

SCARBOROUGH
MAINE

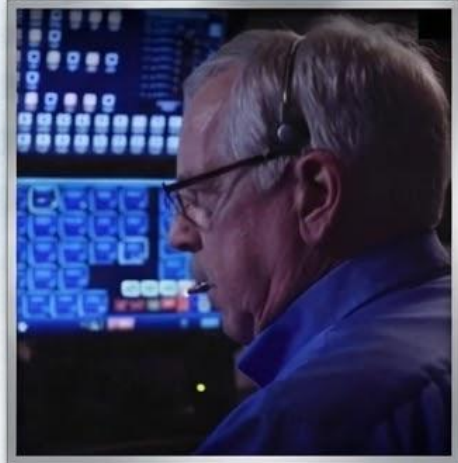
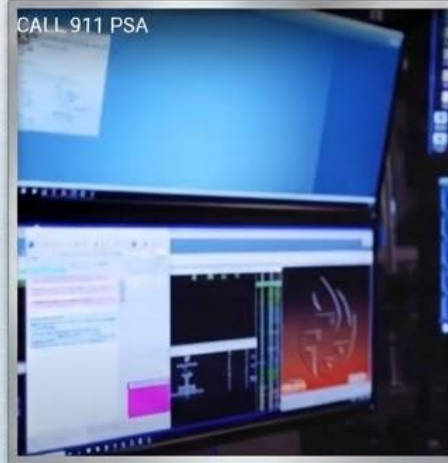


EST. 1883 Old
Orchard
Beach
MAINE



COMMUNICATIONS

MUNICIPAL TWO-WAY COMMUNICATIONS SYSTEM UPGRADE



Current Radio System Design & Architecture

-  Based on 1950's Technology. Pieces were added, replaced, and expanded overtime.
-  System was not designed or installed as one system.
-  Parts are older than 25 years, some pieces were installed prior to any records or current staff can verify.



July 2024

Councils Approve Study (\$85k)



July-Dec 2024

Consultant Analysis



Jan 2025

Radio Study Completed



April 2025

FY26 CIP Estimate (\$13.2M)



Sept 2025

RFP Issued for Upgrade



Dec 2025

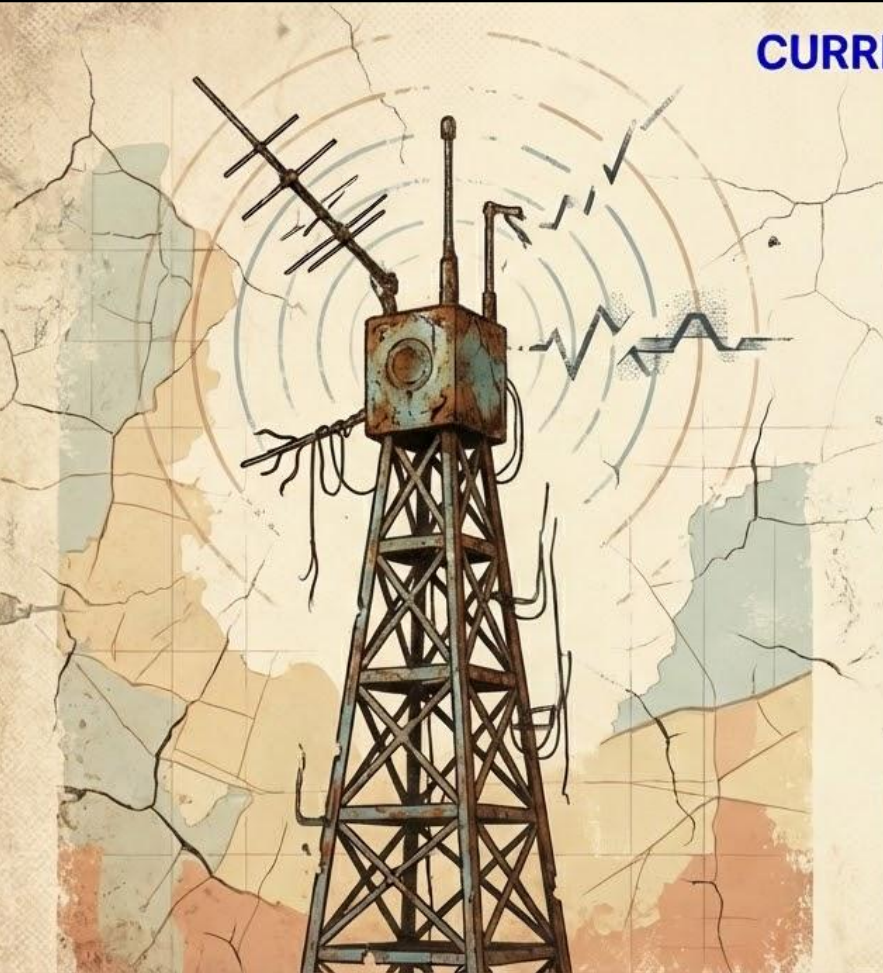
RFP Closed, Interviews



Jan 2026

Vendor Scoring Completed

CURRENT SYSTEM



1950s Era & End-of-Life Infrastructure



- System based on 25-year-old architecture; utilizing 1950's technologies.
- Infrastructure is fragmented and many components are end-of-life (EOL).
- Parts availability diminishing, Service is "best effort" only with no warranties

Significant Coverage & Reliability Gaps



- Low portable radio signal (e.g., outer Broadturn Rd, East Grand Avenue).
- Coverage issues in critical buildings.
- High Noise Interference

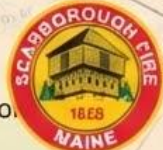
Frequency & Capacity Limitations



- Frequency band mismatches - Mutual Aid Communities, Schools, other municipal Depts.
- Frequency congestion, no available channels, Unable to expand

CURRENT SYSTEM

Independent VHF Analog Radio Systems



Independent UHF Analog Radio Systems

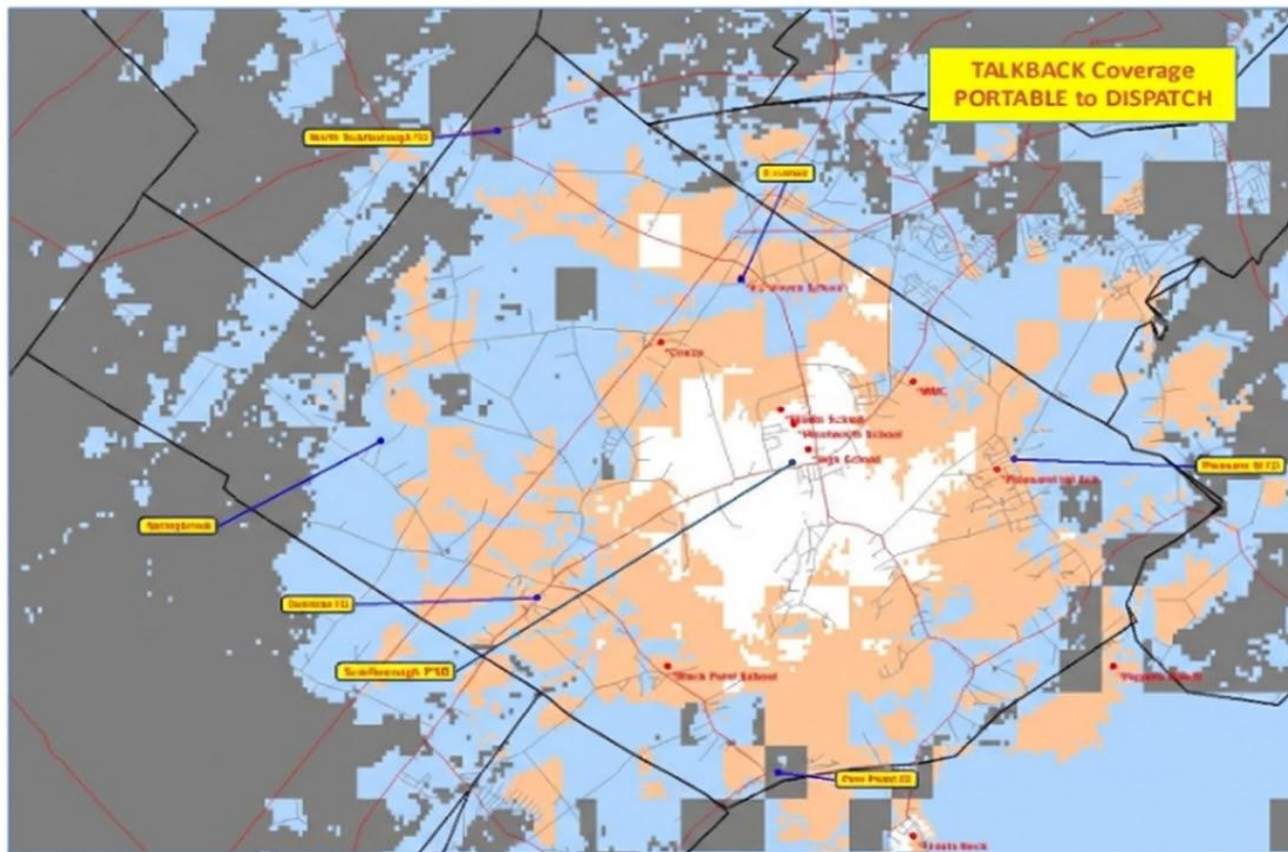


Scarborough

Old Orchard
Beach

CRITICAL ISSUES AND CONCERNS

1. COVERAGE PROBLEMS AT VARIOUS LOCATIONS WITHIN SCARBOROUGH AND OLD ORCHARD



Coverage from
Scarborough
[PSB Tower]

WHITE
Inside Large
Buildings

ORANGE Inside
Residential
Building

BLUE
In-Street
Coverage

GRAY
No/Poor
Coverage

Burnham Road Police



Walmart Police



Dunstan Dental Police



Tapley Road - Fire/EMS

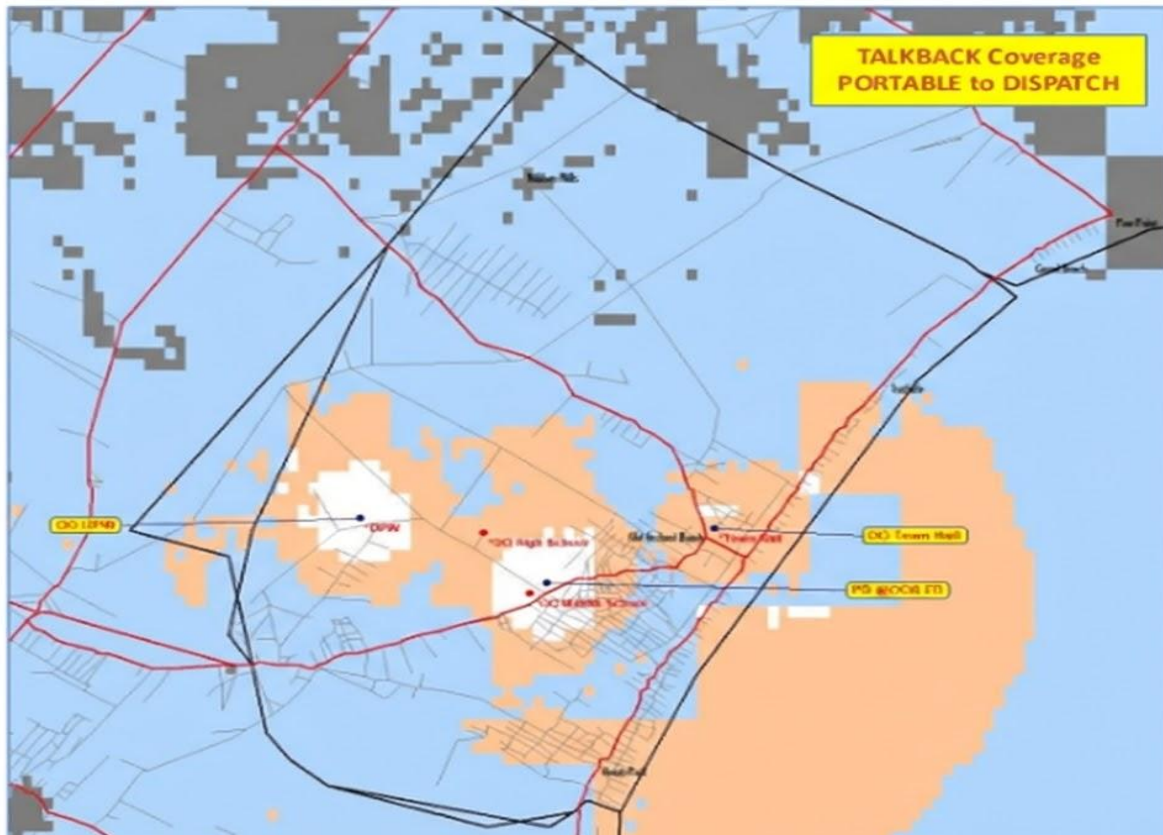


Colby Drive - Fire/EMS



CRITICAL ISSUES AND CONCERNS

1. COVERAGE PROBLEMS AT VARIOUS LOCATIONS WITHIN SCARBOROUGH AND OLD ORCHARD



**Coverage from
Old Orchard Fire
Headquarters**

**[Fire Headquarters
Tower]**

Ocean Park Rd. Police



WHITE
Inside Large
Buildings

Ocean Park Rd. Police



**ORANGE Inside
Residential
Building**

Ocean Park Rd. Police



BLUE
In-Street
Coverage

GRAY
No/Poor
Coverage

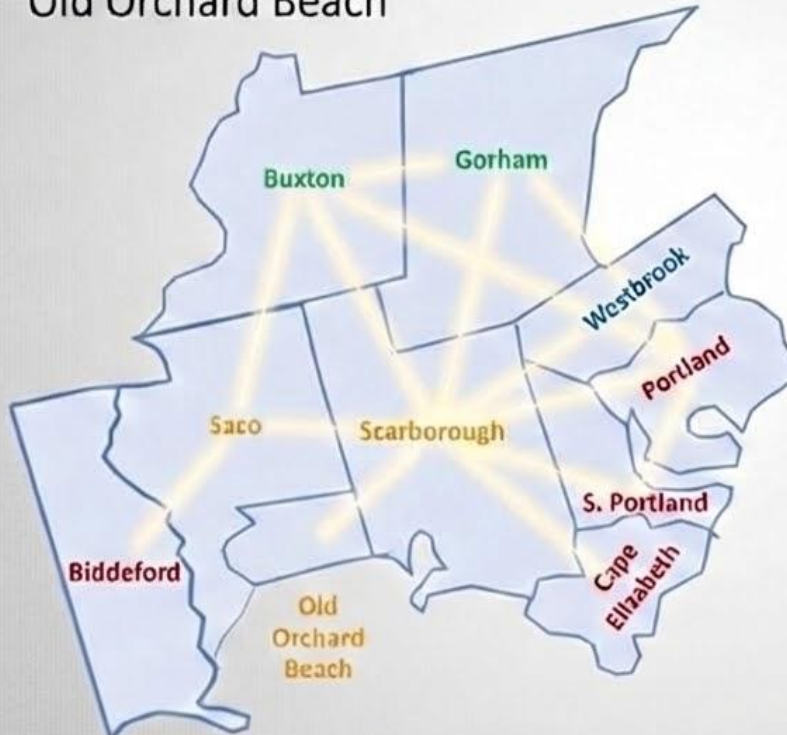
CRITICAL ISSUES AND CONCERNS

2. INTERNAL AND MUTUAL AID COMMUNICATIONS



CRITICAL ISSUES AND CONCERNS

Public Safety Communications in Towns Bordering Scarborough and Old Orchard Beach



- ❖ Existing 800 MHz System
- ❖ Current VHF Planning 800 MHz
- ❖ Existing VHF Analog System
- ❖ Existing VHF DMR System

CRITICAL ISSUES AND CONCERNS

3. END-OF-LIFE EQUIPMENT IN BOTH TOWNS THAT REQUIRE IMMEDIATE REPLACEMENT

Municipality	End Of Life Equipment	Recommended Replacement	Serviceable Equipment	% Critical Equipment
Scarborough	41	23	47	57.7%
Old Orchard Beach	10	1	2	84.6%
TOTALS	51	24	49	60.5%



VISUAL EVIDENCE: Aging, disorganized, and failing infrastructure.

CRITICAL ISSUES AND CONCERNS

4. COMMUNICATIONS CONSOLE

THE PROBLEM: OBSOLETE HARDWARE



THE COMPOUND ISSUE: OUTDATED OS



1980's Technology - Decades Past its Prime



Only User in Maine - Single Point of Failure Risk



Two Known Techs Statewide - Critical Support Vulnerability



Operating on Windows 7 (End of Life)



Security Vulnerabilities & Lack of Updates

CURRENT SYSTEM



150 mhz Analog VHF System

RECOMMENDED SYSTEM



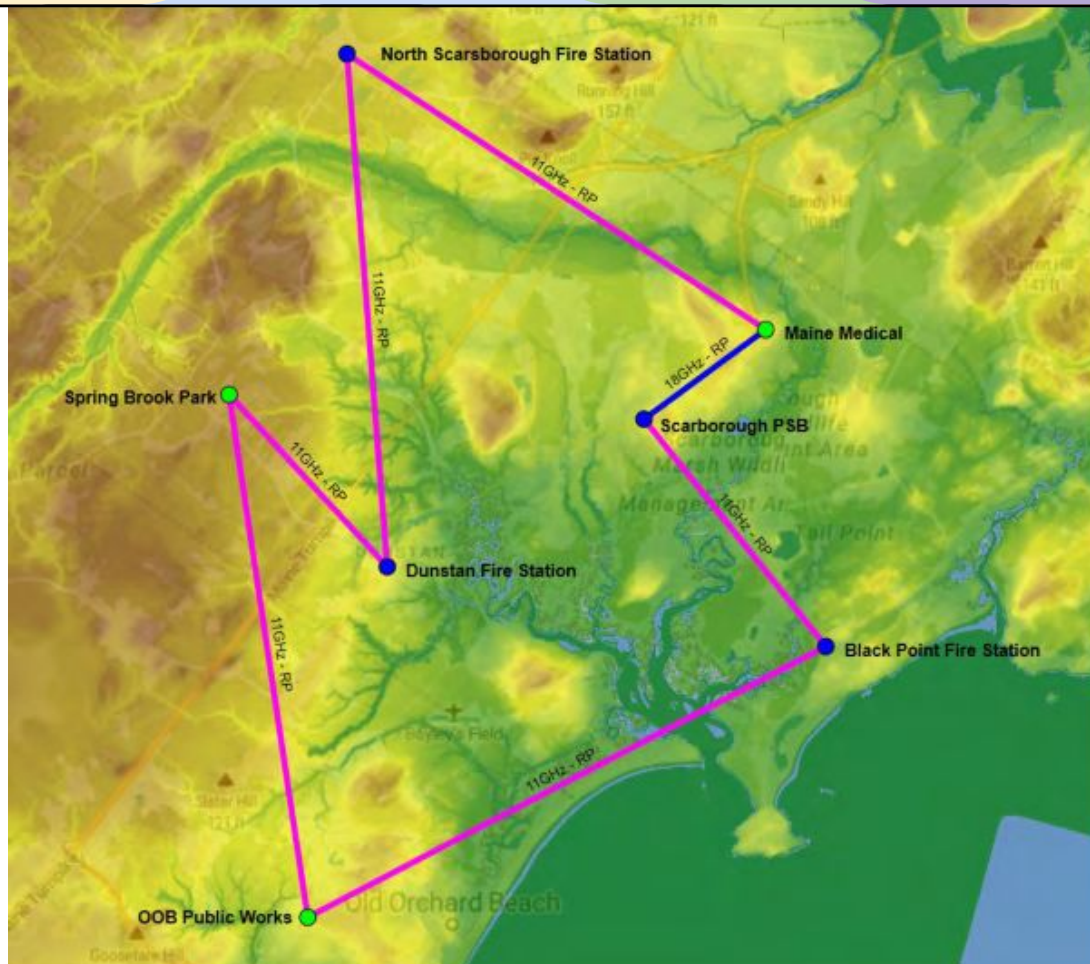
800mhz P25-Phase 2 Digital
Simulcast Trunked System

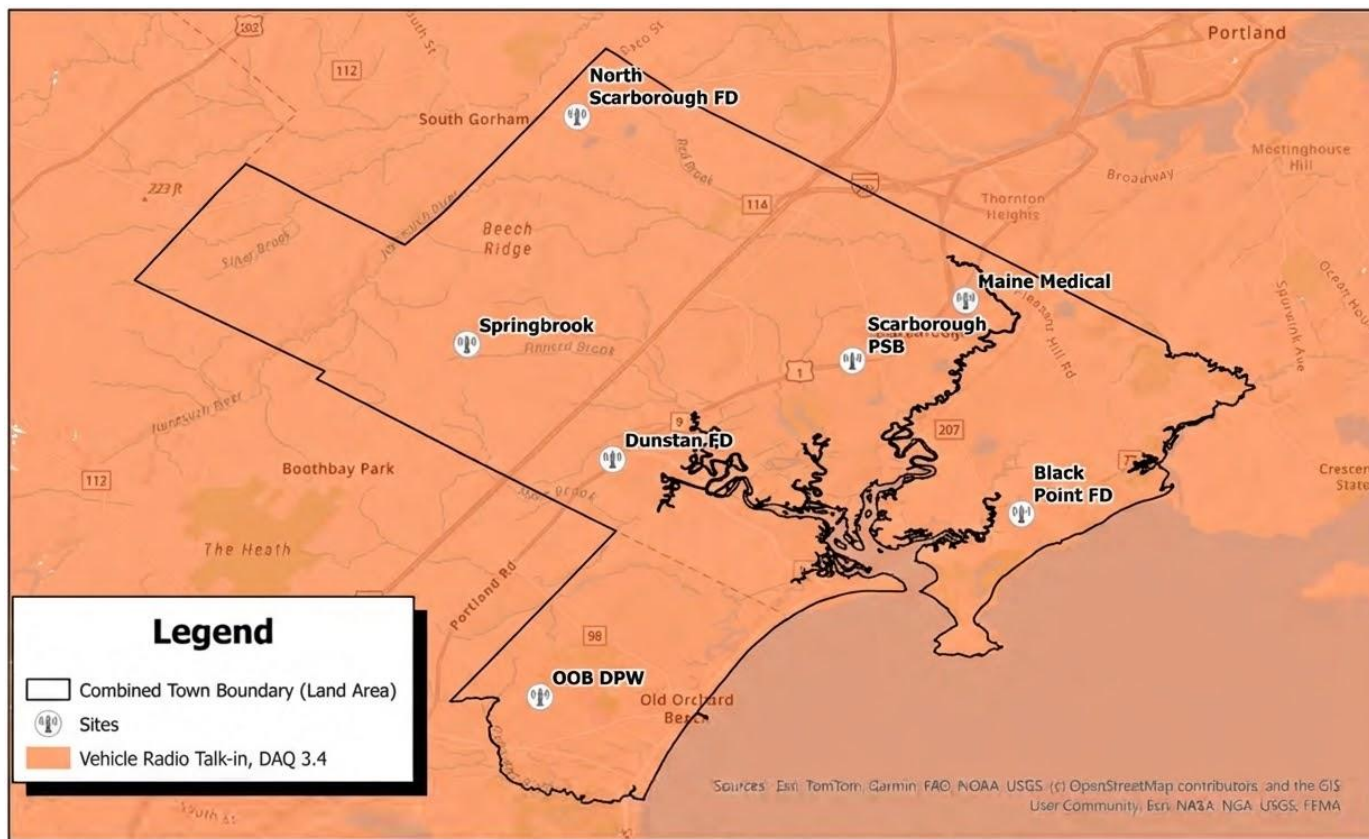
One Regional System



RECOMMENDED SYSTEM - SITE INFRASTRUCTURE

Site Name	Tower
Scarborough Public Safety Building	Existing 180' Tower
Dunstan Fire Station	<i>*New 180' Tower*</i>
North Scarborough Fire Station	<i>*New 180' Tower*</i>
Old Orchard Beach Department of Public Works	<i>*New 180' Tower*</i>
Black Point Fire Station	Replace 80' Monopole with New 100' Tower
Maine Medical	Rooftop Antennas
Springbrook Park	<i>*New 180' Tower*</i>





0 0.390.77 1.54 Miles

January 14, 2026

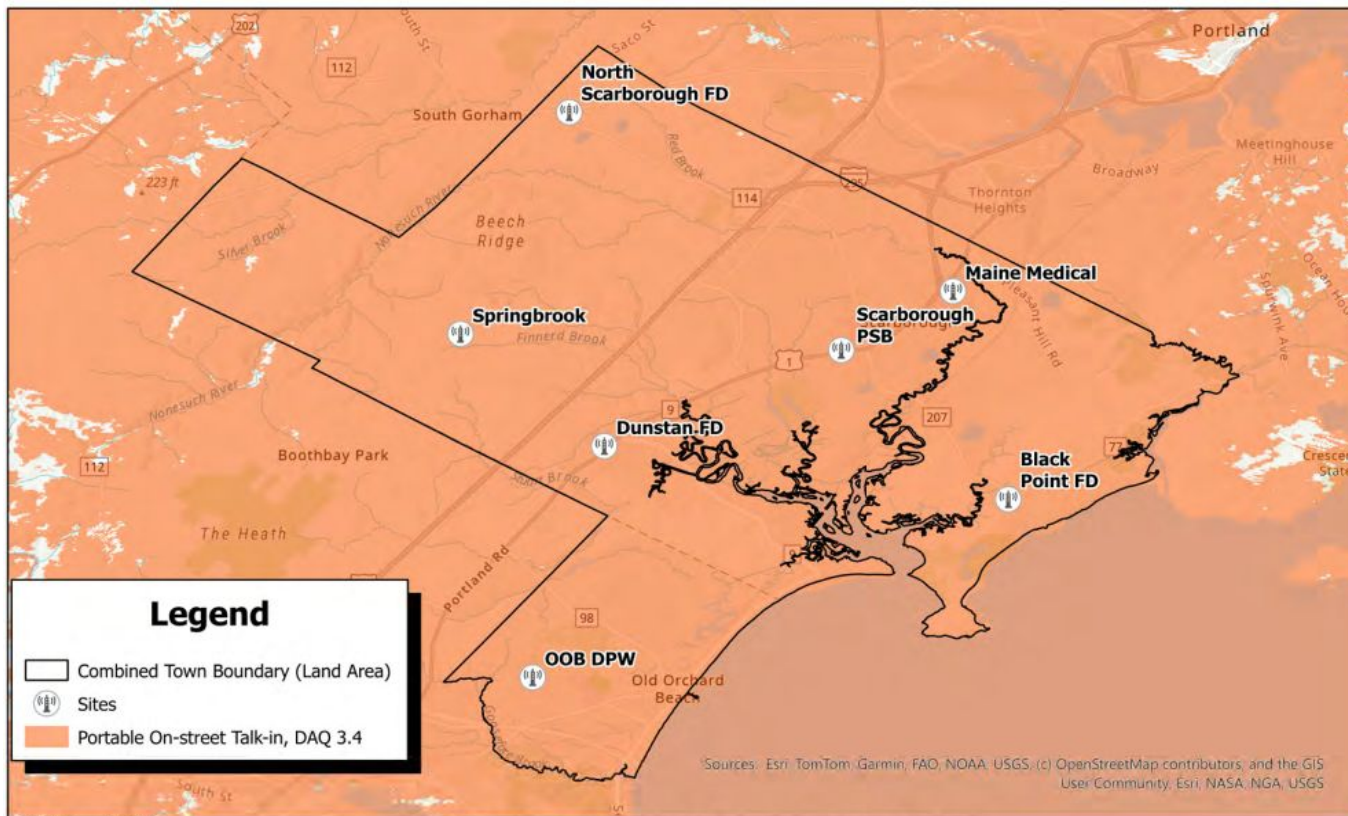
Version: 2.0

800 MHz ATLAS P25 Phase 2 Simulcast Trunked System

Vehicle Radio Talk-in

99.9% Service Area Reliability

Map Reference: 1A
Guaranteed
System Level Map



0 0.390.77 1.54 Miles

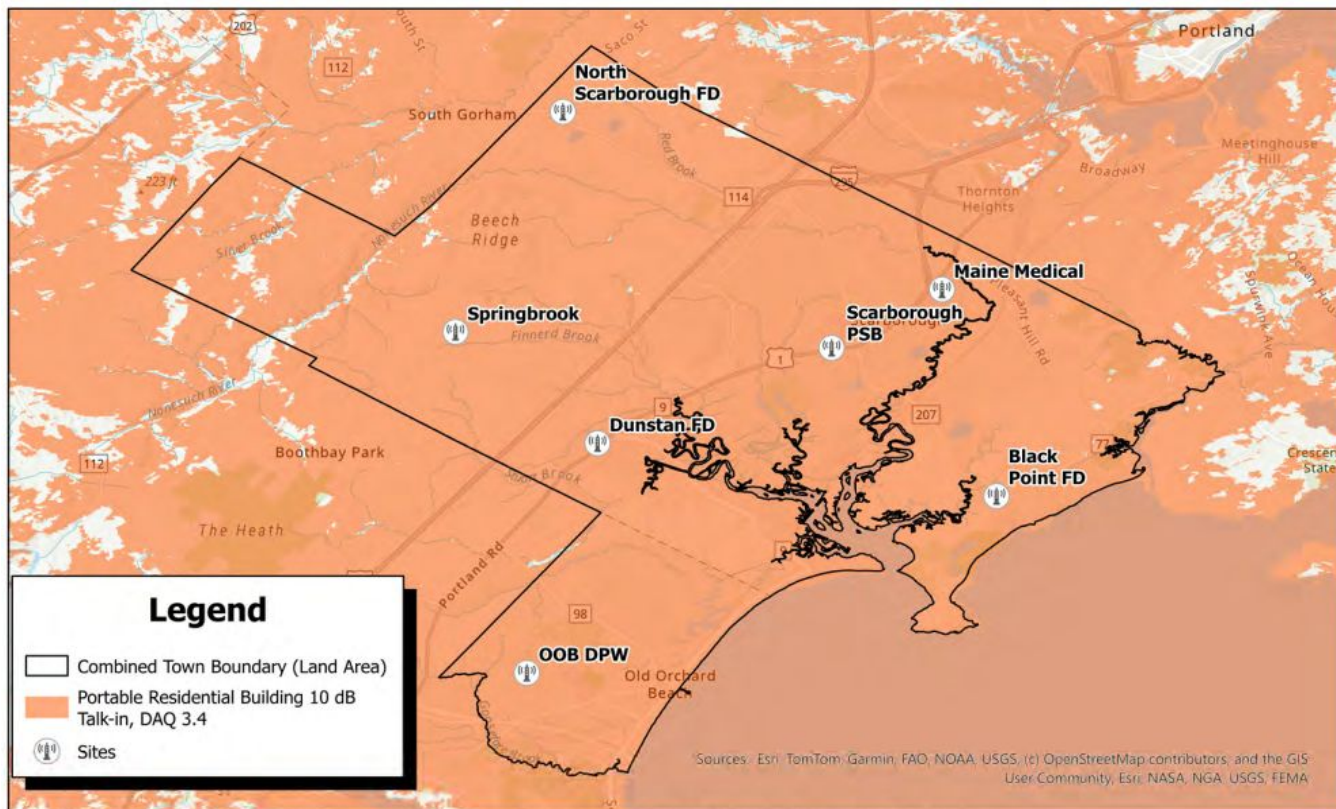
January 14, 2026

Version: 2.0

800 MHz ATLAS P25 Phase 2 Simulcast Trunked System

Portable On-street Talk-in
99.8% Service Area Reliability

Map Reference: 2
Guaranteed
System Level Map



800 MHz ATLAS P25 Phase 2 Simulcast Trunked System

Portable Residential Building 10 dB Talk-in

98.5% Service Area Reliability

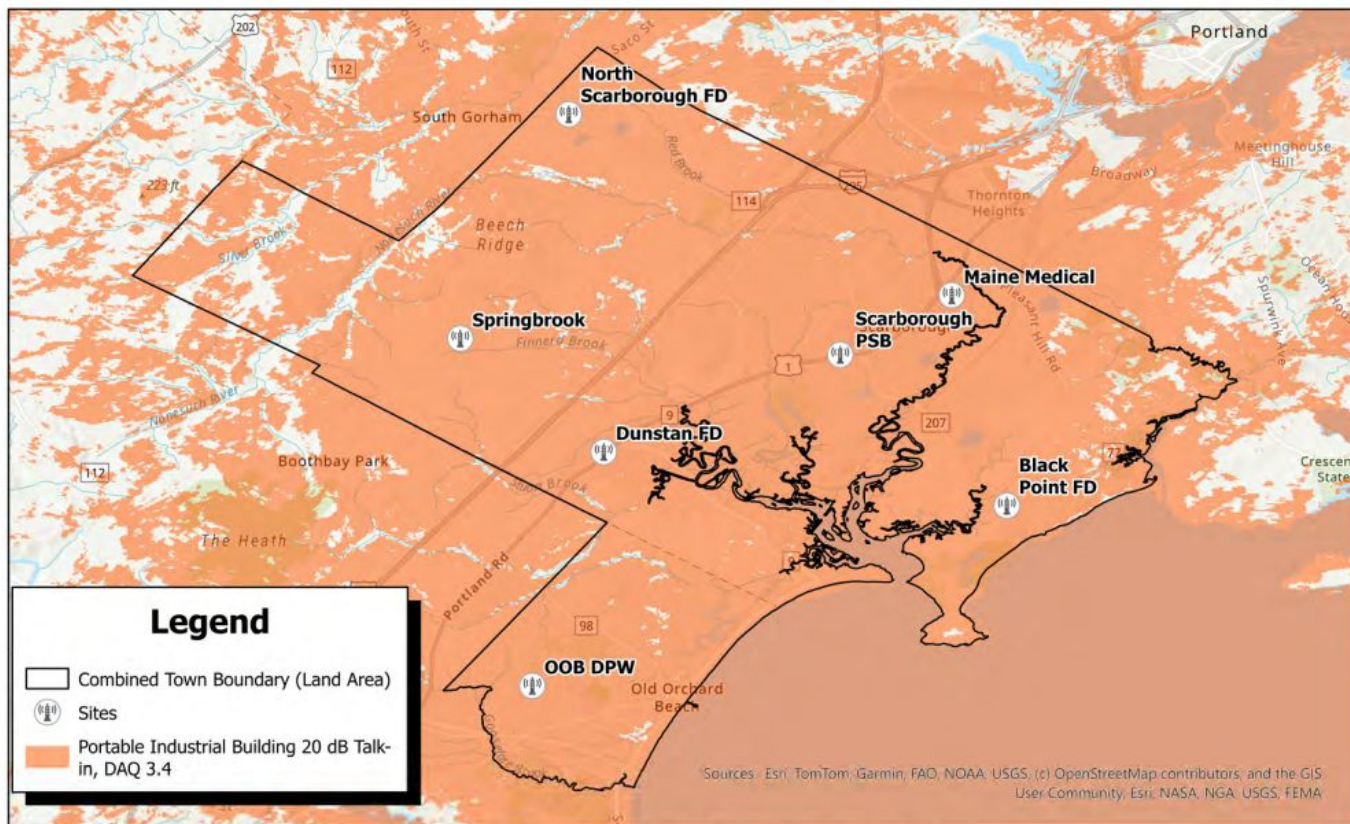
0 0.39077 1.54 Miles



January 14, 2026

Version: 2.0

Map Reference: 3A
Guaranteed
System Level Map



800 MHz ATLAS P25 Phase 2 Simulcast Trunked System

Portable Industrial Building 20 dB Talk-in

92.8% Service Area Reliability

January 14, 2026

Version: 2.0

Map Reference: 4A
For Information Only
System Level Map

SUBSCRIBERS

SCARBOROUGH (857 Total)



Police Dept: 130
(95 Portable, 35 Mobile, 0 Other)



Fire Dept: 263
(140 Portable, 44 Mobile, 79 Other)



Sanitary Dist: 5
(4 Portable, 0 Mobile, 1 Other)



Public Works: 78
(25 Portable, 45 Mobile, 8 Other)



School Dept: 275
(275 Portable, 0 Mobile, 0 Other)



School Bus Dept: 44
(2 Portable, 42 Mobile, 0 Other)



Community Services: 55
(50 Portable, 5 Mobile, 0 Other)



Dispatch Center: 7
(1 Portable, 0 Mobile, 6 Other)



Portable: 592



Mobile: 171



Other: 94

OLD ORCHARD BEACH (296 Total)



Police Dept: 93
(70 Portable, 23 Mobile, 0 Other)



Fire Dept/Lifeguards: 93
(57 Portable, 16 Mobile, 20 Other)



Public Works Dept: 41
(10 Portable, 30 Mobile, 1 Other)



School Dept & Bus Dept: 63
(47 Portable, 16 Mobile, 0 Other)



Wastewater Dept: 6
(6 Portable, 0 Mobile, 0 Other)



Portable: 190



Mobile: 85



Other: 21

GRAND TOTAL: 1153

Portable Radios: 782

Mobile Radios: 256

Other Radios: 115

PRICING

INFRASTRUCTURE AND SUBSCRIBERS

 Scarborough: \$ 10,355,298.33

 Old Orchard: \$ 3,241,093.31

 **TOTAL:** \$ 13,596,391.64

10% CONTINGENCY

 Scarborough: \$ 1,035,529.83

 Old Orchard: \$ 324,109.33

 **TOTAL:** \$ 1,359,639.16

SCARBOROUGH TOTAL:

\$ 11,390,828.16

OLD ORCHARD TOTAL:

\$ 3,565,202.64

TOTAL PROJECT COST:

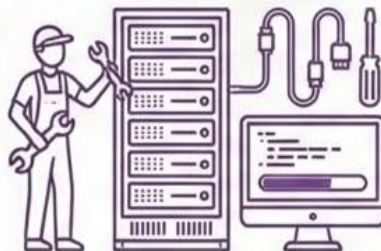
\$ 14,956,030.80

ITEMS STILL BEING CONSIDERED



SPRINGBROOK SIMULCAST TOWER SITE

Estimated Cost: \$1.2 Million
(coverage area and
redundancy affects)



ANNUAL MAINTENANCE

Operating Budget Moving
Forward (Ballpark: \$500,000,
shared between municipalities).



SUBSCRIBER COUNTS & VERIFICATION

Final total and verification of
subscribers. (could only
lower subscriber cost).

