PUBLIC SAFETY

+ THE FAR-REACHING IMPACT OF

THE CLOUD

WHY MOVING TO THE CLOUD IS SO IMPACTFUL









Introduction

Many public safety agencies are wrestling with the decision to move mission-critical systems to the cloud. The shift from on-premises software to software as a service (SaaS) is significant, and it begs the question of whether the benefits outweigh the costs.

In this two-part series, real public safety agencies and Tyler Technologies leaders share their perspectives on why shifting to a SaaS model is one of the most impactful decisions an agency can make to protect against cyberattacks, reduce workload on staff, improve efficiency, and better serve their communities, plus tips for the transition.

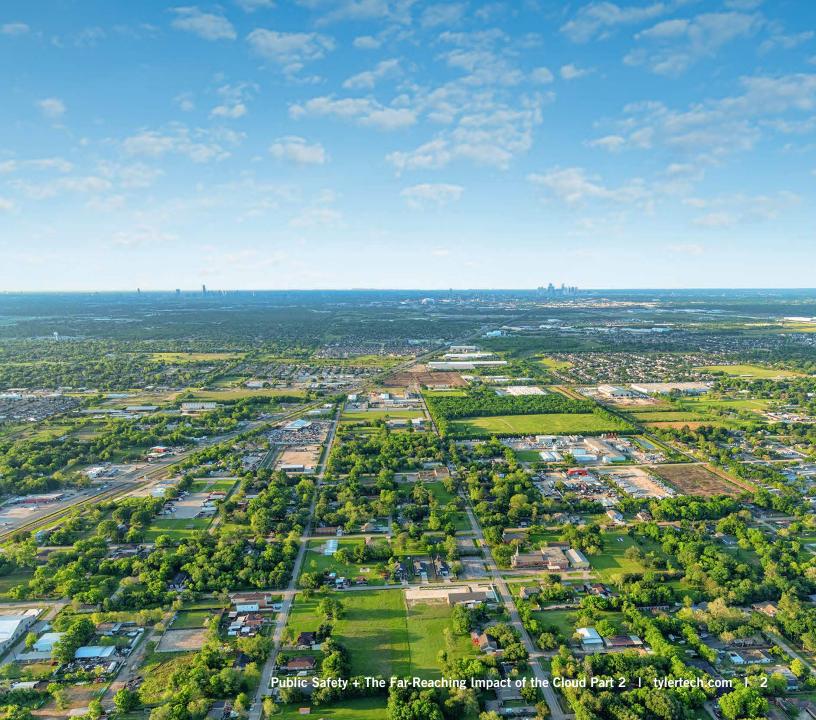
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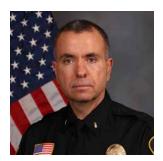
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Shifting from on-premises software to the cloud is a big decision for any organization, but especially public safety agencies when lives are on the line. Below, four public safety agencies of different sizes, from different areas of the U.S., and with different priorities share why they chose to transition to a SaaS model, what the journey looked like, advice for agencies thinking of making the move, and how their agencies and communities are benefiting from the technology upgrade.





Lt. Gabriel Rodman

ABOUT LAREDO:

"Laredo sits on the north bank of the Rio Grande in Texas, bordering Mexico. We're the number one land port between Mexico and the U.S. Our city has a population of 265,000, but with the visitors we get on a daily basis from Mexico and the commercial truck traffic, our population balloons to 300,000+ during the day."

YEAR OF CLOUD MIGRATION: 2022

PRIMARY GOAL(S) OF MOVING TO THE CLOUD:

 Minimize disruption in the event of a cyberattack

Journey to the Cloud: Laredo Police Department, Texas

By Gabriel Rodman, Commanding Lieutenant, Information Technology Bureau of the Laredo Police Department

The city of Laredo suffered a ransomware attack in May 2019, and, as a result, the city's computer network was impacted. Fortunately for Laredo PD, our computer network was not impacted since we have additional firewalls, but it hit close to home, and that was enough to drive the change.

It became mission critical to find a software company that could offer a cloud solution to protect our data because, as a police agency, we could not afford to go offline if we were hit with another attack. We had to revert to pen and paper for payroll during the attack, which was extremely disruptive. For a police department, that kind of disruption is unacceptable.

Tyler was identified as the best option and, in 2020, we signed the contract. We went live on the cloud on Oct. 25, 2022, and there was a lot of change management that went into it. It was a big change for our officers, who had to adapt to a new user interface. Based on our experience, I have three key points of advice for anyone considering a move to the cloud.

Number one, transparency. It's crucial to communicate clearly with your department, your sworn personnel, and your staff about why you're making the switch to the cloud. Administration understands the need to improve cybersecurity and to move into the future, but you also need to convey this your personnel. We're creatures of comfort and, as such, we don't like change. We don't want disruptions. We don't want undue stress. We want to mitigate that hesitation by letting them know the "why" behind it and how it's going to benefit them.

Secondly, involve subject matter experts. During our transition, our IT team handled most of the logistics, including data conversion and mapping. In hindsight, we should have involved subject matter experts from various departments — criminal investigative division (CID), dispatch, patrol, records, property, and administration. Every facet of your agency. These are the people who will be using the system daily and should be involved in testing so you have buy-in from those departments and a well-developed product by the time you go live.

The last key point I want to share — and I can't stress this enough: training. Train, train, and train. Your trainers should be those subject matter experts from different departments. In some instances, you might be moving from Tyler on-premises to Tyler in the cloud — more or less the same user interface. In our case, we moved from our old vendor to Tyler in the cloud, and it was a completely different user interface. With these being mission-critical systems, people need to know how to use them. In hindsight, I would have put more of an emphasis on training.

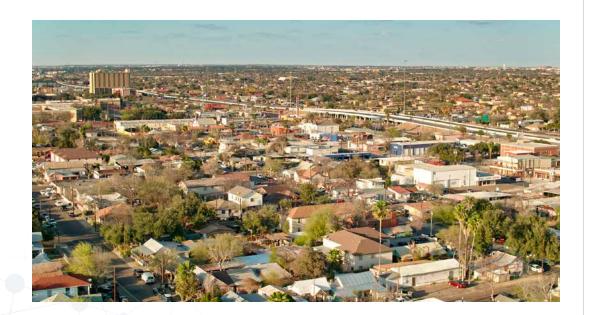
After all was said and done, we're doing really well and we're happy we made the switch. We couldn't be happier with the layers of security that are afforded to Tyler — the sense of security and peace of mind that our network is secure.



Since then, we've worked with Tyler to keep the **forward-looking momentum** going.

We're now using Tyler's analytics solutions — also cloud-based — to measure officer performance. Disregard on that analysis data, we have created an integrity audit unit for officers who need some additional support so we can make sure they get retraining and improve productivity. We also use that data for heat maps to identify crime hotspots and allocate resources more effectively. And, ultimately, that benefits our residents. Additionally, we're using that solution and the mapping functionality to restructure our districts based on call volume data.

The next upgrade on our radar is helping our officers do everything from their phones issue citations, see call types and narratives, self-dispatch, run NCIC/TCIC checks. We've purchased phones for all officers, and we're planning to implement Tyler's Enforcement Mobile and Enterprise Law Enforcement Field Mobile solutions. These solutions are either already cloud-based or heading toward being cloud-based, so we're really all-in with the cloud.





We couldn't be happier with the layers of security that are afforded to Tyler the sense of security and peace of mind that our network is secure.

- Lt. Gabriel Rodman, Laredo Police Department



Director Tony Fischer

ABOUT GERMANTOWN:

"Germantown is a bedroom community of about 40,000 residents outside of Memphis."

YEAR OF CLOUD MIGRATION: 2024

PRIMARY GOAL(S) OF MOVING TO THE CLOUD:

- Reduce staff workload
- Emergency migration after a cybersecurity attack

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Moving to the cloud was a force multiplier for our IT department.

— Tony Fischer, City of Germantown

Journey to the Cloud: City of Germantown, Tennessee

By Tony Fischer, Director of Information Technology, City of Germantown

We had a cybersecurity incident on Feb. 2 — Groundhog Day. Our CAD was down. We were in an urgent situation. It was a crazy time.

At the time, almost all of our other systems and Tyler products were in the cloud. Our last remaining piece was our Enterprise CAD solution. We reached out to Tyler in the middle of this cybersecurity incident, and one of their first suggestions was moving this last piece the cloud to get it back up and running.

We spent about a week working with attorneys on contracts. From the time we delivered our data to Tyler to the time we were live in CAD, it took just a few days. We delivered our data on Monday and were live on Friday. Very quick. I wouldn't recommend that timeline to anyone, but in this case, Tyler had our back and was able to get us up and running very quickly certainly quicker than we could have done ourselves on-premises. At the end of the day, we were able to use the incident as an opportunity to improve our cybersecurity posture and get that final push to the cloud.

Other than remedying the immediate issues, the other big driver behind our move to the cloud was freeing up our staff. We have a small staff of great IT folks, and they're really stretched. Moving to the cloud was a force multiplier for our IT department. We're able to spend a lot more time out in the field with the agencies we support rather than doing patches and updates and reboots and refreshes and messing with the hardware. All of that's gone now. My staff can focus a lot more on our agencies, the end-user experience, and make sure our agencies are getting as much out of the software as they can rather than spending their time working in the data center.





Lt. Heath Hawley

ABOUT JERSEY VILLAGE:

"Jersey Village is a small community on the northwest city limits of Houston. We serve a population of about 7,800, but given our proximity to Houston, we feel a lot bigger."

YEAR OF CLOUD MIGRATION: 2021

PRIMARY GOAL(S) OF MOVING TO THE CLOUD:

- Minimize disruption in the event of a natural disaster or inclement weather
- Reduce staff workload

Journey to the Cloud: Jersey Village Police Department, Texas

By Heath Hawley, Lieutenant, Jersey Village Police Department

When we were assessing a move to the cloud, one factor was our location on the Gulf Coast — knowing we're going to have bad weather, hurricanes, and storms. My power is still out from strong winds last week. Even if our building is flooding, we still need location alerts when we conduct a water rescue. The officers don't care where the server is, they just need the system to work. It's crucial to have reliable access to information, no matter the situation.

With our agency being small, I'm responsible for managing all things Tyler. We have a limited number of IT staff — only three full-time IT personnel for the entire city — so previously, most of the IT problems were handled by me. It was a relief to shift to the cloud and not have to worry about those issues. I don't need to be constantly connected to support to manage our servers. I just submit an online ticket and move on with my day. I may be working a night shift; I may be working patrol, answering calls — I'm not locked down at my desk. That flexibility is huge.

Even so, it was a hard sell for our IT folks at first — like getting into Fort Knox. They want to own that castle. It was important to reassure them that their jobs are secure even as we move public safety operations to the cloud. Tyler and AWS is more equipped to handle this aspect of operations, and it's okay to admit that.





During the initial discussions and implementation, you hear that Tyler can monitor your system and manage any issues. Well, I had a real-life experience that confirmed this to be true.

We had a pretty significant issue, and I was calling support. While I was on the phone, I received a separate call from a member of Tyler's Cloud Operations Team who said, "It looks like you've got a problem." Right then, I was sold. No one is going to do it better or alleviate as much work from the city as Tyler will. That was an eye-opening experience for someone who doesn't understand the back-end processes — seeing that it really does work the way they say it will.

Now that we're live, our IT staff has been liberated to focus on other things. Our phone system used to plug into a cord to use the building's internet; now it's in the cloud. Our IT staff was able to automate our entire review system and yearly evaluations through our existing Microsoft platforms rather than paying an external company to do it for us. When you can free up personnel to focus on other areas, you can really see the benefits.

Our IT personnel are no longer working at 3 a.m. to perform upgrades. We schedule them with Tyler, test before deployment, and when our staff comes to work, they're on a new system. Tyler prioritizes getting CAD back online first, so they work around the time that's best for you. It's really seamless.



It was a relief to shift to the cloud and not have to worry about those issues I just submit an online ticket and move on with my day.

— Lt. Heath Hawley, Jersey Village Police Department



Director Brent Reynolds

ABOUT THE VILLAGE OF GLENVIEW:

"Glenview is part of the Greater Chicago Area. For Glenview alone, we serve a population of 47,000. However, we serve 14 communities and a total of 19 agencies, with a total population of more than 200,000."

YEAR OF CLOUD MIGRATION: 2024

PRIMARY GOAL(S) OF MOVING TO THE CLOUD:

 Minimize disruption in the event of a cyberattack

Journey to the Cloud: Village of Glenview, Illinois

By Brent Reynolds, Director, Glenview Public Safety Dispatch Center

We're moving to the cloud early this fall, and we're excited. Our move to the cloud was mostly proactive, driven by what we've seen with neighboring agencies. In the past couple of years, we've seen agencies revert to pen and paper during incidents. Our concern was how our constituents would react to us shutting down or lowering the level of services to our community if we faced similar issues. So, we took a proactive approach for security purposes, as well as empowering our IT folks to focus on IT work while leaving server hosting to Tyler and AWS.

About five years ago, I was tasked with moving all of our systems to the cloud for the whole village. At the time, I told the village manager that public safety wasn't ready for the move yet, and he was understanding. Then, we attended Tyler Connect. After hearing Tyler and AWS describe what they could do, I said, "There's no reason why we can't move now."

So, I began making calls, asking our Tyler client executives about timelines, and sharing this with the agencies we serve. The agencies had a little bit of hesitation. It's a big move to go to the cloud. But, when I started showing them the differences between on-premises hosting and the cloud, they jumped on board very quickly. Now, when you talk to the end users the firefighters who use Enterprise Fire Field Mobile or the officers who use Enterprise Law Enforcement Field Mobile — and explain to them that they've actually been using those applications in the cloud for a couple of years, it's a lot easier for them to accept. Now, they're excited and ready to go.







When you're doing something for the first time and you're not sure how it's going to work, there's always an element of uncertainty, of surprise. And, sometimes, surprises aren't good. But, in this case, I would say our surprises have been really good.

When we first started talking with Tyler about moving to the cloud, there was a very small team on our initial calls. Now, there's an entire cloud team, which gives us assurance that Tyler is well-prepared and ready for our agency to make the move to the cloud.

The day that our long-time Tyler project manager popped up on our meeting and said she was taking the lead on our project, I felt comforted. Many of our Tyler friends who we've worked with over the years are on this team. It's not just new faces that Tyler is bringing in to run this — it's seasoned veterans, and that really gives me the comfort of knowing we're in good hands.



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- Brent Reynolds, Village of Glenview





Next Steps

Keep Reading

Public Safety + The Far-Reaching Impact of the Cloud: Part 1

Tyler's Vision for Public Safety + The Cloud

Andrew Hittle, president of Tyler Technologies' Public Safety Division, explains how moving to a SaaS model is more than just a change in the way data is stored and shares a vision of the future Tyler Public Safety is working toward.

Inside the Cloud: The Technical, Tactical Benefits of Public Safety Cloud Technology

Adam Boyd, manager of public safety cloud strategy for Tyler Technologies, deep-dives into the cloud and why the benefits of SaaS extend far beyond what meets the eye.

Read Now

Let's Talk

Ready to talk about what the cloud can do for your agency? Reach out to us.



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