



LakeComm Proposal Overview

April 10, 2024

Overview



- **Background**
 - **The “Problem”**
 - **Ongoing efforts**
- **LakeComm Operational Concept**
- **LakeComm Budget Estimate**
 - **Three “building block” approach**
- **Assumptions**
- **Next steps**

Background

- State supports and encourages 9-1-1 and ETSB consolidation
- Studies on Lake County show consolidation can be beneficial to residents and responders
- Smaller consolidations have already occurred in Lake County
 - Some voluntary, some required by State Statute
- Since 2018, partners have been taking real actions to build the systems and infrastructure for a consolidated 9-1-1 agency and system
 - Dual addressing
 - Public safety software modernization
 - ROC Facility
 - IGAs with willing partners to develop an implementation plan

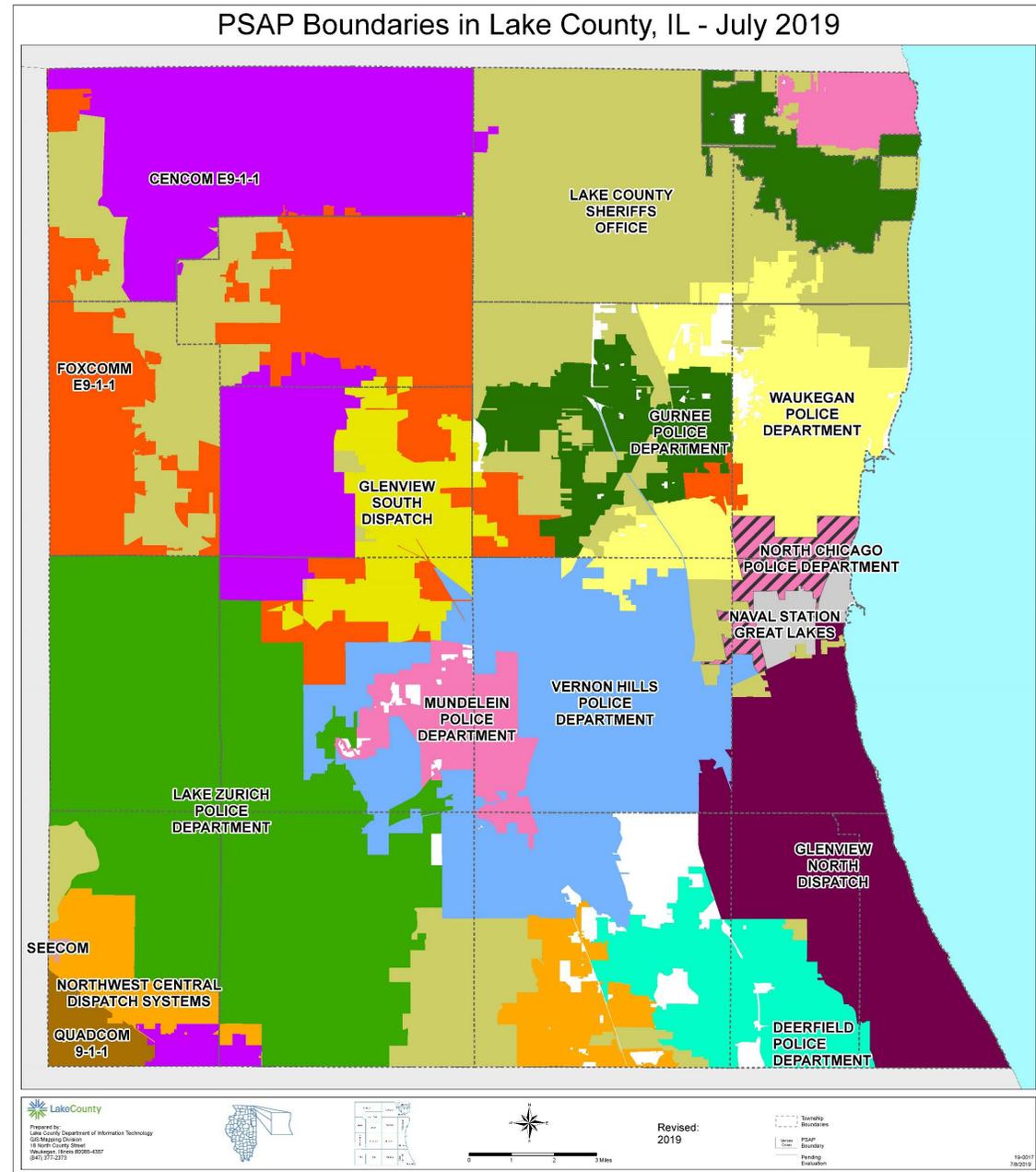
The (1st) Problem

9-1-1 (PSAP*) Boundaries

*Public Safety Answering Point

Problem: Call Transfers

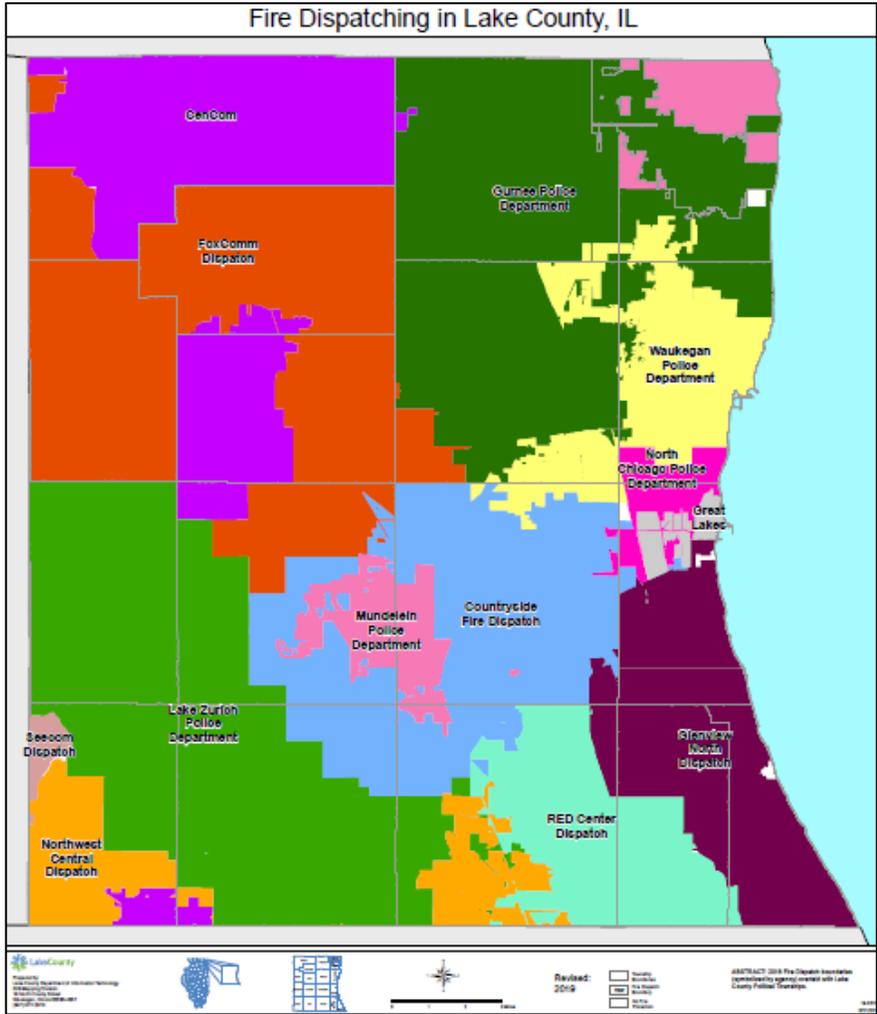
- More than 12 PSAPs serving Lake County
- Wireline 9-1-1 calls follow these boundaries
- Cellular (voice or text message) and VoIP 9-1-1 calls may not follow established boundaries



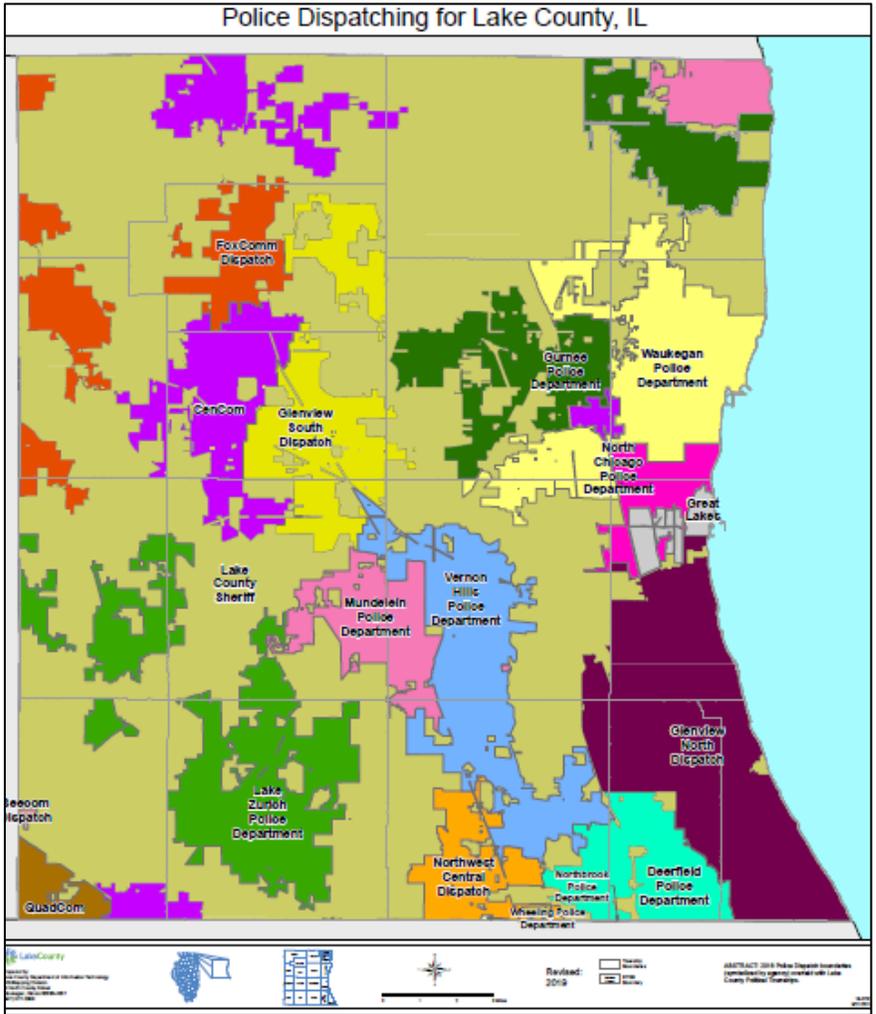
The (2nd) Problem

Dispatch Boundaries

Problem: Call Transfers



Fire / EMS Dispatch Agencies (>12)



Law Enforcement Dispatch Agencies (>12)

9-1-1 Consolidation Report (2013 -2017)



- 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

Consolidation Planning Project (2018-2022)

Purpose

Regional
9-1-1
Consolidation

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)

Concept of Operations

Three Tiers Defined in Dec. 6, 2019 Implementation Plan



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)

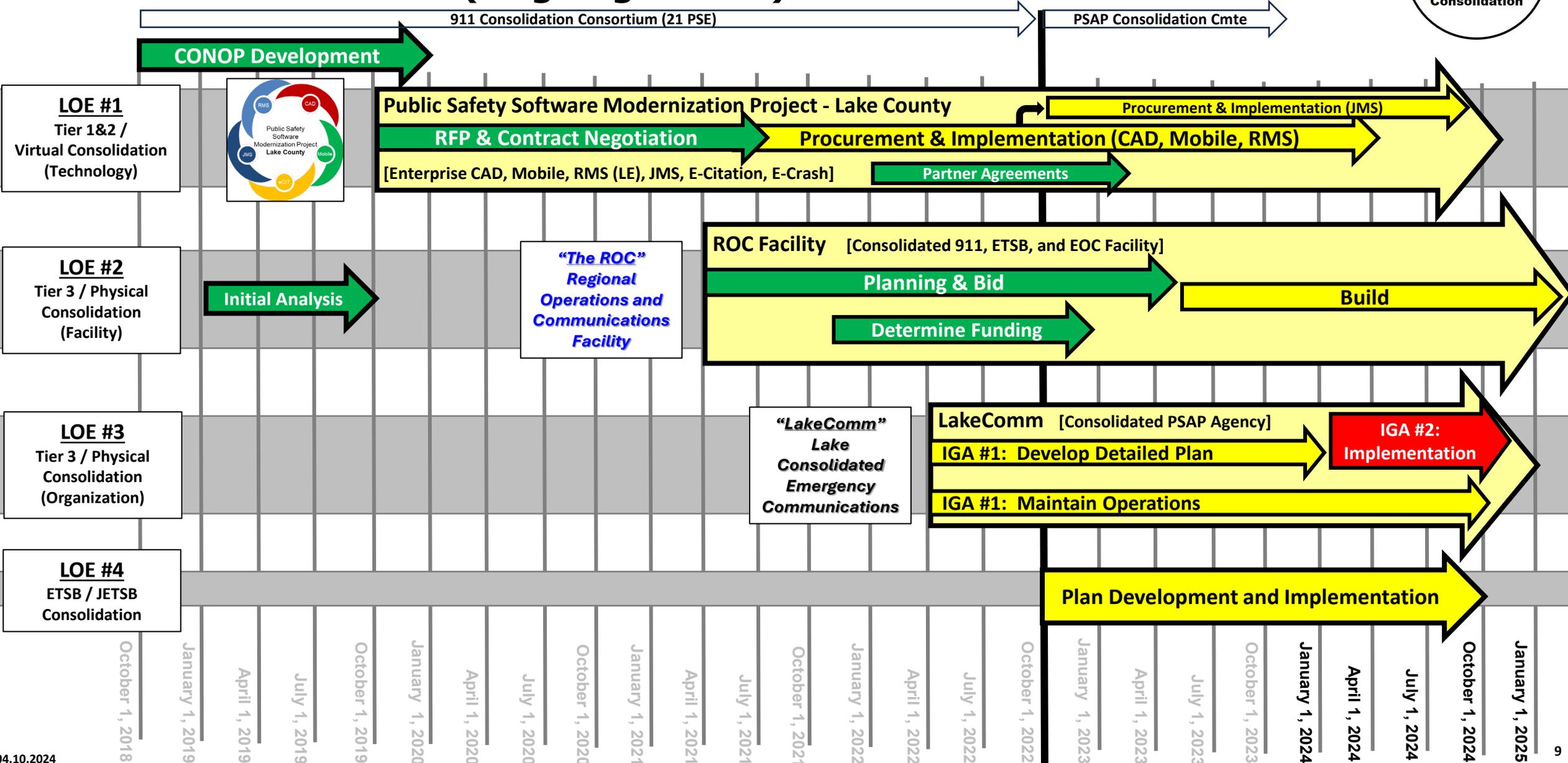
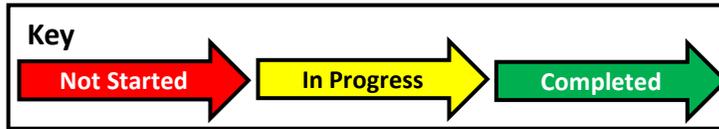
Assessment Criteria

(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?

Lines of Effort (LOE)

9-1-1 Consolidation (Ongoing Efforts)



PSAP Consolidation Cmte (2022-Present)



IGA #1 –*Planning IGA (As Amended, Effective March 1, 2024)*

- Focus: (1) Maintain operations and employees, (2) with partners, draft IGA #2 (Implementing IGA)
- Participating PSAPs agree to:
 - **“(D)evelop an Implementing Intergovernmental Agreement (“Implementing IGA”) that establishes a NEW CONSOLIDATED PSAP in Lake County, Illinois to replace and consolidate the PSAPs operated by the Parties in this Agreement.”**
 - Ensure Consortium partners and new, potential partners are able and encouraged to participate
 - Contribute \$50,000 each to hire required expertise
 - Establish the PSAP Consolidation Committee
- County agrees to:
 - Act as the Executive Agent
 - Construct a purpose-built 9-1-1 and emergency dispatch center at the County’s expense as part of the Regional Operations and Communications Facility for the NEW CONSOLIDATED PSAP
- Became effective on September 1, 2022 (**Amended to 30-month duration**)

PSAP Consolidation Cmte (2022-Present)



IGA #2 – Implementing IGA

- Sets forth the mechanism for a Lake County public entity to become a full partner and receive services from the NEW CONSOLIDATED PSAP

- The Implementing IGA must:
 - Create of a new Intergovernmental Cooperative (joint governance) organization
 - Define a pathway for any public agency to become a partner
 - Include bylaws, governance, cost sharing etc.
 - Define baseline services
 - Include implementation and migration plans to transition from individual PSAPS to the newly constructed PSAP, located in Libertyville
 - Establish staffing structure and support functions
 - Provide a transition pathway for current PSAP employees to the new PSAP
 - Define technology needs and implement the new CAD system
 - Define timelines, insurance and other migration issues

- Goal: Partners / Members approve by June 2024

9-1-1 Consolidation Proposal

Parallel Paths

LakeComm (New Consolidated PSAP)

- IGA to Establish LakeComm (IGA #2)
- LakeComm Bylaws (Draft)
- LakeComm Org Chart / Staffing Estimates
- LakeComm Budget Estimates
- Executive Director Position Description
- Transition Funding
- Transition Plan

<u>Partnering PSAPs</u>	
Mundelein	CenCom E911
Fox Lake	Vernon Hills
Gurnee	Lake Zurich
Countryside FPD (And Lake County)	

New Joint Emergency Telephone System Board

- IGA to Establish a new JETSB
- JETSB Bylaws (Draft)

<u>Partnering (J)ETSBs</u>
Joint Central Lake County JETSB - Mundelein, North Chicago, Winthrop Harbor
Northeast Lake County JETSB - Gurnee, Zion
CenCom E911 JETSB - The Round Lakes
Vernon Hills JETSB - Libertyville
Fox Lake ETSB
Lake County ETSB

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LakeComm Prospective Members



Lake County



15 Fire/EMS Agencies

PSAP	Fire Agency
CenCom	Antioch Fire Protection District
CenCom	Greater Round Lake Fire Protection District
FoxCom	Fox Lake Fire Protection District
FoxCom	Lake Villa Fire Protection District
LZ	Lake Zurich Fire/Rescue Department
LZ	Wauconda Fire Protection District
Mundelein	Mundelein Fire Department
Mundelein	North Chicago Fire Department
Mundelein	Winthrop Harbor Fire Department
NLCC-ETSB	Beach Park Fire Protection District
NLCC-ETSB	Gurnee/WWFPD Fire Department
NLCC-ETSB	Newport Fire Protection District
NLCC-ETSB	Zion Fire/Rescue Department
VH	Countryside Fire Protection District
VH	Libertyville Fire Department

22 Law Enforcement Agencies

PSAP	Police Agency
CenCom	Antioch Police
CenCom	Round Lake Police
CenCom	Round Lake Beach Police
CenCom	Round Lake Heights Police
CenCom	Round Lake Park Police
FoxCom	Fox Lake Police
FoxCom	Lake Villa Police
FoxCom	Lakemoor Police
FoxCom	Park City Police
LZ	Hawthorn Woods Police
LZ	Island Lake Police
LZ	Kildeer Police
LZ	Lake Zurich Police
LZ	Tower Lakes Police
LZ	Wauconda Police
Mundelein	Mundelein Police
Mundelein	North Chicago Police
Mundelein	Winthrop Harbor Police
NLCC-ETSB	Gurnee Police
NLCC-ETSB	Zion Police
VH	Libertyville Police
VH	Vernon Hills Police

LakeComm Operational Concept



- **Established as a public agency as defined in the Intergovernmental Cooperation Act**
- **Membership open to:**
 - **All cities, villages, fire protection districts, the County of Lake, and other units of local government that directly provide public safety service, that are located, wholly or partly within Lake County, Illinois**
- **County's membership includes an "on ramp" for future Sheriff's Office membership**
- **With establishment of Member Board and approval of Bylaws – PCC disestablished**

LakeComm Operational Concept

Member Board of Directors (Member Board)
 One representative (and alternate) for each Member (Mayor, Trustee, Administrator, Manager, etc.)
 Officers: Chair, Vice-Chair, Treasurer, Secretary

Executive Committee
 Up to Seven Voting (7) Members / 2-yr Term

1. Member Board Chair*
2. Member Board Vice-Chair*
3. Municipal Administrator
4. Lake County Representative*
5. Fire Protection District Trustee
6. Fire Chief Representative
7. Police Chief Representative

*Defined in IGA

Executive Director

LakeComm Staff

- 9-1-1 and Dispatch Operations
- Technology / IT
- HR/ Finance
- Legal

Advisory Committees

Examples

- Law Enforcement
- Fire / EMS
- Technology
- Budget

**NEW
Joint
Emergency
Telephone
System Board
(JETSBS)**

- Manage, determine use of 9-1-1 surcharge funds
- Separate, parallel consolidation action
- Intended to be a complementary, supporting entity

LakeComm Operational Concept

- Consolidated PSAP located in the ROC Facility
- Primary PSAP - all Member 9-1-1 calls answered and processed
- Provides dispatching for Member's Fire / EMS and Law Enforcement
- Uses the systems implemented in the Public Safety Software Modernization Project
- Focus on retaining and hiring current employees at LakeComm (IMRF Employer)
- Use of current Partner PSAP center(s) as the LakeComm "back up" center(s)
- Scope of services defined ("what" not "how")
- Annual shares based on agreed formula

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True Cost Estimate

- **2018 true cost estimate**
 - \$17.6M for 6 partner PSAPs and Lake County ETSB
 - Applied 2% annual increase to get to 2024 estimate

- **2024 true cost estimate**
 - **\$19.8M** for 6 partner PSAPs and Lake County ETSB

6 PSAPs		2018 Expenditures	
CenCom	\$2,546,310	8 PSAPs	2018 Expenditures
FoxComm	\$1,401,923		
Gurnee	\$3,584,137		
Lake Zurich	\$2,014,728		
Mundelein	\$2,211,040		
Vernon Hills	\$4,103,369		
Lake County ETSB	\$1,801,537		
Total	\$17,663,044		
		CenCom	\$2,546,310
		FoxComm	\$1,401,923
		Gurnee	\$3,584,137
		LCSO	\$4,671,942
		Lake Zurich	\$2,014,728
		Mundelein	\$2,211,040
		Vernon Hills	\$4,103,369
		Waukegan	\$2,887,156
		Lake County ETSB	\$1,801,537
		Total	\$25,222,141

Source: Regional 9-1-1 Consortium Concept of Operations and Implementation Plan (Dec. 6, 2019)

Budget Estimate

Three “building block” approach

- Identify variables, options, and decision points
 - An “All In” budget for planning
 - Goal to provide an estimated budget and cost range
1. **Core budget (minus personnel)**
 - Technology
 - Administrative expenses
 2. **Personnel budget**
 - Multiple staffing options provided
 - “Cross walk” with scope of services
 3. **Cost sharing model**
 - Variable 1: Percentage of total cost for Fire/EMS and LE
 - Variable 2: Fire/EMS data points and percentage applied to determine share
 - Percentage of CFS, population, EAV, other
 - Does not need to be the same as LE
 - Variable 3: LE data points and percentage applied to determine share
 - Percentage of sworn, population, EAV, other
 - Does not need to be the same as Fire/EMS
 - Variable 4: If needed, options to ease initial financial burden for partners with a larger increases in the cost

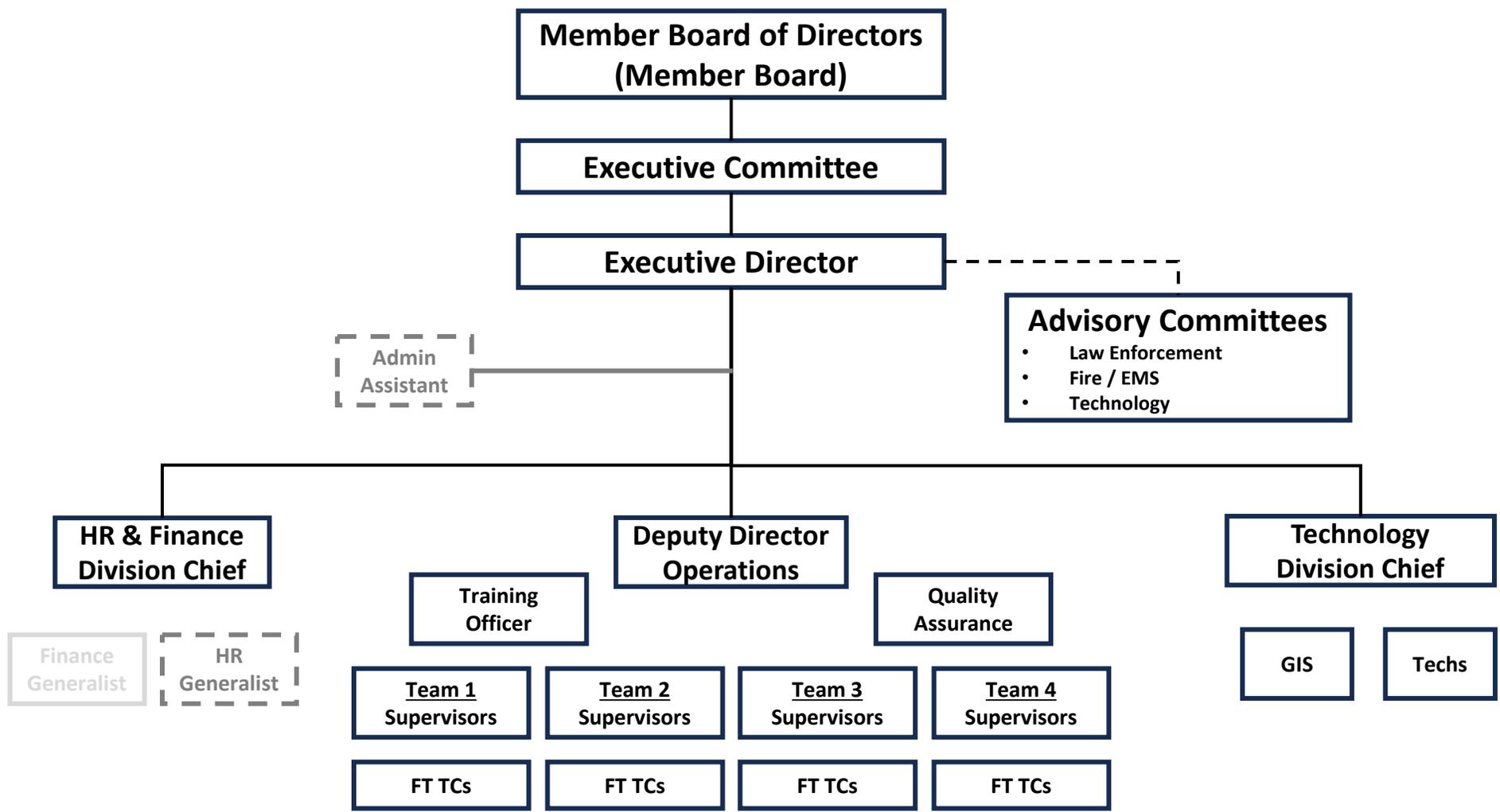
Building Block #1

Core Budget (Minus Personnel)

- Core Budget (minus personnel) - \$3.6M to \$4.1M
 - \$3.6M includes:
 - Professional services, debt service, capital, training, maintenance, network, etc.
 - \$4.1M includes:
 - \$3.6M listed above
 - MDCs (\$500k capital covered by 9-1-1 surcharge funds)

Building Block #2

LakeComm Org Chart (For Planning)



**NEW
Joint
Emergency
Telephone
System Board
(JETSBS)**

- Manage, determine use of 9-1-1 surcharge funds
- Separate, parallel consolidation action
- Intended to be a complementary, supporting entity

Building Block #2

104 TCs and Shift Supervisors



\$14,000,000 Total personnel cost

- **Each team (4 teams):**
 - **Shift Supervisors: 3.5**
 - **Dispatchers (TC 2): 12.5**
 - **Call Taker (TC 1): 10**

- **Positions “On Shift”**
 - **Shift Supervisors: 3**
 - **Dispatchers (TC 2): 11**
 - **Call Taker (TC 1): 4-10 (8 Average)**

<u>Title</u>	<u>Division</u>	<u>Qty.</u>
Executive Director	Administration	1.0
Administrative Assistant	Administration	0.5
HR / Finance Director	Administration	1.0
Finance Analyst	Administration	0.0
HR Analyst	Administration	0.5
Deputy Director / Operations Manger	Operations	1.0
QA/QI Manager	Operations	1.0
Training Manager	Operations	1.0
Shift Supervisor	Operations	14.0
Telecommunicator 2 (Dispatch + CT)	Operations	50.0
Telecommunicator 1 (Call Taker)	Operations	40.0
Alarm Board Operators (PT)	Operations	0.0
Technology Manager	Technology	1.0
GIS Coordinator	Technology	1.0
IS Technician	Technology	4.0
Total		116.0

Budget Estimate (Full Cost/"All In" Budget)

- **Block #1: Core Budget**
 - **\$3,600,000*** to \$4,100,000
- **Block #2: Telecommunicator and Shift Supervisor staffing options:**
 - \$14,600,000 - 109 TCs and Shift Supervisors (FE Min model)
 - **\$14,000,000*** - 104 TCs and Shift Supervisors (Mod Min model)
 - \$13,400,000 - 99 TCs and Shift Supervisors (Hybrid 99 model)

} Range for planning
- **Total / gross budget estimate (full cost, 104 TCs, 116 total pers, no MDCs)**
 - **\$17,600,000***

9-1-1 Surcharge Revenue

- Assumptions:

- \$8.0M to \$8.5M in 9-1-1 surcharge revenue each year
- \$7.5M approved for authorized LakeComm expenses
 - \$2.1M for PSAP technology and 9-1-1 systems (MDCs not included)
 - \$5.4M for staff and operations

- Budget:

\$17,600,000	Total / Gross Budget
- \$7,500,000	<u>Surcharge Revenue</u>
\$10,100,000	

Additional Revenue, Offsets, Etc.

- Additional revenue - \$1,000,000
 - Lake County “share”
 - Additional surcharge funds for authorized expenses
 - Non-partner share of technology expenses (CAD, etc.)
 - Reserves, contingency, deferred payment for debt service
 - Additional budget reductions
- Budget:
 - \$10,100,000
 - \$1,000,000 Additions Revenue, Offset, etc.
 - \$9,100,000** **Net Budget to be split between all agencies**

Building Block #3

Cost Sharing Model

- **Variable 1**: Percentage of total cost for Fire/EMS and LE
- **Variable 2**: Fire/EMS data points and percentage applied to determine share
 - Percentage of CFS, population, EAV, other
 - Does not need to be the same as LE
- **Variable 3**: LE data points and percentage applied to determine share
 - Percentage of sworn, population, EAV, other
 - Does not need to be the same as Fire/EMS
- **Variable 4**: If needed, options to ease initial financial burden for partners with larger increases in the annual cost

Variable #1

Percentage of Total Cost for Fire/EMS and LE

- Of the current \$13M cost for the partner PSAPs (gross)
 - 24% is funding Fire/EMS
 - 76% is funding LE
- DuComm
 - 22.2% funding Fire/EMS
 - 77.8% funding LE
- Based on current costs and comparison with a similar consolidated PSAP, recommend the following assumption for planning:

- 25% of net budget for Fire/EMS
- 75% of net budget for LE

Variable #2 and #3

Fire/EMS Data Points and Percentage Applied to Determine Share

#2 Fire/EMS

- Currently three data points recommended:
 - Calls for service (NFIRS data is consistent)
 - Population (most recent census data)
 - EAV

• Decision: Data points and % applied

#3 Law Enforcement

- Currently three data points recommended:
 - Sworn Officers (4 PT = 1 FT)
 - Population (most recent census data)
 - EAV

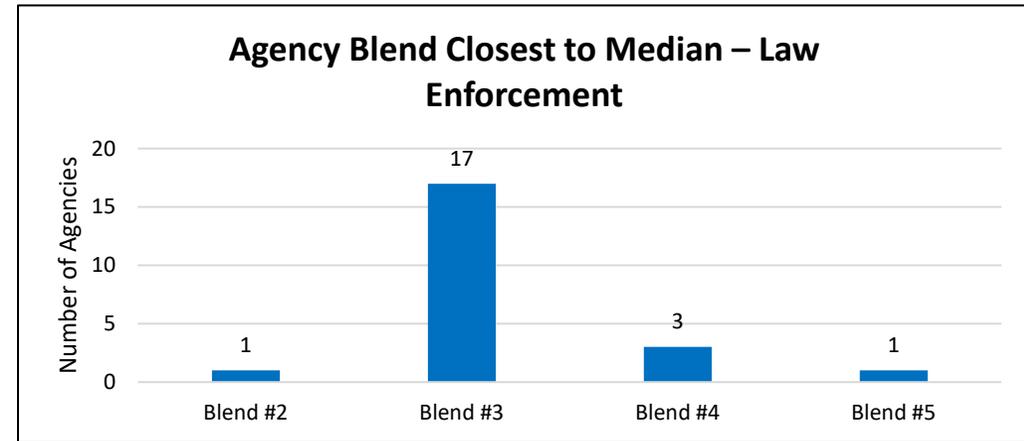
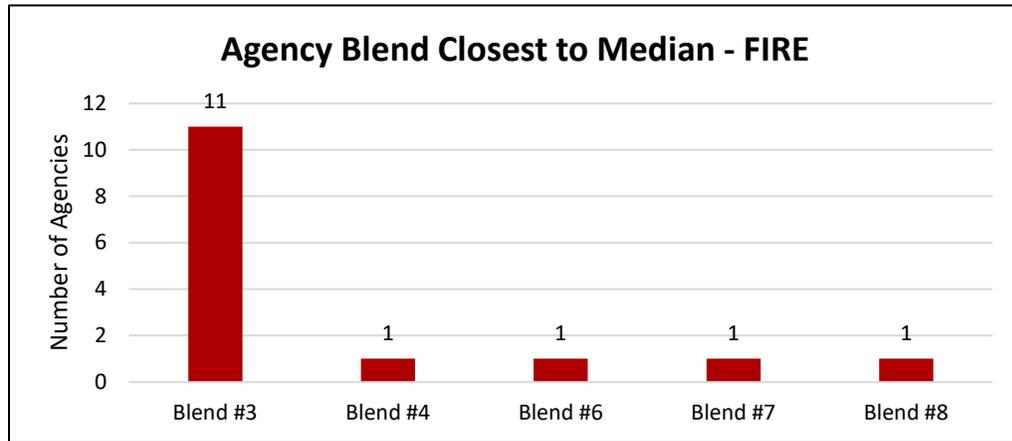
• Decision: Data points and % applied

Variable #2 and #3

“Common Blend” for Planning

- The most common median-costs Blend for the majority of all partner jurisdictions (of 9 measured)

39% Activity – 39% Population – 22% EAV



BLEND #1	Calls/Sworn - 50%, Population - 50%, EAV - 0%
BLEND #2	Calls/Sworn - 50%, Population - 0%, EAV - 50%
BLEND #3	Calls/Sworn - 39%, Population - 39%, EAV - 22%
BLEND #4	Calls/Sworn - 45%, Population - 45%, EAV - 10%
BLEND #5	Calls/Sworn - 50%, Population - 25%, EAV - 25%
BLEND #6	Calls/Sworn - 25%, Population - 50%, EAV - 25%
BLEND #7	Calls/Sworn - 60%, Population - 20%, EAV - 20%
BLEND #8	Calls/Sworn - 20%, Population - 60%, EAV - 20%
BLEND #9	Calls/Sworn - 35%, Population - 35%, EAV - 30%

LakeComm Annual Share

Challenge: How to Compare?



- **Current cost: Total (Gross) vs. Out of Pocket (Net after 9-1-1 surcharge applied)**
- **Numerous methods of applying 9-1-1 surcharge funds for agency or PSAP needs**
 - **Offset agency cost for dispatching**
 - **Capital – PSAP and/or agency**
 - **PSAP operational costs**
 - **Reserve**
- **Difficult to get to an “apples to apples” comparison**

Variable #4

“Smoothing” to Ease Larger Financial Increase

- Option to ease initial financial burden - options could include
 - Smoothing Cost is calculated after base cost share is calculated
 - Smoothing cost is then allocated amongst members who will be paying less under LakeComm
 - Allocation allotted to each saving member on a proportionate basis relevant to the difference between current “out of pocket” cost and the new Annual Share
- Provide 5 years to incrementally move to full cost share

• Decision: Agree to apply “smoothing” for first 5 years

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Planning Assumptions - Summary

- All current partners are participating (FTE and expenses can be scaled if needed)
- All partner and County 9-1-1 calls answered at LakeComm (minimizing 9-1-1 call transfers)
- Consolidation into a new single supporting (J)ETSB – new IGA, new Board
 - \$8.0M - \$8.5M of surcharge funds available for authorized expenses
- Horizontal dispatch model
- Staffing FTE based on 12-hour shifts (for planning) - Hybrid to include 8-hour shifts an option
- Consolidation of radio talk groups occurs
- \$7.5M of 9-1-1 surcharge funds applied to authorized LakeComm expenses
- \$1.0M in additional revenue
 - Lake County “share”, additional surcharge funding, additional budget reductions, etc.
- \$500k shifted from personnel to reserve / contingency for “vacancy savings”
- Functional split: 25% Fire/EMS and 75% Law Enforcement
- Annual Share formula: 39% Activity – 39% Population – 22% EAV
- IMRF employer
- Benefits, finance support, and payroll through Lake County
- Transition / start up funds available through “loan” or line of credit (up to \$6.0M)
- MDCs not provided to agencies in this estimated budget

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Actions



- **Information available for potential members to make decision**
 - Consider full scope of consolidation efforts to include minimizing 9-1-1 call transfers, external capital investments (ROC), new shared software suite, service improvements, etc.
 - Intent is to have initial partners by June
- **JETSB and LakeComm establishment occurs in parallel**
 - 9-1-1 surcharge funds are the key to keeping partner cost down
- **Transition funding decisions from partners**
- **Maintaining and transitioning Telecommunicators**
- **Executive Director - critical to transition**



Questions

Project background available at:

<https://www.lakecountyl.gov/3922/Regional-911-Consolidation>