

BILL NO. S-22-11-01

SPECIAL ORDINANCE NO. S-_____

AN ORDINANCE approving CYBER SECURITY CONTRACT – FUNDING APPROVED IN RESOLUTION R-66-22 - \$3,596,833.43 between RESULTANT and the City of Fort Wayne, Indiana, by and through its Board of Public Works.

WHEREAS, on August 23, 2022, Common Council adopted Resolution R-66-22 pursuant to which Council approved funding for certain cybersecurity improvements in the amount of Three Million Five Hundred Thousand and 00/100 Dollars (\$3,500,000.00); and

WHEREAS, City staff has now finalized the terms of a definitive agreement for a cybersecurity project for which the funding was partially approved under Resolution R-66-22; and

WHEREAS, Common Council desires to approve the attached Agreement and additional funding in furtherance of Resolution R-66-22.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. The Common Council approves the attached Agreement and the additional funding in the amount of Ninety-Six Thousand Eight Hundred Thirty-Three and 43/100 Dollars (\$96,833.43) for a total NOT TO EXCEED COST OF Three Million Five Hundred Ninety-Six Thousand Eight Hundred Thirty-Three and 43/100 Dollars (\$3,596,833.43) to be paid with ARPA funds.

SECTION 2. That all actions previously taken in connection with

1 project that is the subject of the attached Agreement, including, without limitation,
2 the approval of funding under R-66-22 are hereby ratified, confirmed, and approved
3 in all respects.

4 **SECTION 3.** That this Ordinance shall be in full force and effect from
5 and after its passage and any and all necessary approval by the Mayor.
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8 _____
9 Council Member

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11 APPROVED AS TO FORM AND LEGALITY

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13 _____
14 Malak Heiny, City Attorney
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| STATEMENT OF WORK |

IT Modernization & Security | City of Fort Wayne, IN

CITY OF FORT WAYNE AND ALLEN COUNTY AND RESULTANT, LLC
MASTER SERVICES AGREEMENT FOR STRATEGIC INFORMATION
TECHNOLOGY OUTSOURCING SERVICES, INFRASTRUCTURE AND
APPLICATION SERVICES

November 2022



INTRODUCTION

The objective of this engagement is to create a 21st-century infrastructure that provides best in class technology to help improve the lives of the citizens of the City of Fort Wayne and those who serve it. The City of Fort Wayne will improve the resiliency and business continuity of its IT environments by moving core IT services to modern datacenters. Coupled with this migration, the City of Fort Wayne will expand its ability to prevent, mitigate, and respond to cybersecurity threats by introducing new or enhancing existing cybersecurity controls throughout the environment.

Scope of Work

To achieve your objective, Resultant will simultaneously execute two workstreams, Enhance Cybersecurity and Datacenter Resiliency, as detailed below:

ENHANCE CYBERSECURITY

This workstream will expand upon existing services and systems to assist in the continual maturation of the City of Fort Wayne's IT Security Environment, increasing its capabilities to mitigate and respond to cybersecurity threats. Timeline of this effort is depicted within the Timeline section below. This workstream will include three phases as detailed below:

- **Expanded Environment Management**

Expand critical infrastructure responsibility to include 495 (up from 295) servers and 671 (up from 595) network devices. Improve the device refresh lifecycle from seven (7)-years to four (4)-years.

Resultant will execute the actions identified in Fort Wayne Amendment 3 Attachment 1 Change Order.

- **Business Continuity Planning**

The City of Fort Wayne has developed a Disaster Recovery Plan (DRP), an Incident Response Plan (IRP), and backup policies that assist staff if the technology environment requires restoration. The City of Fort Wayne does not currently possess a Business Continuity Plan (BCP) that outlines how all entities will maintain business operations in the event of critical outages or interruptions to services.

Resultant will conduct interviews and working sessions with each department to identify and document requirements needed by each department that would enable them to continue operation in the event of a catastrophic interruption to IT services. Resultant will then develop and deliver a BCP that encompasses all IT procedures needed to support the departments during such events.

- **Workstation Refresh**

City of Fort Wayne workstation environment has unsupported Windows 7 devices still in production.

Resultant will help facilitate the procurement process to replace workstations on a modern operating system to replace these assets.



• GRC Tool Implementation

The City of Fort Wayne does not have a centralized governance, risk, and compliance (GRC) system to manage their security initiatives, procedures, and controls. A GRC tool assist to mitigate risks associated with use, ownership, operation, involvement, influence, and adoption of IT within the environment.

During this phase, Resultant will help facilitate the selection and implementation of a GRC system into the City of Fort Wayne environment that is capable of compliance, policy, operational risk, and vendor risk, and privacy management.

DATACENTER RESILIENCY

This workstream will move core IT services to modern hosting solutions from the aging urban location centered in a floodplain thereby increasing the resiliency and availability of the City of Fort Wayne systems and services. Timeline of this effort is depicted within the Timeline section below. This workstream will be include nine phases as detailed below:

• Datacenter Migration

The current datacenter at the Edward Roseau Center (ERC) lacks fire suppression, contains asbestos material, is built 50 yards away from railroad lines, and lies in a congested urban area within 500 yards of 3 rivers. The City of Fort Wayne seeks to explore, select, and migrate the current on-premises datacenter to a hybrid approach that includes capabilities past co-location such as Infrastructure as a Service (IaaS) and Disaster Recovery as a Service (DRaaS).

Resultant will conduct a datacenter selection, working in conjunction with the Chief Information Officers (CIOs), to identify local, national, Software as a Service (SaaS) offerings, or cloud hosted datacenters with capabilities that align with the CIOs objectives. This selection may include a singular or multiple datacenter approach. Resultant will engage with sales and engineering teams to develop and deliver quotes and/or estimates of services to the the CIOs for their selection and approval.

Upon CIOs selection and approval, Resultant will plan for and execute migration actions to the chosen datacenter(s) or SaaS offerings. Migration actions may include facilitation for purchase and/or installation of hardware, migration of virtualized servers or services, deployment of new servers or network systems, migration of databases, files, or other data as needed.

• SD-WAN

CFW-AC locations are connected to the Edward Roseau Center (ERC) via either a direct fiber connection or through commercially available intranet with a virtual private network configuration, creating single points of failure at all locations, except the ERC.

During this phase, Resultant will facilitate the sourcing, installation, and configuration of commercial Internet Service Provider (ISP) for each location throughout the City of Fort Wayne. Each location, with the exception of ERC, will receive a Meraki firewall, replacing any existing firewalls at the location. Resultant will help facilitate the procurement process of these firewalls. All firewalls will be brought into the Meraki tenant, created as part of the Secure Production Wireless Deployment engagement. These firewalls will be configured with matching policy configurations of the existing firewalls. If no firewall currently exists, one will be deployed and configured. For the



Courthouse and Citizens Square locations, two firewalls configured as a High-Availability (HA) pair will be deployed. All firewalls will be configured to use any existing direct fiber connections as the primary link, while utilizing the newly installed ISP connection as a failover link. Resultant will work with primary stakeholders at each location to identify an outage window during which the new firewalls will be installed.

Auto-VPN connections and policies will be established for each firewall to connect to both the ERC and any datacenters selected as part of the Datacenter Selection phase. Each site will be configured so that outbound traffic is routed through the VPN to the ERC's main firewall, and upon loss of connection to route directly out the newly installed ISP. Internal network traffic at each location will be isolated to only allow connections to server systems and/or networks maintained by the City of Fort Wayne, creating network segmentation between locations. At the ERC, Resultant will deploy two firewalls configured in a HA pair. These firewalls will not directly replace the existing Checkpoint firewalls, but will be used as a VPN concentrator for all remote locations. Any datacenters selected as part of the Datacenter Selection phase will be installed with two firewalls in a HA pair to be used as the primary firewall for inbound and outbound connections.

• Isilon Expansion

The City of Fort Wayne has installed an Isilon system to accommodate reliable data replication and versioning. The existing Isilon solution does not currently possess enough storage space to handle the entirety of the environment.

Resultant will help facilitate the procurement process and install expansion modules to the Isilon systems.

• Virtual Server Consolidation

The City of Fort Wayne's technology environment includes redundant, single purpose, non-critical, or legacy servers. Servers have traditionally been created in response to specific requests, and without a holistic plan to their roles, functions, or services offered.

Resultant will review the function and purpose of all virtual systems within the environment. Resultant, working in conjunction with the CIOs and affected departments and/or agencies will identify servers to be decommissioned from the environment. Resultant will then plan the migration of functions, services, or data from these identified servers to other systems within the environment. This migration plan will be submitted for approval to the CIOs and affected departments and/or agencies. Upon approval, Resultant will execute the approved migrations and finalize decommission of the originating servers. If needed, Resultant will reconfigure systems processor, memory, or storage configuration to meet the requirements of migrated functions, services, or data. Resultant will work with primary stakeholders to create and execute an Organization Change Management (OCM) plan for these systems or services and their respective cutovers to the new environment.

• Access Database Migration

Numerous Microsoft Access Databases are utilized throughout the departments that comprise the City of Fort Wayne technology environment. Many of these databases have not been updated or modernized on recurring cycles.

Resultant will review the functionality of Access Databases identified through the Technology Assessment engagement. This review will determine if the Access Database's functionality can be migrated to a SaaS offering. Once determined, Resultant will work, in conjunction with the CIOs, to engage with sales and engineering teams of



the identified SaaS vendors to develop and deliver quotes and/or estimates of services to the the CIOs for their selection and approval.

For those Access Databases where a SaaS solution is not viable, Resultant will determine the ability of that Access Database to be upgraded to a modern Access version. If possible, Resultant will then perform the upgrade of the Access Database. For these Access Databases, Resultant will also migrate the location to a centrally located data repository.

Any Access Databases that are unable to be either migrated to a SaaS offering or upgraded to a modern version will be submitted to the CIOs for determination of future actions to retire. Resultant will work with primary stakeholders to create and execute an OCM plan for these Access Databases and their respective cutovers to their new environments.

• Virtual Desktop Infrastructure (VDI) Application Delivery

Legacy applications that cannot be upgraded pose a challenge to upgrading other components of the environment. Certain applications may require frequent updates to large segments of the workstation and/or user base.

Resultant will create a VDI within the City of Fort Wayne datacenter environments that supports remote and internal access to legacy applications. This VDI will also support Multifactor Authentication (MFA), multiple users, and encrypted communications. Applications to be accessed through the VDI will be identified during the Virtual Server Consolidation and Access Database Migration phases. Once identified, these applications will be installed and configured to work within the VDI environment. Once tested is confirmed within the VDI environment, Resultant will work with primary stakeholders to create and execute an OCM plan for these applications and their respective cutovers to the new environment.

• Wireless Upgrade

Current wireless at City of Fort Wayne locations do not allow direct access to production systems, monitored and controlled guest access, or the ability to easily change Pre-Shared Keys (PSK) as needed.

Resultant will help facilitate the procurement process of the Meraki Access Points as needed. Resultant will then deploy a Meraki wireless platform capable of leveraging enterprise security that allow connections to production systems from the wireless network, while still allowing a secured and monitored public access mechanism. Resultant will replace the existing wireless access point throughout the City of Fort Wayne environment and locations, utilizing Facilities if needed, for the hanging of access points. All access points will be brought into the Meraki tenant, created as part of the Secure Production Wireless Deployment engagement.

Each new access point will project 3 SSIDs to citizens and staff from all City of Fort Wayne locations. The first SSID, FWAC Secure, configured with 802.1x with RADIUS for authentication of users will allow City of Fort Wayne staff members to securely access IT resources. FWAC Public, a 5 MBPs bandwidth limited wireless connection has been configured with open encryption and a click through splash page, will enable guests and citizens access to the internet, and has been designed to not allow access to resources on the network. The third SSID, FWAC Wifi, also a 5 MBPs limited connection with a Secure Pre-Shared Key (PSK), will allow staff to connect personal devices for internet access, and like the FWAC Public, does not allow for connections to other systems or services.



• Network Device Refresh

To provide access and distribution of network access, the City of Fort Wayne manages and maintains an inventory of over 280 Cisco Catalysts switches. Over 30% of these switches have reached End of Support from the manufacturer, and an additional 40% are no longer covered by device warranty.

Resultant will help facilitate the procurement process, then deploy Meraki network switching that aligns with the SD-WAN and Wireless Upgrade phases. This new equipment will replace existing switches that are no longer under contracted or original equipment manufacturer support. Switch replacements will include Power over Ethernet (PoE) and 10gb trunk capabilities. For each switch to be replaced, a comparable Meraki model will be selected to ensure the port capacity is replicated in the new switch. All replacement switches will be brought into the Meraki tenant, created as part of the Secure Production Wireless Deployment engagement.

Resultant will work with primary stakeholders at each impacted location to identify an outage window during which the existing switch will be removed, and the replacement installed. When possible, Resultant will align this outage to coincide with the requested window of the SD-WAN phase.

• Compute Resource Upgrade

Server processor, memory, and storage within the environment do not currently possess enough resources to facilitate future need expectations.

Resultant will help facilitate the procurement process then install expansion modules to the server systems.



DELIVERABLES

DELIVERABLE	DESCRIPTION	DELIVERABLE PHASE
Draft Business Continuity Plan	Draft BCP that details all procedures, actions, resources, and vendors associated with the continuity of operations, with department and/or agency specific details specified.	Business Continuity Planning
Datacenter and/or SaaS estimates/quotes	Vendor supplied estimates or quotes for services selected.	Datacenter Migration
ISP Quotes	Vendor supplied quotes for ISP connectivity by location.	SD-WAN
Server List	Updated server list showing the finalized server information including hostname, installed roles, and intended purpose/function.	Virtual Server Consolidation
Server Consolidation Work Breakdown Structure	Work plan and schedule detailing servers to be migrated or decommissioned, timeline, associated risks, and primary stakeholders.	Virtual Server Consolidation
Server Consolidation OCM Plan	OCM plan detailing approach to prepare for, manage, and sustain changes with stakeholders and end users.	Virtual Server Consolidation
SaaS Migration estimates/quotes	Vendor supplied estimates or quotes for services selected.	Access Database Migrations
Access Database OCM Plan	OCM plan detailing approach to prepare for, manage, and sustain changes with stakeholders and end users	Access Database Migrations
Access Database List	List detailing access databases within the environment that were not upgraded or migrated as part of this engagement.	Access Database Migration
VDI OCM Plan	OCM plan detailing approach to prepare for, manage, and sustain changes with stakeholders and end users	VDI Application Delivery
Workstation Quote/Estimate	Vendor supplied estimates or quotes for hardware selected.	Workstation Refresh
Firewall Quote/Estimate	Vendor supplied estimates or quotes for hardware selected.	SD-WAN
Switch Quote/Estimate	Vendor supplied estimates or quotes for hardware selected.	Network Device Refresh
Access Point Quote/Estimate	Vendor supplied estimates or quotes for hardware selected.	Wireless Upgrade
Isilon Module Quote/Estimate	Vendor supplied estimates or quotes for hardware selected.	Isilon Expansion
Server Hardware Quote/Estimate	Vendor supplied estimates or quotes for hardware selected.	Compute Resource Upgrade



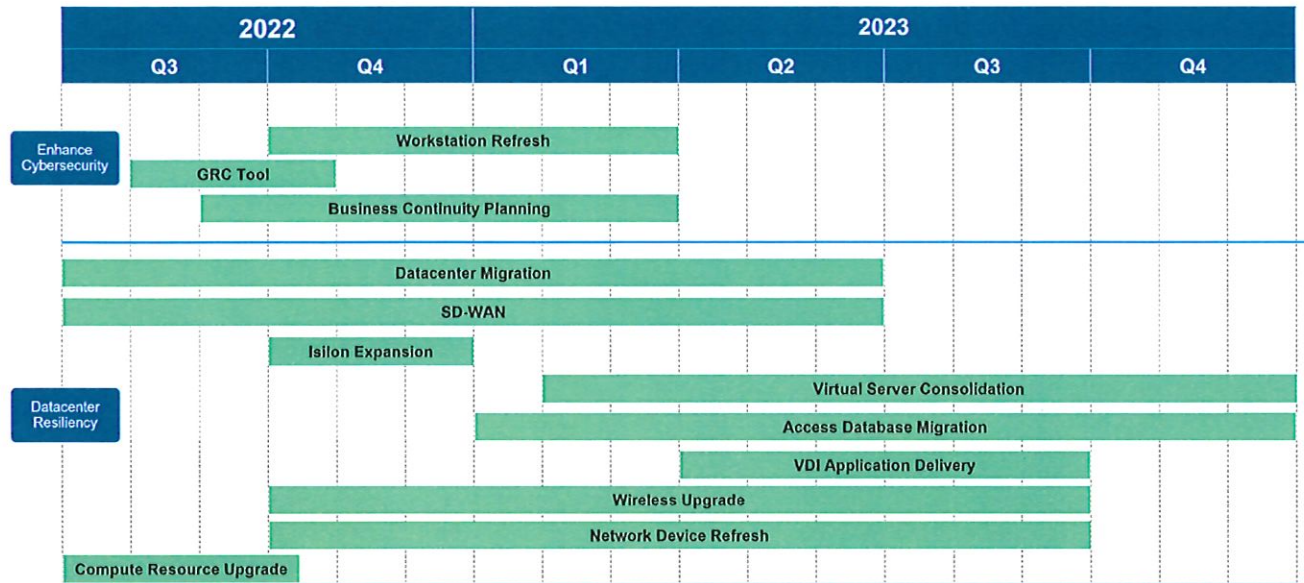
Deliverable Approval Protocol

- Resultant shall provide City of Fort Wayne with draft Deliverables prior to finalization and City of Fort Wayne will provide timely review and approval of the Deliverables within ten (10) business days.
- All deliverables will be deemed 'Accepted' after a ten (10) business day period unless feedback is received by the Resultant team prior to the end of the fifth day.
- All final Deliverables will be marked "City of Fort Wayne" or such similar designation City of Fort Wayne may direct from time to time.



TIMELINE

This engagement is expected to last 21 months as depicted below, start date to be adjusted upon acceptance:





ROLES AND RESPONSIBILITIES

The Resultant team will leverage the following roles and responsibilities to complete work for this project. The level of effort for each role will fluctuate based on the project phase and exact demands of the project. We are committed to the success of the scope of work and will ensure resources applied are sufficient to accomplish this project. Additional delivery resources may be applied to the project as appropriate.



ROLE	RESPONSIBILITIES
Executive Director	• Advises on escalated issues
Engagement Manager	• Advises on escalated issues • Provides guidance and oversight at key checkpoints throughout the engagement • Advises on strategic partnerships • Guides project vision and helps to ensure high quality outputs
Technical Solution Owner	• Oversees technical requirements and ensures that plans fit requirements • Reviews the solution for quality and maintainability • Ensures overall solution is stable, secure, and scalable • Provides recommendations on resolution of scope-related matters • Advises on project risks and roadblocks
Project Manager	• Oversees detailed project delivery • Collaborates with stakeholders to refine requirements • Coordinates efforts between Resultant, you, and any other appropriate third parties • Identifies risks and issues and takes appropriate actions
Project Coordinator	• Prioritizes and schedules the team's activities • Allocates Resultant resources to support project implementation
Solution Architect	• Works with project stakeholders to convert business requirements to technical requirements • Creates technical roadmap for fulfilling requirements • Oversees implementation of roadmap • Reviews designs for risks and adjusts accordingly
Network Engineer	• Performs the implementation and configuration of network devices or services • Works with the Solution Architect on any required changes in implementation • Creates network documentation • Reviews all configurations for quality and adherence to established best practices • Implements features and functionalities • Provides ongoing support during the support period



Systems Engineer

- Performs the implementation and configuration of system devices or services
- Works with the Solution Architect on any required changes in implementation
- Creates and implements cloud infrastructure
- Reviews all configurations for quality and adherence to established best practices
- Implements features and functions
- Provides ongoing support during the support period

Cybersecurity Engineer

- Performs the implementation and configuration of security devices or services
- Works with the Solution Architect on any required changes in implementation
- Creates or revises policies or other security documentation as needed
- Reviews all configurations for quality and adherence to established best practices
- Implements features and functions
- Provides ongoing support during the support period

Collaboration & Productivity Specialist

- Performs the implementation and configuration of collaboration and productivity services or systems
- Works with the Solution Architect on any required changes in implementation
- Develops and implements business workflows
- Reviews all configurations for quality and adherence to established best practices
- Implements features and functions
- Provides ongoing support during the support period

Technical Writer

- Coordinates project deliverables and any necessary documentation
 - Edits and formats documentation for consistency and clarity
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FEES

This Agreement includes service fees at a fixed fee of \$2,398,763.33.

It will be necessary for Allen County to obtain certain hardware and software, listed below, for Resultant to complete the services. Associated costs for the purchase of hardware or software needed to support this Statement of Work, totaling \$1,198,070.10 are included to help you better understand the total investment for this Statement of Work, and are not indicative of any additional fees to be paid to Resultant. The total project cost is **\$3,596,833.43**.

Services

This is a fixed-fee engagement. The City of Fort Wayne will be invoiced according to the Payment column of the table below, plus out-of-pocket expenses including travel. Fees were developed based on the assumptions included in this Agreement. Fees for services outside the scope of this agreement, if any, will be billed based on the time incurred at the standard hourly rates.

PHASE	FEES
Environment Management	\$465,000.00 Will be invoiced at signing for services rendered through end of 2022.
Enhance Cybersecurity	Invoiced Monthly for services performed.
Business Continuity Planning	\$105,840.00
GRC Tool Implementation	\$30,000.00
Datacenter Resiliency	Invoiced Monthly for services performed.
Datacenter Migration	\$1,099,800.00
SD-WAN	\$30,135.00
Isilon Expansion	\$16,340.05
Virtual Server Consolidation	\$305,250.00
Access Database Migration	\$114,000.00
VDI Application Delivery	\$180,000.00
Wireless Upgrade	\$2,456.75



PHASE	FEES
Network Device Refresh	\$31,191.53
Compute Resource Upgrade	\$18,750.00
TOTAL Program Service Charges:	\$2,398,763.33

Products

You may require new, additional, or changed subscriptions, software, or hardware for one or more products in order for the work set forth in this Agreement to be completed. A purchase order for any products you may choose to order through Resultant will be completed separately. You may purchase products may be purchased directly from the vendor. The additional product costs you may incur are set forth below and is based on Resultant's discussions with you and assumptions made about the work. After this Agreement is fully-executed, Resultant will help facilitate the procurement process of any products listed below.

PRODUCT NAME	ESTIMATED COST
Workstation	\$120,931.00
GRC Tool	\$90,000.00
Firewall	\$309,450.00
Isilon Modules	\$146,499.95
Wireless Access Points	\$45,818.23
Switch	\$429,120.92
Compute Resource	\$56,250.00
TOTAL ALL PRODUCTS:	\$1,198,070.10



ASSUMPTIONS

Resultant made the following assumptions in preparing this scope of work, fees, roles, and timeline.

1. You will make two Executive Sponsors available for this Statement of Work. The Executive Sponsors will have the authority to make and approve final decisions related to the work, and will facilitate access to administrative support, as may be required, to schedule meetings or obtain documentation.
2. You will provide any documentation and information requested by Resultant within a timely manner (typically 3-5 business days) to support the work. You will make a best effort to obtain any relevant documentation from vendors.
3. You will make key stakeholders and subject matter experts available to the Resultant engagement team to ensure a complete understanding of needs and to make day-to-day decisions.
4. Resultant is not providing legal advice or any attestation of the state of security within your environment.
5. Estimated fees assume that unusual or unexpected circumstances do not occur during the engagement. This fee estimate assumes that nature of operations does not differ materially from the information reviewed in connection with the preparation of this agreement.
6. Any additional work effort requested by the City of Fort Wayne will be defined and estimated prior to commencement of new work for your review and approval.



RISKS

The following section describes the known and/or anticipated risks associated with the project and our team's mitigation strategies.

1. Difficulty engaging subject matter experts, division executives, or competing priorities.
2. Changing rules and regulations surrounding the use of hosting and other technologies (i.e., cloud vendor hosting contracts).
3. Slow decision making or changes to decisions related to the use of specific software, policies, or technologies.
4. During the execution of project work there is potential for service impact or outages to systems being worked on or systems adjacent to the system being worked on.
5. Working with source system data can lead to discoveries of gaps or poor condition during the project. Resultant will inform the City of Fort Wayne when conditions indicate the work is more challenging than expected. These situations can cause the estimated efforts and cost to increase. Resultant will provide estimated impacts when the impact is material to the cost of the project.
6. Migration or conversion of data during execution of this project may lead to loss of data.
7. Delays in hardware procurement, including delays in shipping, may delay implementation timelines.
8. Availability of the City of Fort Wayne key resources for this project delay implementation timelines.
9. Resultant will create a formal Risk Register upon execution of this Statement of Work to outline these and other ongoing risks for the scope of work included in this document. This register will include a probability and impact scoring mechanism and outline a combination of avoidance, escalation, and mitigation tactics to minimize risks and ensure overall successful delivery of the project.



APPROVALS

City of Fort Wayne

Garry Morr

Date

Resultant, LLC

Ryan J. Schebler

Date



IT Modernization & Security Request

June 10, 2022

The City of Fort Wayne is working to create a 21st-century infrastructure to help improve the lives of citizens and has developed two projects towards that goal. We will move core IT services to a modern datacenter and expand our cybersecurity capabilities. With a combined total of \$3,596,833.43 these projects will increase our ability to prevent, mitigate, and respond to cybersecurity threats, while improving the resiliency and business continuity of systems and services.

Project #1

Enhance Cybersecurity

CITY TOTAL

\$811,771.36

WHAT:

Expand existing services and systems to continually mature the CFW-AC IT security environment.

BUSINESS VALUE:

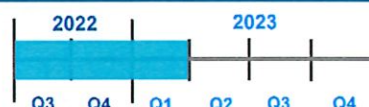
Increase CFW-AC capabilities to prevent, mitigate, and respond to cybersecurity threats.

PHASES

1. Environment Right Sizing
2. Business Continuity Planning
3. Workstation Refresh
4. GRC Tool Implementation



TIMELINE



Project #2

Datacenter Resiliency

CITY TOTAL

\$2,785,062.07

WHAT:

Move core IT services to a modern hosting solution from the aging urban location centered in a floodplain.

BUSINESS VALUE:

Increase resiliency and availability of CFW-AC systems and services and community offered broadband services.

PHASES

1. Datacenter Migration
2. SD-WAN
3. Isilon Expansion
4. Virtual Server Consolidation
5. Access Database Migration
6. VDI Application Delivery
7. Wireless Upgrade
8. Network Device Refresh
9. Compute Resource Upgrade

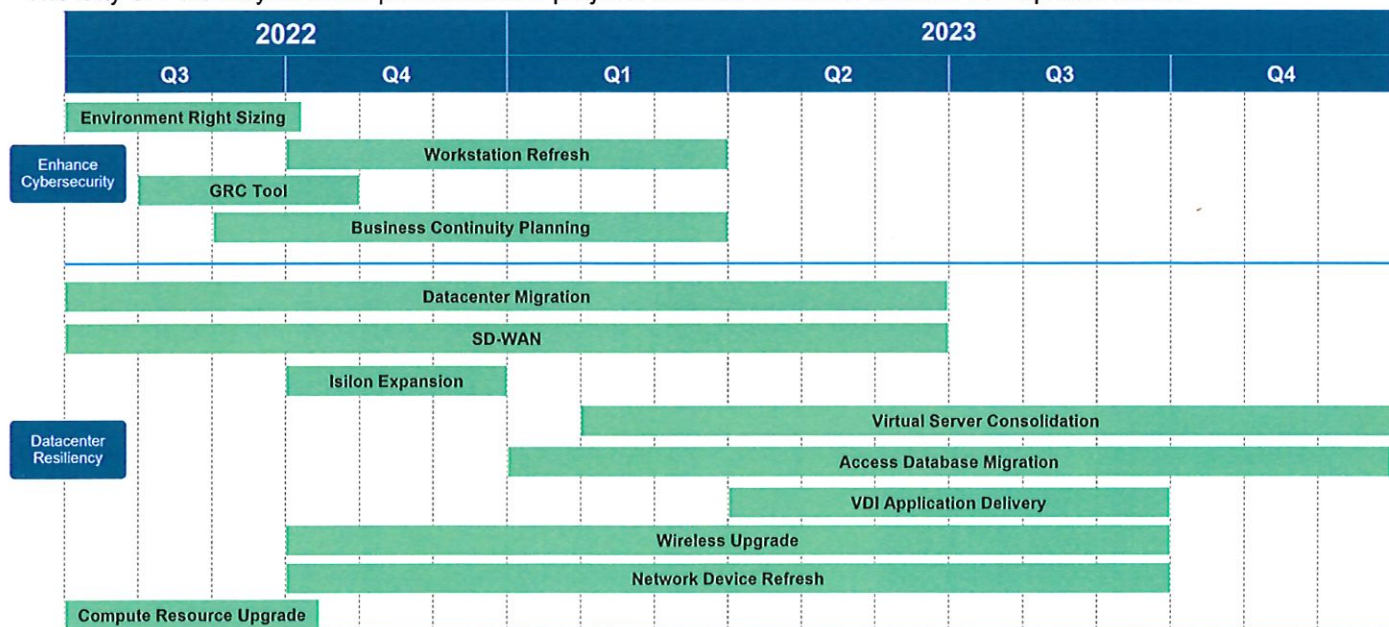


TIMELINE



Timeline

The City of Fort Wayne will implement these projects over an 18-month timeline as depicted below:





IT Modernization & Security Request

June 10, 2022

Enhance Cybersecurity Phases:

Environment Right Sizing

Server team staffing was built on the articulated size of the environment during the RFP process, with an assumption of 295 servers. After onboarding discovery, and further iterations as the team has met with business units, the current server count for the CFW-AC environment is 676. Further, the workstation refresh interval for workstations was articulated to be 7 years. This has been shortened from 7 years to 4 years; providing modern tools to the City and County staff at a timelier cadence. This initiative seeks to hire additional resources to both support the infrastructure tower as well as the desktop tower.

Associated total City costs of this phase is: **\$465,000**

Service costs: \$465,000 (2022)

Equipment/Software costs: \$0

Business Continuity Planning

CFW-AC has developed a Disaster Recovery Plan (DRP), an Incident Response Plan (IRP), and backup policies that assist staff if the technology environment requires restoration. CFW-AC does not currently possess a Business BCP that outlines how all entities will maintain business operations in the event of critical outages or interruptions to services.

Associated total City Costs of this phase is: **\$105,840**

Service costs: \$105,840 (\$60,480 in 2022 | \$45,360 in 2023)

Equipment/Software costs: \$0

Workstation Refresh

CFW-AC workstation environment has 547 unsupported Windows 7 devices still in production. This initiative seeks to refresh these workstations so that the devices within CFW-AC are on a modern, supported OS and have active equipment warranties.

Associated total City costs of this phase is: **\$120,931**

Service costs: \$0

Equipment/Software costs: \$120,931 (2022)

GRC Tool Implementation

CFW-AC does not have a centralized governance, risk, and compliance system to manage their security initiatives, procedures, and controls. This initiative seeks to implement tools can determine and mitigate risks associated with use, ownership, operation, involvement, influence, and adoption of IT within the environment.

Associated total City costs of this phase is: **\$120,000**

Service costs: \$30,000 (2022)

Equipment/Software costs: \$90,000 (2022)



IT Modernization & Security Request

June 10, 2022

Datacenter Resiliency Phases:

Datacenter Migration

The current datacenter at the Edward Roseau Center (ERC) lacks fire suppression, contains asbestos material, is built 50 yards away from railroad lines, and lies in a congested urban area within 500 yards of 3 rivers. This initiative seeks to explore, select, and migrate the current on-premises datacenter to a hybrid approach that includes capabilities past co-location such as Infrastructure as a Service (IaaS) and Disaster Recovery as a Service (DRaaS).

Associated total City costs of this phase is: **\$1,099,800**

Service costs: \$1,099,800 (\$549,900 in 2022 | \$549,900 in 2023)

Equipment/Software costs: \$0

SD-WAN

CFW-AC locations are connected to the Edward Roseau Center (ERC) via either a direct fiber connection or through commercially available intranet with a virtual private network configuration, creating single points of failure at all locations, except the ERC. This initiative seeks to transform the network architecture into a SD-WAN deployment, by deploying Meraki firewall equipment and installing business class broadband at all locations.

Associated total City costs of this phase is: **\$339,585**

Service costs: \$30,135 (\$15,067.70 in 2022 | \$15,067.50 in 2023)

Equipment/Software costs: \$309,450 (2022)

Isilon Expansion

CFW-AC has installed an Isilon system to accommodate reliable data replication and versioning. The existing Isilon solution does not currently possess enough storage space to handle the entirety of the environment. This initiative seeks to expand the replication capability of the existing Isilon platform, including offsite replication and storage capabilities.

Associated total City costs of this phase is: **\$162,840**

Service costs: \$16,340.05 (2022)

Equipment/Software costs: \$146,499.95 (2022)

Virtual Server Consolidation

The CFW-AC technology environment includes redundant, single purpose, non-critical, or legacy servers. Servers have traditionally been created in response to specific requests, and without a holistic plan to their roles, functions, or services offered. This initiative seeks to streamline services to a consolidated server stack, removing sprawl and reducing the complexity of the environment.

Associated total City costs of this phase is: **\$305,250**

Service costs: \$305,250 (2023)

Equipment/Software costs: \$0

Access Database Migration

Numerous Microsoft Access Databases are utilized throughout the departments that comprise the CFW-AC technology Environment. Many of these databases have not been updated or modernized on recurring cycles. This initiative seeks to migrate them to Software as a Service (SaaS) offering.

Associated total City costs of this phase is: **\$114,000**

Service costs: \$114,00 (2023)

Equipment/Software costs: \$0



IT Modernization & Security Request

June 10, 2022

VDI Application Delivery

Legacy applications that cannot be upgraded pose a challenge to upgrading other components of the environment. Certain applications may require frequent updates to large segments of the workstation and/or user base. This initiative seeks to migrate these types of applications to a Virtual Desktop Interface (VDI), Remote Desktop Services (RDS), or Software as a Service (SaaS) offering.

Associated total City costs of this phase is: **\$180,000**

Service costs: \$180,000 (2023)

Equipment/Software costs: \$0

Wireless Upgrade

Current wireless CFW-AC does not allow direct access to production systems, monitored and controlled guest access, or the ability to easily change Pre-Shared Keys (PSK) as needed. This initiative seeks to deploy a wireless platform capable of implementing enterprise security that allow connections to production systems from the wireless, while still allowing a secured and monitored guest access mechanism.

Associated total City costs of this phase is: **\$48,274.98**

Service costs: \$2,456.75 (\$1,228.38 in 2022 | \$1,228.37 in 2023)

Equipment/Software costs: \$45,818.23 (2022)

Network Device Refresh

To provide access and distribution of network access, CFW-AC manages and maintains an inventory of over 280 Cisco Catalysts switches. Over 30% of these switches have reached End of Support from the manufacturer, and an additional 40% are no longer covered by device warranty. This initiative seeks to deploy Cisco Meraki network switching that aligns with other initiatives and returns the hardware inventory to manufacture warrantied and supported devices.

Associated total City costs of this phase is: **\$460,312.09**

Service costs: \$31,191.17 (\$10,397.06 in 2022 | \$20,794.11 in 2023)

Equipment/Software costs: \$429,120.92 (2022)

Compute Resource Upgrade

Server processor, memory, and storage within the environment do not currently possess enough resources to facilitate future need expectations. This initiative seeks to add additional computer resources to the physical servers.

Associated total City costs of this phase is: **\$75,000**

Service costs: \$18,750 (2022)

Equipment/Software costs: \$56,250 (2022)