

CASE STUDY



At Caltrans, Collaboration Ensures Implementation Success

CHALLENGE ▼

New system implementations are never easy. When the California Department of Transportation (Caltrans) decided to replace their 40-year-old legacy system with AASHTOWare Project Preconstruction™, the natural challenges arose: coordination, technical requirement issues, user training, contractual requirements, etc.



Deadline met



1200+
people trained



Prepared for
decommission

PROCESS ▼

Fueled by the potential to improve the lives of hundreds of Caltrans employees, the implementation team tackled every obstacle with determination. A strong relationship between the agency and Infotech, the implementation contractor, allowed Caltrans to focus on the project objectives and reach their goal as scheduled.

RESULTS ▼

Through ample coordination, collaboration, and aplomb, the Caltrans team was able to successfully implement AASHTOWare Project Preconstruction. As part of the agency's implementation goal, Infotech and Caltrans found a solution to keep the legacy system running in parallel to AASHTOWare Project during the transition period.

Three decades later, an implementation begins

"I wish we would have listened to you guys 30 years ago, we would have been having this call in 2000 instead of 2022."

That's Devang Vora, joking about how someone from Infotech first approached Caltrans about AASHTOWare Project nearly 30 years ago. Vora is practical, focused, and honest - he's just the kind of person you want leading a complex implementation effort where communication is just as important as execution.

As an AASHTOWare Project Program Manager at Caltrans, Vora is responsible for overseeing implementations, acting in a hybrid role as a contract manager, project manager, and system administrator. He ensures progress is made, deadlines are met, stakeholders are bought in, and staff is adequately trained to use the new system. It's a lot of responsibility, as the chart below indicates.

Caltrans Implementation Staff

7 Full-Time
AASHTOWare
Project Support Staff

50-60
Core Implementation
Team Members

1200+
Caltrans Employees
Trained

To further complicate matters, Vora took over the AASHTOWare Preconstruction implementation after it was already begun by a previous employee. It's the sort of handoff that's never easy, no matter how comprehensive the transition plan. Still, Vora had ample motivation to see things through - first and foremost, moving on from legacy system pain points.



Leaving a legacy by leaving a legacy

Moving on from the legacy system was Vora's, and by extension, Caltrans' chief motivation in implementing AASHTOWare Project Preconstruction. It was by no means a bad system - any software that has managed to weather four decades of use has a solid core. But there were one too many issues, from tedious processes to project item limitations. When a system breakdown led to a call from California's Governor, it became even more clear that it was time to move on.

Vora recognized that by helping leave the legacy system behind, he and his team could build a better present and future for hundreds of Caltrans employees.

"That was a big motivation behind me getting interested in this. I'm going to do my best to make this system better for a thousand people - changing their lives day-to-day and how they feel about their work. Think about the thousands of people."

Diving into the implementation process

As previously mentioned, Vora had a team of 7 full-time AASHTOWare Project support staff alongside a core team of 50-60 for the implementation. Throughout the pandemic, the team coordinated on Zoom and eventually held several onsite workshops that were led by Infotech. Their roles and responsibilities broke down as follows:

TEAM	ROLE	RESPONSIBILITIES	TIME COMMITMENT
AASHTOWare Project Support Staff	Project administration and execution	Document control, User guide and website development, Maintaining data, providing training, supporting the user	Full-time
Core Implementation Team	Project stakeholders	Review configurations and tool functions, tool requirements, needs, and expectations	1-2 hours weekly

Infotech played a role throughout the process as the contractor for the effort. It was always Caltrans' vision to have Infotech involved in the implementation, but as is often the case, it soon seemed as if they were part of Caltrans' own team. When everyone is working in partnership with specific industry experience, it allows for increased efficiencies in operational and organizational changes.

"After some time it felt like we were the same team, like Infotech wasn't working as a contractor, it was like they were an employee working for Caltrans. All the people were trying to solve a problem to move forward."

Tackling the biggest implementation challenges

"I thought we were only supposed to bring good memories to this."

Vora laughs as he recalls some of the bumps along the road, but it's the laughter of a man who has climbed a mountain, and having conquered it once, has no desire to return to the summit anytime soon. The view at the top is always worth it, but there's no denying the climb can be challenging. With the right perspective, Vora and his team were able to collaborate with Infotech to work through the major challenges.

CHALLENGES IN NAVIGATING AND ALIGNING AGENCY AND CONTRACTOR CONTRACTUAL REQUIREMENTS

"Our biggest challenge in executing the contract was gaining internal approval from Information Technology and Contract departments and working with AASHTO and Infotech to change their contracting processes."

Caltrans, like any transportation agency, has an extensive history of working with contractors to build things like bridges and roads. As such, they went into the implementation process with a similar mindset towards Infotech as any other contractor - both sides will agree on a contract, and then the contractor will do the work. But because system implementations are an extensive process that necessitate a deep understanding of an agency's business practices, it was never going to be that simple. This project required a partnership, with active project management and involvement from both Caltrans and Infotech.

Discoveries during the process bring up issues which was not captured by both sides during the analysis phase. Ongoing conversations affect priorities. And for Vora, the reality

was becoming clear - if both sides obsess over the contract, neither is going to make any progress. Spearheaded by Vora and Infotech's Account Management team, a new understanding was reached: a successful implementation of AASHTOWare Project Preconstruction was the top priority.

"Why we waste so much time on paperwork? We would rather complete the system. That helped to change the relationship and I'm very thankful to [Infotech] for having a positive attitude to move forward."

RUNNING THE LEGACY SYSTEM IN PARALLEL

"Our understanding was that both systems would run parallel during the transition phase. It was a wake up call to both, Infotech and Caltrans that this could not be easily done."

A few technical snags always pop up during the implementation process, but Vora shared a curveball no one saw coming: the difficulty in running AASHTOWare Project Preconstruction in parallel with the agency's legacy system during the transition phase. This aspect was a major part of the plan, key to a smooth transition. After weeks spent trying to figure out how to make this happen, the Infotech team figured out a way to configure key files which allowed both systems to work parallel. While this was a speed bump no one saw coming, crossing it only strengthened the team's resolve and approach.

"Sometimes some of those 'bad' things are good. We learn our lesson and avoid bigger problems down the road."

Advice to interested agencies

COMMUNICATE EARLY AND OFTEN WITH INFOTECH

"As an outside entity, Infotech can only do so much. We need to actively get involved."

One of the key roles of the agency during the implementation process is to provide Infotech with all the necessary information to move forward. No one knows an agency's business practices and needs better than that agency. Communicating those expectations early and often during the first phase of implementation is crucial to a smooth process. Vora notes that it can be challenging to make sure every potential disconnect is covered early on.

"We know little about this new system, and at the same time, as the system provider, you know little about Caltrans business practice. It's always going to be a challenge, but how can we do better in this specific scenario? Have better communication early, have a detailed role breakdown of Infotech and your agency, and have enough resources on the agency end based on that understanding with Infotech."

HAVE THE RIGHT PEOPLE ON YOUR TEAM

Are the people on your implementation team passionate about leading change? For Vora, that's one of the primary questions to ask in the early stages of putting a core group together. He says that

knowledge of the agency's business practice and the desire to evolve the system are the two key factors to a strong implementation team member.

"Who is going to be the project manager for your agency? They need to have a strong understanding of the business practice. You can't just put a good manager in and think they are going to run the show they should be passionate and knowledgeable of the agency's business practices to successfully implement the new system."