The background of the slide features a large, faint watermark of the University of Buffalo seal. The seal is circular, with the words "UNIVERSITY OF BUFFALO" around the perimeter. In the center is a crest depicting a beaver standing on a rock, holding a branch in its paws. The seal is rendered in a light blue or grey tone.

Budget Workshop FY24/25

Information Technology

FY 2024-25 Top Accomplishments -- Communication

- Provided FirstNet cell phones and range extenders for improve Police, etc. ability to communicate during emergencies.
- Implemented Town Hall HD 4K laser projector, and other HD video output improvements to improve visibility / readability during presentations.
- Assisted with implementation of new CV Starr Website, and integrated payment system.
- Implemented powerful Remote Monitoring and Management (RMM) system for all PC endpoints and Servers.
- Improved useability / flexibility of City Hall Conference Rooms by adding in-room mini-PCs and large wall screens for presentations, Zoom meetings, etc.
- Saved telecommunications costs by causing the new phone system to complete all outbound Long Distance calls via the Internet (with fallback to local land-lines).
- Expanded awareness of the availability of surplus City vehicles for sale by listing them online (and thereby helping to offset expenses as well).

FY 2024-25 Top Accomplishments – Data / Network Security

- Began implementation of automated visibility and analysis for *internal* City Network traffic, including the ability to detect, flag, and block based on *patterns* in encrypted traffic communication that indicate probable malware.
- Implemented several additional current aspects of “Best Practices” security in our Windows Active Directory and Microsoft Online Administration accounts.
- Implemented new internal WiFi system for Employees, Elected Officials, and approved contractors that provides greatly enhanced security and visibility, as well as greatly improved performance / throughput.
- Implemented a Password Manager tool for IT, and began rolling out (first) to those who have access to the most critical data.
- Acquired new critical security improvements for CV Starr, including a Next-Gen Firewall, Email security, and upgraded Endpoint Security.

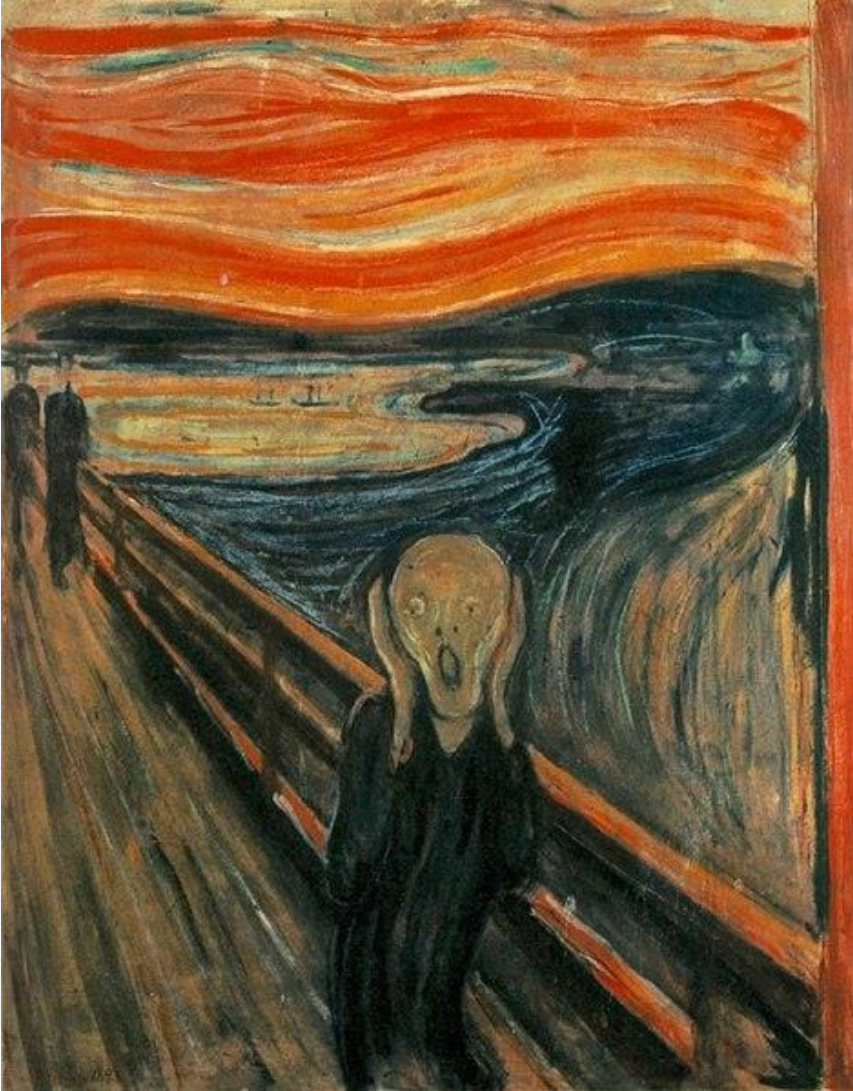
FY 2024-25 Top Accomplishments – Data / Network Security, Cont'd

- Used our new RMM tool to automate the rollout of critical Windows and Application updates, and report to IT when these updates have failed and remediation is required.
- Expanded government-approved, cloud-based server backups, with *secure isolation* of data from malware such as ransomware.
- Continued to perform monthly Penetration testing and Vulnerability scanning using automated tools so we can have visibility to previously hidden weaknesses and prioritize addressing them.
- Continued automated weekly email anti-“phishing” training campaigns via KnowBe4.
- Continued automated quarterly CyberSecurity online training campaigns, also via KnowBe4.
- Continued implementation of MFA where possible.

FY 2024-25 Top Accomplishments – Infrastructure & Services

- Implemented new File Servers that more than doubled capacity and performance.
- Implemented new HyperV Virtual Machine host servers.
- Added Domain Controller VMs at PD for High Availability.
- Implemented centralized WiFi Controller to manage all sites' new Wireless Access Points.
- Began Phase One rollout of Toughbook Laptops to Police Department Patrol Vehicles that immediately enable personnel to access their Law Enforcement Records Management Suite (greatly improving efficiency and effectiveness in the field).
- Continued annual process of replacing poorest performing endpoint hardware with new replacements.
- Continued replacement of older, poor-performing monitors with new ones that greatly improve user ergonomics.
- Continued roll-out of hardware upgrades required to maximize internal network availability, and ability to prioritize Voice over IP traffic.

CyberSecurity “Screams of the Day”



- Microsoft internal email breach earlier this year by a Russian state-affiliated group Midnight Blizzard.
- Ticket Master (Live Nation) reported May 20. *Possibly* millions of users' data compromised (size of breach yet to be confirmed officially).

➔ USE MFA!

➔ Use long, difficult to guess “pass-phrases”!

➔ Do not use the same “pass-phrase” on multiple accounts!

➔ Consider a password manager to make following these recommendations easy!

FY 2024-25 Top Priorities -- Communication

- As part of the Town Hall improvement project, IT will re-design the (expanded) interior of the rear control room, and then work with Public Works to implement an improved layout for greatly improving usability, manageability and maintenance.
- In Town Hall, replace EOL hardware and greatly reduce complexity (and possible points of failure) by implementing a new Video and Meetings core control system (with full native 4K capabilities).
- Assist in the possible implementation of a new system for managing public meetings, public comments, etc.
- Assist in the possible upgrade of our websites to implement both new capabilities, and easier management by staff.
- Assess, choose, and implement a new eFax system.

FY 2024-25 Top Priorities – Data / Network Security

- Complete implementation of automated visibility and analysis for *internal* City Network traffic.
- Complete implementation of the Password Manager for all staff that have a critical need for it.
- Continue increasing CV Starr network security by replacing all EOL hardware and systems.
- Leverage our new RMM system to enable more secure and auditable Contractor access for certain systems.
- Expand new internal WiFi system to CV Starr.
- Extend secure cloud backup services to CV Starr server.
- Continue to perform monthly Penetration testing and Vulnerability scanning.
- Continue automated weekly email anti-“phishing” training campaigns via KnowBe4.
- Continue automated quarterly CyberSecurity online training campaigns, also via KnowBe4.
- Continue implementation of MFA where possible.

FY 2024-25 Top Priorities – Infrastructure & Services

- Complete Phase Two rollout of Toughbook Laptops to Police Department Patrol Vehicles to implement electronic Dispatch capability
- Reduce downtime risk and possibility of performance issues by replacing remaining EOL hardware and systems at CV Starr, and implementing QoS for Voice traffic.
- Add additional Domain Controllers at each location for local network resiliency.
- Implement additional security and ease of use features of new internal WiFi system.
- Continue annual process of replacing poorest performing endpoint hardware with new replacements.
- Continue replacement of older, poor-performing monitors with new ones that greatly improve user ergonomics.