

Greater Cleveland Regional Transit Authority

Project Update Radio Replacement Study

Presented to : Operations Committee
November 14, 2017

Greater Cleveland Regional Transit Authority



Purpose of the Study

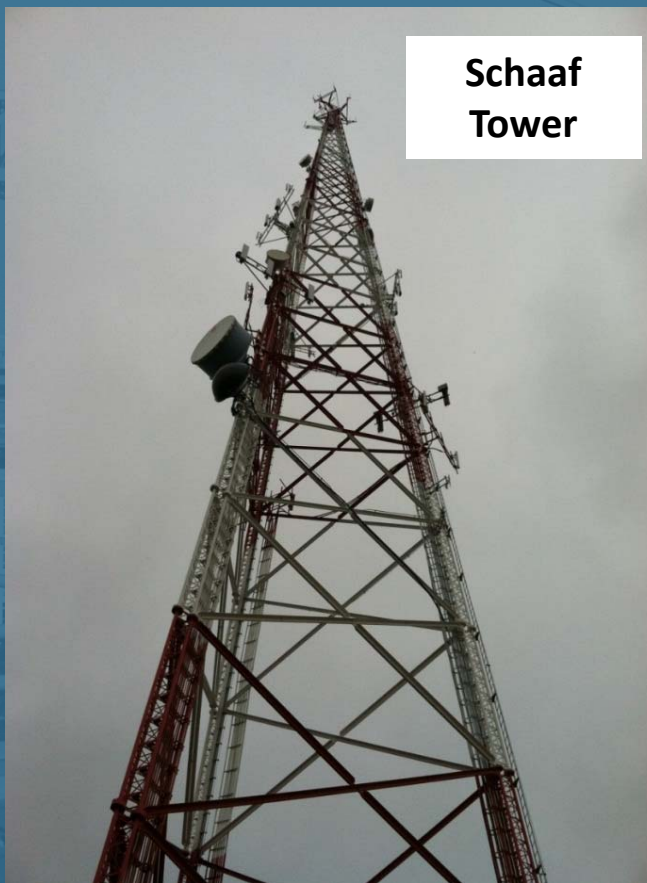
- RTA hired IBI Group to identify the best communication option for RTA
 - Transit-focused firm and has conducted similar studies for other authorities
- Current System: Aging infrastructure with obsolete technology
- Include study in grant applications

Current Radio System Equipment



Vehicle Radio

IVLU (Computer)



Schaaf Tower

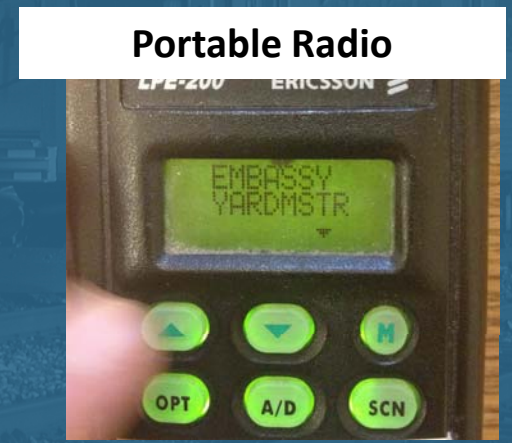


OnStreet Signs



Handset

MDT



Portable Radio

Radio System Communication



Vehicle



Radio Towers



Servers



TransitMaster
Software



Customer Real-
Time
Information



Radio System Communication

Route Ladder Vehicle Schedule Route O rel Map

Vehicle Map

Zoom

Operator Communication

2831	75	CM No
2478	70	RTT
3372	70	RTT
338	70	RTT Rai
816A	70	RTT Rai
3427	70	RTT
3372	60	CM Fare
2268	50	CM Cod
2629	50	CM Cod
2471	50	CM Cod
2471	50	CM Cod
2440	50	CM Cod
2440	50	CM Cod
3210	50	CM Cod
314	40	Operat
2448	40	Operat
2903	10	CM Pick
2437	10	CM Pick
2231	10	CM Pick

Project Status

Task	Description	Status
Task 1	Identify radio replacement opportunities/methods	Complete
Task 2	Develop SWOT and Gap Analysis for each method	In-Progress
Task 3	Perform a voice and data coverage test for each method	In-Progress
Task 4	Develop cost/benefit analysis for each method	In-Progress
Task 5	Provide a final recommendation	Not Started

* Project on schedule for January 2018 completion



Project Status – Task 1 and Task 2

- Replacement Opportunities:
 - Hybrid Solution – Traditional Radio and Cellular
 - Commercial Cellular Provider (Verizon/AT&T)
 - Traditional Radio - Leased
 - Traditional Radio – RTA owned

Current Radio Coverage

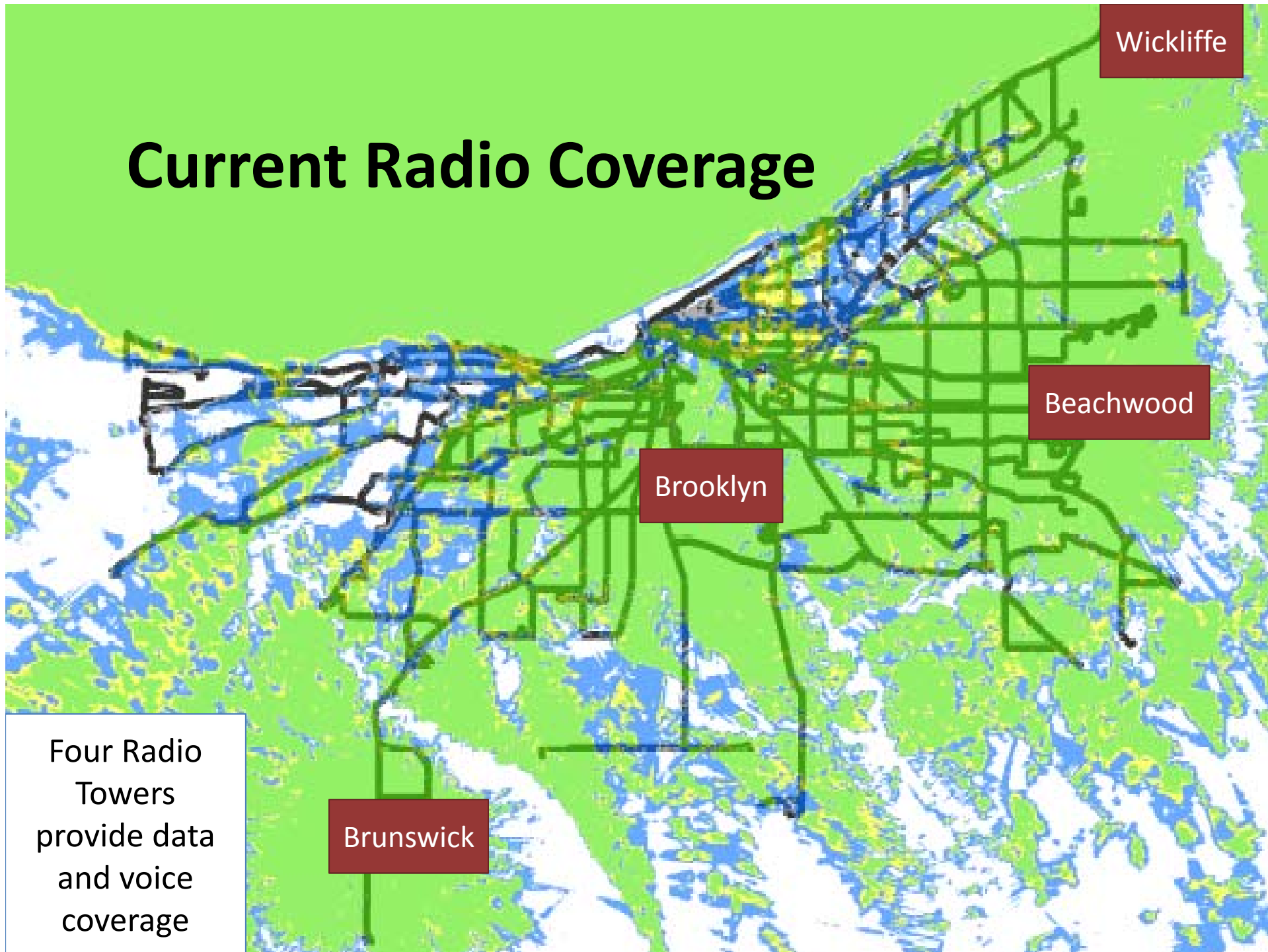
Wickliffe

Beachwood

Brooklyn

Brunswick

Four Radio
Towers
provide data
and voice
coverage



Grant Award

- RTA planned on using the final recommendation for grant applications
 - In September, RTA was notified it received a federal grant of \$5.8 million
 - US DOT Transportations Advanced Transportation and Congestion Management Technologies

Next Steps

Date	Task
January 2018	Radio Study Completion: Final Recommendation
February 2018	Develop RFP for replacement system
May 2018	Publish RFP
July 2018	Select Vendor
August 2018	Project Kickoff
May 2020	Project Closeout

*Project Schedule depends on the system selected