



New computer system for unemployment-insurance taxes

July 2014

Doc. #FS-0020-B

Three-decades-old computer system is inflexible and inefficient

Current system requires staff-intensive work-arounds

New system will adapt to changes and be cost-effective

True accounting of taxes and benefits

Background

Employers must report how many hours their employees work and how much they are paid to the Employment Security Department each quarter. The information determines whether workers qualify for unemployment benefits if they lose their jobs and how much those benefits will be.

The computer system that manages unemployment tax information (about 200,000 employers and more than 3 million employees) is a complex mix of several distinct systems. The central mainframe system was put in place in 1984. It is based on technology that matured in the 1970s and is now obsolete. The department has developed a series of 15 subsystems to manage specific features of the tax system that the mainframe system cannot handle, such as filing electronic tax reports, audits and collections.

Each system has its own database, user interface and security, making it difficult to maintain accurate and consistent data across systems and requiring many changes to be made and tested individually in each system.

As laws have changed over the last 24 years, the department has modified the tax computer system and applied hundreds of elaborate patches to compensate for its shortcomings. While necessary to keep the unemployment system running, this solution is no longer viable because the system has become so complex it is difficult to maintain or to make additional changes. It also requires several work-arounds, including manual processes, to keep up with current tax laws.

Example: In 2006, the department had to adjust and calculate almost 3,000 employers' tax rates by hand because they were too complex to be done in the current system.

Finding a solution

In 2006, the department hired a consultant to review the tax computer system and recommend the best option for moving forward based on current and anticipated business needs and the cost versus the benefits. Specific options included:

- Leave the system as it is and continue adding patches as necessary.
- Retrofit the system to support at least five years of changes in tax law and policy.
- Develop a new system that will meet needs for at least 15 years.

The consultant conducted a comprehensive gap analysis and compiled a 40-plus-page report identifying more than 100 gaps. (A typical gap analysis has only 10 to 12 pages.) The report identified the following serious gaps:

- The system relies on a proliferation of patches because the original system design and the lack of documentation make modification difficult, at best.
- Several important functions, such as accounting and collection, had to be disabled to ensure that core functions continued to work.

More accurate & consistent data

- The various databases that support the system cannot be synchronized, and data elements share names, which compromises the integrity of the data.
- The system cannot process or assign new account numbers, so it must reuse numbers, making it impossible to maintain accurate historical data.
- Screen names do not match accounting functions and cannot be changed.

New system will improve accuracy and efficiency

Based on the many problems uncovered in the gap analysis, the consultant concluded that the system had reached the end of its life cycle and recommended the department build a new computer system with the capacity and flexibility to effectively and efficiently manage the tax system.

Building a better system

The new system will be table-driven, with a Web-based front end that is easy to use and will solve both business and technical issues associated with the current system. Among its many features, the new system will:

- Protect the integrity of the Unemployment Insurance Trust Fund by introducing a true accounting system to track all tax and wage reports.
- Improve the accuracy and consistency of data, including data that serve as the basis for economic forecasts for the state of Washington.
- Automate tax collection, saving staff time and minimizing errors.
- Uncover fraud by employers that try to buy, restructure or merge businesses to get a lower tax rate.
- Consolidate calculation functions that are currently done outside the system, including the social-cost rate and trust-fund solvency surcharge.
- Increase security because data will be fully encrypted.

Project will be completed in 2014 and cost about \$62.2 million

Essentially, the new tax computer system will improve accuracy and efficiency in the unemployment system and will support the department's efforts to crack down on fraud by both employers and by people who collect benefits.

Work plan

The department estimates that the new tax system will cost about \$62.2 million to develop and be completed in 2014. The main contractor for the project is Hewlett-Packard.

Work plan requires stable tax system

The department's work plan depends on a consistent and stable tax system, particularly in the last three years of the project. Given the complexity of the system, the department is concerned that changes to unemployment tax laws during that period would extend the time it takes to develop the system and would increase costs.

Contacts

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