



Utah Department of Transportation
Salt Lake City, UT
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Utah Department of Transportation

Building Utah

State agency improves training, certification, and management of construction projects using Adobe® Connect™

The industriousness, self-reliance, and workman-like mentality of its earliest settlers earned Utah the moniker The Beehive State. Today, the Utah Department of Transportation (UDOT) aims to live up to those same ideals through cost-effective, efficient management of construction projects in the state's transportation system.

From road repairs and noise walls to pedestrian pathways and bridge design, the department relies on an extensive network of state-employed engineers, contractors, and inspectors that work with its various agencies to plan, manage, and complete construction projects across the state.

Communicating with a large, geographically dispersed network is challenging. For years, UDOT relied on in-person meetings and training seminars to deliver important training about standards and regulations, inspections and quality control, and other matters that can have a direct impact on public safety. The department deployed Adobe Connect to streamline its communications and accelerate training for statewide employees and contractors.

"We have complex, large-scale projects that require a lot of information to be distributed and updated," says Mike Garcia, construction operations specialist for Utah Department of Transportation. "Coordinating more than 300 people from around the state to be in one place for training or meetings is ineffective and very costly. Adobe Connect provides a convenient, cost-effective way to communicate with people everywhere so we can get projects completed faster, at lower costs, and in compliance with guidelines and regulations."

Rebuilding the building process

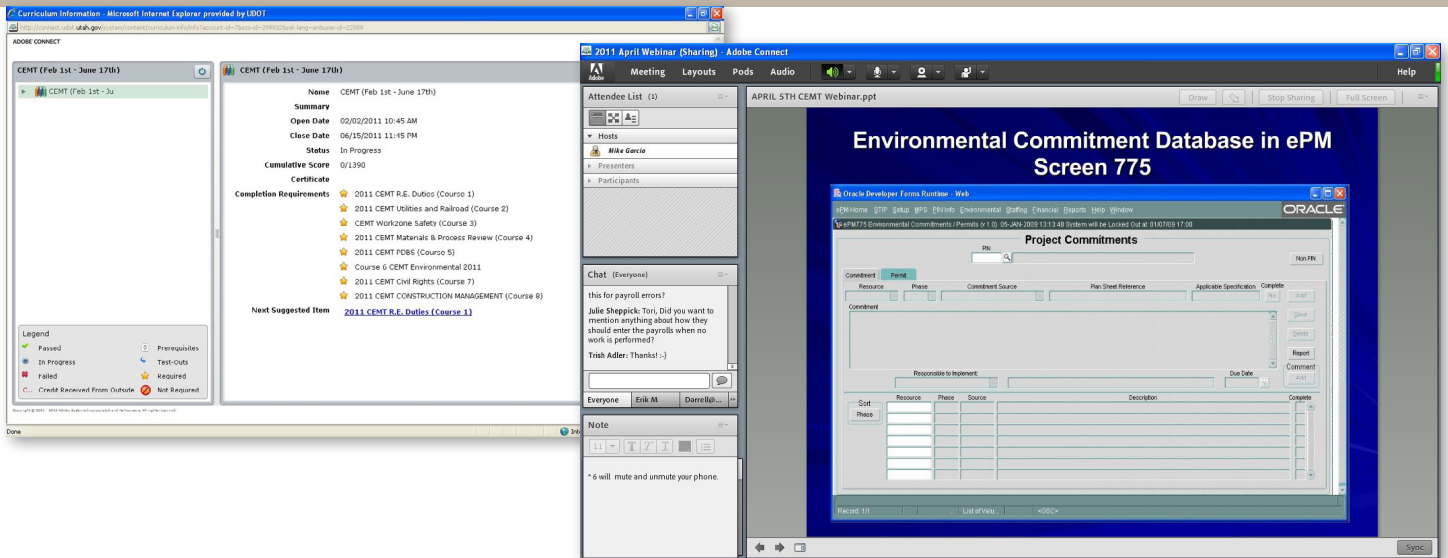
Each year, the agency plans, manages, inspects, and completes a number of infrastructure development and maintenance projects throughout the state. Amid growing budget restrictions, shortened timelines, new environmental regulations, and ever-present concerns about the durability and safety of construction projects, communicating standard processes and project details with dispersed workers assigned to the construction or inspection crews is a challenge.

Traditionally, project guidelines—construction documentation processes, environmental impact guidelines, and safety inspection requirements—were printed and presented to workers when they arrived for an annual or semi-annual training seminar. But, since federal and state project guidelines evolve rapidly, UDOT found that the guide books were often outdated virtually as soon as they were printed and needed to be updated again.

Using Adobe Connect, along with Adobe Captivate® and Adobe Presenter, UDOT can instantly create and update electronic versions of its various specification books and qualification procedures and distribute them electronically for faster, more reliable delivery. In addition, the department can access existing training content created by the Federal Highway Administration—also developed with Adobe software—and easily incorporate it into the manuals.

"Reprinting books all the time was really expensive and an ineffective way to keep up with changing requirements. Other online solutions could take two or three days to incorporate our updates and deploy them," Garcia says. "With Adobe Connect, we can add, create, and update training materials with updated regulations in just a matter of minutes and distribute them electronically. We're eliminating unnecessary spending on printing materials while getting important information out faster. It's a win-win."

UDOT uses Adobe Connect, Adobe Captivate, and Adobe Presenter to create rich, engaging webinars to reach geographically disparate construction crews with important updated information. The webinars can be streamed from virtually any computer, at any time, enabling contractors and engineers to take mandatory training at their convenience.



Challenge

- Accelerating training for statewide construction managers and crews
- Reducing training costs and travel times
- Improving collaboration for streamlined construction processes

Solution

- Adobe Connect for eLearning
 - Adobe Connect for Web meetings
- UDOT is using Adobe Connect to deliver live and on-demand training and meetings for construction workers and contractors statewide for more efficient, cost-effective project management.

Benefits

- Reached more than 400 workers statewide simultaneously with training content
- Eliminated hundreds of thousands of dollars in travel expenses
- Accelerated project completion to save millions of dollars annually
- Enabled better tracking of training completion, compliance, and comprehension
- Reduced training costs by reducing travel and printing expenses
- Enhanced data security by storing it in on-premise databases

Advantages of Adobe Connect

- Recording capabilities, editing, and playback
- Platform ubiquity
- Reporting and tracking training
- Integration with PGI

Cost-effective project planning and training

The Adobe solution helps UDOT reduce expenses associated with creating paper-based training information while also boosting productivity. On-site training required extensive, costly overnight travel to a central location. From end to end at its longest point, Utah is about 350 miles long, so workers and contractors from the farthest reaches of the state could spend hours on the road away from their offices and frequently had to pay for gas, food, lodging, and other expenses out of pocket for a one-day seminar.

With Adobe Connect, UDOT can provide contractors and engineers critical training content and updated information more efficiently and cost effectively. Because the Adobe solution leverages the free and ubiquitous Adobe Flash® Player, contractors, engineers, and others from around the state—even those who don't operate on state-owned networks—can access live and on-demand training sessions from virtually anywhere, at any time without needing to download additional software.

The online training sessions feature a variety of rich, interactive elements like dynamic presentations, integrated audio and video, real-time chat, and live polling, among many others, to replicate an in-person experience. Live sessions are recorded for on-demand playback for those unable to attend live sessions or simply for refresher training. For larger groups—like the 400 or so contractors around the state who need training—UDOT releases two fully produced webinars per month to streamline the delivery of important information to large groups.

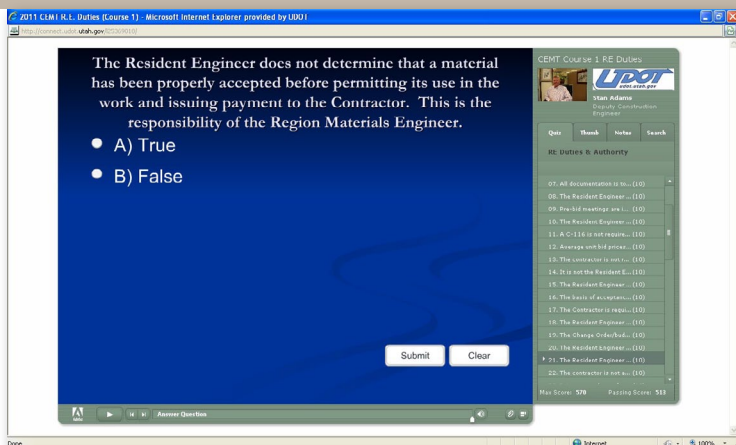
"In the past, someone working in the southern part of the state would have to travel overnight just to attend a one-day seminar," Garcia says. "Using Adobe Connect to deliver all that information online eliminates hundreds of thousands of dollars that otherwise would be spent on gas, food, and lodging, and reduces the amount of time they spend away from the office."

Not only does the Adobe solution make it easier for contractors, engineers, and field technical staff to take training, but it also provides UDOT administrators a convenient method for creating new training programs, and tracking and documenting training progress to ensure that anyone assigned to a project has the proper, full education. In addition, managing the training content on premise provides a higher level of security than other solutions could offer.

Using the Adobe platform, UDOT can integrate periodic quizzes and tests to challenge a worker's understanding and comprehension of rules, regulations, and policies. Garcia notes that each training course includes a series of intermittent quizzes and a final exam, which must be passed at a 90% or higher rate in order to qualify to work or bid on a project.

"The Adobe solution makes it easy for us to not only see who has taken specific training courses, but also see their exact quiz and test scores to understand which content they truly understand and identify the areas that are a bit more suspect," says Garcia. "It helps us make sure that only those who've qualified to work or bid on a project can, which reduces our liability risks, and more importantly, provides important trends and clues as to which content needs to be re-evaluated and possibly changed for the best learning experience."

With Adobe Connect, UDOT administrators can employ a series of quizzes and tests in each training module to gauge the effectiveness of training. Test scores help UDOT make sure only qualified contractors and engineers work on projects, and help identify topics and content that need to be revised or improved.



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Mike Garcia
Construction operations specialist,
Utah Department of Transportation

Meeting the needs of workers and citizens

When they're not learning about the latest developments in construction technology or reviewing revised federal and state guidelines for managing projects, UDOT workers and contractors are in consistent communication planning and refining project plans.

Much like with training, gathering crews, project leaders, and others for project kick-off or status meetings had previously been challenging. With the Adobe solution, UDOT engineers and contractors can hold live, interactive project meetings from any location. Unlike in the past when travel expenses and lengthy travel times restricted large inter-disciplinary meetings to one or two per year, today UDOT teams hold as many as 12 meetings per year that include as many as 100 people at a time.

"Adobe Connect makes meeting more convenient, cost-effective, and efficient," says Garcia. "The interactive elements—screen sharing, high-quality audio and video, and real-time chat—help us get more done in a shorter amount of time. This means we spend less time traveling and meeting, and more time actually executing projects."

Garcia notes that while the meetings and webinars help make his and others' jobs easier, the true value of the Adobe solution is for the citizens of the state of Utah. "Adobe Connect helps us to make sure that everyone is on the same page from the beginning. We get information out faster and more reliably now, so we're able to complete projects correctly the first time," he says. We can complete projects that citizens need faster and at lower costs, saving taxpayers millions of dollars per year."

For more information
www.adobe.com/products/adobeconnect



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