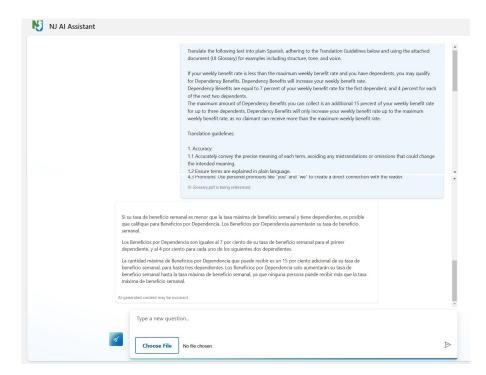


## Case study: NJ AI Assistant

### **NJDOL: Making UI Content Accessible**

NJDOL leverages their state's <u>NJ AI</u>
<u>Assistant</u> as a translation tool to quickly create unemployment insurance content in plain English and Spanish. By combining a specialized glossary, translation guides, and custom instructions, they guide the AI to produce content that reflects their state's UI terminology and meets their workers' needs.

While NJDOL implemented this within their state system, their approach can be replicated by any government using off-the-shelf Al tools.





# How to create an AI translation assistant



# Quick start guide: How to create an AI translation assistant

Follow these steps to set up an Al translation assistant for your agency. Steps 2, 3, and 4 will be covered in more detail in the following slides.

- Choose your Al platform: Select from available tools like Claude, ChatGPT, or Gemini. Creating an account is quick and free.
- 2. **Prepare your materials:** Gather your glossaries, style guides, and policy documents. These *reference materials* help the Al understand your specific terminology and requirements.
- 3. **Create clear instructions:** Develop *prompts* that tell the AI exactly how to handle translations. We provide templates and examples in this toolkit.
- 4. **Test and validate:** Try sample translations and use our **evaluation rubrics** to assess quality. Remember not to include any sensitive information during testing.
- Launch and monitor: Once you're satisfied with the results, begin using your assistant for translations. Regularly review output quality and update materials as needed.

# How to: Use reference

materials

Reference materials help your Al assistant understand government terminology and provide more accurate translations. This is especially important for legal and procedural terms, where slight misinterpretations can impact one's ability to receive benefits.

If document upload isn't available in your tool, you can paste key terms and guidelines directly into your prompts. See our "Writing Effective Prompts" section for guidance.

### Try it out:

- 1. Sign in to your chosen Al platform
- Look for the upload or attachment feature (usually a paper clip icon)
- 3. Select and upload your reference documents

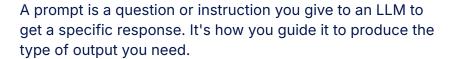
For unemployment insurance, you can use:

- Plain English-Spanish Glossary of Unemployment Insurance Terms
- <u>USDR Spanish Translation Guide for Unemployment</u>
   <u>Insurance</u> (you can download this as a pdf)



# <u></u>

# How to: Write effective prompts



Here are a few key principles to keep in mind:

- Write clear and specific instructions. To get a certain type of response, you can also ask the model to adopt a persona.
- **Give it time to think.** Specify the steps required to complete a task, and ask it to justify its response.
- Break tasks into smaller steps. Use the results from each step to help with the next one. Start simple and build up to more complex tasks.

#### Try it out:

- Click <u>here</u> to locate the tab labeled "Language Access prompts for UI."
- Copy and paste the text into your Al translation assistant.
- 3. Replace the [TERM] and [DEFINITION] fields with terms you want to translate.



# How to: Evaluate translation quality



Use our evaluation tool to ensure your translations meet quality standards for accuracy, clarity, and cultural relevance.

### Why evaluate?

- Maintain consistent terminology across materials
- Ensure translations are clear and accessible
- Meet legal and procedural requirements
- Preserve cultural context and meaning

### Try it out:

Once the LLM has produced a translation based on the prompt provided, use a rubric to check for quality.

- Access the <u>USDR LLM Translation Evaluator</u>.
- **2.** Score your translation using the provided criteria.
- 3. Make revisions based on results.
- Document any patterns to improve future translations.

Tip: Try asking the AI to score its own translation according to these rubrics.

# Let's see it all come together in this next example



## 1. Start with plain language for better translations

By simplifying complex terms and sentence structures in the original text, you reduce the risk of confusion or misinterpretation. This also involves addressing the claimant directly and using active voice to promote conciseness and engagement. You can **use your Al translation assistant to convert complex text into plain language**, making translations into other languages more accurate and easier to understand. Here's an example:

### **Original version**

### Discharged

A separation that is initiated by an employer for a reason other than they have no more work. A claimant may be discharged, for example, for lateness, poor performance or failure to meet deadlines or quotas. If a discharge relates to misconduct connected with the work, a claimant may be subject to a period of disqualification.

### **Plain English**

### Discharged (fired)

Getting discharged (also known as dismissed or fired) occurs when your employer lets you go for reasons other than they have no more work for you. You may be discharged, for example, if you are frequently late, have poor performance, or miss deadlines. If you are discharged for misconduct at work, you might be disqualified from collecting unemployment benefits for a while.

## 2. Create the Spanish translation

Once you have a clear plain English version, use your Al translation assistant to translate the content into Spanish. Use the provided guidelines and reference materials to ensure your translation is both accurate and culturally appropriate.

### **Plain English**

### Discharged (fired)

Getting discharged (also known as dismissed or fired) occurs when your employer lets you go for reasons other than they have no more work for you. You may be discharged, for example, if you are frequently late, have poor performance, or miss deadlines. If you are discharged for misconduct at work, you might be disqualified from collecting unemployment benefits for a while.

### Plain Spanish (unedited)

### Despido con causa

El despido con causa (también conocido como destitución o despido justificado) ocurre cuando su empleador/a lo/la deja ir por razones distintas a la falta de trabajo. Por ejemplo, puede ser despedido/a si llega tarde con frecuencia, tiene un rendimiento deficiente, o no cumple con los plazos establecidos. Si su despido se debe a una mala conducta en el trabajo, podría quedar descalificado/a para recibir beneficios por un tiempo.

## 3. Review and refine the Spanish translation

While your Al assistant will create a strong initial translation, having a native Spanish speaker **review and edit the text ensures accuracy and natural language flow**. If bilingual staff aren't available, you can use your Al assistant to generate alternative versions and measure them using our translation evaluator. These refined translations can then serve as examples to help your Al assistant produce even better results over time.

### **Plain Spanish (unedited)**

### Despido con causa

El despido con causa (también conocido como destitución o despido justificado) ocurre cuando su empleador/a lo/la deja ir por razones distintas a la falta de trabajo. Por ejemplo, puede ser despedido/a si llega tarde con frecuencia, tiene un rendimiento deficiente, o no cumple con los plazos establecidos. Si su despido se debe a una mala conducta en el trabajo, podría quedar descalificado/a para recibir beneficios por un tiempo.

### Plain Spanish (edited)

### Despido/a con causa (fired)

Ser despedido/a con causa ocurre cuando su empleador/a le deja ir por razones distintas a la falta de trabajo. Por ejemplo, puede ser despedido/a si suele llegar tarde, tiene un mal rendimiento, o no cumple con fechas de entrega. Si su despido se debe a una mala conducta en el trabajo, podría quedar descalificado/a para recibir beneficios de desempleo por un tiempo.

# Additional considerations



# **Protecting Privacy and Sensitive Information**

When using AI tools for translation, protecting privacy and sensitive data is critical. Here are best practices for privacy protection:

- Review and configure privacy settings for any Al platform you use
- Consider enterprise or government-specific versions of AI tools that offer enhanced security
- Remove all personal identifying information (PII) before using content for translations
- Document your privacy protocols and train staff accordingly
- Consider consulting your IT security team for guidance



# **Ensuring Quality and Fairness in Translations**

When using AI for translations, it's important to maintain high standards for accuracy and cultural sensitivity. Here's how to address common quality concerns:

- Review source content for bias before translation any issues in the original text will carry over to translations. Start with clear, unbiased source content.
- Ensure translations maintain the intended tone and meaning of official communications
- Have translations reviewed by native speakers when possible to catch any cultural nuances
- Use our quality guidelines to evaluate both original and translated content
- Document any issues found to help improve future translations
- Use provided reference materials and glossaries
- Apply evaluation guidelines consistently
- Document and share learnings across your team



# Reviewing AI Translations for Accuracy

Al translation tools can sometimes generate content that appears correct but contains inaccuracies. Here's what to watch for and how to ensure quality.

### Common accuracy issues:

- Translations that don't fully match the original meaning
- Added or missing information
- Incorrect technical terms
- Inconsistent terminology

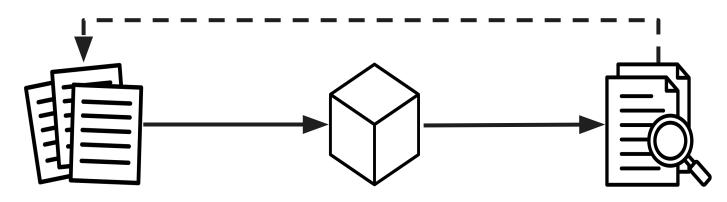
### Quality control steps:

- Compare translations directly with source content
- Pay special attention to technical terms and program requirements
- Use provided reference materials to verify terminology
- Have subject matter experts review translations when possible
- Document any patterns of inaccuracy to improve future work



## Keep humans in the loop to maximize value

Generative AI is a powerful tool for translations but cannot replace **human translators or subject matter experts**. Involving native speakers in testing and revising LLM outputs is recommended to help with localization and to ensure the content is accurate and culturally appropriate.



Training data (UI Glossary, Translation Guide, Policy) + Prompts Large language model (LLM)

User Research, SME Review, Content Strategy, Output Evaluation



# Conclusion



## **AI Translation for Government Services**

Our research shows that AI tools can significantly improve government translation processes when used effectively. When it comes to translation quality, we found that generative AI tools consistently outperform traditional machine translation for commonly used languages. Well-crafted instructions help these tools produce more culturally appropriate translations, while reference materials notably improve accuracy for government-specific terminology. However, human review remains essential for ensuring quality and accuracy across all translations.

Off-the-shelf Al tools work very well for basic translation needs, though specialized setups may be needed for handling sensitive information or more complex documents and systems. Agencies that establish clear processes maintain better consistency and quality in their translations, and those who regularly evaluate their results see continuous improvement over time.

People with Limited English Proficiency (LEP) gain significant benefits from improved translation services. They can access information in their preferred language, allowing them to navigate government programs with greater independence and confidence. With better language access, they stay informed about critical services and programs through timely updates, while gaining a clearer understanding of their application status and next steps.



## How can we help?

Partner with us to improve language access and better serve your residents. Our team can guide you in using generative AI to make translations more accessible and effective.

- <u>Request a workshop</u> on Gen AI for Language Access to explore more about this solution and how to expand it to multiple languages.
- Get in touch today to learn more and take the first step toward ensuring vital services are accessible to everyone.



