



Regional 9-1-1 Consolidation Consortium

Agenda Items 8.10 & 8.11

Contracts for:

- **Computer Aided Dispatch (CAD)**
- **Mobile Messaging**
- **Records Management System (RMS)**
- **Jail Management System (JMS)**
- **E-Citation and E-Crash**

Lake County Law & Judicial Committee

May 4, 2021

Lake County Strategic Plan



Strategic Initiatives

- Regional Leadership - **Advancing Regional 9-1-1 Consolidation**
 - Lake County, in **partnership** with the Lake County Emergency Telephone System Board (ETSB), will continue to **advance efforts toward the regional consolidation** of Emergency Telephone System Boards (ETSB) and Public Safety Answering Points (PSAP)
 - This will result in a **reduction of call transfers and service delays, while providing the same or better service more efficiently**

Goals and Strategies

- Goal 1: **Provide Public Safety** and Advance an Integrated, Data-Driven Justice System
 - Strategy 2: Regularly evaluate and **implement enhanced technologies to provide effective service, transparency, data sharing and integration** throughout the justice system.
 - Action A: **Advance and support regional 9-1-1 consolidation. Evaluate and pursue both physical and virtual consolidation with partners.**
 - Action C: Support the **selection and replacement of public safety technology**

Consortium Partners

2018 Inter-Governmental Agreement



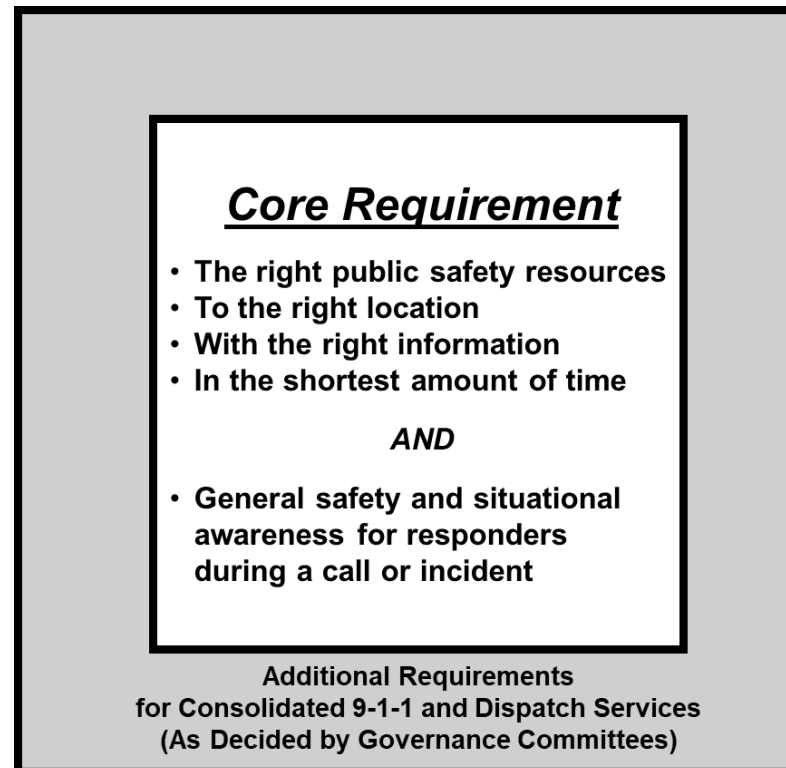
Regional 911 Consolidation Public Safety Entities (PSE)
1. Barrington, Village of
2. CenCom
3. Countryside Fire Fire Protection District
4. Fox Lake, Village of (PD / FoxComm 911 Center)
5. Grayslake Fire Protection Dist
6. Greater Round Lake Fire Protection District
7. Gurnee, Village of
8. Lake County
9. Lake County ETSB
10. Lake County Sheriff's Office
11. Libertyville, Village of
12. Lincolnshire, Village of
13. Mundelein, Village of
14. North Chicago, City of
15. Northeast Lake County Consolidated JETSB (Gurnee ETSB / Zion ETSB)
16. Round Lake, Village of
17. Round Lake Beach, Village of
18. Vernon Hills , Village of
19. VHL Joint ETSB (Vernon Hills, Libertyville)
20. Wauconda Fire Protection District
21. Waukegan, City of

Consolidation Planning 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



Concept of Operations

Three Tiers

Three-tiered concept of operations to improve 9-1-1 and emergency dispatch service and provide lasting value

Increased Efficiency & Effectiveness

3. Full (Physical) PSAP Consolidation

Decrease total number of PSAPs. Single entity or agency formed through an IGA between members that operate one (or more) physical PSAP(s)

Could be more than one consolidated entity or agency

2. Virtual PSAP Consolidation

Independent, geographically separated PSAPs who operate as a single entity through shared technology, policies, and procedures formalized in an IGA between PSAPs

1. Standardized PSAP Technology

Independent, geographically separated PSAPs agree to operate some or all of the same 9-1-1 and emergency dispatch systems / technology

Parallel Pathway: Standard, shared, integrated RMS and JMS

Individual partners decide if and when they participate in planning or execution for each tier

Current Situation

Independent, geographically separated PSAPs (8 primary, 1 secondary)

Assessment Criteria

(9-1-1 and Emergency Dispatch)

- How does each tier improve service?
 - Improve getting the right public safety resources, to the right place, with the right information, in the shortest amount of time
 - Decrease call transfers
- How does each tier decrease technology costs?
- How does each tier decrease facilities costs?
- How does each tier decrease personnel / staffing costs?
- What does each tier do to the competitive environment?

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9-1-1
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Implementing
the
Approved
Plan

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Consortium

Standard Technology Procurement



- Expanded mission to include coordinating the procurement of a shared, scalable, integrated, enterprise family of public safety systems
 - Computer aided dispatch (CAD)
 - Mobile messaging
 - Records management systems (RMS)
 - Law enforcement
 - Fire / emergency medical services
 - Jail management system (JMS)

Consortium

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Contracts

General



- Consortium committed to the process - Lake County the administrative agent
- April 2020, issued a Request for Proposal (RFP) to contract for a scalable, shared, integrated, enterprise family of systems
- RFP extended to 47 vendors - proposals received from nine vendors (June 2020)
- In accordance with evaluation criteria, Consortium's selection team determined that the proposal submitted by Tyler Technologies, Public Safety Division, Troy, Michigan is the most qualified and favorable proposal for the 9-1-1 Consortium
- Resolutions authorizing two contracts with Tyler Technologies, Public Safety Division, Troy Michigan for licensing, software and implementation services for the replacement of CAD, Mobile, RMS, JMS, E-Citation, and E-Crash software
- CAD & Mobile Messaging contract approved by Lake County ETSB on April 30

Contract (LC ETSB) – Item 8.10

CAD & Mobile



- Lake County ETSB is the Consortium's executive agent for this scalable, shared, integrated, enterprise CAD and Mobile Messaging software
- Joint resolution authorizing a contract with Tyler Technologies, Public Safety Division, Troy Michigan, in the amount of \$1,355,568 for the replacement of the Lake County Emergency Telephone Service Board (ETSB) CAD and Mobile Messaging software
- Includes software, professional services, implementation services, and training
- Software maintenance and third-party hardware, software, and services are estimated in the annual amount of \$181,681 for years two through five with an annual increase not to exceed three percent and not to exceed four percent for years six through 10
- Separate contract for hardware will be funded and awarded by the ETSB

Contract (Sheriff's Office) - Item 8.11

RMS, JMS, E-Citation, E-Crash



- Lake County Sheriff's Office is the Consortium's executive agent for this scalable, shared, integrated, enterprise RMS, JMS, E-Citation, and E-Crash software
- Joint resolution authorizing a contract with Tyler Technologies, Public Safety Division, Troy, Michigan, in the amount of \$2,831,209 for the replacement of the Lake County Sheriff's Office RMS, JMS, E-Citation, and E-Crash software
- Includes the software, professional services, implementation services, and training
- Software maintenance and third-party hardware, software and services are estimated in the annual amount of \$426,336 for years two through five with an annual increase not to exceed three percent and not to exceed four percent for years six through 10
- Funds allocated in FY2020 budget (carried over to FY2021)

Operational Improvements

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)

- Opportunity to reduce the number of 9-1-1 call transfers
- Improved information sharing and coordination
- Lower long-term costs – personnel, maintenance
- Improved business continuity and disaster recovery
- CAD, RMS, JMS, E-Citation and E-Crash will all flow together, reducing the requirement for double or triple data entry
- With a planned connection to the new Integrated Court Management System (ICMS), files can be electronically transferred to Branch Courts and Circuit Clerk's Office
- Less paper - information shared electronically, no need to print

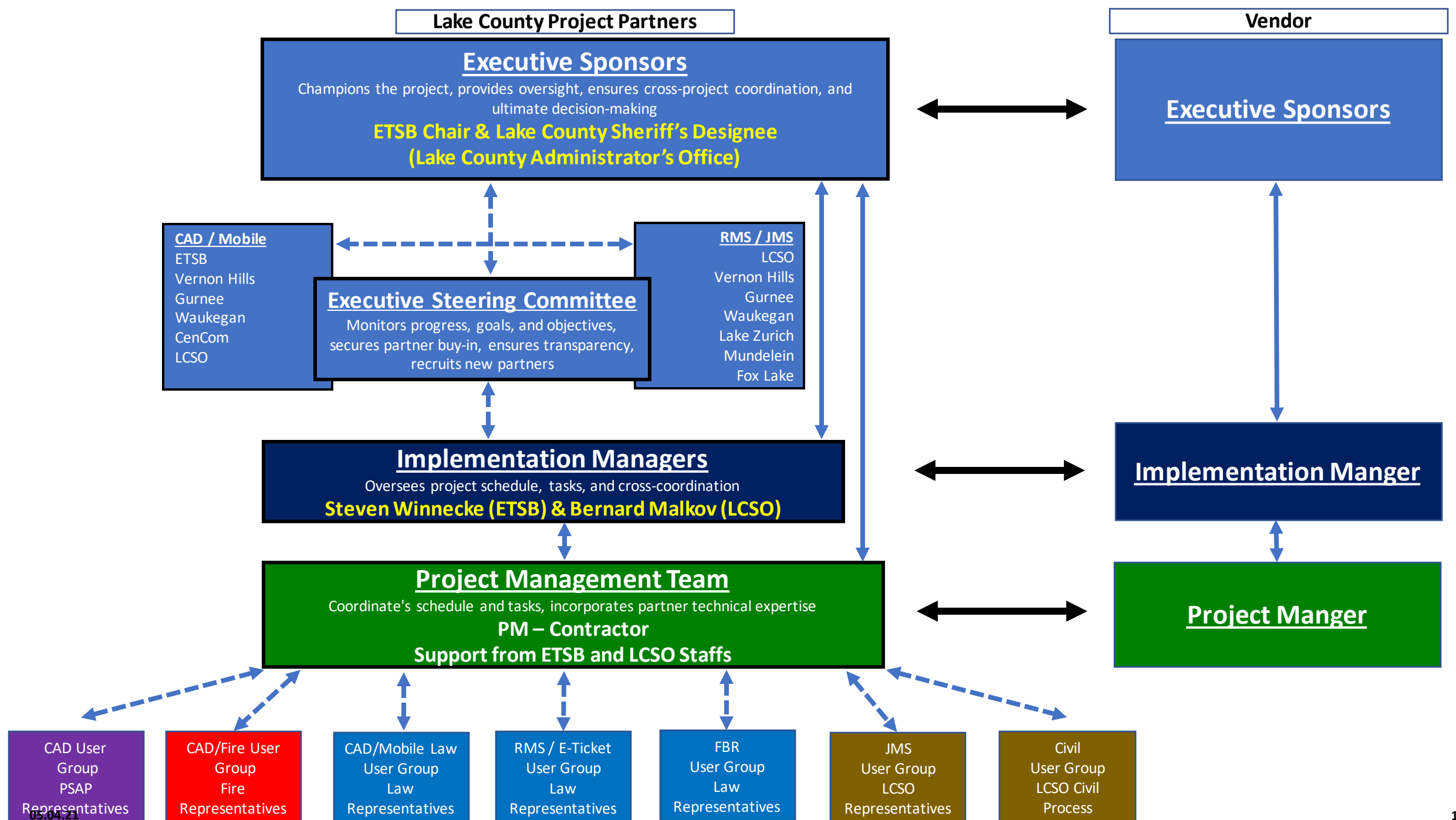
Dedicated Partners

- All 21 original partners have remained in the Consortium (Original IGA - 2018)
- Additional resolutions authorizing support at the Tier 3 (full consolidation)
 - Village of Libertyville
 - Wauconda Fire Protection District
- New resolutions continuing participation to secure pricing for Public Safety Software
 - Village of Gurnee
 - Vernon Hills and Libertyville Joint ETSB
 - Village of Vernon Hills (for board approval the week of May 3)
 - City of Waukegan (for board approval the week of May 3)
 - Village of Mundelein (for board approval the week of May 10)
 - Northeast Lake County Joint ETSB (for board approval the week of May 10)



Thank You

Are There Any Questions?



Backup - LCSO



Why Consolidate?

- **Serve the citizens of Lake County better by reducing the number of call transfers when someone calls 911.**
- **Improve technology and operational efficiencies.**
- **Create better business continuity and disaster recovery plans.**
- **Consolidation will lower long term costs not only for the Lake County Sheriff's Office, but all agencies that join.**
- **Due to enhanced technology, there will also be a positive environmental impact where information will be shared electronically and not need to be printed. Moreover, documents won't need to be driven to branch courts and the Circuit Clerk's Office.**

History

- In April 2017, Lake County and the Lake County ETSB received a report they commissioned (["9-1-1 Consolidation Report"](#)) that concluded PSAP consolidation is a mutually beneficial path for public safety entities in Lake County. The potential benefits of PSAP consolidation include:
 - Reduced call transferring
 - Staffing improvements to provide enhanced coverage for 24/7 operations
 - More consistent and effective service delivery
 - Greater opportunities for interagency response and backup
 - Better data sharing between agencies and responders in the field
 - Enhanced interoperability and ability to share information across jurisdictions
 - Operational savings
 - Reductions in future capital investment
 - Elimination of duplicate technology systems and maintenance agreements

History Continued



- In 2017, the Sheriff's Office CAD/RMS and JMS was approaching end of life and the Lake County Sheriff's Office explored options of upgrading. The cost for an upgrade was in excess of one million dollars. However, that upgrade would not have met the goals of the April 2017 report. Therefore, the upgrade was not pursued.
- On February 25, 2020, Lake County Sheriff's Office appeared at L&J Committee asking for \$62,914.98 to upgrade our CAD,RMS and JMS with new hardware and servers as the hardware and server operating systems were end of life and end of support. As stated in the minutes of the meeting "These systems are at end of their operational life and this procurement is required to minimize operational risk while the 9-1-1 Consolidation Consortium moves toward a new enterprise system. "

Financial Benefits



- Our prior maintenance costs for an outdated CAD, RMS, JMS and e-Citation product were \$340,000. Since the CAD, RMS and JMS Systems are so old, none of the data or information in the different systems communicated with one another. The lack of operability creates several points of double data entry. In 2019, when the Lake County Sheriff's Office added the E-Citation and E-Crash program from another vendor the flow of information helped a little on the front end; however, this separate software ultimately was not able to be integrated into our CAD and RMS. The flow of information did not create the efficiencies sought. Therefore, we canceled the contract.
- On 12/31/2020, a portion of our CAD System went End of Life. Moreover, there were other aspects of our annual software maintenance that we were able to reduce because other products were no longer supported. Therefore, our annual maintenance decreased to \$160,000 per year, however, we lost several components of our system.

Financial Benefits



- In our new consolidated shared system, the CAD,RMS,JMS, E-Citation and E-Crash will all flow together so we will no longer have the issues with double or even triple data entry!
- For example, if a person is arrested by Gurnee and brought to the Lake County Jail, the information from the Gurnee Field Based Report can electronically be sent to the Lake County Jail Management System eliminating errors while the arrestee is booked into our jail.
- As more agencies join this consortium, every agency's long-term costs will be lower while all members are able to share in the efficiencies of a shared system. So far, we have met with 17 agencies and we have more scheduled for the next few weeks.
- In the prior slide, Lake County was paying \$340,000 yearly in maintenance costs for a solution that was outdated and did not meet our operational needs.
- Under this model, Lake County will be paying approximately \$207,000 yearly for maintenance. Maintenance costs will start two years from contract signing based on the number of partners that join for a fully integrated system!

Back-Up General



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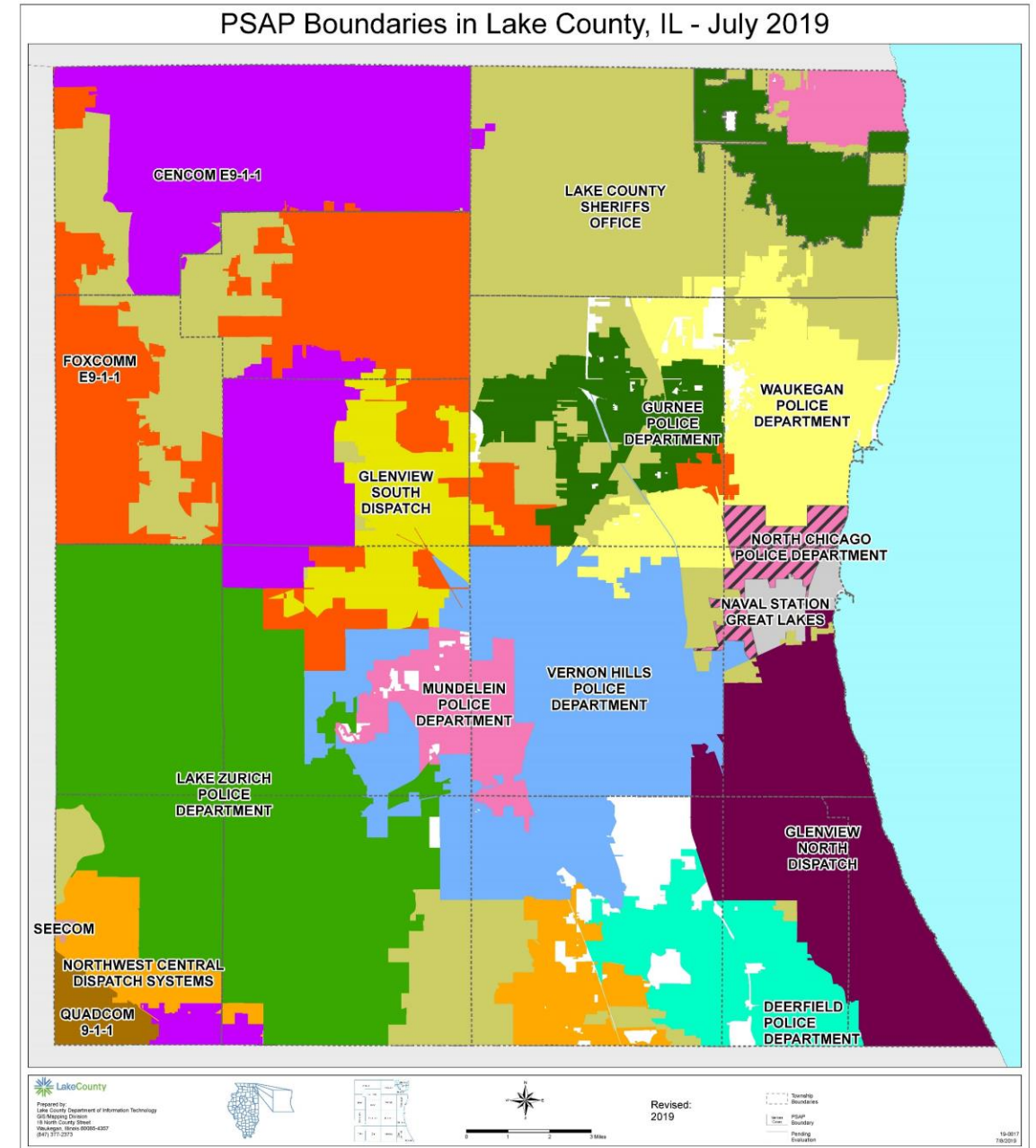
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**Regional
9-1-1
Consolidation**

Current Environment

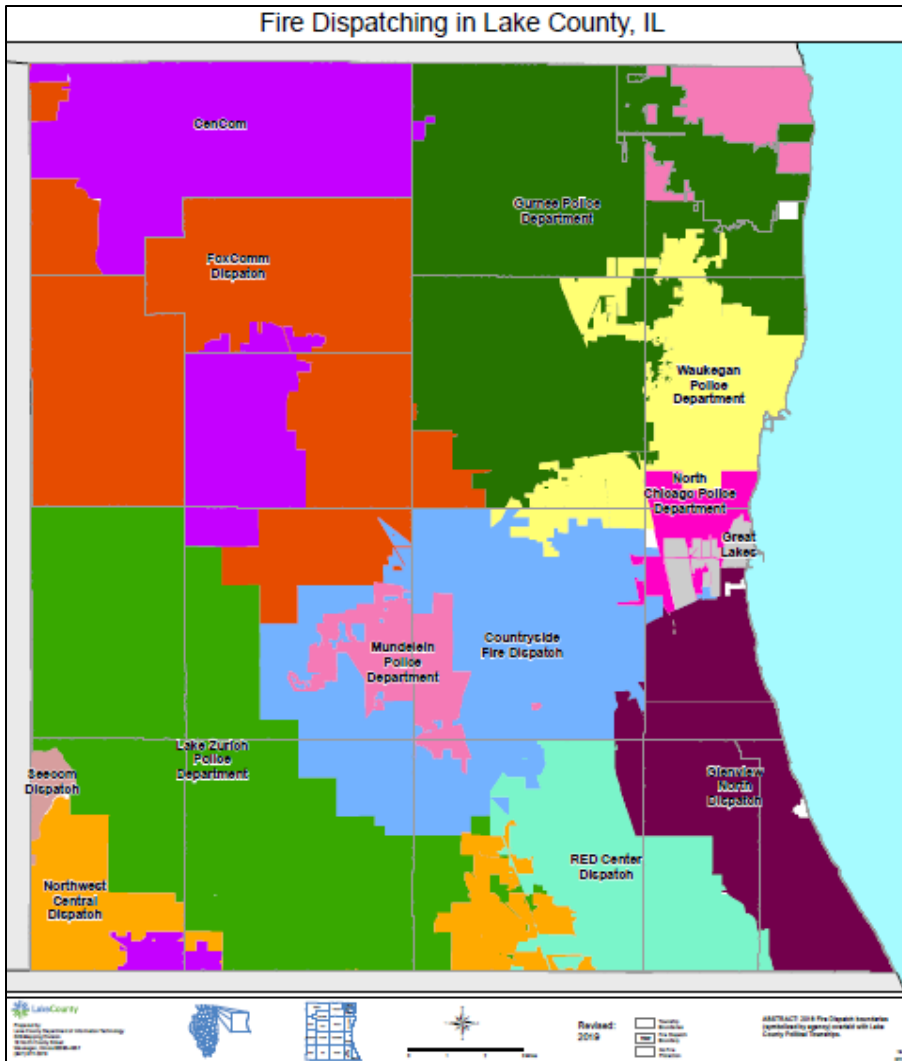
PSAP Boundaries

- More than 13 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
- Next Generation 9-1-1 initiative will improve location from cell phones

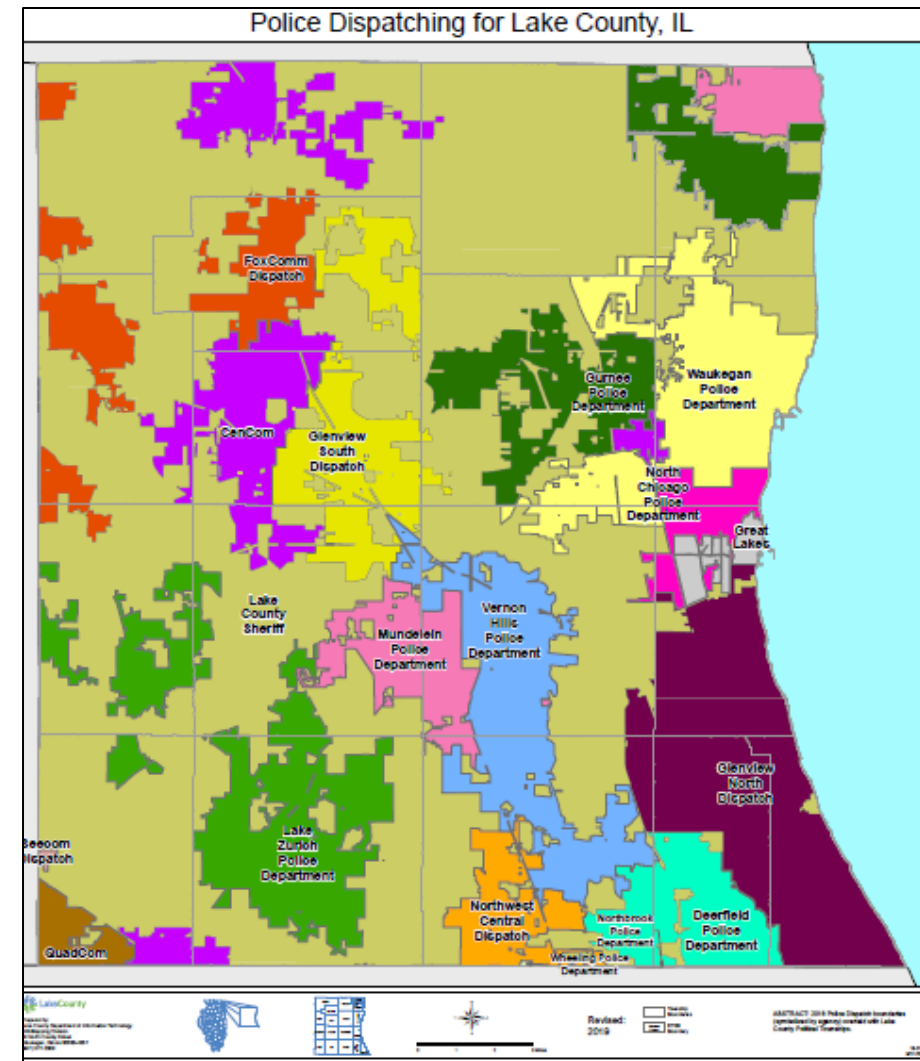


Current Environment

Dispatch Boundaries



Fire / EMS Dispatch Agencies (>13)



Law Enforcement Dispatch Agencies (>13)

Current Environment

Consolidation Partners



9-1-1 Consolidation Partners (21 public safety entities) represent:

- 8 Primary PSAPs (answer 9-1-1 calls), 1 Secondary PSAP (dispatch only)
 - 1 independent agency (CenCom)
 - 7 PSAPs part of LE agencies
 - 1 PSAP part of Fire / EMS agency
- 8 Law Enforcement dispatch agencies
- 8 Fire / EMS dispatch agencies
- 26 municipalities
- 12 fire protection districts,
- 1 county (Lake County)
- 28 Law Enforcement agencies
- 20 Fire / EMS agencies
- 8 “Other” agencies
- 7 ETSBs (≈ \$6.5 million in 9-1-1 surcharge funds)
- Partners service a population of:
 - ≈ 590,000 (Primary PSAP / 9-1-1 Call Answering)
 - ≈ 560,000 (Law Enforcement Dispatch)
 - ≈ 580,000 (Fire / EMS Dispatch)

Current Environment

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



- Total calls at Partner PSAPs \approx 1,330,000
- 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 1,070,000)
 - \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