



OFFICE OF EMERGENCY MANAGEMENT AND COMMUNICATIONS  
CITY OF CHICAGO

**City of Chicago OEMC Public Safety Radio System  
Justification for an Extended Implementation Period**

The Office of Emergency Management and Communications of the City of Chicago respectfully requests an extended implementation period of five (5) years for constructing and placing our proposed system in operation.

The City of Chicago is beginning an effort to modernize our land mobile radio communications. Our goals are to improve efficient use of our existing channels, consolidate disparate systems, enhance security, and plan for T-Band migration. We plan to repurpose channels already licensed to the City of Chicago and to use those channels efficiently for our first responders and the greater good of the citizens of, and the visitors to, our city.

This project is being undertaken for three specific reasons: 1.) to bring together several disparate systems; 2.) to combat the amount of unauthorized transmissions on our current channels; and 3.) to provide a path for our transition from the T-Band as mandated by the Federal government.

A significant benefit of this project is not only interoperability between all of the many critical users in the city, but also true operability.

An opportunity exists for the City of Chicago to repurpose 800MHz channels that have been used for our Computer Aided Dispatch (CAD) system because of advances in data communications, the use of private public partnerships, and the potential adoption of FirstNet. We propose to repurpose our existing data channels and combine them with our existing 800MHz trunked voice channels. Our goal is to consolidate five different trunked systems in the city into one interoperable network.

We are proposing a multi-phased plan for slow growth over the next five years, but with tangible benefits at the end of each phase. Our first step is to consolidate the existing trunked systems and channels. We will also integrate Chicago Midway International Airport's system. Midway currently uses T-Band frequencies. We plan to integrate with the City of Chicago's Department of Water Management (DWM) to provide enhanced coverage within their critical infrastructure. Our first phase will consist of 13 simulcast sites (8 Tx/Rx and 5 Rx only), one ASR at Midway, and two separate conventional in-building systems at the DWM filtration plants.

The second phase will modernize O'Hare International Airport's operations and public safety systems with 800 MHz. The subsequent phases will create a framework and methodology to add more departments by adding capacity to the simulcast subsystem accomplished through reallocating additional current data system frequencies. Later phases will integrate the Chicago

Fire Department, Chicago Police Department Patrol Operations, and Chicago's public works systems to achieve fully unified city radio.

If you have any questions or requests for clarification or further information, please contact me or Eric Reinhardt at the City of Chicago Office of Emergency Management and Communications.

Below is the proposed implementation schedule.

OEMC Channel deployment plan

Phase	Schedule	Added Channels	Added Departments	Total Users
1	9/2017	12	CPD (Specialized Units), Midway	3,000
2	7/2018	17	Water Dept., O'Hare, additional CPD units	6,200
3	6/2019	13	Public Works, additional CPD/CFD units	9,500
4	6/2020	6	Parks, Support Services	12,000
5	6/2021	6	CPD/CFD Citywide Operations	20,000