

# **Regional 9-1-1 Consolidation Project**

## ***Updates to the Operations Committee***

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

**April 25, 2019**

# **Regional 9-1-1 Consolidation Project**

## ***Working Group Updates***

### **Working Group Leads**

**April 25, 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:

- Established access to existing server to share files
- Dual Addressing in Unincorporated Lake County:
  - Policy Committee approved and forward letter to the Lake County Board requesting a remedy
  - Lake County Fire Chiefs Association drafting letter of support

### Future:

- May 2 informational presentation to F & A Cmte
- MOU formalizing data sharing and coordination

## Recommendations (*Decision*)

- Committee Member(s) present dual address concerns and requirements to the Chief's of Police Association and NEIL (Telecommunicators) requesting formal support for a remedy

(Outreach to Professional Associations) **Y** / N

- Committee Members attend May 2 informational presentation to Lake County F & A Committee

(Attend May 2<sup>nd</sup> F & A Committee) **Y** / N

Project Manager will coordinate with committee members

# Gov. Structure Working Group

Regional  
**9-1-1**  
Consolidation

## 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:

- Refined governance options

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

General concept approved – no additional discussion

- 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

# **Governance Concept** (Proposed)

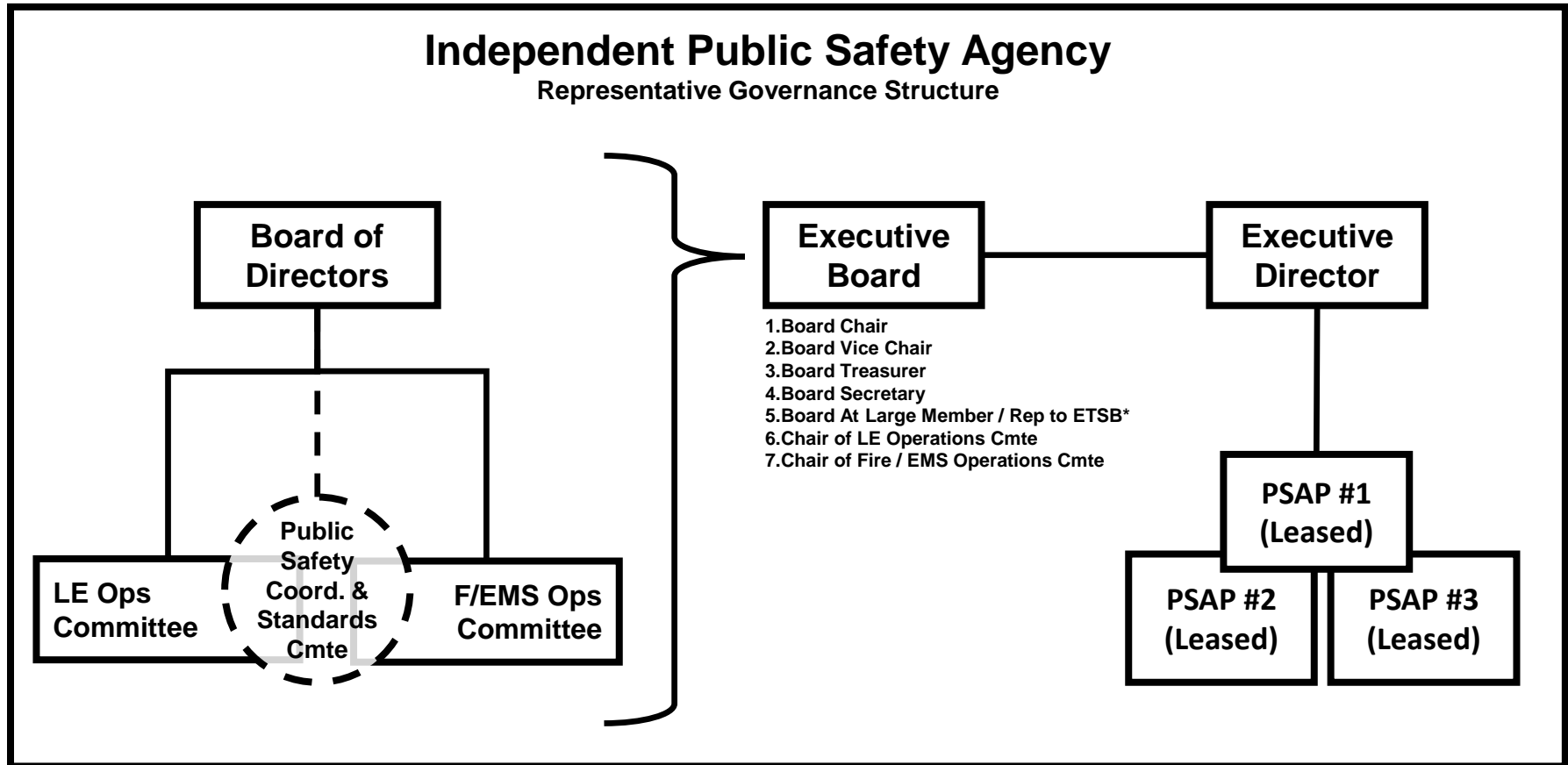
## **What to Govern?**

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- **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



# 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

- **Public Safety Coord. & Standards Committee**

- Membership: LE Ops Committee leadership, Fire / EMS Committee leadership, Executive Director, PSAP training and standards representatives, other public safety representatives (as required)
- Appoint: PSAP Exec. Dir. is 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

# 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:**

- Follow-on meetings for exploratory study with Lake County (EMA, LCSO, Construction Dept.) and Lake County ETSB for a new, multi-use building

**Future:**

- Initial analysis of existing and proposed facilities
- Information session with proposed new sites

## Recommendations (*Decision*)

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

*(Decision not required at this time)*



# **Facility Concepts (Options)**

## **Proposed 2 to 4 Consolidated Facilities By 2030**

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- **“Four Equals”**
  - 4 (leased) facilities each covering 25% of call / CAD volume
- **“Three Equals”**
  - 3 (leased) facilities each covering 34% of call / CAD volume
- **“Two Satellites”**
  - 3 (leased) facilities total
  - One large facility covering 50% of call / CAD Volume
  - Two facilities each covering 25% of call / CAD volume
- **“Three Satellites”**
  - 4 (leased) facilities total
  - One large facility covering 49% of call / CAD volume
  - Three facilities each covering 17% of call / CAD volume
- **“Two Facility”**
  - 2 (leased) facilities each covering 50% of call / CAD volume
- **“Single Facility”**
  - 1 (leased) facility
  - Requires an external entity / agency provide a backup capability

# Facility Concepts

## Initial Review of Proposed PSAP Buildings and/or Property



Name of proposed building and/or property	[name]
Building owner	[name]
Property owner	[name]
Existing building?	Y / N
Proposed shared use of building?	Y / N
Owner willing to lease all or part of the building?	Y / N
Total available ft <sup>2</sup>	XX,XXX ft <sup>2</sup>
Room to Meet 17% of Total Call Capacity (XX TCs / XX,XXX ft <sup>2</sup> )	Y / N
Room to Meet 25% of Total Call Capacity (XX TCs / XX,XXX ft <sup>2</sup> )	Y / N
Room to Meet 34% of Total Call Capacity (XX TCs / XX,XXX ft <sup>2</sup> )	Y / N
Room to Meet 50% of Total Call Capacity (XX TCs / XX,XXX ft <sup>2</sup> )	Y / N
Room to Meet 100% of Total Call Capacity (XX TCs / XX,XXX ft <sup>2</sup> )	Y / N
Power - Generator - Back-up power?	Y / N
Power - Grounding - Single point?	Y / N
HVAC - Both temperature and humidity controlled?	Y / N
Radio Comms - Tower on site?	Y / N
Hazards - Lowest floor above 100 year flood plan?	Y / N
Hazards - Lowest floor above 500 year flood plan?	Y / N
Hazards - Proposed comm center floor above or below grade?	[above / below]
Hazards - Name and distance to 3 closest man-made or natural hazards.	1.
	2.
	3.
Distance to closest existing PSAP	[miles]
<p><b>Note: Analysis using the call and CAD volumes reported in the "Data Book" by the current 21 Partner Agencies.</b></p>	

# Finance Working Group

Regional  
**9-1-1**  
Consolidation

## 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
- Standardized breakdown of expenses

### Future:

- Requesting PSAP FY18 expenses
- Research / compare 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:**

- RFI response review for CAD, RMS, and JMS
- RFP for a scalable, enterprise CAD, RMS, and JMS (phased acquisition)

## Recommendations (*Decision*)

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

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

- Provide name of Partner Agency RMS subject matter expert for review of RFI responses (LE and F/EMS)

(No Decision Required)

# Personnel & Staff Working Group

Regional  
**9-1-1**  
Consolidation

## 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:

- Initial discussions on operational procedures concepts for consolidated PSAPs / Comm Centers

### Future:

- Refine operational procedures concepts

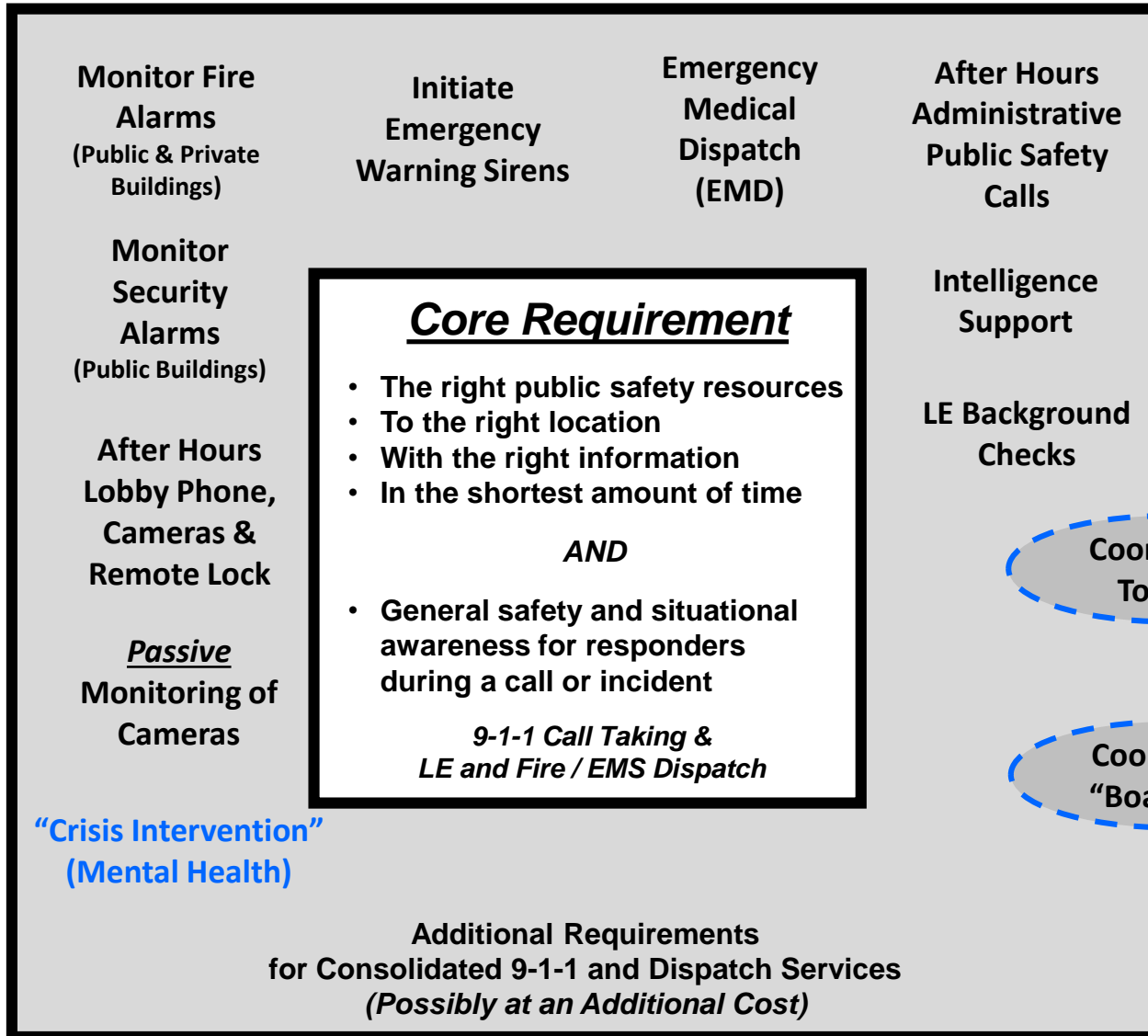
## Recommendations (*Decision*)

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

*(Decision not required at this time)*

# Operational Concept (Options)

## Additional Requirements



### Services Not Provided

**RMS Entries**

Lobby Window Services

Operate Detention Facility

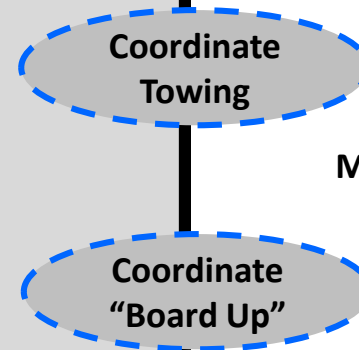
LE Remote Room & Building Access

Admin. Functions

Actively Monitor Jail Cameras

Dispatch Non-Public Safety Agencies

Municipality’s “Operator”



# Operational Concept (Options)

## Who Calls 9-1-1?

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**IS A PERSON HURT OR IN DANGER? DO YOU NEED THE POLICE,  
FIRE OR AMBULANCE?**

9-1-1 is for emergencies only. An emergency is any serious situation where a law enforcement officer, fire fighter, or emergency medical help is needed right away. If unsure of whether a situation is an emergency, call 9-1-1. The 9-1-1 call taker will determine if emergency assistance is needed and will route resources to the correct location.

Committee agreed with new wording – no additional discussion

(Based on NENA's 9-1-1 Tips Page: <https://www.nena.org/page/911TipsGuidelines>)



# 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:

- April 2, 2019 Data Book provided to Policy Committee

Future:

- Support MCP's review and analysis of data
- Prepare follow-on survey (2018 data, fill gaps, etc.)

## Recommendations (*Decision*)

- None at this time

# Questions

# **Regional 9-1-1 Consolidation Project**

## ***Project Manager Update***

**Jim Hawkins  
Project Manager**

**April 25, 2019**

# Overview

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

# Current Environment

## 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 currently 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
- ≥ 14 Fire / EMS Dispatch Agencies

# Current Environment

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

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- **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

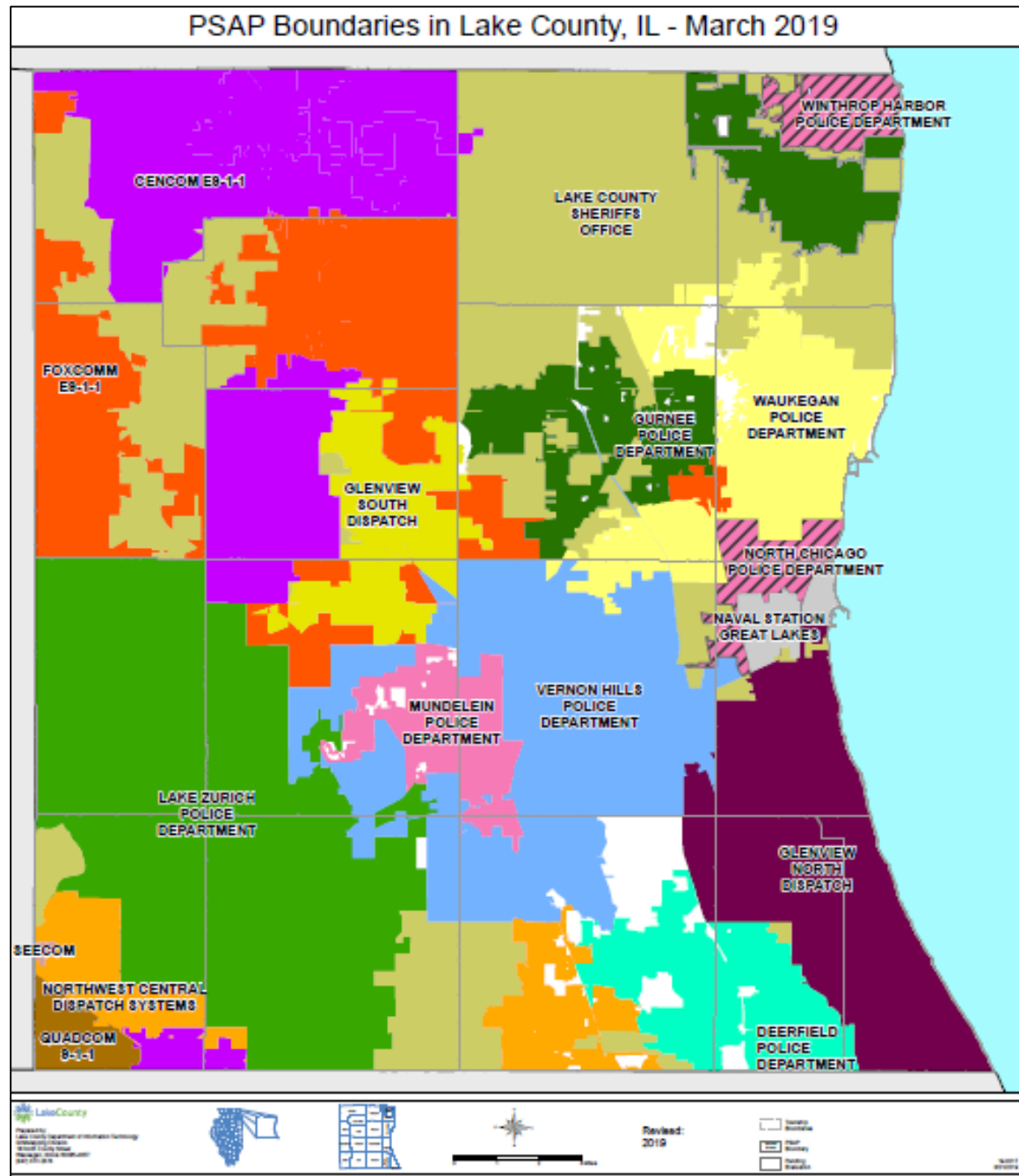
**Regional**  
**9-1-1**  
Consolidation

	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
  - 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

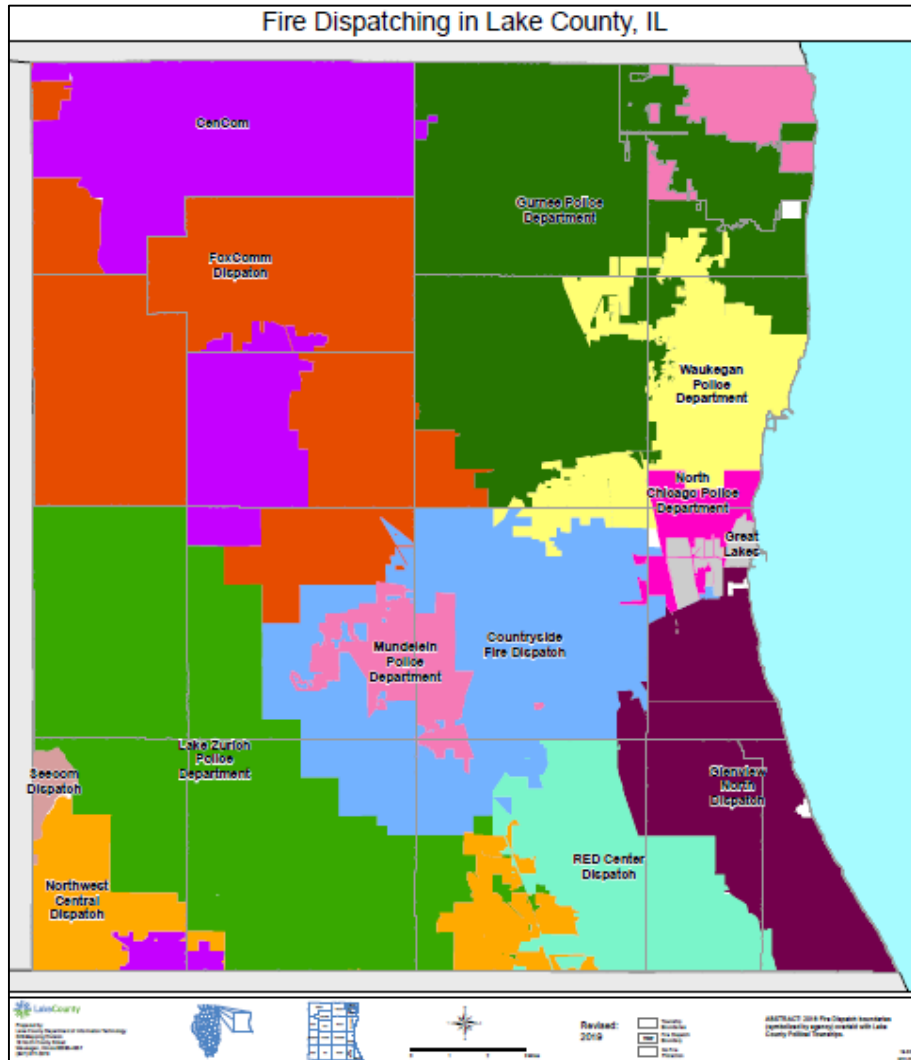




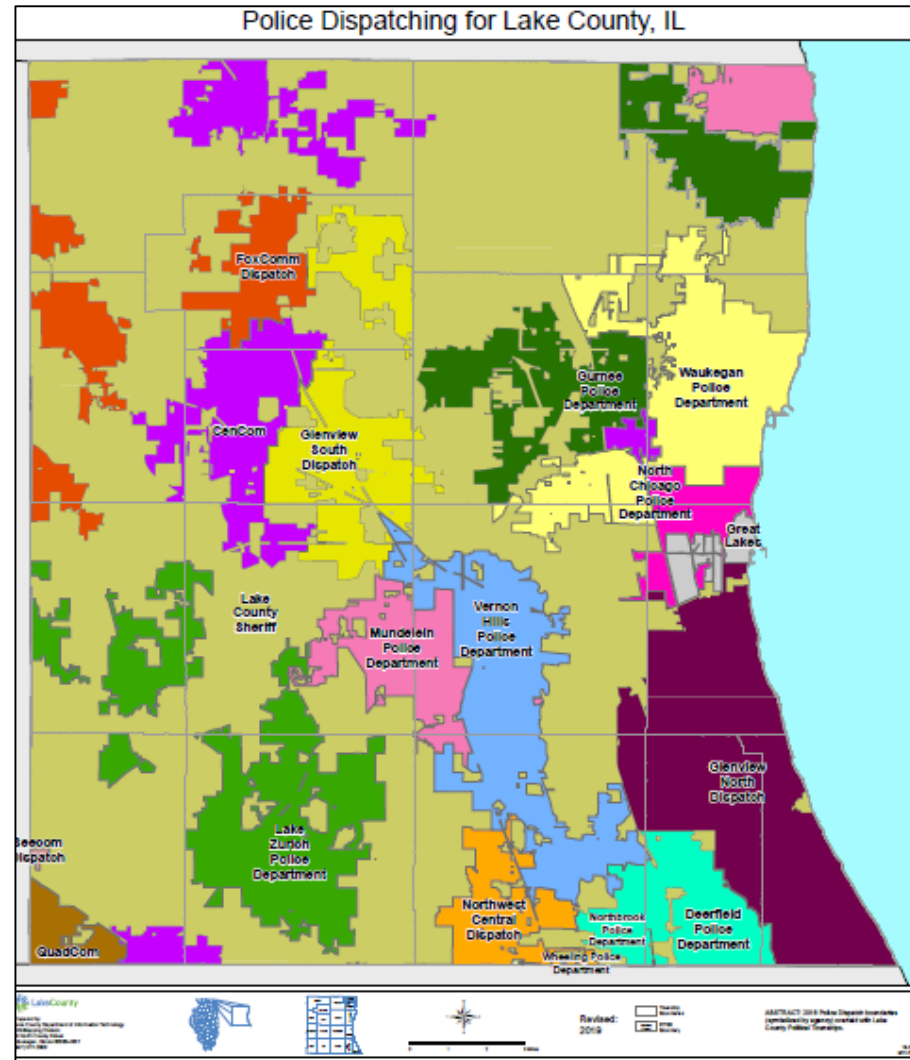
# Current Situation

## Dispatch Boundaries

**Regional  
9-1-1  
Consolidation**



**Fire / EMS Dispatch Agencies (>14)**



**Law Enforcement Dispatch Agencies (>14)**

# 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)**

# **“Enablers”**

## **External Issues Affecting 9-1-1 Consolidation**

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- **Remedy for the “Detention Dilemma”**
  - 9-1-1 consolidation requires an actionable option / plan to remove detention tasks from PSAP operations
  - Initial meeting on Mar. 21
  - Current focus is RFI review working toward enterprise RMS
- **“Unified” ETSB vision and resourcing**
  - Combining of ETSB resources can increase buying power and efficiently bring standard technology to partners
  - Initial meeting on Apr. 22 to discuss “unifying” – agree to meet again
- **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
  - Window of opportunity for Lake County LE community and LCSO to work together in selecting a new, shared RMS in coordination with CAD selection
  - RFI review process starting Apr. 26

# Assumptions

## For Planning

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

# General Concept

## Benefits and Keys to Success

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- **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 with a representative governance structure that operates and maintains a joint public safety communications system for mutual benefit of members
- 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
- All participating PSAPs using the same / standard CAD system by 2025
- General pricing:
  - LE by # of Sworn Officers
  - Fire /EMS by # of calls
- 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)











# 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

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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. 23: RFI Responses for CAD Systems Due

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

Concept Development

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)

Concept Decision

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



# Questions