

# Cook County, IL

## County Trunked and Conventional Operations

The Cook County Sheriff's Police and other county agencies have been using various VHF repeater and simplex frequencies for decades. This system has been outgrown and is prone to interference from other users. It also suffers from coverage problems and aging equipment.

The Cook County Jail moved to an in-house Motorola SmartNet trunked system several years ago. This system has evolved to include 6 channels for local, in-house use at the Jail and Courthouse facility in the "26th & California" area of the south side of Chicago. It also has 6 higher power "wide area" channels that cover a wider area of the county. This SmartNet system can often be heard by scannists throughout the Chicago area on the wide area channels.

A separate Countywide Astro SmartZone networked system was built and as of early 2006 taking over day-to-day operations for the Sheriff's Department. This system is intended to replace the VHF systems used by the Sheriff's Police, courthouse operations and Transportation / Corrections units. Eventually the County Highway Department will likely switch to this system as well.

Unfortunately for scannists and local law enforcement agencies most Sheriff's Department communications on the trunked system are encrypted. This will serve to further isolate the Cook County Sheriff's Department from its mutual aid partners as well as the public.

This SmartZone system has 2 main zones. Zone 1 is the "South" portion, with sites around the southern parts of Cook County and Zone 2 is the "North" zone with sites around the north and northwest parts of the County. Both of these zones have sites at "26th & Cal". In addition there are 5 "IntelliRepeater" sites situated at or near county courthouses or facilities to assist in localized communications.

Both the North and South Zones have 10 individual simulcast sites including the 26th & Cal site. There are 10 channels assigned to each Zone plus each IntelliRepeater site has 2 frequencies. The Jail/Courthouse system has 12 channels of it's own for a total of 42 individual frequencies.

Sometime in 2010 this system is intended to be merged with the StarCom21 system, with Cook County becoming "Zone 4". Suburban agencies are being recruited to join the merged system. Some south suburban towns have already started using the system for police communications.

Several years ago the county was issued a license for a 3 site 800 MHz. system consisting of several frequencies with a call sign of WPEV426. The purpose of the system was believed to have been to replace the VHF Sheriff's system but it apparently was not built out. Some of the frequencies assigned to this license were swapped to other agencies to minimize interference between the several systems. 2 of the channels were traded with Northwest Central Dispatch to provide geographical separation to other systems. The 761b Countywide Astro system is currently using a 3600 baud analog control data signal which makes it compatible with the various computer tracking programs like Trunker and Treport. It also allows one to use the older BC250 and BC785 scanners as well as newer vintage digital Trunktrackers. It is believed that most law enforcement communications will be in Astro (digital) mode while non law communications would be in analog mode. This will allow less expensive analog radios to co-exist with the digital radios.

Techs working on the system have heard using digital encryption while communicating on the system. In addition to this a 9600 baud control data signal has been heard on one of the County assigned channels (866.2250) that, if adopted by the county system, would eliminate the possibility of analog radios, restricting the system to digital radios only. This signal showed a System ID of 229 and a Tower ID of 637. Sheriff's Police Numbering:

First Digit	District
4	Maybrook (Maywood) HQ & Court Complex
5	Bridgeview
6	Markham
7	Rolling Meadows
8	Skokie

**SmartZone Site ID's:**

1	South Wide Area (10 Simulcast sites)	5	Bridgeview Intelli-repeater
2	North Wide Area (10 Simulcast sites)	6	LaGrange Park Intelli-repeater
3	Northfield Intelli-repeater	7	Oak Forest Intelli-repeater
4	Schaumburg Intelli-repeater	8	Jail Sub-system

**South: (SmartZone Site 1)**

866.1000	866.1500	866.3125	866.7000	867.2375
867.2625	867.6125	868.5000a	868.5250	868.7750a

Bridgeview	10210 S. 76th Av	
Homewood	1154 Ridge Rd	
Blue Island	13500 S. Rolls Rd	CCHD District 5
Chicago	10351 S. Woodlawn	CCS Auto pound
LaGrange Park	850 E. 26th Av.	CCHD District 3
Palos Park	12201 W. McCarthy Rd	Sag Valley FPD
Bedford Park	6700 S. Archer Av	
Oak Forest	15940 S. Central Av	G. W. Dunne Golf Club
Steger	3300 S. Ashland Av	Schubert's Woods FPD
Chicago	2650 S. California Av,	County Jail/Courthouse complex

**North: (SmartZone Site 2)**

866.1250c	866.1750v	866.6125v	866.7250v	867.0500v
867.2125v	867.2875a	867.5625d	868.1375	868.2625a

(868.1250 replaces 866.1250 at some sites,, possible typo in license application)

Schaumburg	2325 N. Meacham	CC Highway Garage
Melrose Park	1903 N. Ruby,	CC Highway Garage
Northfield	1720 Cherry	Skokie Valley Div. HQ
Barrington Hills	110 S. Barrington Rd	Crabtree Woods FPD
Chicago	2650 S. California Av,	County Jail/Courthouse complex
Des Plaines	2101 Ballard Rd,	CCHD District 2
Chicago	50 W. Washington,	Daley Center (Radiax Site? 6.8 W ERP)
Deerfield	I-294 south of Deerfield Rd.	ITHA Tower
Chicago	4750 W. Foster	I-94 NB IDOT
Elgin	3100 W. Golf Rd	Poplar Creek FPD

**IntelliRepeater sites**

SZ3	866.2000	867.3375a	Northfield	1720 Cherry St.,	FPD Div HQ
SZ4	866.7500	867.1625	Schaumburg	2325 N. Meacham,	CCHD Dist 1
SZ5	866.2250	867.1875d	Bridgeview	10210 S 76th Av,	
SZ6	867.0875	868.7375d	LaGrange Park	850 E. 26th St,	CCHD Dist
SZ7	868.0625	868.6875d	Oak Forest	15940 S. Central Av	GWD Forest Prs

**Cook County Jail System: (SmartZone Site 8)**

High Power Channels (Wide Area, 150 Watts)					
868.2625cv	866.2875v	867.1375v	867.7125dv	867.8000dv	868.6125dv
Low Power Channels (Local, 35 watts)					
866.5750v	866.8250v	867.8500v	868.2375v	868.5875v	868.8375v

**Trunked System Talkgroups:**

(Jail system)

1616	Division 1	2224	Jail Tac 4a
1648	Division 2 South	2288	Special Operations Response Team (SORT) 1 3600 Units
1680	Receiving Room (Tunnel, Bridge)	2320	Command Post
1712	Division 3 & 4	2384	System Wide (ATG)
1744	Division 1A	2448	154.9950 simulcast
1776	Division 6	2480	Sheriff A4 ISPERN (155.4750)
1808	Cermak EMS/	2512	Boot Camp Division 12
1840	Division 3&8 DWJS	2576	Maintenance Channel 1
1872	Division 9	2608	Maintenance Channel 2
1904	Building Control Division 10	2736	Dept of Corrections Supervision & Intervention (DCSI)
1936	Division 11	2800	DCSI
2000	External Operations 1	2832	DCSI
2032	External Operations 2	3472	(Old) Control Court Services Dept
2064	Central Kitchen/Sanitation	3536	26th & California Courts
2096	Sheriff A6 "Support" (Radio Room)	3728	(Old) Juvenile Detention Center
2128	Sheriff C12 Jail Tac 1a		
2160	Sheriff C13 Jail Tac 2a		
2192	Jail Tac 3a		

**Countywide system talkgroups:**

*(These talkgroups are usually encrypted)*

34896	
35152	
35216	
35376	
35408	Sheriff A1 North
35600	Sheriff A2 South
35696	
36816	
36880	Sheriff A3 Countywide
36944	Sheriff A5 Countywide
36976	Juvenile Detention Center
37616	Sheriff C10 Tac1
37648	Sheriff C11 Tac2
37904	
38608	
44880	
48016	Control Court Services
48048	Juvenile Probation
48080	Adult Probation

Dynamic Regrouping is also available, as channel Sheriff C14

Conventional 800 MHz. Operations:

868.0625	Sheriff B1 North Talkaround
866.2000	Sheriff B2 South Talkarund

In addition, ITAC channels are included in radios in both Repeat and Direct modes (Channels C1 thru C9).

**Old VHF/UHF Operations**

**Sheriff:** *Operations from the trunked system are occasionally patched to the legacy VHF system. This is also used during outages of the trunked system.*

Receive	Transmit	PL	Channel #	Use
155.5950	153.9650	107.2	Band 1	North Patrol
155.5350	152.9950	107.2	Band 2	South Patrol
154.9950	153.7850	107.2	Band 3	Admin/Warrants
155.4750	155.4750	000.0	Band 4	ISPERN
155.6400	153.9350	107.2	Band 5	Aux. Repeater Channel
153.9050	153.9050	107.2	Band 6	Car to Car Simplex
159.0900	unknown	misc	Band 7	Alternate
155.0550	155.0550	000.0	Band 8	IREACH Aid Channel
153.8450	153.8450	107.2	Band 9	Tac Simplex
153.8450	153.8450	173.8	Band 10	Courts
154.0250	154.0250	173.8	Band 11	Tac Simplex
153.8150	153.8150	107.2	Band 12	Tac Simplex
155.0250	155.0250	000.0	Band 13	ESMARN Aid / County EMA
158.8650	158.8650	107.2	Band 14	Tac Simplex
155.9850	155.9850		Band 15?	Detectives/ERT
158.8950	158.8950		Band 16?	Detectives/ERT

**Courts, Corrections, Buildings and Transportation:**

Frequency	PL	Channel	Use
153.8150	173.8	F1	Jail, Surveillance
154.0250	173.8	F2	Jail
153.8450	173.8	F3	Jail
158.8650	173.8	F4	Corrections Vans/Transportation

**Highway Department:**

Frequency	Output PL	Input PL	District	Location
453.950	127.3	156.7	District 1	Schaumburg
453.750	127.3	141.3	District 2	Des Plaines
453.950	127.3	167.9	District 3	LaGrange Park
453.750	127.3	156.7	District 4	Orland Park
453.950	127.3	141.3	District 5	Blue Island

**Hi Performance Data System:**

769.2625	Chicago Loop
769.5125	Chicago Far South, Des Plaines
769.8125	Chicago South
770.2625	Chicago North
771.2625	Chicago Loop
771.5375	Chicago Far South
771.9875	Chicago South
772.3875	Chicago North
773.1375	Elgin, Homewood
773.3875	Chicago Far South
773.6375	Chicago South
774.9125	Palos Park