



CASE STUDY

With Cloud Hosting, the Kentucky Transportation Cabinet Protects Their Data and Their Budget

CHALLENGE ▼

Under an on-premise infrastructure model, the Kentucky Transportation Cabinet (KYTC) experienced challenges with maintenance, support, data backups, and AASHTOWare Project™ upgrades. After issues, outages, and an instance of lost data, KYTC began looking for alternative solutions.

SOLUTION ▼

AASHTOWare Project Hosting Services with Infotech®

By partnering with Infotech for cloud hosting services, agencies can access applications and data in a secure environment that eliminates the need for on-premise infrastructure and support.

RESULTS ▼

By moving AASHTOWare Project into the cloud, KYTC now experiences improved maintenance and support, in addition to a painless upgrade process for new application releases.

ESTIMATED SAVINGS

\$20,000/YEAR

“We’d run into roadblocks or outages and find out about it when our users called and said the system’s down. That was a big reason why we went hosted.”

Matt Looney, Transportation Engineer
Branch Manager, KYTC

Interested in implementing
AASHTOWare Project
Hosting Services?

Contact your Infotech Account Manager
or visit aashtowareproject.org/hosting-services
for more information.



Lost Data, Painful Upgrades, and High Costs: The Challenges of Centralized IT Support

Many states are centralizing server maintenance and technical support under one office of technology that serves every state department. While this process reduces the burden of IT support on individual departments, it can create challenges as different departmental priorities and processes conflict with each other. For Mark Faulhaber, Matt Looney, and the rest of the KYTC, those challenges were incredibly problematic.

DATA LOSS

KYTC experienced significant data losses that resulted in staff rework. Once, a loss of a week's worth of data meant the entire department needed to re-enter everything from daily reports to payroll data.

HIGH COSTS

With the application maintained in the state datacenter, KYTC was charged for CPU and Memory usage, data storage, and the physical machines used by the agency. While these charges aren't atypical, moving to cloud hosting with Infotech resulted in

\$20,000 annual savings. KYTC no longer bears the staff cost of managing and maintaining the server.

PROLONGED UPGRADES

"When they said 'we're going to do the upgrade this weekend, are you available?,' it meant everyone better have all hands on deck," said Looney. Upgrading to the latest version of an AASHTOWare Project™ module was a process that required the support of the entire staff and extensive troubleshooting.

After growing frustrated with these recurring issues, Faulhaber and the rest of his team began vetting the idea of hosting AASHTOWare Project in the cloud with Infotech. While cloud hosting came with its own concerns, Faulhaber realized it was the way of the future and a necessity for the department.

"I started reading up on hosting and seeing a lot of instances where there would be data disasters and the question would be 'why didn't you put this out on the cloud?'"
- Mark Faulhaber, IT Consultant, KYTC

The Benefits of Cloud Hosting with Infotech

While financial savings was an added benefit of transitioning to hosting, it wasn't KYTC's primary motivation. Even if the costs were "apples to apples," said Looney, they would have gone with cloud hosting for the other benefits it provides. So, how do those benefits stack up?

EXPEDITED AASHTOWARE PROJECT UPGRADE PROCESS

KYTC currently hosts AASHTOWare Project Preconstruction™, AASHTOWare Project Civil Rights & Labor™ and AASHTOWare Project Estimation™ with Infotech, and are currently in the process of migrating to AASHTOWare Project Construction & Materials™. Infotech has aggressive policies in place to help agencies stay current that involve notifications, checklists, and test plans for every upgrade. "It's a much smoother process for any upgrades," said Looney. Faulhaber notes the expedited process, but bemoans the loss of excitement in current upgrades:

"It takes us several months less elapsed time to do an upgrade. It's really kind of sad because the drama is gone. It used to be a real adrenaline surge when you'd put that last patch in."

IMPROVED CUSTOMER SUPPORT Infotech isn't just KYTC's cloud hosting provider - they're the developer and official contractor of AASHTOWare Project. That means that Infotech doesn't just understand KYTC's hosting requirements; their application use and business needs are also common knowledge. Having the same entity host and support the software means customer support is exceptionally streamlined for the agency.

"Whenever we report a problem, we don't have to send a copy of the current data, it's just an email that says 'yes, you can have access to our data and system, look at whatever you need to.' Getting support for issues we have has been greatly improved," said Looney.

SECURITY AND BACKUP PROTOCOLS Data security and backups were one of the main motivations behind KYTC's move to hosting. Having gone through painful data losses before, the team wanted to ensure that procedures were in place to prevent that from ever happening again. To ensure data integrity, Infotech encrypts all data at rest and in transit. In addition to nightly backups and redundancies, Infotech also employs a "Zombie Apocalypse" scenario strategy that would protect an agency's data in even the most extreme circumstances.

NOTE: Infotech is SOC 2 Type II compliant under SOC guidelines.

"We're getting more security now, not just from an access standpoint, but backups as well. Having a time when we would lose a chunk of data, that's traumatic, and it's much less likely to happen now, if ever at all," said Looney.

SIMPLIFIED AND SECURE EXTERNAL ACCESS Often, agencies need to grant contractors external access to an AASHTOWare Project module, which for many agencies, is easier said than done. For good reason, internal security protocols can make it difficult to grant internal parties access to a state system. Having a separate hosted domain allows KYTC to grant contractor access through a Hosted Active Directory, rather than their KYTC Active Directory. "The users aren't actually touching the central servers," mentions Faulhaber, meaning the KYTC team can collaborate with contractors in AASHTOWare Project without creating a potential security risk.

KYTC's Implementation Process and Advice to Agencies

THE IMPLEMENTATION PROCESS ▼

10-12

Team Size

infotech

Project Management

THE TIMELINE ▼



"A good portion of our time was going through all of the [state IT] stage gates to convince them that it was safe and getting them all the documentation they needed to approve the hosted solution."

Matt Looney,
Transportation Engineer
Branch Manager, KYTC

KYTC's team of 10-12 people supported the implementation from beginning to end. Project management was handled by Infotech's hosting team, who provided regular assignments and updates to the KYTC implementation team. The biggest challenge, as is often the case, was getting through all the processes and procedures required

by the state IT organization. The expertise of the Infotech hosting team was crucial in working through those conversations.

"It was like having a hosting expert [on staff], someone who really did it well and had chosen good partners and could explain why and really understood our needs. It really is a benefit to have folks that are

experts with the product as well as servers so they know how to mesh the two." - Mark Faulhaber, IT Consultant, KYTC

Today, KYTC enjoys the many benefits of hosting, including expedited upgrades and application support from Infotech, the developers of AASHTOWare Project.

Agency Advice Column

Dear KYTC,

My agency is considering the transition to cloud hosting, but it seems like an extensive and potentially costly process. What advice would you give to an agency that's considering the move to hosting?

Sincerely,
Head in the Cloud

Dear Head in the Cloud,

With strong internal support and Infotech's guidance, it's relatively easy to upgrade to hosting. We recommend that your team:

- ▶ Start collaborating with your state IT organization very early on in the process to understand their requirements and needs
- ▶ Do your due diligence in the test environment to ensure you understand the network structure and that everything works properly
- ▶ Understand who owns the data and where it's stored so if a worst case scenario occurs, you understand how your data reverts back to you
- ▶ Lay out your expectations of data ownership and support so the contract is clear and easy for both parties to sign

Hope that helps,
KYTC Implementation Team