

## CUSTOMER NAME

Texas Department of State Health Services (DSHS)

## INDUSTRY

Vital Records

## LOCATION

Austin, TX

## SOLUTION HIGHLIGHTS

- Rapid deployment
- Rigorous quality assurance process
- Inter-operability with the agency's existing systems
- 34 million data fields captured in just 90 days

## BENEFITS

- Rapidly captured complex, interdependent data
- Maintained high standards for critical data provided to state and federal agencies
- Leveraged vendor staff to support increased volume
- Enabled agency staff to focus on core business

## CUSTOM IMAGING AND WORKFLOW SPEEDS CAPTURE AND MAINTAINS DATA INTEGRITY

### BUSINESS PROFILE

The Department of State Health Services (DSHS) is the public health agency for the state of Texas. It oversees a variety of services, from basic immunizations and nutrition programs to the tracking of infectious diseases. The agency is also responsible for collecting and reporting a wide array of information, including hospital discharge data, health surveys, and vital records such as birth, death, and marriage certificates.

### OPERATIONAL OVERVIEW

Within DSHS, two key business units handle the state's vital records. The Vital Statistics Unit (VSU) captures images and data from the state's paper and electronic records and provides the data to the Center for Health Statistics (CHS). CHS analyzes the information, performs quality control to ensure its validity, and publishes annual reports for the general public and other stakeholders.

A variety of audiences, including the state legislature, the demographer's office, and local, regional, and federal government agencies use this information for strategic planning, decision-making, and providing goods and services to the people of Texas. For example, the state's population projections may be used to define the location of schools, hospitals, or commercial districts.

### BUSINESS NEED

The agency had a backlog of 340,000 death certificates that needed to be processed in a short period of time. Normal processing time for this volume of records would have been two years; however, the agency needed the work to be completed within 6 months.

In addition to meeting these time constraints, the agency needed to maintain strict quality requirements for the data collected from its forms. This was a significant challenge, because Texas death certificates contain approximately 100 interdependent pieces of data, some of which require detailed knowledge of medical transcription to understand. Additionally, some of the data may come in on paper, while other pieces are received electronically.

The agency analyzed whether to use its own staff and try to process the documents internally, or bring in a vendor with proven experience in this type of project. Agency leaders selected Neubus, a trusted vendor with extensive prior experience with the agency, to implement a solution to meet their needs.

## SOLUTION

Neubus developed a custom solution that incorporated a unique combination of technology and industry expertise.

The solution includes scanning, imaging, and workflow technology, statistical quality control processes, and transfer of data and images to the state's existing database and image repository.

Using an open technology platform, Neubus developed, tested, and deployed the system with over 70,000 lines of custom programming code in just 60 days.

To make sure that the agency could meet its processing deadline while maintaining data accuracy and integrity, Neubus built a team of 60 people – including medical transcriptionists – to support the project. Then, working with a nosologist – a professional trained in classification of diseases – the company developed in-depth training programs to ensure that staff members had the knowledge required to accurately capture medical terminology from the forms. They also developed custom lookup functions within their system to enable users to verify terms when needed.

To simplify the capture process and make it as efficient as possible, Neubus developed an indexing tool that incorporates dependencies among related data fields on the form. Additionally, they divided sections of the form into logical parts, assigning workflow tasks to certain team members based on their knowledge and skill set.

Neubus configured the solution so that each capture step was followed by a corresponding quality control step, ensuring that quality objectives were met throughout the process.

When the certificates were captured, imaged, and indexed, Neubus delivered the records in various formats to meet the agency's needs. They provided a data feed to the agency's system for analysis and encoding per federal requirements, and delivered images for upload into the state's online repository.

Using a web-based review tool developed by Neubus, agency staff can now search for and review images as soon as they are delivered to the agency. Staff members can compare the images with original paper files, and if any information on the original document was submitted incorrectly, they can immediately update the record with correct information.

## BENEFITS

### ***RAPID DATA CAPTURE***

With a flexible technology platform and extensive knowledge of industry and agency standards, Neubus was able to capture and index the agency's vital records on a tight schedule.

The solution enabled DSHS to capture 34 million data fields in just six months.

### ***DATA ACCURACY AND INTEGRITY***

Built-in quality assurance processes ensured that DSHS could handle a large workload with tight deadlines, while still adhering to quality requirements for the data it provides to state and federal agencies.

"Neubus worked with DSHS to maintain high standards for critical data, and make sure the data is transmitted securely and in a timely manner," said Dr. Ramdas Menon, Director of the Center for Health Statistics.

### ***EFFECTIVE USE OF RESOURCES***

With staffing resources provided by Neubus, the agency did not have to hire additional data entry operators, and current staff members were able to focus on the agency's core business.

"We had a lot of data entry operators and were able to retrain and reallocate them to focus on critical needs of the agency," said Dr. Menon.

## SUMMARY

Neubus combined sophisticated technology and in-depth knowledge of vital records to help the agency eliminate its backlog of death certificates in just six months. The solution enabled the agency to rapidly capture, image, and index hundreds of thousands of forms, while adhering to strict quality guidelines.

**Neubus, Inc.**  
**11700 Stonehollow Drive**  
**Suite 100**  
**Austin, TX 78758**

**1-877-Y-NEUBUS**  
**info@neubus.com**  
**www.neubus.com**