

Regional 9-1-1 Consolidation Project

Updates to the Operations Committee

- 1) Working Group Updates**
- 2) Project Manager Update**

March 28, 2019

Regional 9-1-1 Consolidation Project

Working Group Updates

Working Group Leads

March 28, 2019

G.I.S. Working Group

(Next Generation 9-1-1 Geographic Information Systems)



Membership

Lead: Mr. Steven Winnecke (Lake County ETSB)

Members:

CenCom	North Chicago
Gurnee	Vernon Hills
Greater Round Lake FPD	Waukegan
Lake County ETSB	QuadCom
Lake County (GIS)	MCP (Consultant)
LCSO	

Focus

- NG9-1-1 readiness and standardized PSAP, ESN, dispatch, CAD, MSAG, and jurisdictional maps across the County
- Plan / roadmap to be NG9-1-1 compliant by July 2020
- Approved policies, agreements and SOPs to build and maintain standardized public safety GIS products

Actions

Past:

- Agreement on data sharing and update concept
- Established access to existing server to share files
- [Drafted a resolution requesting County remedy dual addressing issue](#)

Future:

- Formalize a process for sharing and updating maps

Recommendations (*Decision*)

- [Forward resolution to Policy Committee for approval then forward to Lake County requesting remedy to dual addressing in unincorporated areas of Lake County](#)

(Resolution approved / forward to Policy) **Y** / N

Gov. Structure Working Group



Membership

Lead: Chief John Kavanagh (Gurnee)

Members:

- | | |
|----------|------------------|
| CenCom | Lake County ETSB |
| Fox Lake | Lake Zurich |
| Gurnee | MCP (Consultant) |
| LCSO | |

Focus

- Research and examine governance models
- Provide options and recommendations for a governance structure

Actions

Past:

- Discussed governance options (recommendation)
- Discussed funding models (recommendation)

Future:

- Define processes and timeline to:
 - Form an independent unit of government
 - Unify ETSBs

Recommendations (*Decision*)

[See the following slides]

Governance Concept (Proposed)

What to Govern?



- **Independent, stand-alone public safety agency that establishes, operates, and maintains a joint public safety communications system for the mutual benefit of members**
 - “Association of units of local government”
 - “Public agency”
 - “Voluntarily established”
- **Membership open to all cities, villages, fire protection districts, and other units of government that:**
 - Provide public safety services
 - Located wholly or partly in Lake County, Illinois
 - Permitted to contract and associate with other units of local government
- **Agency name to be determined (example, “Shared Public Safety Communications Agency of Lake County”)**

Governance Concept (Proposed)

Structure



- **Board of Directors**

- Each full member can appoint one representative (and alternate) to the Board
- Reps from participating Municipalities, Fire Protection Districts, County
 - City / Village Administrators
 - FPD Trustees
- Elect: Chair, Vice-Chair, Treasurer, Secretary, At Large / Representative to the ETSB*

- **Law Enforcement Operations Committee**

- Membership: Police Chiefs, Senior Sheriff Rep.
- Elect: Chair and Vice Chair

- **Fire / EMS Operations Committee**

- Membership: Fire Chiefs
- Elect: Chair and Vice Chair

- **Finance and/or Support Services Advisory Committee(s) (Optional)**

- Appoint: Lead(s)

- **Executive Director**

- Hired by Board of Directors
- Attends all board and committee meetings
- Day to day operations of the agency

- **Executive Committee (7)**

- Allow for expeditious conduct of operations
- Timely policy direction to Exec. Dir.
- Voting Members
 1. Board Chair
 2. Board Vice Chair
 3. Board Treasurer
 4. Board Secretary
 5. Board At Large Member / Rep to ETSB*
 6. Chair of LE Operations Committee
 7. Chair of Fire / EMS Operations Committee
(*Could expand over time*)
- Non-voting Members
 - Executive Director
 - Finance and Support Services Leads

* Requires further research

Gov. Structure Working Group



Membership

Lead: Chief John Kavanagh (Gurnee)

Members:

- | | |
|----------|------------------|
| CenCom | Lake County ETSB |
| Fox Lake | Lake Zurich |
| Gurnee | MCP (Consultant) |
| LCSO | |

Focus

- Research and examine governance models
- Provide options and recommendations for a governance structure

Actions

Past:

- Discussed governance options (recommendation)
- Discussed funding models (recommendation)

Future:

- Define processes and timeline to:
 - Form an independent unit of government
 - Unify ETSBs

Recommendations (*Decision*)

- Agree to board of directors governance concept for an independent, stand-alone public safety agency that establishes, operates, and maintains a joint public safety communications system (see following slides)

(Approve concept. Support detailed analysis) **Y** / N

Working Group will incorporate Committee recommendations.

- Focus further analysis on the following basic funding model:
 - LE – Number of Sworn Officers
 - Fire/EMS – Number of Calls

(Approve concept. Support detailed analysis) **Y** / N

Facility Working Group



Membership

Lead: Mr. Chris Velkover (Gurnee)

Members:

- | | |
|-----------------------|------------------|
| CenCom | Lake County ETSB |
| Gurnee | Lincolnshire |
| LCSO | Mundelein |
| Lake County (Finance) | MCP (Consultant) |

Focus

- Understanding standards for PSAPs / comm centers
- Review buildings / lots for new or expanded center(s)

Actions

Past:

- Reviewing current and proposed facility locations
- Participated in “kick off” meeting with consultant performing exploratory meetings with Lake County (EMA, LCSO, Construction Dept.) and Lake County ETSB for a new, multi-use building

Future:

- Provide general criteria to support MCP’s review of existing and proposed facility locations

Recommendations (*Decision*)

- Based on proposed governance model, research concept and options for leasing facilities (pros & cons, risk, etc.)

(Decision not required at this time)

Finance Working Group



Membership

Lead: Chief Greg Formica (Greater Round Lake)

Members:

CenCom	Lake County (Finance)
Fox Lake	Round Lake
Grayslake FPD	MCP (Consultant)
Gurnee	

Focus

- Normalization of expenses across partner PSAPs

Actions

Past:

- Reviewing PSAP revenue and expenses provided during data survey

Future:

- Continuing standardizing breakdown of expenses
- Support research of funding models

Recommendations (*Decision*)

- Validate State 9-1-1 distributions to participating ETSBs / partners

Technology Working Group



Membership

Lead: Mr. Kent McKenzie (LCSO)

Members:

CenCom	LCSO
Countryside FPD	Vernon Hills
Fox Lake	MCP (Consultant)
Gurnee	
Lake County ETSB	

Focus

- Baseline current technology used by partners
- Compile proposed requirements for future systems
- Build structure and process to research, review, and decide (as partners) on future technology

Actions

Past:

- “Data Book” (Current Tech & CAD Requirements)
- Issued Request for Information (RFI) for CAD systems (via Ops Committee and L.C. Purchasing)
 - Included language for RMS and JMS

Future:

- Recommend process for partners to review and decide on technology Requests for Proposal (RFP)
 - CAD and RMS

Recommendations (*Decision*)

- Establish RFI review committee that includes both RMS and CAD experts

(Combined CAD & RMS RFI review committee) **Y** / N

The Project Manager will support the Technology Working Group, partner agencies, and Lake County Purchasing in building a RFI review team with CAD and RMS expertise and appropriate partner representation.

Personnel & Staff Working Group



Membership

Lead: Ms. Brandy Schroff (Round Lake)

Members:

CenCom	Lake Zurich
Countryside FPD	Mundelein
Fox Lake	Vernon Hills
Gurnee	Waukegan
LCSO	MCP (Consultant)

Focus

- Build baseline understanding of current PSAP staffing and personnel costs

Actions

Past:

- **Compiled benefits summary**
- **Met with College of Lake County Workforce Development to explore possible collaboration**
- **Compiled Telecommunicator salary ranges**

Future:

- **Review staffing models (when available)**

Recommendations (*Decision*)

- None at this time

Ops. Procedures Working Group

Membership

Lead: Ms. Lisa Berger (CenCom)

Members:

CenCom	Lake Zurich
Countryside FPD	Mundelein
Fox Lake	Vernon Hills
Gurnee	Waukegan
LCSO	MCP (Consultant)

Focus

- Review current PSAP operational procedures with a focus on standardization

Actions

Past:

- Reviewed and agreed to support further development of “Understanding 9-1-1 in Lake County” flyer

Future:

- Work with existing associations (NEIL, Chiefs of Police, Fire Chiefs) to finalize “Understanding 9-1-1 in Lake County”
- Look for future opportunities to work together to build understanding of 9-1-1 in Lake County

Recommendations (*Decision*)

- Use existing national professional standards as baseline for any consolidation of procedures

(Decision not required at this time)

- Support working with public safety entities and associations to finalize “Understanding 9-1-1 in Lake County” flyer

(Continue “Understanding 9-1-1” Initiative) Y / **N**

As written, too broad an audience, no agreement on “dos and don’ts”, too detailed, no defined need.

Data Collection Working Group



Membership

Lead: Chief Rich Carani (Libertyville)

Members:

Barrington	LCSO
CenCom	Lake County ETSB
Countryside FPD	Vernon Hills
Gurnee	MCP (Consultant)

Focus

- Compiling and normalize PSAP and agency data
- Providing a single source for data (“Data Book”)

Actions

Past:

- Draft Data Book provided for Ops Committee review prior to Feb. 28, 2019 meeting

Future:

- Support MCP’s review and analysis of data
- Prepare follow-on survey (2018 data, fill gaps, etc.)
- Next version of the Data Book to include all newly collected information / data

Recommendations (*Decision*)

- Forward Data Book to Policy Committee to use as baseline document during Concept Development

(Forward Data Book to Policy Committee) **Y** / N



Questions

Regional 9-1-1 Consolidation Project

Project Manager Update

**Jim Hawkins
Project Manager**

March 28, 2019

Overview



- **Current Situation**
- **Concept Discussion**
- **Assumptions**
- **Project Report Card**
- **Milestones and Events**

Current Situation

End of 2019



- **9-1-1 Consolidation Partners include:**
 - 7 ETSBs (approx. \$6.5 million in 9-1-1 surcharge funds)
 - 8 Primary PSAPs (answer 9-1-1 calls)
 - 8 Law Enforcement Dispatch Agencies
 - 8 Fire / EMS Dispatch Agencies
- **9-1-1 Consolidation Partners service a population of:**
 - ≈ 590,000 (Primary PSAP / 9-1-1 Call Answering)
 - ≈ 560,000 (Law Enforcement Dispatch)
 - ≈ 580,000 (Fire / EMS Dispatch)
- **Telecommunicators**
 - At any time, between 23 and 36 telecommunicators working at the eight partner PSAPs
 - Training period ranges from 3 to 9 months (PSAP dependent)

Comparison: Lake County as a whole (population ≈ 703,000) is serviced by:

- ≥ 10 ETSBs (approx. \$8 million in 9-1-1 surcharge funds)
- 15 Primary PSAPs (answer 9-1-1 calls)
- 14 Law Enforcement Dispatch Agencies
- 15 Fire / EMS Dispatch Agencies

Current Situation

9-1-1 Consolidation Partner Totals (Averages for 2016 & 2017)



- **Total calls at Partner PSAPs \approx 1,260,000**
- **Total 9-1-1 calls (\approx 260,000)**
 - \approx 45,900 (17.5%) wire line 9-1-1 calls
 - \approx 202,100 (77.2%) wireless 9-1-1 calls
 - \approx 8,800 (3.4%) VoIP 9-1-1 calls
 - \approx 4,900 (1.9%) abandoned 9-1-1 calls
- **Total 10 digit calls (\approx 1,000,000)**
 - \approx 779,000 (72.6%) inbound 10-digit calls
 - \approx 293,400 (27.4%) outbound 10-digit calls
- **Total computer aided dispatch (CAD) incidents (\approx 953,000):**
 - \approx 67,000 (7%) Fire / EMS Incidents
 - \approx 847,900 (89%) Law Enforcement Incidents
 - \approx 38,300 (4%) Other

Current Situation

PSAP Operations Summary 2017

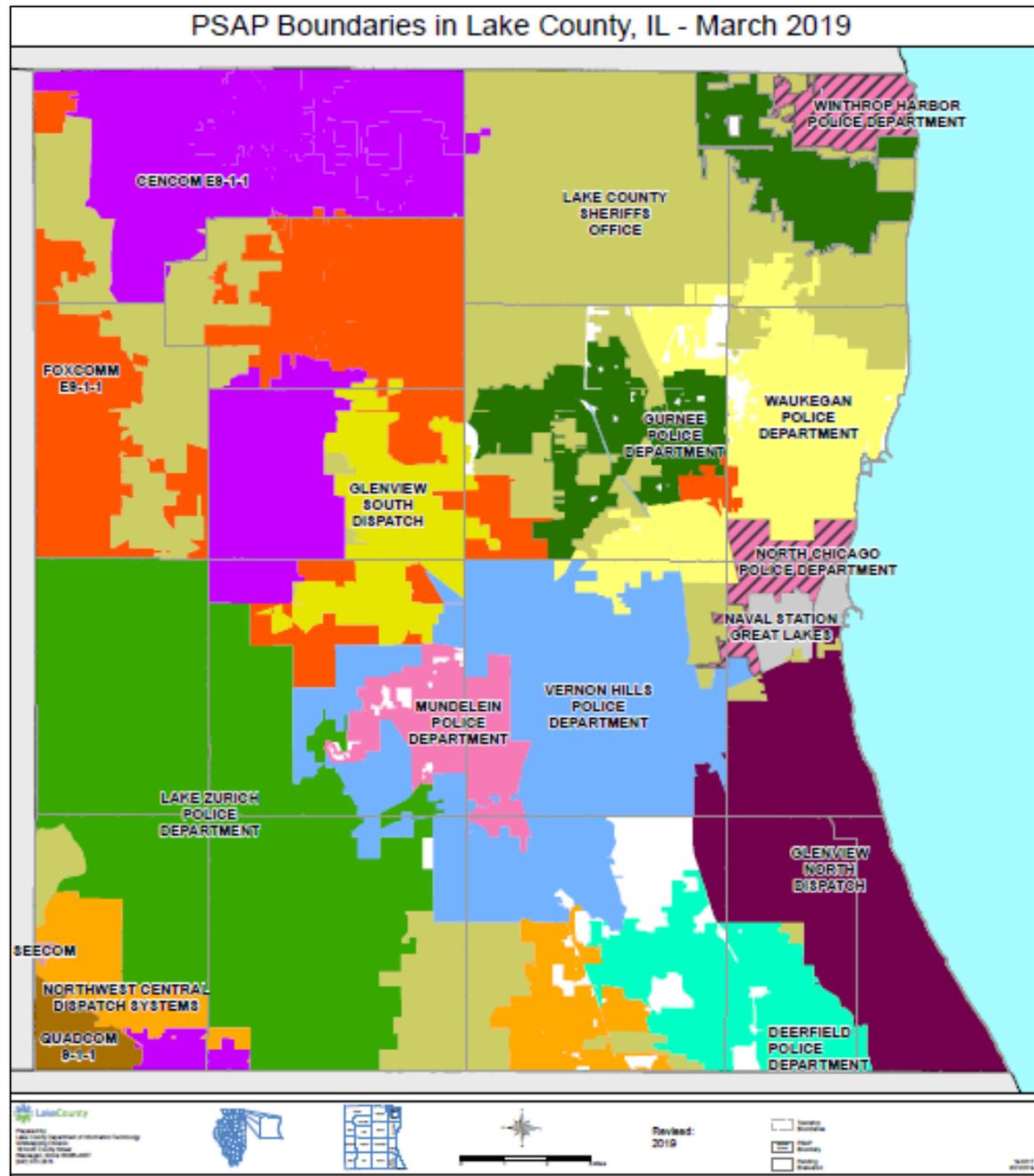


	Totals	CenCom	FoxComm	Gurnee	LCSO	Lake Zurich	*Mundelein	Vernon Hills	Waukegan	*N. Chicago
PSAP / 9-1-1	590,935	81,500	63,982	90,000	52,149	81,000	31,394	71,181	87,729	32,000
LE Dispatch	561,857	81,379	32,848	54,719	136,876	50,833	31,394	54,079	87,729	32,000
Fire / EMS Dispatch	583,399	91,363	85,000	111,168	0	81,000	31,394	63,745	87,729	32,000
Total Annual 9-1-1- Call Volume	261,675	30,760	14,750	22,720	65,921	19,243	7,458	24,482	62,701	13,640
Wireline (Including VoIP) 9-1-1 Call Percentage	20%	30%	28%	23%	12%	27%	19%	33%	15%	10%
Wireless (Cell) 9-1-1 Call Percentage	78%	62%	72%	68%	88%	73%	81%	67%	85%	84%
9-1-1 Call Volume by Percentage of Partner Total	100%	12%	6%	9%	25%	7%	3%	9%	24%	5%
Total Annual Non 9-1-1 Call Volume	1,084,322	187,416	98,006	126,133	115,767	73,516	38,615	122,279	275,086	47,504
Ten Digit Inbound Call Percentage	73%	77%	71%	71%	69%	70%	70%	70%	75%	76%
Ten Digit Outbound Call Percentage	27%	23%	29%	29%	32%	30%	30%	30%	25%	24%
Non 9-1-1 Call Volume by Percentage of Partner Total	100%	17%	9%	12%	11%	7%	4%	11%	25%	4%
Total Annual Incident Volume	969,044	135,046	126,416	93,067	197,727	144,934	42,048	94,926	84,574	50,306
Fire / EMS Incident Volume Percentage	7%	8%	9%	14%	0%	6%	8%	10%	13%	6%
Law Incident Volume Percentage	89%	69%	88%	85%	100%	94%	92%	90%	87%	94%
Incident (CAD) Volume by Percentage of Partner Total	100%	14%	13%	10%	20%	15%	4%	10%	9%	5%

Current Situation

PSAP Boundaries

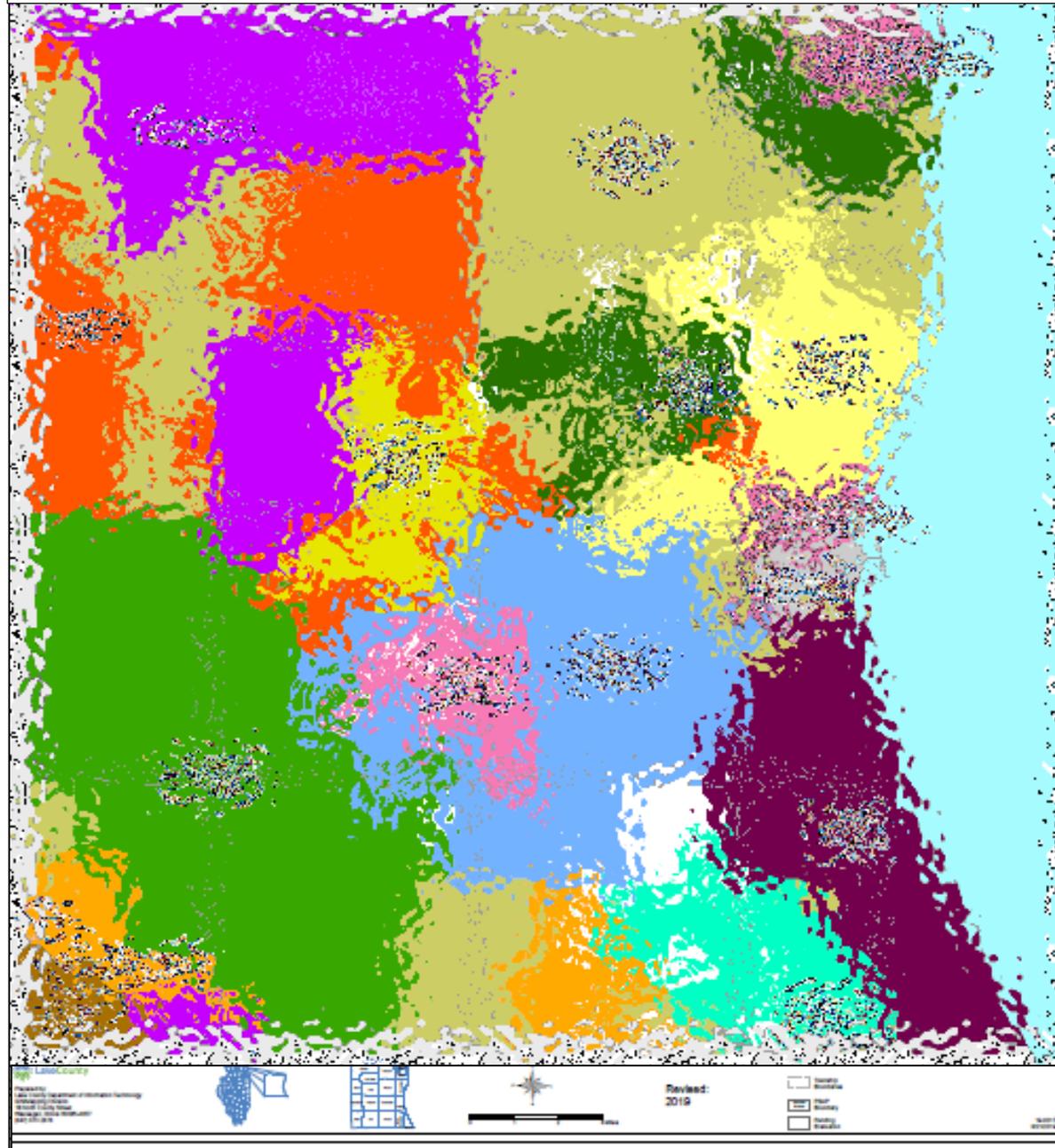
- More than 15 Primary PSAPs
 - Answer 9-1-1 calls
- Wireline 9-1-1 calls follow boundaries to the right
- Cellular (voice or text message) and VoIP 9-1-1 calls may not follow established boundaries



Current Situation

PSAP Boundaries

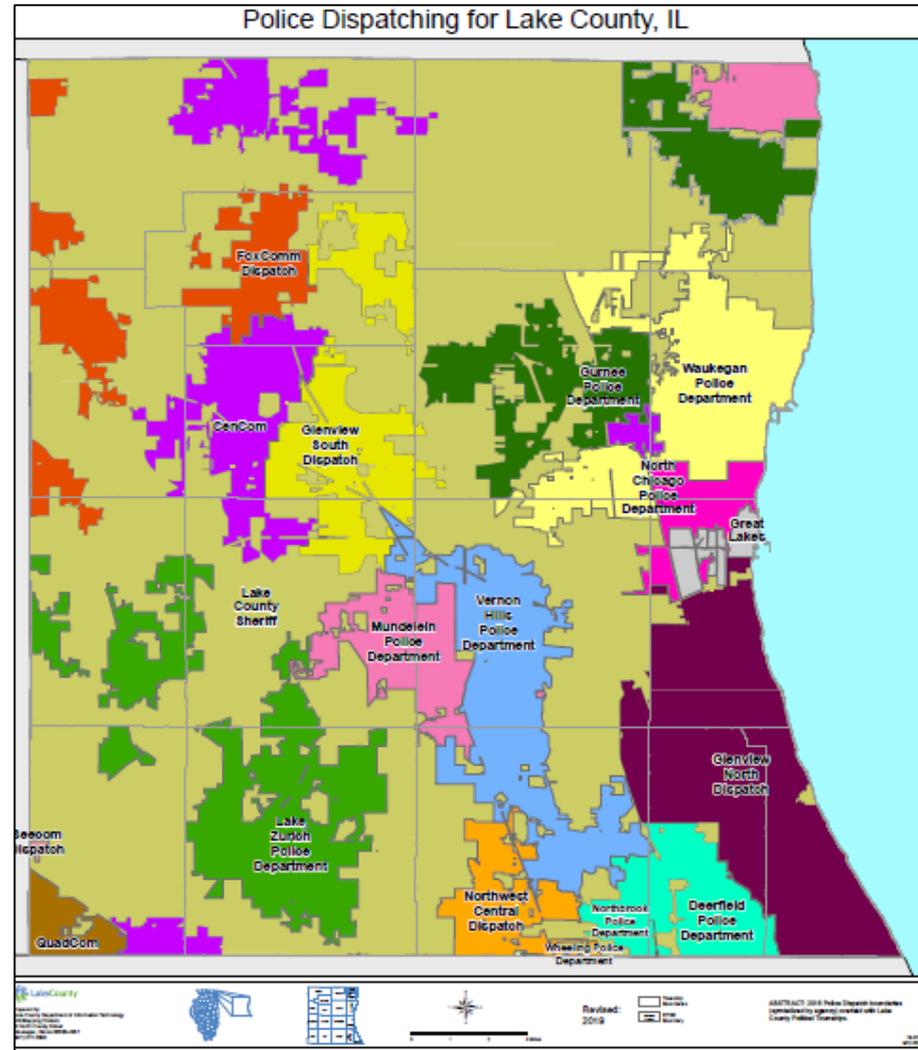
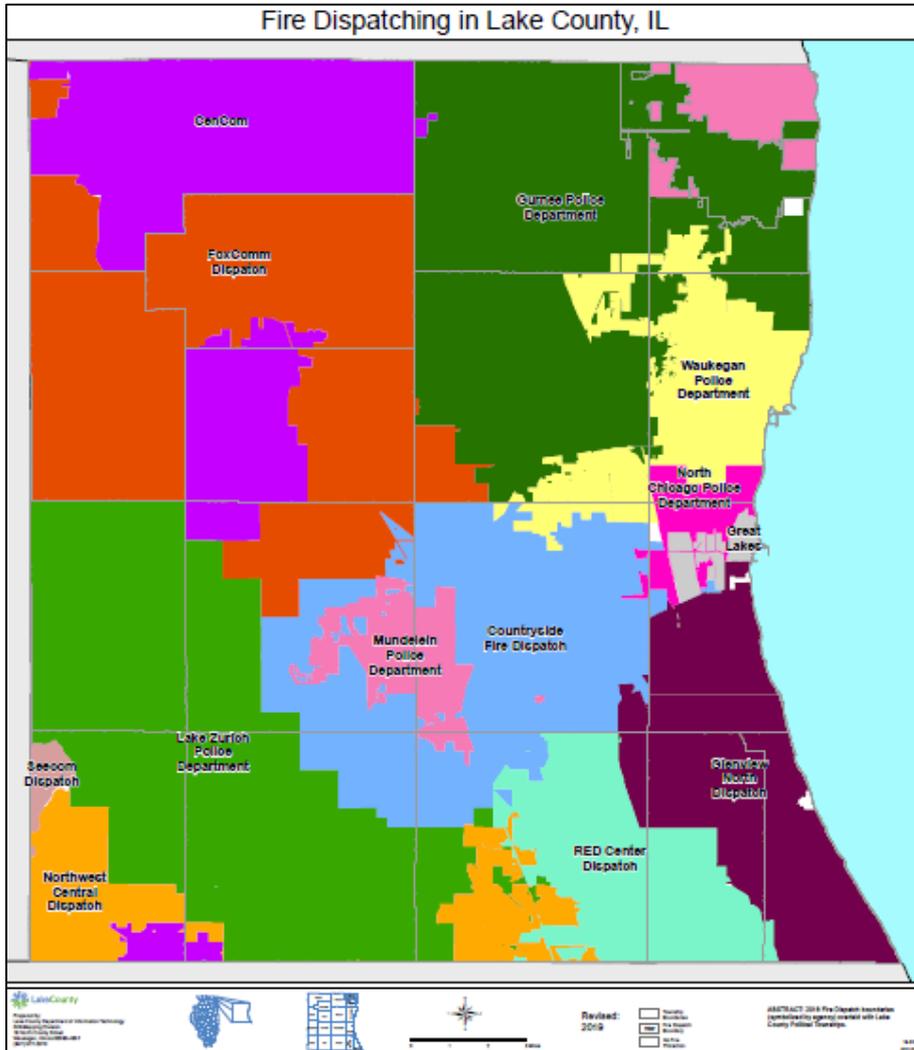
- **More than 15 Primary PSAPs**
 - Answer 9-1-1 calls
- **Wireline 9-1-1 calls follow boundaries to the right**
- **Cellular (voice or text message) and VoIP 9-1-1 calls may not follow established boundaries**
 - A cellular 9-1-1 call may go to the closest available cell tower
 - Text message to 9-1-1 is very limited in Lake County
 - A VoIP 9-1-1 call may show the physical location of the internet server and not the caller's actual location
- **NG 9-1-1 will improve cell phone location information**



Current Situation

Dispatch Boundaries

Regional
9-1-1
Consolidation



Fire / EMS Dispatch Agencies (>14)

Law Enforcement Dispatch Agencies (>14)

Project Purpose



Build an implementation plan to consolidate regional 9-1-1 services in order to provide the highest quality 9-1-1 service and lasting value for the residents of participating communities

Core Requirement

- The right public safety resources
- To the right location
- With the right information
- In the shortest amount of time

AND

- General safety and situational awareness for responders during a call or incident

**Additional Requirements
for Consolidated 9-1-1 and Dispatch Services
(As Decided by Governance Committees)**

General Concept

Benefits and Keys to Success



- **Expected benefits (from the IGA)**
 - Reduced call transferring
 - Staffing improvements / enhanced coverage for 24/7 operations
 - More consistent and effective service delivery
 - Greater opportunities for inter-agency response and backup
 - Better data sharing between agencies and responders in the field
 - Enhanced interoperability / ability to share information across jurisdictions
 - Operational savings
 - Reductions in future capital investment
 - Elimination of duplicate technology and maintenance agreements
- **Keys to success**
 - Focus on providing the highest quality 9-1-1 service and lasting value
 - Transparency and dialogue
 - Agree to, and work towards, a “coordinated consolidation” instead of a “competitive consolidation”

General Concept (Proposed)

By 2030 ...



- **IGA establishes an independent, public safety agency that operates and maintains a joint public safety communications system for mutual benefit of members**
- **Representative governance model**
- **Primary PSAP (answering 9-1-1 calls) and dispatch for LE & Fire / EMS**
- **Between 2 and 4 leased facilities under one governance structure providing dynamic mutual support including short-term and long-term back up**
 - **Back-up facilities are operating centers (“warm” back-up)**
 - **Short-term and long-term “back-up” facilities physically located in Lake County**
 - **Primary and back-up facilities have the same equipment**
- **Shared / consolidated public safety data base(s)**
 - **Single, shared GIS database**
 - **Shared / 100% compatible CAD, RMS, Booking, JMS**
- **Larger, contiguous PSAP boundaries (minimal seams, gaps, and overlaps)**
- **Agency has representation on supporting ETSB(s)**

Concept of Operations (Proposed)

Who Should Call 9-1-1?



After Committee discussion, recommendation is to forward to working groups for further study and new options

Option #1

- Call 9-1-1 for emergencies only
 - DO: Dial 9-1-1 only for an emergency. An emergency is any serious medical problem (chest pain, seizure, bleeding, etc.), any type of fire (business, car, building), or any life-threatening situation (fights, person with weapons, etc.). Call 9-1-1 to report crimes that are in progress, whether a life is threatened or not. If unsure an incident is an emergency, call 9-1-1.
 - DO NOT: Dial 9-1-1 for a non-emergency. Instead, dial a non-emergency telephone number for your agency. A non-emergency incident is a property damage accident, break-in of a vehicle when the suspect is gone, theft of property when the suspect is gone, vandalism, intoxicated persons (not disorderly), or cars blocking a street or alley. Do not dial 9-1-1 to “test” your phone or system.
- Discussion:
 - Generally, the excepted standard
 - Maintains focus on emergency incidents
 - Need common vision and message

Concept of Operations (Proposed)

Who Should Call 9-1-1?



After Committee discussion, recommendation is to forward to working groups for further study and new options

Option #2

- Call 9-1-1 anytime you would like to request service from Law Enforcement or Fire/EMS (all non-emergency and emergency requests)
 - DO: Dial 9-1-1 for an emergency. If unsure an incident is an emergency, call 9-1-1
 - DO NOT: Dial 9-1-1 for a non-emergency. Instead, dial a non-emergency telephone number for your agency. Do not dial 9-1-1 to “test” your phone or system
- Discussion:
 - Some partners use this model
 - Easier for community members to remember how to reach LE or Fire/EMS
 - May increase cost to member(s) or change funding formula
 - Need common vision and message

Concept of Operations (Proposed)

Additional Requirements



After Hours
Administrative
Public Safety
Calls

Initiate
Emergency
Warning Sirens

Emergency
Medical
Dispatch
(EMD)

Monitor Fire
Alarms
(Public & Private
Buildings)

Services Not Provided

Lobby
Window
Services

Operate
Detention
Facility

LE Remote Room
& Building Access

Admin.
Functions

Actively
Monitor Jail
Cameras

Dispatch
Non-Public
Safety Agencies

Municipality's
"Operator"

Core Requirement

- The right public safety resources
- To the right location
- With the right information
- In the shortest amount of time

AND

- General safety and situational awareness for responders during a call or incident

*9-1-1 Call Taking &
LE and Fire / EMS Dispatch*

Monitor
Security
Alarms
(Public Buildings)

After Hours
Lobby Phone,
Cameras &
Remote Lock

Passive
Monitoring of
Cameras

Coordinate
Towing

Coordinate
"Board Up"

Intelligence
Support

LE Background
Checks

Additional Requirements
for Consolidated 9-1-1 and Dispatch Services
(Possibly at an Additional Cost)

“Enablers”

External Issues Affecting 9-1-1 Consolidation

- **Remedy for the “Detention Dilemma”**
 - 9-1-1 consolidation requires an actionable option / plan to remove detention tasks from PSAP operations
- **Combining ETSBs**
 - Numerous partners have mentioned an interest in pursuing further combining of ETSBs
 - Opportunity to increase buying power and efficiently bring standard technology to partners
- **NG 9-1-1 Compliance**
 - GIS Working Group will continue to draft recommendations for Governance Committees to forward to decision makers
- **Shared / consolidated public safety data base(s)**
 - CAD, Records Management (LE & Fire/EMS), booking, JMS

Assumptions

For Planning



- **Option(s) will be available to remove detention operations from Lake County PSAPs (remedy to the “Detention Dilemma”)**
- **Participating PSAPs and ETSBs agree to 100% compatible CAD system(s) by 2025**
- **“Unified” ETSB funds will be available to purchase standardized 9-1-1 technology for Lake County PSAPs**
- **LCISO and Lake County LE community work together to select a new, shared RMS in coordination with CAD selection**
- **Partner LE agencies support STARCOM as the standard LE radio system**
- **State NG 9-1-1 compliance date remains July 2020**
- **State does not provide new 9-1-1 or ETSB mandates in the next 3 years (2022)**

Planning: Month 1 - 4

(Oct. 2018 – Jan. 2019)

Goal: Establish baseline (“Data Book”) and build understanding of current operations

Status

-  Meet all participating stakeholders
-  Define timeline and milestones
-  Devote quality time at centers and facilities
-  Review existing studies and engage existing consolidated centers
-  Hire contractor support
-  Collect / validate data (call volume, financials, etc.)
-  Collect / validate current capabilities (facilities, technology, personnel, etc.)
-  Collect / update agencies’ current operational constructs
-  Define assumptions
-  Establish working groups and required output
-  Build and execute an information plan

Status

	Completed
	In Progress (Trend)
	Problem / Not Started

Planning: Month 5 - 8

(Feb. 19 – May. 19)

Goal: Concept of operation approved

Status

-  Update data, capabilities, and assumptions
-  Update timeline and milestones
-  Update working group actions and required output
-  Define outcomes and requirements for:
 - Facilities, Tech, Personnel, Finances, Operating Procedures, Governance
-  Address options for “additional” duties currently performed by dispatch centers
-  Build multiple concepts of operation for committee review
-  Evaluate and compare each concept of operation
 - Outputs / Outcomes, Value, Risk
-  Operations and Policy Committees approve single concept of operation
-  Update agency participant list
-  Update and execute the information plan

Status

	Completed
	In Progress (Trend)
	Problem / Not Started

Milestones & Events

Mar. 28 - Ops Committee Meeting (1:00 pm)

Apr. 4 - Policy Committee Meeting (2:00 pm)

Apr. 11: Working Group Meetings

Apr. 14 - 20: National Public Safety Telecommunicators Week

Apr. 18: Working Group Meetings

Apr. 25 - Ops Committee Meeting (1:00 pm)

May 2 - Policy Committee Meeting (2:00 pm)

May 9: Working Group Meetings

May 16: Working Group Meetings

May 23 - Ops Committee Meeting (1:00 pm)

Jun. 6 - Policy Committee Meeting (2:00 pm)

Concept Discussion

Concept Discussion

Concept Decision

Questions