



Fire Department Update FY 2018

September 26, 2017

Minimum Staffing



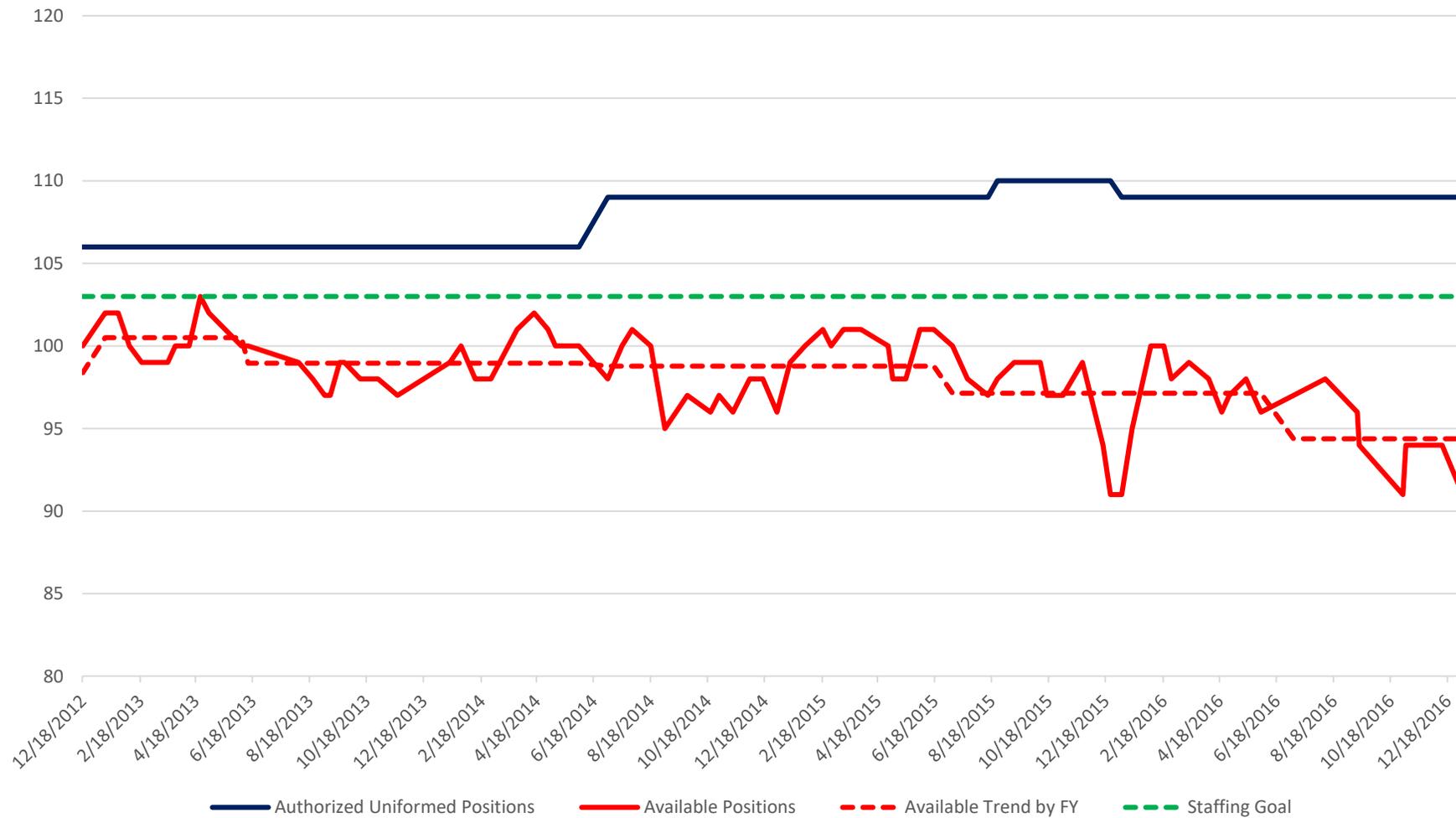
Group	On-Duty	Leave	Total
A-Shift	27	4	31
B-Shift	27	4	31
C-Shift	27	4	31
Fire Marshals Office	4	N/A	4
Administration	6	N/A	6
TOTAL			103

*Need 103 personnel available to work

Previous Fiscal Years



Authorized Positions vs. Available to Work



ALS Career Ladder Change



FY 2018 Plan

FY 2018 O.T. Plan
\$ 733,412

FY 2018 Salary Plan
\$ 6,351,440

- \$ 217,837

+ \$ 183,807

FY 2018 Adopted

FY 2018 O.T. Adopted
\$ 515,575

FY 2018 Salary Adopted
\$ 6,535,247

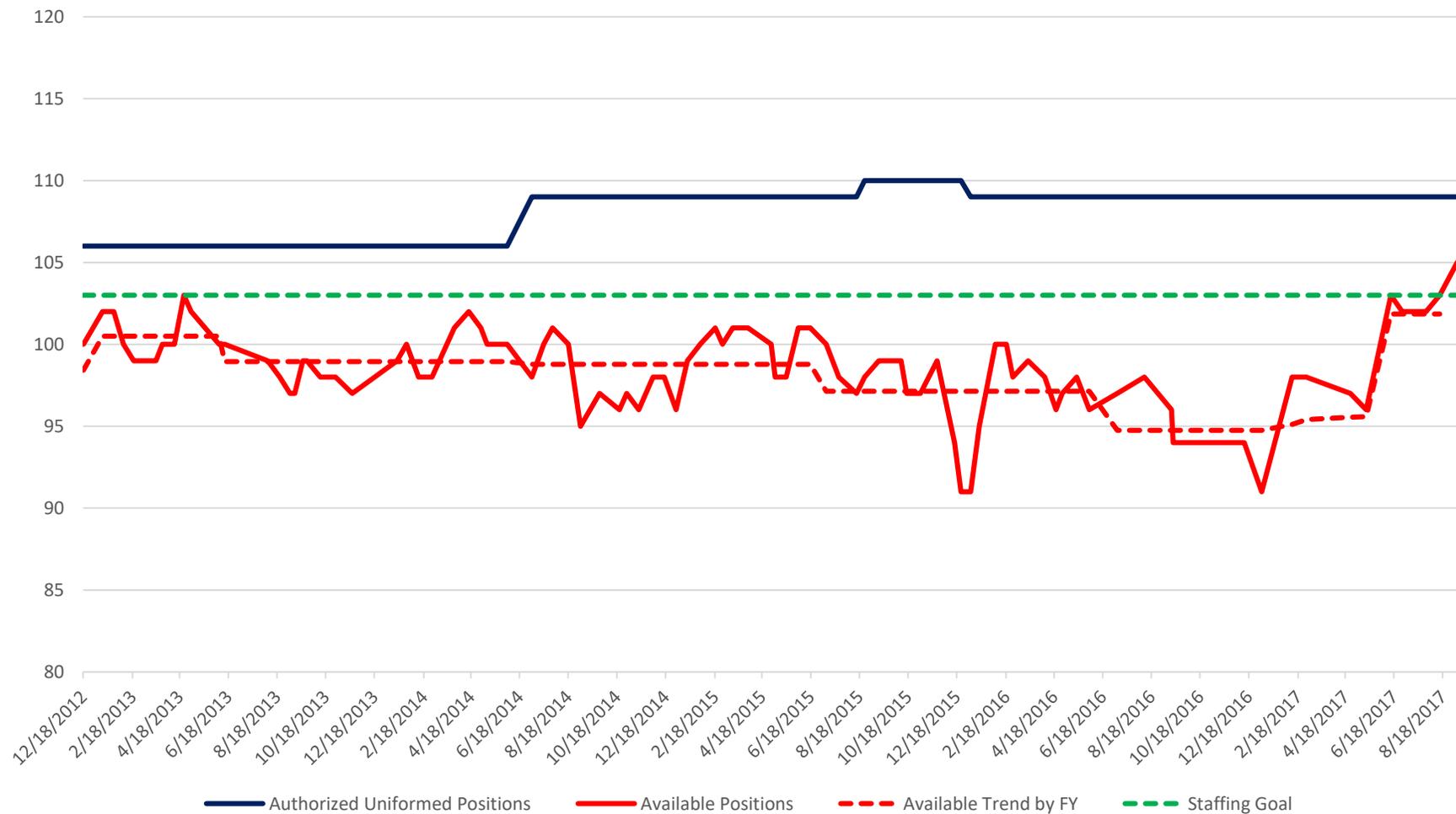
ALS Career Ladder Changes

- EMT-Intermediate
 - \$3,000
- Paramedic
 - \$6,000
- Positive Impacts
 - Increased retention- less need for O.T.
 - Competitive salary structure
 - Recruitment of pre-qualified applicants
- Decrease in personnel budget from FY 2017 – FY 2018

FY 2018 Current Staffing



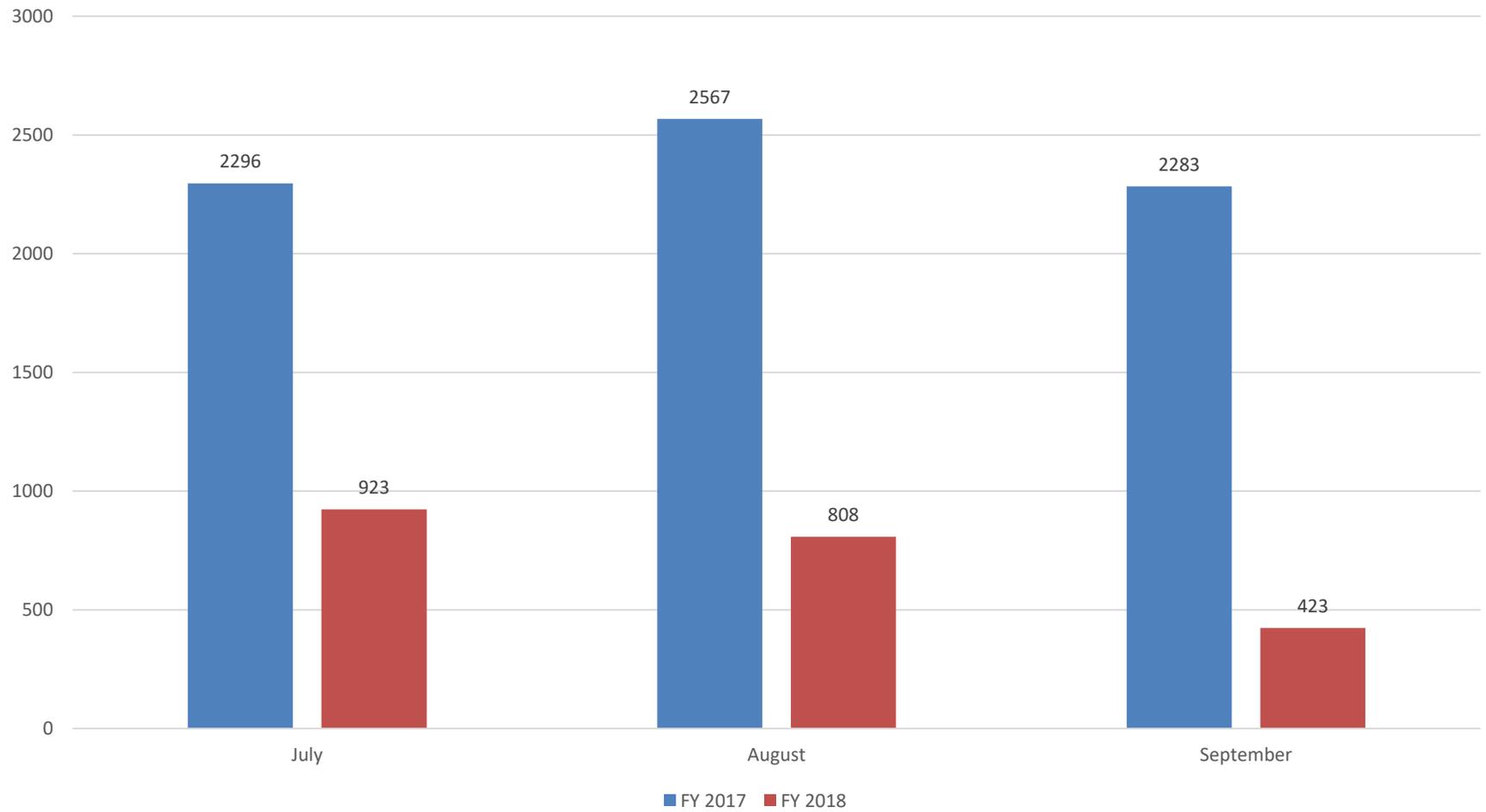
Authorized Positions vs. Available to Work



Overtime Analysis



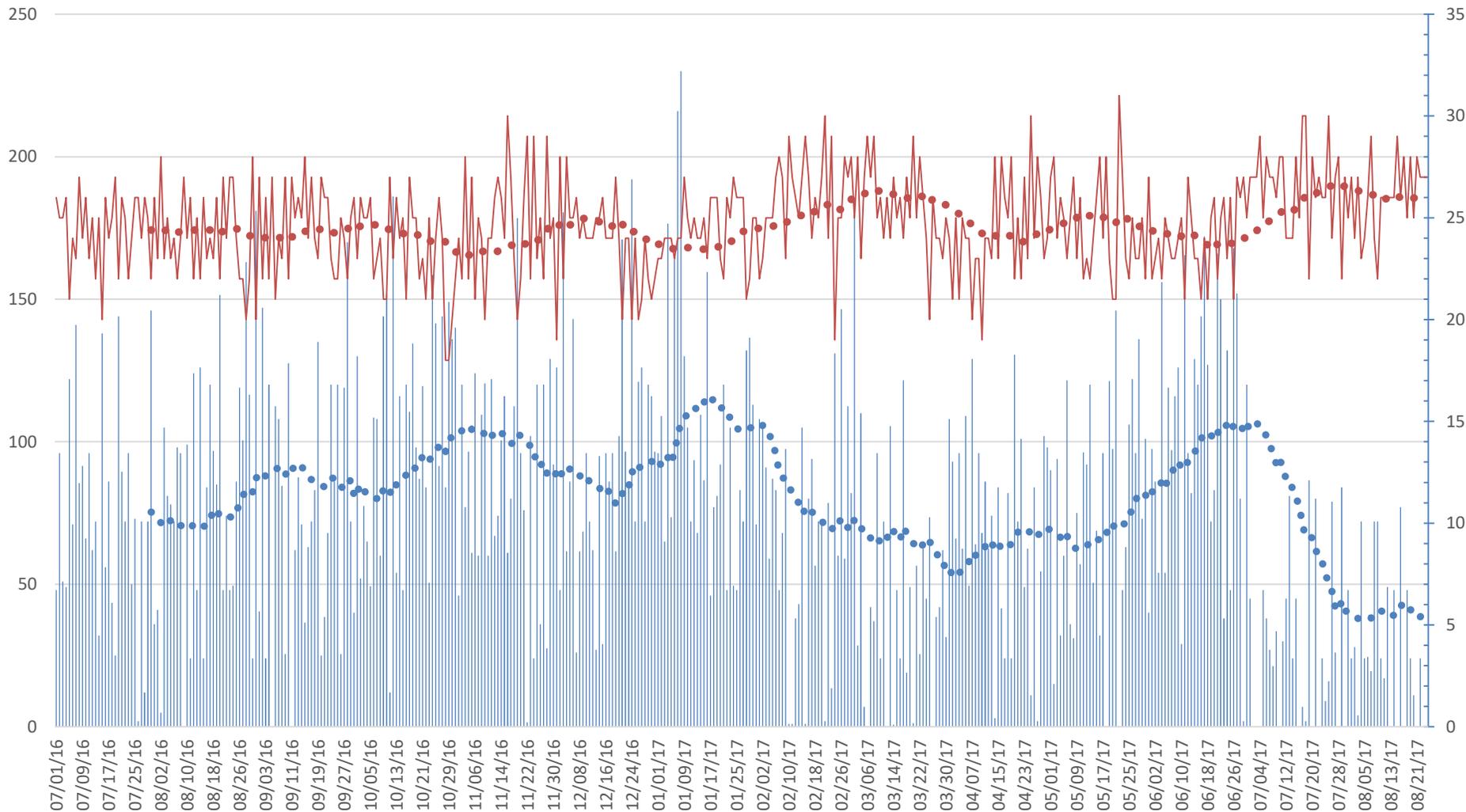
Overtime Hours Needed for Staffing



Per Day Overtime Hours



Overtime Hours by Day- July 1, 2016 through Current



Questions



**Goal 3: Expanding and Diversifying
Local Economy**



**Goal 4: Protected Community
Character and an Enhanced Built
Environment**



Goal 5: Exceptional Public Services



Goal 7: Fiscally Efficient Government

Emergency Communications Radio System Update

September 26, 2017

Public Safety

History



- Independent needs assessment – 2000/2001
 - Inadequate radio coverage
 - Lack of interoperability
 - Age and life expectancy of current system
 - Recommended regional system
- James City/York Partnership - 2004
 - Regional governance structure
 - Regional purchasing cooperative



Goal 2: Modern Infrastructure, Facilities, and Technology Systems



Goal 4: Protected Community Character and an Enhanced Built Environment

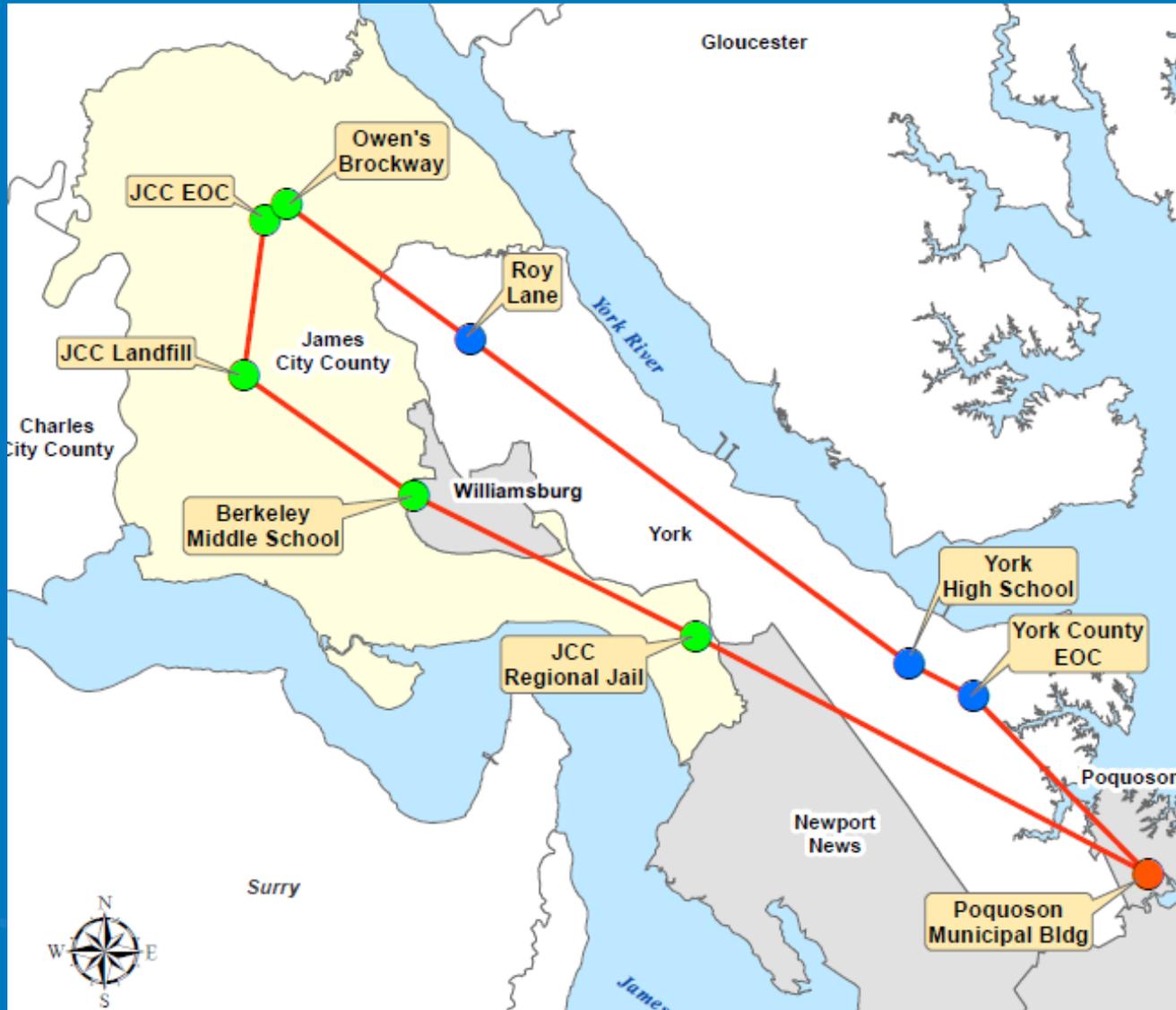


Goal 5: Exceptional Public Services



Goal 7: Fiscally Efficient Government

James City/ York



9 Tower Sites

Tenants

- City of Williamsburg
 - Police, Fire & Public Works
- City of Poquoson
 - Police, Fire & Schools
- College of William and Mary
 - Public Safety and Student Services
- Colonial Williamsburg Foundation
- Eastern State Hospital
- Kingsmill Security
- United States Coast Guard
- National Parks Service



Goal 4: Protected Community Character and an Enhanced Built Environment



Goal 5: Exceptional Public Services



Goal 7: Fiscally Efficient Government

Gloucester Expansion

- Gloucester – inadequate radio coverage
 - Lack of regional interoperability
 - Antiquated technology
 - High cost of system replacement
- James City/York needed master site/software upgrade
 - \$1.1 M upgrade
- Gloucester joins partnership - 2010
 - Funded upgrade
 - Shares maintenance costs – 20%



Goal 2: Modern Infrastructure, Facilities, and Technology Systems

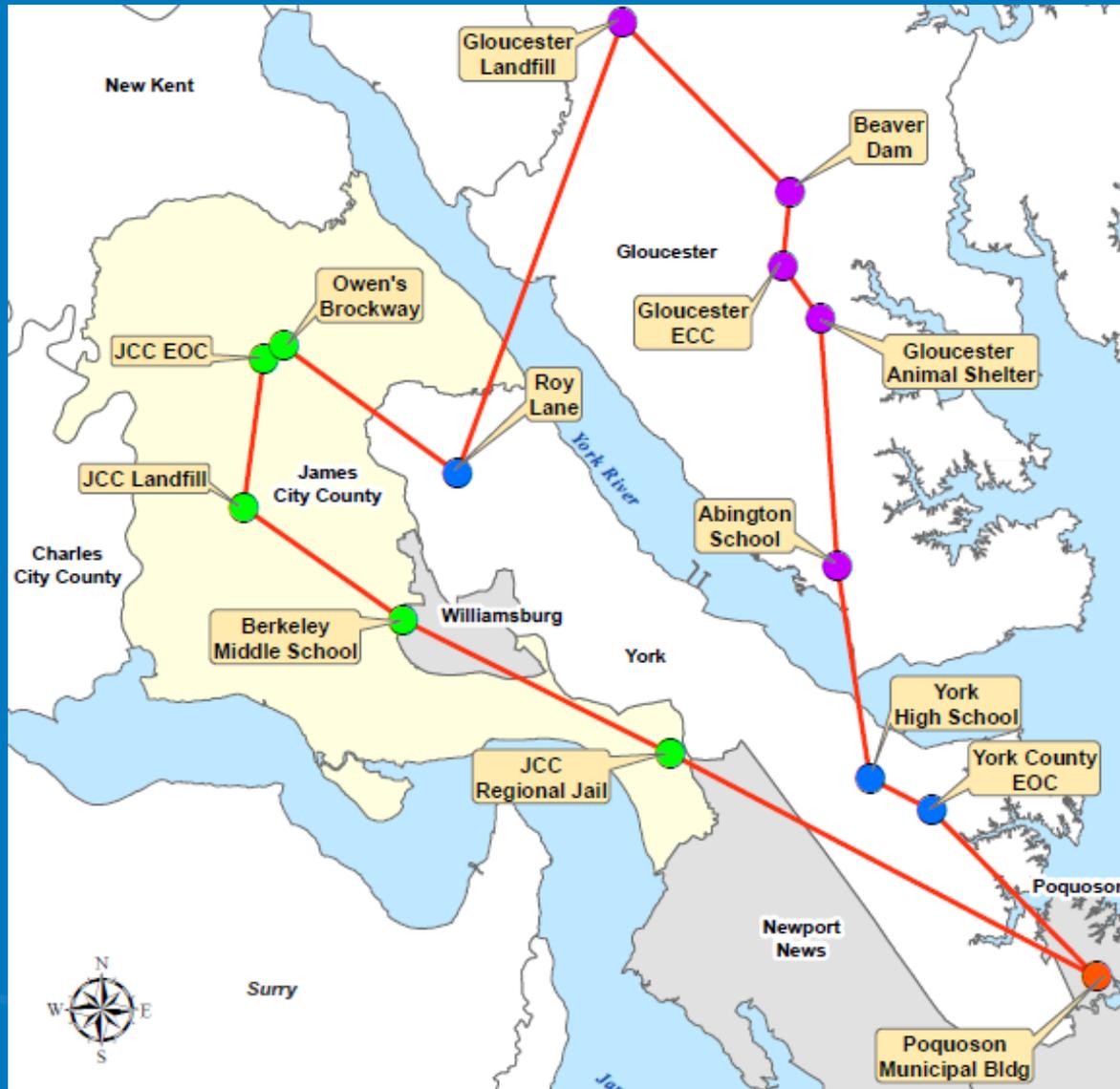


Goal 5: Exceptional Public Services



Goal 7: Fiscally Efficient Government

James City/ York / Gloucester



14 Tower Sites

Lifecycle Management Plan

- Phase 1
 - Upgrade to 7.16 software platform
 - Replace switch
 - Replace base station radios at tower sites
 - Replace dispatcher consolettes
- Lease agreement
 - \$1,134,000 – FY 2017
 - \$ 949,658 – FY 2018 - 2021



**Goal 2: Modern Infrastructure,
Facilities, and Technology Systems**



Goal 7: Fiscally Efficient Government

Equipment Staging



Linking our Systems

- Suffolk/ Isle of Wight
 - Suffolk recently upgraded to 7.16 software platform
 - Isle of Wight sharing Suffolk switch
- Linking our systems
 - Dynamic Systems Resilience
 - Geo diverse backup switch



Goal 2: Modern Infrastructure, Facilities, and Technology Systems



Goal 4: Protected Community Character and an Enhanced Built Environment

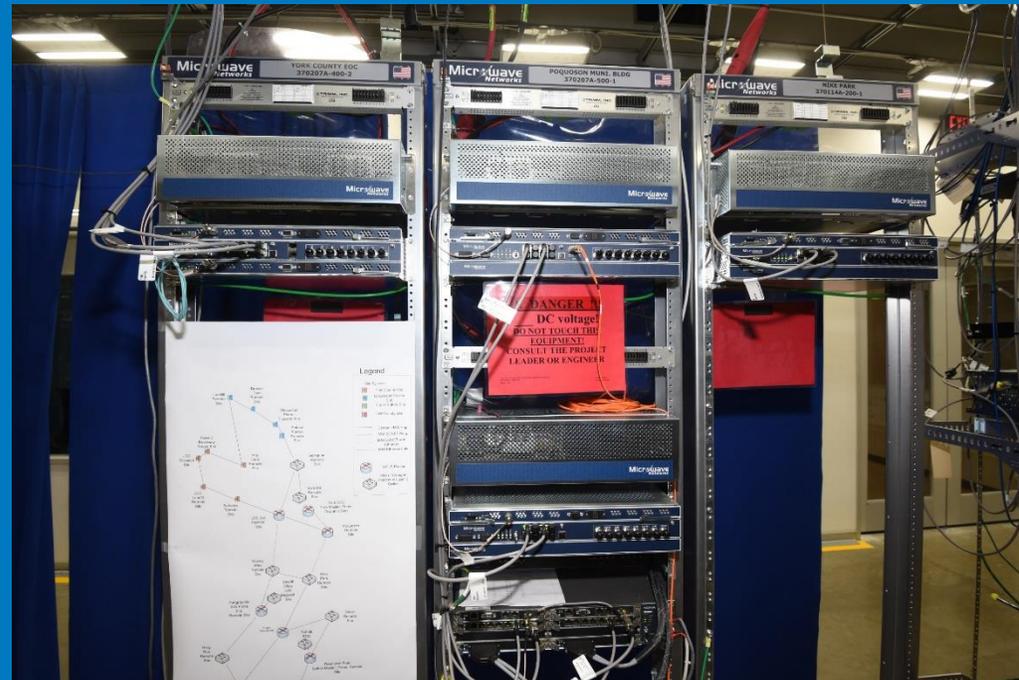
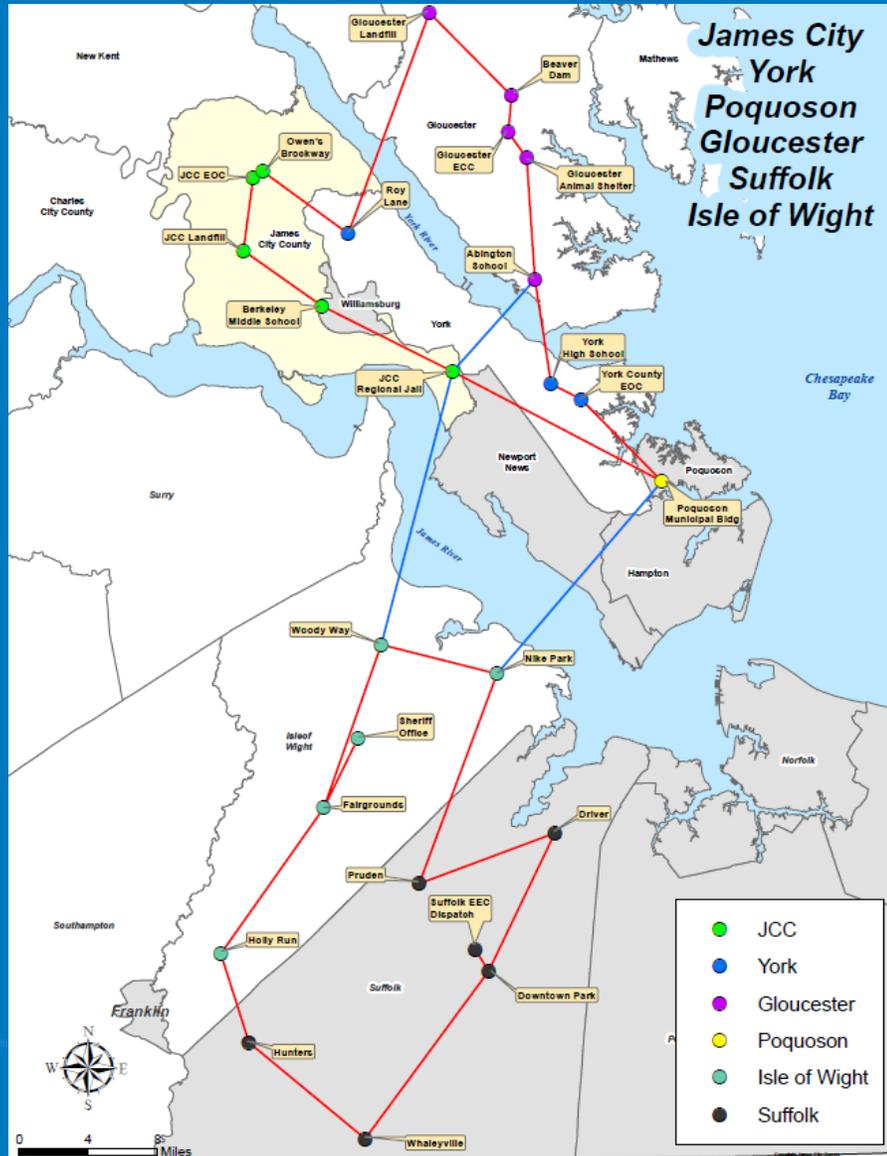


Goal 5: Exceptional Public Services



Goal 7: Fiscally Efficient Government

Linking Our Systems

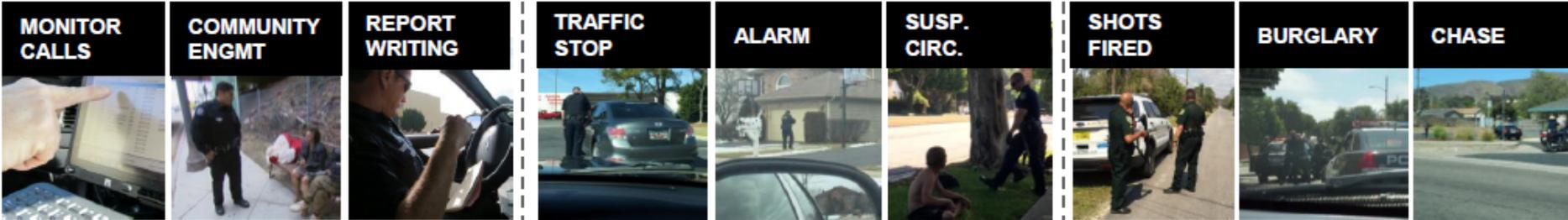


Future Technologies

UNDERSTANDING THE HUMAN CONTEXT



HIGH VELOCITY HUMAN FACTORS

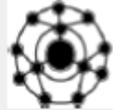


Low Stress Level -
Routine, secure, predictable

Elevated Stress Level -
Routine, potential to escalate

High Stress Level -
Unpredictable, volatile, complex

COGNITIVE ALLOCATION



OFFICER

SYSTEM

Full capabilities
Advanced interactions
Detailed information

COGNITIVE ALLOCATION



OFFICER

SYSTEM

Reduced fine motor skills
Optimal reaction time
Key information only

COGNITIVE ALLOCATION



OFFICER

SYSTEM

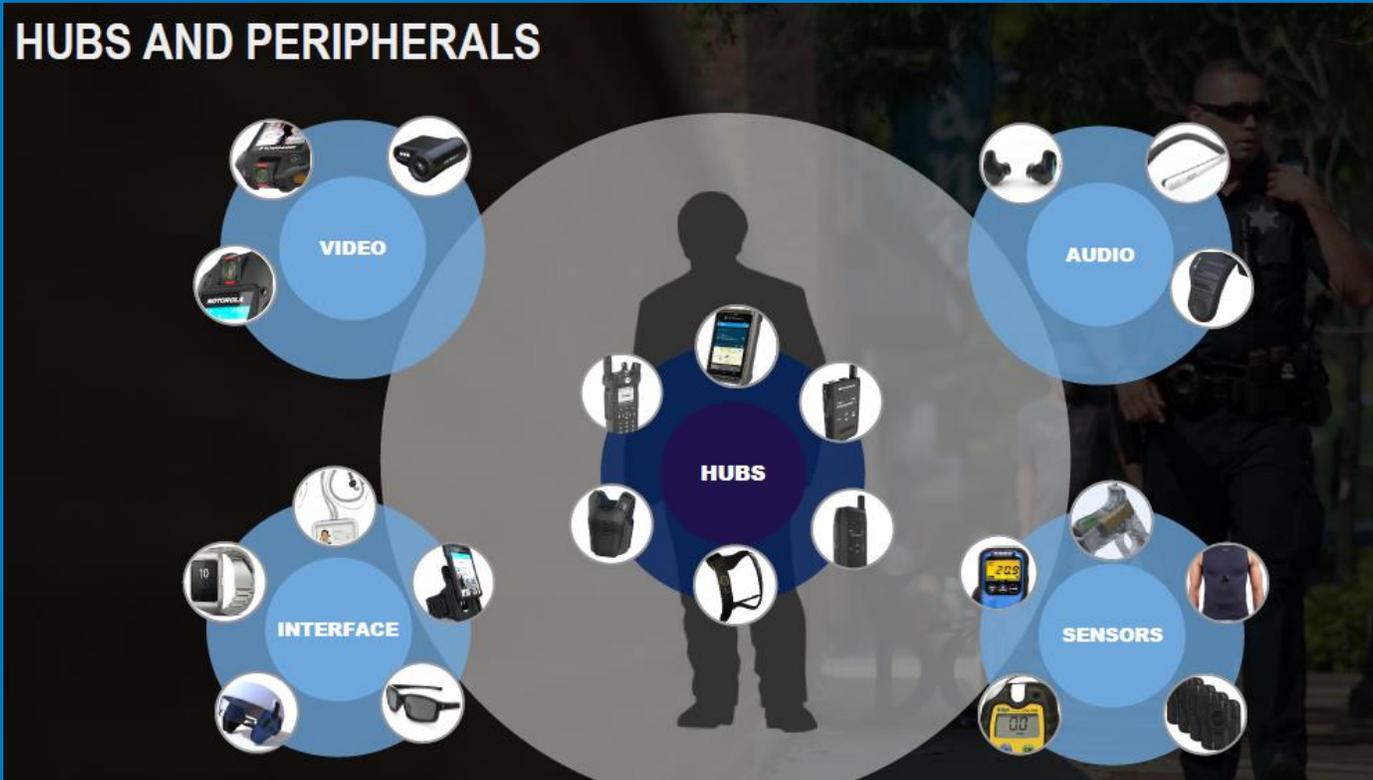
Only gross motor skills
Limited cognitive capabilities
Critical alerts only

HANDS-ON, ADVANCED INTERACTIONS
MORE VISUAL

EYES-UP, HANDS-FREE
AUDIO, TACTILE, CRITICAL VISUAL

Future Technologies

HUBS AND PERIPHERALS



DATA, DATA, DATA...

90% Of the World's Digital Data was Created in the last 2 years



Goal 2: Modern Infrastructure, Facilities, and Technology Systems

Questions



Goal 2: Modern Infrastructure, Facilities, and Technology Systems



Goal 4: Protected Community Character and an Enhanced Built Environment



Goal 5: Exceptional Public Services



Goal 7: Fiscally Efficient Government