Hampton Roads Interoperable Communications System
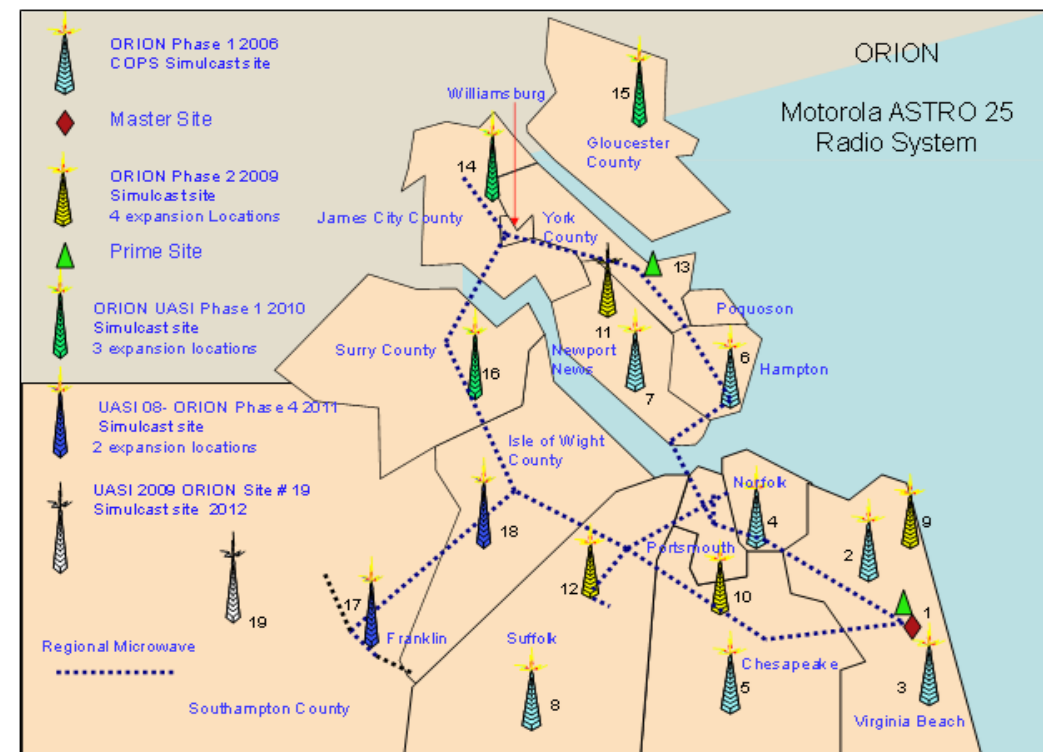
July 6, 2022

Interoperability in Hampton Roads

Interoperability is a communication lifeline that connects users in an emergency

- In 2005, Hampton Roads was on the forefront of addressing this critical need of first responders when they envisioned the Overlay Regional InterOperability Network (ORION).

- The buildout was funded by Homeland Security Urban Area Security Initiative (UASI) grants.

- Originally designed for the 7 cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Suffolk, and Virginia Beach.
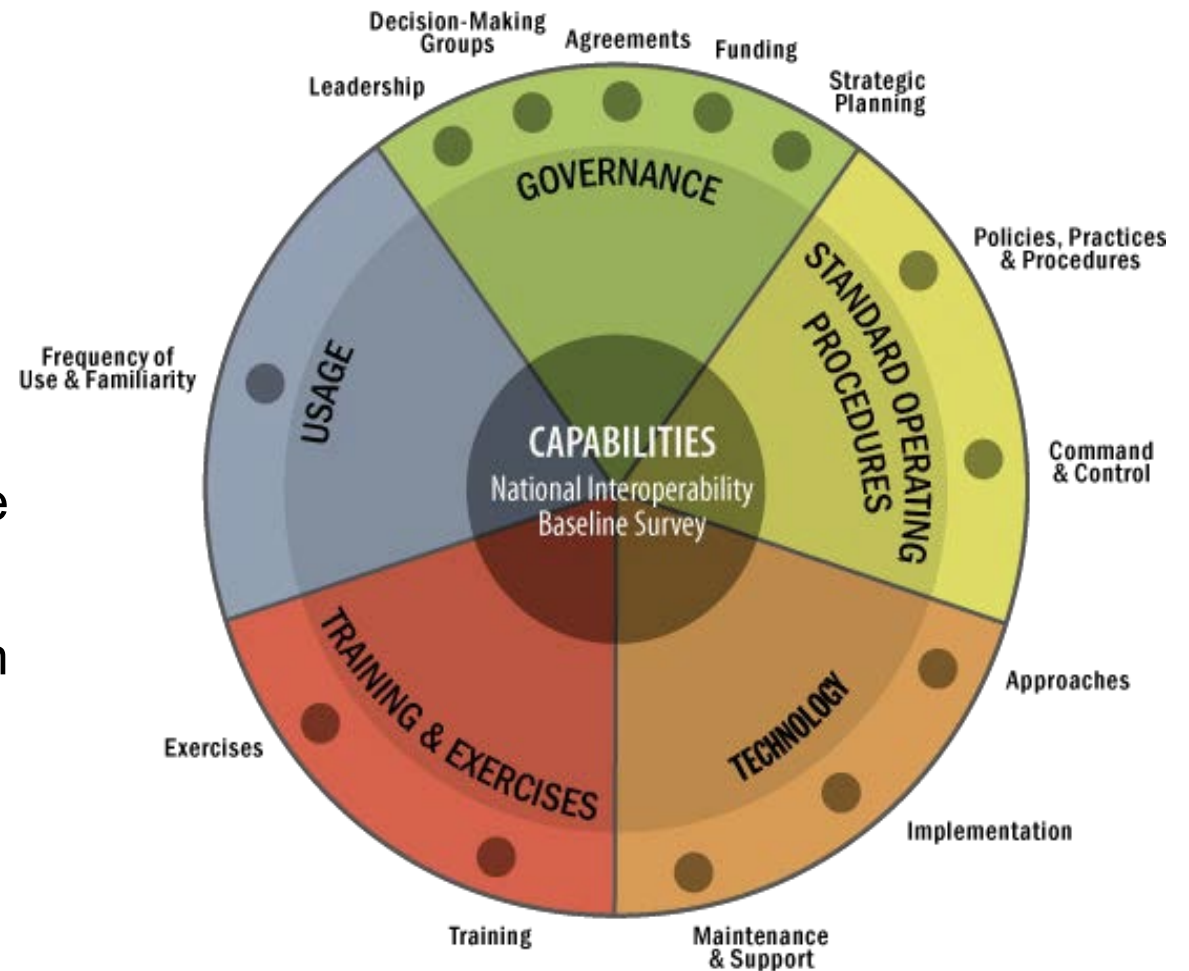
ORION Challenges

2019 ORION Stakeholders provided all data which is the foundation of the Assessment

➢ Need additional capacity
➢ Need improved coverage (north and west)
➢ Need portable coverage
➢ Need to own frequencies
➢ Need sustainable financial model
➢ Need reliable maintenance by all localities
➢ Need structured governance
➢ Need user training

Strategic Plan

2021 Hampton Roads Interoperability Planning

➢ Develop a clearly articulated vision and mission for Interoperability

➢ Develop the goals necessary to prioritize that vision and mission

➢ Develop technology implementation plan

➢ Develop governance implementation plan

➢ Develop costs and funding models

Solution that Benefits all Hampton Roads jurisdictions

Recommended Interoperability Approach

Hampton Roads - Integrated Regional Interoperable Systems

➢ Leverages existing jurisdiction's infrastructure

➢ Leverages existing jurisdiction's portable coverage footprint

➢ ISSI Technology connects Hampton Roads jurisdictions

➢ Provides seamless interoperability throughout Hampton Roads

➢ Provides interoperability with State and Federal partners

➢ Leverages regional financial resources

➢ Creates structured maintenance

➢ Creates structured governance & training

HR-IRIS provides a sustainable interoperability solution, benefiting all Hampton Roads jurisdictions.

HR-IRIS Advantages for Region

HR-IRIS Basic

➢ System of Systems **Interoperability**

➢ Consistent support and maintenance

➢ Provide Redundancy / Backup

➢ Secured frequencies (800MHz) and improved capacity

➢ Improved infrastructure coverage

➢ Seamless Roaming - **Interoperability**

HR-IRIS Enhanced

➢ System of Systems **Interoperability**

➢ Consistent support and maintenance

➢ Provide Redundancy / Backup

➢ **Enhanced** infrastructure capacity (800/700MHz)

➢ **Enhanced** infrastructure coverage (core cities)

➢ Seamless Roaming – **Interoperability**

➢ Support Virginia Port Authority – Capacity & Coverage

➢ Support State & Federal Agencies – Capacity & Coverage

HR-IRIS Costs & Funding Approach

- ➤ Funding Methodology
  - ✓ Establish equitable jurisdiction cost model
    - ▪ Per Capita
    - ▪ Per Unit
    - ▪ **Blended (60% / 40%)**
  - ✓ Modified based on participation
  - ✓ Offset by grant funding

- ➤ Cost Breakdown
  - ✓ Initial Implementation
  - ✓ 10 Year Maintenance

JURISDICTION / AGENCY	HR-IRIS Basic		HR-IRIS Enhanced	
	Implementation Value	10 Year Maintenance Value	Implementation Value	10 Year Maintenance Value
	$8,500,000.00	$1,500,000.00	$13,300,000.00	$2,900,000.00
Chesapeake	$ 1,096,112	$ 193,432	$ 1,715,094	$ 373,968
Franklin	$ 28,868	$ 5,094	$ 45,171	$ 9,849
Gloucester County	$ 143,735	$ 25,365	$ 224,903	$ 49,039
Hampton	$ 1,016,434	$ 179,371	$ 1,590,420	$ 346,783
Isle of Wight County	$ 94,026	$ 16,593	$ 147,123	$ 32,079
James City County	$ 297,093	$ 52,428	$ 464,863	$ 101,361
Newport News	$ 1,115,375	$ 196,831	$ 1,745,234	$ 380,540
Norfolk	$ 1,061,359	$ 187,299	$ 1,660,715	$ 362,111
Poquoson	$ 58,998	$ 10,411	$ 92,314	$ 20,129
Portsmouth	$ 424,807	$ 74,966	$ 664,698	$ 144,934
Smithfield	$ 26,105	$ 4,607	$ 40,846	$ 8,906
Southampton County	$ 55,958	$ 9,875	$ 87,557	$ 19,091
Suffolk	$ 359,077	$ 63,367	$ 561,850	$ 122,509
Surry County	$ 21,579	$ 3,808	$ 33,765	$ 7,362
Virginia Beach	$ 2,025,526	$ 357,446	$ 3,169,352	$ 691,062
Williamsburg	$ 68,883	$ 12,156	$ 107,781	$ 23,501
Windsor	$ 9,261	$ 1,634	$ 14,490	$ 3,160
York County	$ 546,210	$ 96,390	$ 854,658	$ 186,354
Eastern Shore	$ 3,373	$ 595	$ 5,278	$ 1,151
FBI	$ 4,497	$ 794	$ 7,037	$ 1,534
Fort Eustis/Langley	$ 15,741	$ 2,778	$ 24,630	$ 5,370
Matthews County	$ 1,124	$ 198	$ 1,759	$ 384
Norfolk Airport	$ 12,368	$ 2,183	$ 19,352	$ 4,220
Nightingale	$ 1,124	$ 198	$ 1,759	$ 384
Regent	$ 5,622	$ 992	$ 8,796	$ 1,918
Riverside Health	$ 1,124	$ 198	$ 1,759	$ 384
USCG	$ 5,622	$ 992	$ 8,796	$ 1,918
TOTALS	$ 8,500,000	$ 1,500,000	$ 13,300,000	$ 2,900,000

Interoperability succeeds when the whole community contributes!