

Orange County Transportation
Authority
Cyber-Security Update

Agenda

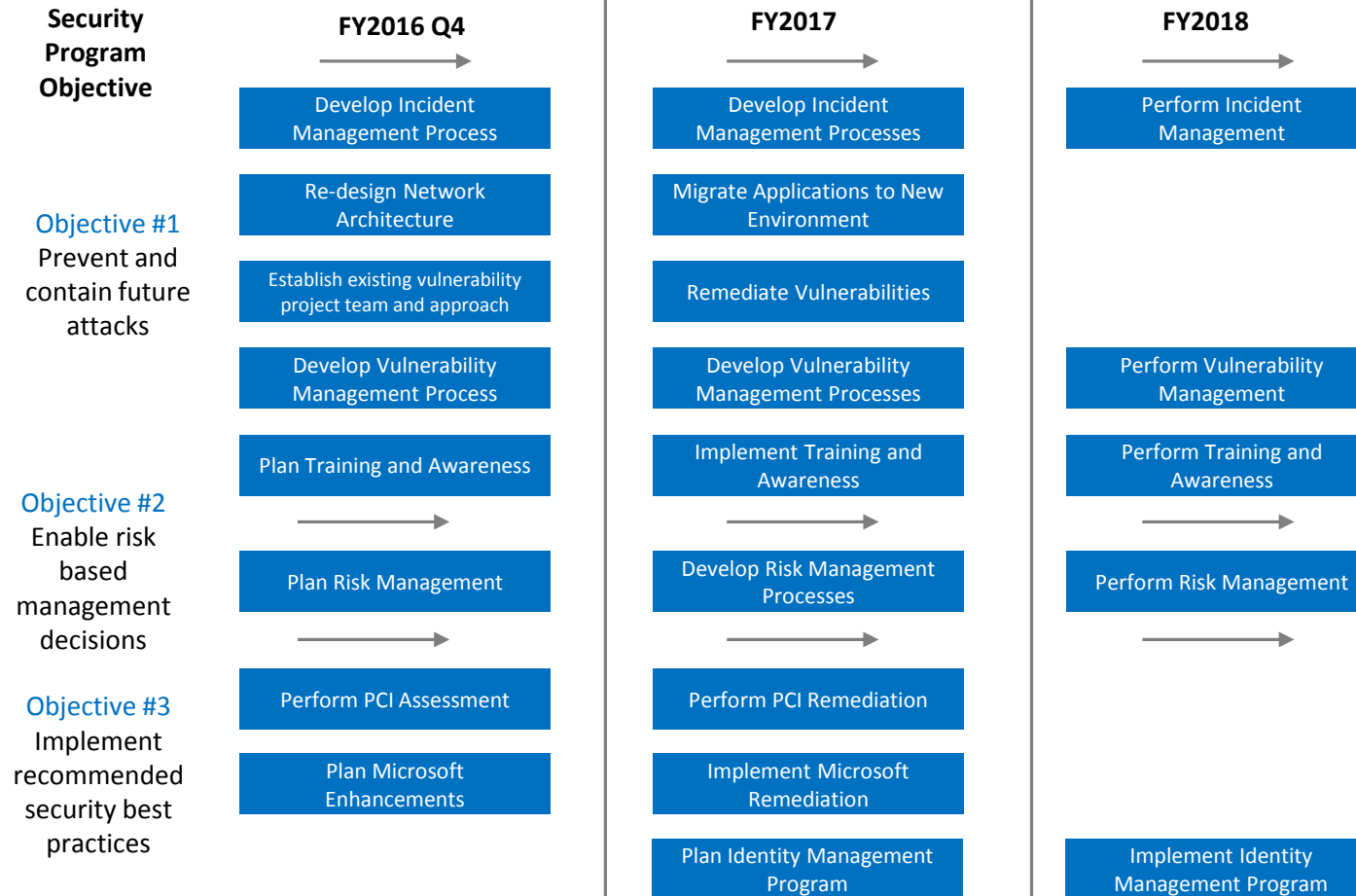
- Framework
- Accomplishments
- Employee Training
- Recent Threats
- Industrial Control Systems

Security Program Remediation Plan

- Objective #1:
Prevent and contain future attacks
- Objective #2:
Enable security risk based management decisions
- Objective #3:
Implement recommended security best practices

Security Remediation Roadmap

Information Security Implementation Approach



Progress to date

- Microsoft Tactical recommendations completed (from Forensics report)
- Vulnerability Remediation (implemented new patching process)
- Implementing Network segmentation
- Reviewing Industrial Control Systems
- Continue our migration into the cloud
- Much improved backup and DR, tied to BIA and COOP
- Mandatory Employee Training completed
- Reallocated Project Management and technical resources to Security team
- Contracts for immediate cybersecurity support available

Staff Training

- OCTA Mandatory Staff Training completed
 - Password
 - Malware
 - PII
 - Phishing
- \$2000 budget/ head for tech staff training

Recent Threats

- WannaCry
 - March 14th Microsoft released fix for vulnerability
 - Majority of OCTA devices patched within 30 days after release
 - May 12th Wanna Cry attack began in Europe
 - OCTA patched remaining servers over weekend
 - English researcher implements kill switch
- Petya
 - June 27 Petya attack began in Europe/Ukraine
 - Used same vulnerabilities as Wanna Cry
 - Not regarded as ransomware but “destructware”
 - Researchers discovered “Inoculation”

Industrial Controls Review

- Determine whether cyber event affects Life, Property and Service
- Grant - \$300,000
- Review Industrial Control Vulnerabilities
 - Radio, Fluid Management, HVAC, CNG Monitoring systems, etc.
- Project started in May 2017
 - 12 month project
 - Ankura Consulting selected.

Next Steps

- Develop next phase of Staff Security Training
- Complete Network Segmentation tool implementation
- Risk and Vulnerability Management Process
- Review Industrial Controls findings
- Board Updates as requested