**Understanding 911 Governance:
Examining Factors Influencing and Related to the Governance of our Nation's
Emergency Communications Centers**

Heidi Choi, Jason Lerner, and S. Rebecca Neusteter

Overview

Throughout the United States, at least 240 million calls are made to 911 each year.[1] Many of these result in life-saving responses to medical emergencies and serious crimes in progress. This everyday excellence – 24 hours a day, 365 days per year – is a remarkable, often undervalued accomplishment. At the same time, our nation's 911 system presents many opportunities for improvement. 911 systems would particularly benefit from better documentation and dissemination of best practices to address continuing service challenges.[2]

To assist this process, the University of Chicago Health Lab launched Transform911.This initiative sought to explore how the nation's 911 system can better prioritize health and safety, to ensure that the right responder is dispatched at the right time, and to identify and disseminate best practices to improve first response. Transform911 has engaged a diverse coalition of 911 practitioners, researchers, policymakers, and other impacted parties in a community of practice to identify evidence-based practices, spark innovation, and – we hope – inspire change that positively transforms our nation's emergency crisis response system.

Before describing 911 governance, we want to highlight an important point about the terminology used in this brief. Traditionally, 911 call centers were collectively referred to as Public Safety Answering Points (PSAPs), but the 911 industry is shifting toward describing these as Emergency Communications Centers (ECCs) to better appreciate the full suite of communications solutions (including text, chat, and video-based services in addition to call-based services) they handle today.[3] This term is favored by many 911 professionals, and through consensus-building and member input, Transform911 has also adopted this language. However, because many local, state, and national associations and governing bodies continue to employ PSAP terminology, both ECC and PSAP are used throughout this brief.

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[1] National Emergency Number Association, "9-1-1 Statistics," accessed November 22, 2021, https://www.nena.org/page/911Statistics.

[2] S. Rebecca Neusteter et al., "Understanding Police Enforcement: A Multicity 911 Analysis," Vera Institute of Justice, September 2020, https://www.vera.org/publications/understanding-police-enforcement-911-analysis.

[3] For related definitions and background, see the glossary in Transforming 911: Assessing the Landscape and Identifying New Areas of Action and Inquiry, https://www.transform911.org/resource-hub-old-2023/transforming-911-report/.

911 Governance

911 governance is one area on which Transform911 is focused – and where existing research, guidance, and tools are limited. In the context of emergency communications, the term governance refers to the coordination, oversight, funding, and standardization of 911, alternative hotlines, and emergency services. While 911 governance exists at the federal, state, regional, and local (e.g., county and city) levels, it is primarily driven by the geographic purview of ECCs.[4] Given overlapping roles based on geography, issue, and type of emergency service provided, governance of the 911 system requires planning, collaboration, and coordination. Effective governance is essential for ensuring that funds are sufficient to support 911 operations and technological improvements. 911 governance has evolved over time with increases in population, advances in technology, and increased demand for emergency services more generally.

Reports developed by governmental entities and emergency communications associations, in partnership with practitioners, have proposed ways in which 911 governance can:
- establish better standards of practice,
- promote coordination and interoperability,
- improve data collection and reporting requirements,
- ensure compliance with quality control and performance measurement practices, support decision-making processes, and
- develop efficient and economical operational structures.

In developing such best practice standards, researchers, policymakers, and practitioners have emphasized the importance of each ECC's unique characteristics and circumstances. Many emergency communications processes are governed by the agency in which the ECC is housed, as well as by state- and jurisdictional-level rules and governance factors, which often vary considerably. Transform911, therefore, highlighted a need to prioritize developing a better understanding of how 911 is governed at the local level.

The Federal Communications Commission (FCC), which – among other entities – governs ECC/PSAP communications activities nationally, regularly administers a census of all ECCs in the U.S. – the publicly available "911 Master PSAP Registry."[5] According to this census, there are approximately 6,000 ECCs presumed to be primary centers operating nationwide, comprising 68% of all ECCs.[6] According to the FCC, "primary PSAPs" receive 911 calls directly and "secondary PSAPs" receive calls routed or transferred from primary PSAPs.[7] As with state level emergency management

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[4] Industry Council for Emergency Response Technologies (iCERT), History of 911 and What It Means for the Future of Emergency Communications (Washington, DC: 2015), 3, https://perma.cc/YL97-9J9C.
[5] Public Safety and Homeland Security, *911 Master PSAP Registry* (Aug. 9, 2024), distributed by the Federal Communications Commission, https://www.fcc.gov/general/9-1-1-master-psap-registry.
[6] Federal Communications Commission, "911 Master PSAP Registry," February 29, 2024. https://www.fcc.gov/general/9-1-1-masterpsap-registry.
[7] iCERT, "History of 911."

governance, local governance of ECCs varies widely, with many operating at the county level, but others at the regional or even city level. All ECCs operate in discrete geographic areas. Some ECCs cover regions that span multiple jurisdictions, while others – particularly those in tribal settings – may have no dedicated emergency service, and instead rely upon local jurisdictional support.[8] In fact, based on the organic way in which ECCs have proliferated over time, ECC boundaries do not necessarily align with jurisdictional boundaries, and may overlap across cities and counties.

Even within the same state, local ECC structures differ. For example, in Washington State, close to half of all ECCs are housed under an intergovernmental entity, whereas the remainder reside within a variety of other governance structures, including county emergency management agencies, sheriff's offices, mayor's offices, and county commissioners.[9] Given the varying roles, authorities, and geographies associated with ECCs, their managerial, operational, and fiscal functions depend on the nature of the local agencies that they serve.[10]

As described in the Transform911 research report, [Transforming 911: Assessing the Landscape and Identifying New Areas of Action and Inquiry](#), empirical research on the most effective approaches to 911 governance is virtually non-existent. The dearth of outcome evaluations likely reflects the diversity and complexity of ECC governance models. Considerable variation in state and local contexts hinders efforts to isolate the effect of specific strategies on key outcomes of interest. Even if such outcome evaluations were possible to execute, the findings would have limited generalizability to other jurisdictions without rigorous accounting of organizational processes, contextual barriers, and facilitating factors. The literature that does exist on 911 governance is confined to case studies of specific states or localities, surveys of various governance structures, and recommendations stemming from expert practitioner study groups. Much of this literature is dedicated to advising on how to develop a suitable governance structure along with varying models of collaboration and consolidation, rather than prescribing any one specific governance strategy.

ECC Independence and Equality
Transform911 broadly defines 911 as the system that, when working at its full potential, provides members of the public who are facing acute threats to their wellbeing with appropriate, equitable, relevant, immediate, and around-the-clock access to needed supports. Transform911's North Star envisions a 911 system that equitably and reliably increases access to wellbeing for those who need emergency assistance, the

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[8] iCERT, "History of 911."
[9] State of Washington Military Department, "911 Cost Study Report to the Legislature," December 2020, https://mil.wa.gov/asset/6012f4af4611d.
[10] Task Force on Optimal PSAP Architecture (TFOPA), "Task Force on Optimal PSAP Architecture Final Report," Federal Communications Commission, January 29, 2016, https://transition.fcc.gov/pshs/911/TFOPA/TFOPA_FINALReport_012916.pdf.

professionals who staff 911, and those deployed to respond.[11] 911 is a complex system requiring expertise, communication, coordination, resources, and trust to span:

a) the diverse cultural, historical, linguistic, and other realities across and within America's communities;
b) the methods by which users initiate the request for assistance—be that by way of a telephone call, text, or other mechanism;
c) the call-taking, call-handling, and dispatching procedures; and
d) the response—be that by virtual or traditional on-scene (i.e., Emergency Medical Services (EMS), fire, or police) and/or new models of crisis response and other sectors of the first-responder ecosystem.

As discussed below, the Transform911 Blueprint for Change posits that to achieve this North Star, ECCs must be independent and equal to their other first responder counterpart agencies and that independence will improve outcomes for callers, 911 professionals, and other first responders alike.

In addition to ECC independence, the Transform911 Blueprint calls for ECCs to be equipped to deploy a diverse range of responses that best match the response to needs of the emergency. This requires removing the common default to police, which we hypothesize is particularly prevalent when ECCs are housed within a law enforcement or other traditional emergency response agency.

The mission and function of ECCs across the nation have transformed from simple information transfer stations into critical points in the public safety incident lifecycle where resource deployment and tactical decisions are made. These organizations and their leaders need autonomy to address issues that affect the greater public safety mission of a jurisdiction. This has proven practically and politically difficult when ECCs are in a subordinate position to or housed within a law enforcement and/or fire agency.[12] An ECC director should be in an equal position to that of a fire or police chief to fully inform elected

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[11] The recognition that transformation of the 911 system is an essential element in increasing equitable access to wellbeing is what led Transform911 to partner with the Full Frame Initiative (FFI) on this effort. FFI has developed and works with systems and communities to operationalize an evidence-informed framework for wellbeing, which FFI, and by extension this effort, defines as "the set of needs and experiences universally required in combination and balance to weather challenges and have health and hope" (for more information, see www.fullframeinitiative.org). There is a discrete set of these needs and experiences, which all humans are "hardwired" for; they include social connectedness and belonging; safety; stability (predictability and familiarity); influence, purpose, and a correlation between efforts and outcomes; and meaningful access to relevant resources such as food and shelter. While all people are driven to meet their needs in these domains, racism, sexism, and other "otherings" create differential social, contextual, and structural access.

[12] See Transform911: Assessing the Landscape and Identifying New Areas of Action and Inquiry, https://www.transform911.org/resource-hub/transforming-911-report/ for the limited research and discussion related to this recommendation. This is an area in which empirical evaluation is wanting, however. Through the Transform911 workgroup deliberations and data shared from involved practitioners, i.e., the practitioner-based evidence gleaned through the Transform911 workgroup processes, this a reality that has been well established and understood for and among 911 practitioners and leaders nationwide.

officials, governing bodies, and the public without fear of recourse or minimization of legitimate concerns.

Recent examples of ECCs becoming independent include New Orleans, Louisiana, Tucson, Arizona, and Camden, New Jersey. Nashville, Tennessee and the District of Columbia have similarly centralized all emergency communications (i.e., police, fire, and EMS) into an independent agency reporting directly to their respective mayors.

As noted above and documented by Transform911, there is a very limited understanding among community members, researchers, and policymakers of what ECCs do, how they are governed, and their structure. To improve public understanding, and to facilitate Transform911's recommendation for ECCs to be independent and equal to other crisis response agencies, the University of Chicago Health Lab has developed an ECC Exploration dashboard.

For the first time, this tool allows users to estimate what proportion of ECCs are potentially independent, fall under or within existing law enforcement agencies, or operate under a different governance structure for free and in context with related geographic and sociodemographic features. To better understand this landscape and 911 governance within the context of one's own local community, this tool provides users with community demographics and other information about jurisdictions of interest. With this information more readily available, we hope that local leaders, community members, and advocates will better understand their 911 governance and be in a stronger position to implement the Transform911 Blueprint for Change action steps. This would allow for a future in which ECCs are both truly independent and equal to their other public safety counterpart agencies.

This brief provides a methodological overview of the tool and explores key issues related to this critical topic. A link to the dashboard user manual is also provided.

Transform911 ECC Dashboard

The [ECC Dashboard](#) was developed to help communities, practitioners, researchers, and policymakers view, understand, and classify the available information about ECCs across the United States. To this end, we provide various ways to view these data, including a geographical county map, list/spreadsheet format that allows for easier downloading of the data, and a comprehensive view that combines the map and list with aggregated summaries of the data and county-level community demographic information.

Several data sources were used to create this dashboard, including the FCC's 911 Master PSAP Registry.[13] In addition to the FCC's registry, data from the U.S. Department of Homeland Security,[14] U.S. Census Bureau,[15] and the U.S. Department of Agriculture[16,17,18,19] were used to provide geographic and demographic context for each ECC. These data sources are not available in real time (i.e., they are periodically updated). Thus, the dashboard will be maintained and refreshed periodically. We will do our best to update files as new FCC and U.S. Census Bureau data become available.

Currently, no publicly available national information exists to facilitate a greater understanding and appreciation for current ECC structure and governance.[20] By aggregating the available data and presenting these data in user-friendly formats, the dashboard will assist policymakers, ECC leaders, and others to understand patterns of ECC independence across the U.S. The dashboard uses an ECC's name – as provided in the FCC's ECC registry – to estimate whether its governance is independent or falls under the purview of another agency. Specifically, ECCs are classified as being "*Potentially Independent*" if their names do not contain any reference to law

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[13] Public Safety and Homeland Security, "911 Master PSAP Registry."

[14] GeoPlatform ArcGIS Online, *PSAP 911 Service Area Boundaries* (June 7, 2017), distributed by the Geospatial Management Office in the U.S. Department of Homeland Security, https://hifld-geoplatform.opendata.arcgis.com/datasets/geoplatform::psap-911-service-area-boundaries/about.

[15] U.S. Census Bureau, *Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2020 to July 1, 2022* (June 2023), distributed by the U.S. Census Bureau, https://www2.census.gov/programs-surveys/popest/datasets/2020-2022/counties/asrh/.

[16] U.S. Department of Agriculture, *Poverty estimates for the U.S., States, and counties, 2021* (June 16, 2023), distributed by the USDA Economic Research Service, https://www.ers.usda.gov/data-products/county-level-data-sets/county-level-data-sets-download-data/.

[17] U.S. Department of Agriculture, *Unemployment and median household income for the U.S., States, and counties, 2000-22* (June 16, 2023), distributed by the USDA Economic Research Service, https://www.ers.usda.gov/data-products/county-level-data-sets/county-level-data-sets-download-data/.

[18] U.S. Department of Agriculture, *Educational attainment for adults age 25 and older for the U.S., States, and counties, 1970-2021* (Feb. 24, 2023), distributed by the USDA Economic Research Service, https://www.ers.usda.gov/data-products/county-level-data-sets/county-level-data-sets-download-data/.

[19] U.S. Department of Agriculture, *Population estimates for the U.S., States, and counties, 2020-22* (June 16, 2023), distributed by the USDA Economic Research Service, https://www.ers.usda.gov/data-products/county-level-data-sets/county-level-data-sets-download-data/.

[20] NENA does currently offer their own version of a PSAP registry—the Enhanced PSAP Registry and Census dashboard—to PSAP and non-PSAP entities, though they do not make the dashboard available publicly, charge an annual subscription fee, and must approve all user access. See: https://eprc-nena.hub.arcgis.com/pages/nonpsap.

enforcement (e.g., "police", "sheriff", "patrol", "trooper"), fire (e.g., "fire"), or other adjacent keywords (e.g., "EMS").[21] This is an imperfect approach, which reflects the limited categorization methods currently available using the FCC Master PSAP Registry. We encourage users to provide feedback on our methodology and provide any suggested corrections to the model—for individual ECCs or more broadly.[22]

A detailed user guide for the ECC Dashboard tool is available here.

Conclusion

Under current practice, ECCs are often neither independent nor equal to other first response agencies. These centers and their 911 professional leadership require greater autonomy in deciding what the response to a call for service will entail. Currently, ECC staff are tasked with classifying a call, while the partnering response agency (e.g., EMS, fire, police) dictates what the response will be, who will carry it out, and what tools will be used.

While trained 911 professionals have expertise in translating these needs to other agencies, the current system does not leverage the reality that the 911 professional is the first responder most proximate to the emergency, at least until or if help arrives on the scene. The nuance and insights gained during a call, interpreted by a trained 911 professional (see Chapter Five of the Blueprint on Advancing the Workforce), are often essential to ensuring that the right response is deployed at the right time (see Chapter Seven of the Blueprint on Ensuring the Right Response).

Furthermore, EMS, fire, and law enforcement agencies are often understaffed, overtaxed, and responsible for advancing *their* mission, which may be outside the direct scope required to effectively code, triage, and dispatch calls for service. The current practice of tasking these other agencies with the call taking and dispatching functions can introduce additional burdens and divert front-line and executive-level staff members' attention from the core mission for which their agencies are responsible and should be held accountable.

Transform911 therefore envisions a 911 system in which ECCs have greater authority in designing and directing responses. The related recommendation of ECC independence and equality helps meet this objective. 911 professionals have direct access to the information gained on a call and should be empowered to help define and direct the response. The ECC in which the 911 professional works should similarly be empowered to craft and monitor the related policies and governing practices, rather than simply having to follow another agency's operating procedures. This will further allow other first response agencies to redirect their resources currently spent on ECC governance toward the response.

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[21] Please see Appendix A for a complete description of these source words.
[22] Transform911 staff can be reached at: Transform911@uchicago.edu.

Making ECCs independent and equal offers the opportunity to encourage specialization, enhanced prioritization, and progress toward excellence across agencies for mission advancement and alignment. The independence and equality of agencies also allows greater opportunity for the public to better understand the role of each agency, the associated governing practices and structures, and, as such, create more straightforward pathways of achieving full accountability and transparency.

Acknowledgements

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Appendix A

Determining Governance Structure

The FCC updates and releases the ECC Registry periodically as it receives additional information. For further information concerning the FCC's Master ECC/PSAP Registry and carrier reporting requirements, or to notify the Commission of changes to the PSAP Registry, the FCC requests that you please send an email to: fccpsapregistryupdate@fcc.gov.

Full list of keywords used for governance categories:
- **Law Enforcement**
  - "POLICE"
  - "SHERIFF"
  - "SHERIFFS"
  - "SHERIFF'S"
  - "PATROL"
  - "TROOPER"
  - "TROOPERS"
  - "TROOPER'S"
  - "LAW ENFORCEMENT"
- **Fire**
  - "FIRE"
- **EMS**
  - "EMS"
  - "MEDICAL"
  - "EMERGENCY MEDICAL SERVICES"
  - "MED"

Otherwise, if the ECC name did not contain any of the above keywords, it was categorized as "**Potentially Independent**".

Appendix B

ECC Tool User Guide
Note: The full user guide is also available on the [tool](#).

Landing Page

Welcome to the Emergency Communications Center (ECC) Dashboard.
This tool is intended to help practitioners, policy researchers, and analysts better understand the current landscape of ECCs in the United States.

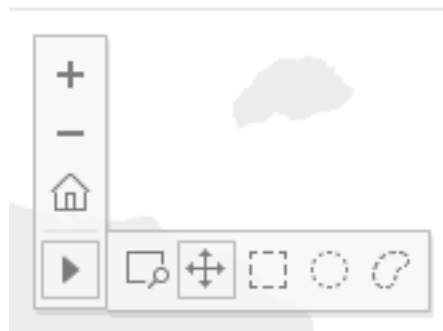To continue using this tool, please select one of the following options below:

Show me everything   I want to see a map   I want to see a list
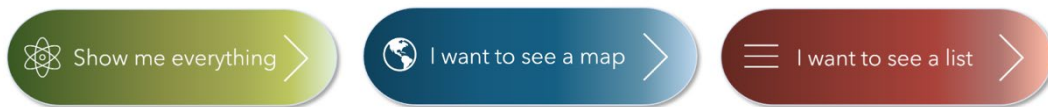
The landing page is where you begin the navigation into the tool. All relevant sources are located at the bottom of the page (not shown here), with links to the respective websites and datasets used to compile the dashboard.

The data are collated into three viewing options – "everything", "map", and "list" – alongside relevant filters and navigation buttons that will allow you to switch back and forth between views:

a. "Everything" will show all available data in the dashboard
b. "Map" will show geographic data on a map
c. "List" will show the ECC data in list form (similar to a spreadsheet)

Filters

There are two sets of filtering options on the tool: **top-row filters** and **additional filters**. The top-row filters are near the top of the screen, and consist of five primary filtering options:

1. State
2. County
3. City
4. Governance (EMS, Fire, Law enforcement, Potentially Independent)[23]
5. ECC Type (unconfirmed primary, secondary, orphaned)

Image: Top-row filters

All of the top-row filters will change depending on your selection. For example, if you select Illinois as a state, all the subsequent counties and cities will change to only those that exist in Illinois. The same applies to the respective ECCs' governance structures and types.

The additional filters are provided to help filter the census data in the tool, and may be accessed by clicking the grey "Show Additional Filters" button on the right-hand side of the screen:

There are four additional filters:
1. Rural/Urban
2. Rural/Urban Continuum – this is a more detailed drill-down of rural and urban that includes metropolitan vs. non-metropolitan areas, with several population level options
3. Total Population (County-level)
4. Median Household Income (County-level)

Image: Additional filters

It is important to note that all census data shown in the tool are **county-level.**

Show me everything (green button, far left)

Welcome to the Emergency Communications Center (ECC) Dashboard.
This tool is intended to help practitioners, policy researchers, and analysts better understand the current landscape of ECCs in the United States.

To continue using this tool, please select one of the following options below:

| Show me everything > | I want to see a map > | I want to see a list > |
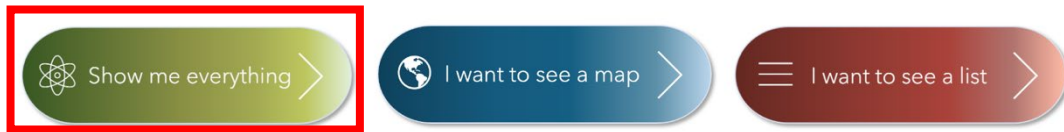
The "show me everything" button takes you to the page shown below. From here you will be able to filter all the data on the screen using the top-row filters, as well as additional filters that are provided to filter the census data.

Map (blue button, middle)

Welcome to the Emergency Communications Center (ECC) Dashboard.
This tool is intended to help practitioners, policy researchers, and analysts better understand the current landscape of ECCs in the United States.

To continue using this tool, please select one of the following options below:

The "I want to see a map" button takes you to a zoomed-out map page as shown below. The map is divided into counties, and clicking on each county will show a tooltip with detailed information about the ECC(s) in that county. You can also hover over any county to see the same tooltip information without clicking.

Use the map controls on the top left-hand portion of the map to zoom in, zoom out, move the map, and select portions of the map:

Image: Map controls

As with the previous section, both the top-line and additional filters may be used to further narrow down the data.

List (red button, far right)

Welcome to the Emergency Communications Center (ECC) Dashboard.
This tool is intended to help practitioners, policy researchers, and analysts better understand the current landscape of ECCs in the United States.
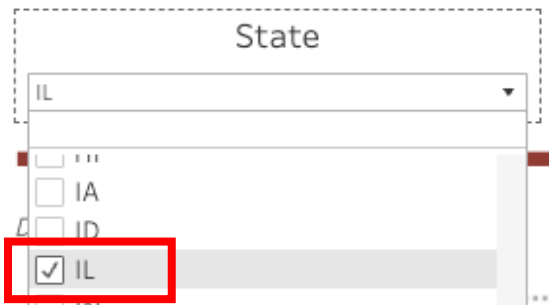
To continue using this tool, please select one of the following options below:
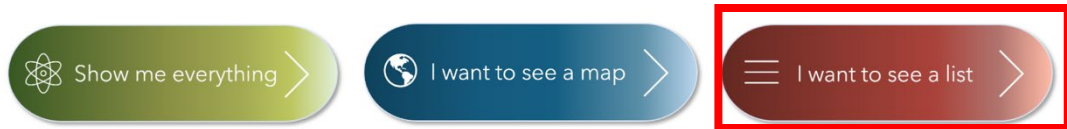

The "I want to see a list" button will take you to a page that contains all the underlying data powering the dashboard, in a "list" or spreadsheet format. All the top-line and additional filters can be used to further narrow down the data.

Example Use Case 1

Example Use Case 1: I want to look at the details of all primary ECCs in Cook County, Illinois

1. Click on the red "List" button on the landing page

Welcome to the Emergency Communications Center (ECC) Dashboard.
This tool is intended to help practitioners, policy researchers, and analysts better understand the current landscape of ECCs in the United States.

To continue using this tool, please select one of the following options below:

Show me everything   I want to see a map   I want to see a list
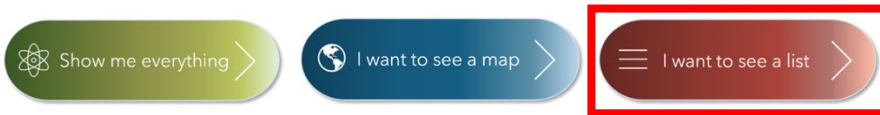
2. Uncheck "All" from the "State" filter dropdown

State

(All)

☑ (All)
☑ AK
☑ AL
☑ AR

3. Scroll down and select "IL"

State

IL

☐ IH
☐ IA
☐ ID
☑ IL
☐ IN

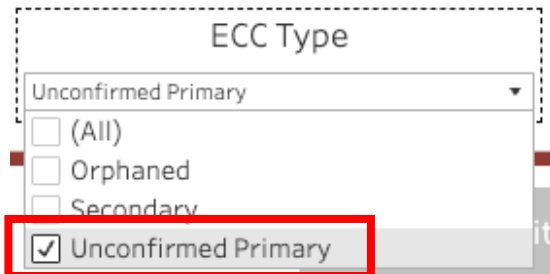4. Uncheck "All" from the "County" filter dropdown
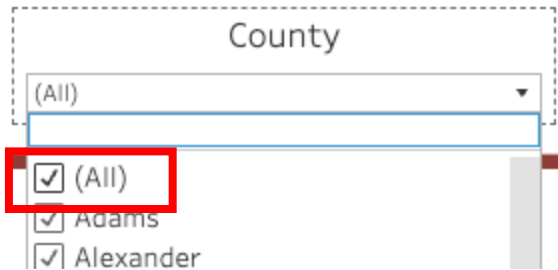
5. Scroll down and select "Cook"
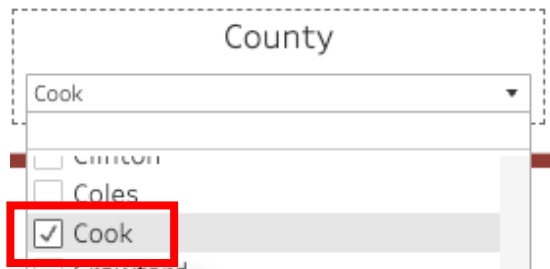
6. Uncheck "All" from the "ECC Type" filter dropdown
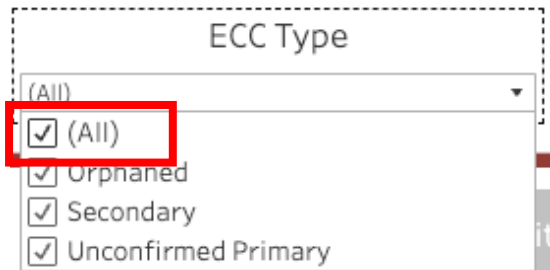
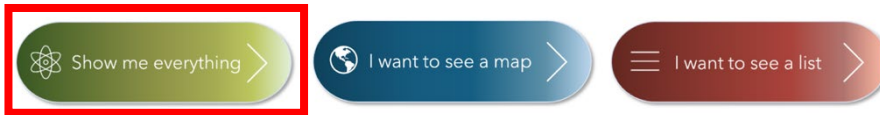7. Scroll down and select "Unconfirmed Primary"

Example Use Case 2

**Example Use Case 2:** I want to look at interesting data about primary ECCs in the United States

1. Click on the green "Show me everything" button

Welcome to the Emergency Communications Center (ECC) Dashboard.
This tool is intended to help practitioners, policy researchers, and analysts better understand the current landscape of ECCs in the United States.
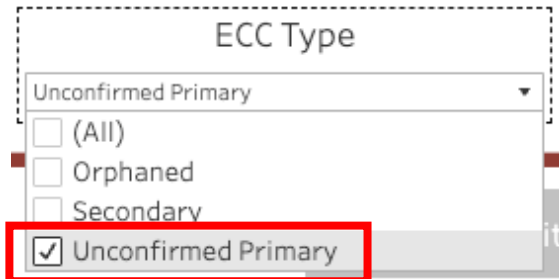
To continue using this tool, please select one of the following options below:

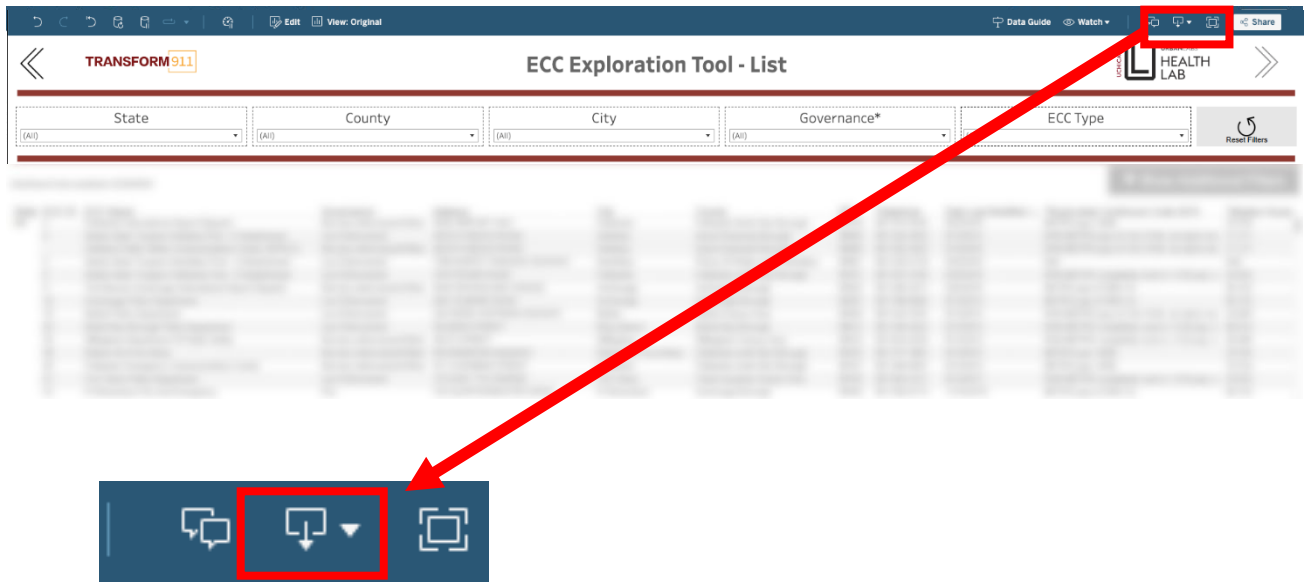

2. Uncheck "All" from the "ECC Type" filter dropdown
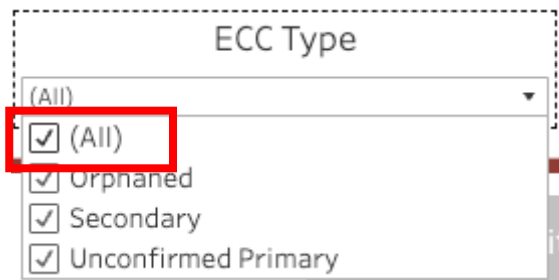

3. Scroll down and select "Unconfirmed Primary"

Downloading the data

All the data contained in this dashboard may be downloaded via the download option on the top right-hand corner of the dashboard:

Steps to download data:
1. Select dashboard view option as "I want to see a list" (note: having the dashboard on this page will produce the best results).
2. Click on the "Choose a format to download" button as shown above.
3. Select "Crosstab"
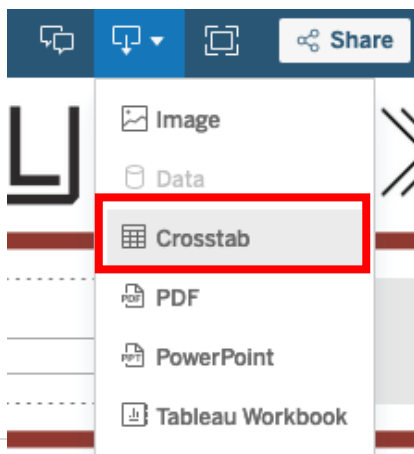
4. Keep "List" selected and click on CSV

5. Once the file downloads, click "Don't Convert" when prompted while opening the file. This ensures that any leading zeroes remain in the data for variables that require it (e.g., zip codes)