



PROPOSED PROJECT

Proposed Project Name: Tyler Technologies Cloud Hosting Services

Business Problem:

Under the current model, maintaining the infrastructure that hosts the Tyler Technologies Public Safety platform creates variable overhead in the form of recurring capital expenditures and personnel investment. Maintaining the Tyler system is not an efficient use of staff's time, and the current platform is more vulnerable to cyber-attacks than the cloud solution.

Goal / Objectives:

- Create and get approved a budget revision for a contract with Tyler Technologies – Cloud Hosted Services
- Move our current services from a Paradise Valley onsite (self-hosted) solution to a state-of-art cloud hosted solution provided and maintained by Tyler Technology's and Amazon Web Services Government Cloud
- Utilize Tyler's staff expertise to maintain and secure the mission-critical software services needed for the PD department
- Reduce the town's risk for cyber and disaster recovery events by engaging Tyler Technologies team to maintain on a 24-hour basis the health and stability of our PD software programs (*Improved Operational Resiliency and Cyber Vigilance*)

Tyler's goal is to provide peace of mind to their customers that the software environment is in good hands, to ensure the best possible configuration of the environment, and to lower IT overhead for managing physical equipment, virtual machines, the application, and Microsoft updates.

Project Description:

The project will consist of moving all the current Tyler PD software services to a modern and world-class datacenter hosted and managed by Amazon Web Services and Tyler Technologies.

World-Class Datacenter

At the completion of the technology project migration; Tyler Technologies services will be deployed and hosted in a State and Federal compliant Amazon Web Services Government Cloud facility utilizing Tyler's expert staff, disaster recovery capabilities and Tyler 24/7 Managed Services for day-to-day support

Latest Infrastructure and Hardware

Tyler Technologies and Amazon Web Services will be responsible for all computer and disk storage infrastructure, datacenter networking and cloud security best practices.

Tyler will manage and maintain the Amazon platform, applications, operating systems, system backups, and disaster recovery procedures

Tyler's customer (Paradise Valley) will be responsible for all existing on-premises equipment, workstations, and the redundant internet connections

Tyler Service Level Commitments

Backup and Recovery

If a failure occurs, Tyler strives to achieve the following business restoration capabilities:

Server Failure Recovery Time: Less than < 4 hours to restore application

Data Recovery Point Objective: Less than < 1 hour data loss

Cyber Vigilance

Security / Monitoring / Support:

Tyler Technologies will perform all systems and security maintenance, security testing, and security compliance activities matching the state and federal security standards.

Operational Resiliency

Utilizing a dedicated and trained staff; Tyler Hosted Managed Services (HMS) will ensure that the environment is properly configured and maintained.

Tyler will be responsible for the setup, configuration, system monitoring, system and application updates, triage, support, system backup and ensuring that the applications are installed in the best possible configuration.

The Managed Services team will perform the following daily routine functions:

Verifying backups are current and useable in case of an emergency
Real-time alerts
Monitoring application and hardware health
Server Resource utilization – memory, processors, hard drive space
Tyler Technology application and Microsoft Windows services monitoring
SQL database performance execution times
Network performance optimization
Applying best practice cyber security updates for operating system and application patches
Tuning the environment as customer business requirements grow

Primary stakeholders identified in this project include IT, Legal, Dispatch, Patrol Officers, Detectives, and Command Staff.

Justification/Benefits: Why should/must the project be started now? List reasons

1. Reduce the risk of system failures due to self-hosting the application servers onsite and directly managing the software technology
2. Current staff lacks the expertise and time to manage the evolving complexity and specialization required to maintain Tyler Technologies software services
3. Improved security compliance by moving to an Amazon Government approved datacenter facility
4. The Cloud solution quickly identifies any failures in the system and Tyler staff promptly corrects the any issues. This will decrease staffs time spent working with Tyler on fixing solutions
5. Historical costs in hardware/servicers specific to Tyler Public Safety will go away. Costs of licensing Microsoft components for Tyler's software to include server migrations to overcome Microsoft's end-of-life issues will also go away.

Funding Sources:

To complete the process Town Council would need to approve a contract revision with Tyler Technologies costing \$108K
Funding: 10-63-290

Strategic Plan Alignment:

PD Value: Operational Resiliency, Reduced Cyber Risks
PD Goal 4: Incorporate tech into the department

LIFECYCLE COSTS

Assumption: Yearly renewal contract of \$108k

Estimated:	\$108k
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PROJECT TIMELINE		
Duration:	2 month	(April 2023 Completion)
Resources:	Legal approved and updated contract.	

PROJECT RISKS
1. 100% cloud based, so dependent on 3 rd party
Consequences of Not Performing Project: 1. Increasing risks of operational failures due to self-hosting, staff knowledge and skills gaps, aging hardware, and increased state mandated cyber security best practices 2. PD department would miss out on the benefit from the latest software product updates 3. Tyler Technologies staff can overcome the product knowledge and datacenter infrastructure requirements faster and with less impact risks to PD operations than current Paradise Valley IT staff 4. Benefiting from a standard disaster recovery backup and restoration plan maintained by Tyler Technologies 5. Current supply-chain dependencies leave town vulnerable to extraordinary long lead times for system replacements in case of failure 6. Tyler Technologies shares in the responsibility to maintain the state mandated cyber security audit compliance best practices
What criteria should halt this project for review? 1. If it becomes over budget by 10%

ROLES					
Organization	Project Mgmt.	Sponsor / Owner	User/ Client	M&O Support	Stakeholder
Chief of Police		X			

<i>PD Cmdr. Operations</i>	X		X		
<i>PD Cmdr. Technology</i>			X		X
<i>PD Crime Analyst</i>			X		X
PD Patrol Officers			X		X
PV Legal Dept.					X
<i>IT</i>				X	X
<i>3rd Parties</i>				X	

Approvals

NAME	ROLE	SIGNATURE	DATE
Pete Wingert	Chief of Police		