



HOW SEATTLE PUBLIC UTILITIES ENHANCED THEIR ENGINEERING RECORDS EFFICIENCY FIVEFOLD

Industry

Public Sector

"It used to take us half a day to process a twenty-page plan set; now we are publishing five times that in half the time"

– Geoff Brown, Supervisor, Engineering Records Vault

5X

PROCESSING SPEED

44%

REDUCTION IN FILES

83%

ACCESSING RECORDS ONLINE

THE COMPANY

Seattle is home to over 750,000 people and spread across 142 square miles in Washington state, Seattle Public Utilities (SPU) is tasked with preserving a sustainable and livable environment for the city's inhabitants. This critical role involves managing clean drinking water, waste disposal, sewer, and drainage systems.

SPU had been grappling with an outdated custom system for managing their engineering drawings and documents known as 'The Vault'. An internal solution built in the 1990s, the Vault was, as Geoff Brown, supervisor of SPU's engineering records explains, an interface for their digitized collection of engineering records, that spanned back to 1885. However, as the Vault aged, SPU found that it had become inflexible and slow with discrepancies in metadata affecting daily operations, and increasing cybersecurity concerns.

Moreover, as an on-premises solution hosted on internal infrastructure, the system was failing to meet SPU and its people's users, requiring anyone needing access to records, be they members of the public, private consultants, surveyors, or even curious homeowners, to physically visit the Seattle Municipal Tower and use a public terminal.

This led SPU to seek a new, robust Engineering Drawing Management System (EDMS) that could seamlessly integrate with their Geographic Information Systems (GIS) environment.

THE CHALLENGE

The Vault's growing list of issues presented a significant challenge for SPU. The system's backbone was built on outdated technology that struggled to keep pace. The inflexibility of the system's architecture made it difficult to add metadata without assistance from developers within SPU. There were also security considerations as the system could not be made accessible externally without exposing SPU servers to the public.

Furthermore, the Vault's functionality was based on geo-referencing plans to the Street Network database. The initial geo-referencing plans to the Street Network database seemed sensible, but as the system expanded to include areas that were complex to geo-reference, difficulties arose.

Ultimately for SPU, the management of their 750,000 files became increasingly challenging, leading them to seek a replacement for the Vault.

THE SOLUTION

SPU partnered with Accruent, with the goal of merging its GIS environment with the RedEye solution. This decision proved to be highly beneficial, particularly as the COVID-19 pandemic began to significantly affect work conditions. The situation highlighted the essential need for a cloud-based system that could be accessed externally, ensuring that SPU's team members were not left vulnerable or exposed to unnecessary risks.

RedEye's data management tools were instrumental in cleaning and refining SPU's legacy data and ingesting new records from current projects.



The migration process to RedEye involved careful planning – focusing especially on the cleanup, organization, and structuring of data as it was migrated. Initially identifying millions of records for potential upload into RedEye, SPU and Accruent utilized RedEye’s powerful data tools to bring the number of files down, collating different versions of the same drawing into single, unique artifacts.

“The time savings from RedEye are tremendous and have enabled us to focus on other backlog work that are critical for preserving our engineering records.”

– Geoff Brown, Supervisor, Engineering Records Vault

THE BENEFITS

The transition to Accruent’s cloud-based EDMS revolutionized SPU’s data management, significantly improving efficiency and productivity. Office visits decreased drastically, and the processing speed of plan sets increased fivefold.

Following their go-live on RedEye in 2022, in 2023 SPU was able to migrate their Public Record processes (a requirement in Washington State) to RedEye – launching an online portal for the public. Not only does this continue to receive strong interest, it has dramatically reduced the administrative burden on their records team, and made their records more accessible to all their stakeholders.

Moving forward, SPU plans to further leverage RedEye by increasing public access to their new RedEye-powered Vault, utilize the RedEye mobile app as they roll out mobile tablets to their field crews, and build business processes in RedEye to improve archival work.

This successful transition to RedEye demonstrates how digital solutions can transform legacy systems, streamline operations, boost efficiency, and secure valuable data for the future.

“Now that we’ve empowered people to search for engineering records themselves, we’ve gone from 6-10 people a week visiting our office to, on average, one person a week.”

– Geoff Brown, Supervisor, Engineering Records Vault

CONTACT FOR A DEMO



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