Eddie M. Pope, General Counsel
100 Ovilla Oaks Dr., Suite 200, Ovilla, TX 75154
Direct: (512) 689-7815 • empope@telesentient.com

July 11, 2025

Marlene H. Dortch, Secretary
Federal Communications Commission
45 L Street, NE
Washington, DC 20554

RE: Comments in the Commission's Further Notice of Proposed Rule Making (FNPRM)

Dear Honorable Commissioners and Staff,

Attached you will find the Comments of FailSafe Communications in this FNPRM. Due to the somewhat unusual nature of these Comments we are filing them several days early.

By instrument of this letter we request an ex parte forum in order to present a live demonstration of the first system anywhere that identifies callers to 911 and 988 *that cannot get through.*

In a spirit of openness and to further industry dialogue concerning adoption of this lifesaving methodology, we are filing the entire presentation in advance as Exhibit 1 of our Comments. We will of course file an additional ex parte after conclusion of the meeting. We also invite the Commission to open the meeting to other industry participants if they believe this would be helpful and appropriate. There are no secrets here in our desire to save lives and we would value their input.

The inventor of T911™ (former Mayor Leo A. Wrobel) will be in the Washington DC area on July 16, 17, and 18. He embraces the opportunity to meet with any FCC stakeholder with an interest in this subject. There will be no others in attendance other than Mr. Wrobel and his wife but please feel free to invite any FCC Commissioners or Staff with an interest in this presentation. It should take no more than 30 minutes unless extended by your Agency for questions and answers.

Please call me at (512) 689-7815 so we can work out arrangements.

Sincerely

/ S /

Eddie M. Pope

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	§	
	§	
Facilitating Implementation of Next Generation 911 Services (NG911)	§	PS Docket No. 21-479
	§	
	§	
Improving 911 Reliability	§	PS Docket 13-75

COMMENTS OF FAILSAFE COMMUNICATIONS, INC

FailSafe Communications, Inc. ("FailSafe") applauds the Federal Communications Commission's ("FCC" or "Commission") effort to enhance the reliability of Next Generation Core Services ("NGCS" or "NG911"). In support we describe T911™ in these Comments, a companion to NGCS that identifies callers to 911 that cannot get through. As Chairman Carr observed when the Further Notice of Rulemaking was announced in this docket, *"And one of the most important things we can do . . . is to make sure that calls to 911 always go through."*[1]

This Commission noted that today's Public Switched Telephone Network (PSTN) is not only wireless and landline services but many other kinds of Communications Service Providers. (CSPs) Whatever network is used, the act of calling for help is the weak link in the lifesaving capabilities that legacy 911 or NGCS provides. All too often callers do not get through to 911 during mass calling events (e.g. tornadoes, major accidents, mass shootings, wildfires, floods). Despite the millions being spent on NGCS across the nation, *it cannot help 911 callers who do not get through.* That is, until now.

The use of *Intelligent Signaling Networks* is a means to meet the FCC's objectives quickly. It vastly improves reliability standards for 911 while minimizing financial burdens on CSPs. It provides more meaningful alerts for 911 Authorities and Regulators. Most importantly, the data derived from these highly reliable networks is being introduced into the 911/988 ecosystem right now to help unsuccessful callers find help. [2] The trade name for this methodology is **T911.™**

---

1 STATEMENT OF CHAIRMAN BRENDAN CARR (March 27, 2025).

2 Signaling networks have "five nines" reliability, a standard sought by this Commission. See Exhibit 1 Page 7 of 18.

T911™ may render FCC 22-88 alerts from CSPs obsolete. It improves notifications to Emergency Communications Centers (ECCs) by reducing duplication. It pinpoints which CSP is experiencing an outage, reducing "Sympathy Reports" about problems involving unrelated providers. It provides empirical data based on actual callers, rather than estimates derived solely from 22-88 outage reports. It assures that public officials that have the greatest need to know, learn about issues in real time.

The Commission should give consideration to new tools or approaches that provide additional safety to Americans. In giving this Commission additional powers to encourage NG911, Congress expected that it would incorporate advances: *"[s]hould changes in the marketplace or in technology merit, the Committee expects that the Commission will reexamine its regulations as necessary, consistent with the Commission's general authority under Section 1 of the Communications Act of 1934 to promote the 'safety of life and property' through the use of wire and radio communications."*[3] T911™ is exactly the kind of *"technological advancement, [and] ordinary market forces"* that the Committee foresaw.

The second most important issue (behind unsuccessful 911 and 988 callers) is Command and Control. Responsible elected and public officials who coordinate recovery efforts during disasters need a lot more than estimates by CSPs based solely on carrier outage information. Under the present rules, the Alerts and Reports provided to public officials and ECCs lack completeness because there is little or no visibility to what is going on in the PSTN. Responders and officials never know who, when, where, or how many have been blocked from getting the help they need.

With the exception of the 22-88 Alerts mandated by this Commission, NGCS is blind to callers who try but cannot reach help.[4] As the terrible floods in Texas this past week illustrate, these are oftentimes the people who need help most. During the tragic fire in Lahaina Hawaii, 4500 calls to 911 were answered in one day. In actuality, our direct (proprietary) observation revealed *tens of thousands* of unsuccessful 911 *call attempts* that day and in those following the fire.[5] As a former Mayor, our founder can attest personally that the most frustrating issues facing elected officials during disasters are (1) incomplete information, and, (2) being the last one to know. This is generating support for T911™ from other elected officials. Consider the resolution illustrated in Exhibit 1 Page 14 of 18.

3 H.R. Rep. No.110–442, at 13 (Nov. 13, 2007), and FPNRM, Footnote 203.

4 One need only to look at the June 2024 statewide failure of 911 in Massachusetts, where public officials were forced to air non-emergency numbers on television at the spur of the moment, and ask people to walk into a fire station to report fires.

5 Exhibit 1 Page 11 of 18 is a redacted version of this data. Numerous redundant paths existed for signaling network messages during the tragic Lahaina fire that could have identified unsuccessful 911 callers.

Regarding the CSPs, some of them actually like this idea. First, T911™ does not compete with them. They can actually license and resell it. Second, it does not create new financial burdens because it uses systems already in place. The same signaling systems used to complete billions of calls every day are re-purposed by T911™ to automatically trigger alerts. Third, T911™ allows use of live calling data derived from actual 911 and 988 callers, rather than estimates derived solely from CSP reports. It takes some of the spotlight off CSPs for reporting (and potential fines) while it provides automation and higher quality data based on actual callers. Finally, it's available nationwide. Any CSP, elected or public official, regulator, or 911/988 entity can dial **1 202-920-9008** right now to see it work or request a private demonstration. The Comments that follow describe how T911™ makes NGCS and Legacy 911 more resilient, assuages CSP liability concerns, begets more meaningful Alerts, and saves lives.

Possible 911 / 988 Outage in Your Area

You are receiving this **Alert** because the TeleSentient® system has detected a possible service-affecting outage in your area. Like the "Check Engine" light on your car, these indications merit further investigation by your company.

If your organization is a TeleSentient® licensee, please consult the outage detail report that was sent to it minutes ago. If you are not a current licensee call 1 **(214) 214-SAFE** for further instructions, or visit www.failsafecommunications.com to sign up.

* THIS IS A TIME-SENSITIVE NOTIFICATION. Pursuant to regulations by the Federal Communications Commission your organization is required to report outages that affect 911 and 988 services within 30 minutes.
Failure to report these outages may result in significant fines or other sanctions to your company. If you are not sure what to do, please forward this Alert to your legal and regulatory department immediately.

FailSafe Communications Inc.
"Because Lives Are On The Line"™

Email Alerts like the one above are not only helpful to NGCS and Legacy 911 providers. They can also serve as the proverbial "canary in the coal mine" to alert CSP management, technicians and regulatory departments about problems the instant they begin for faster and more efficient response.

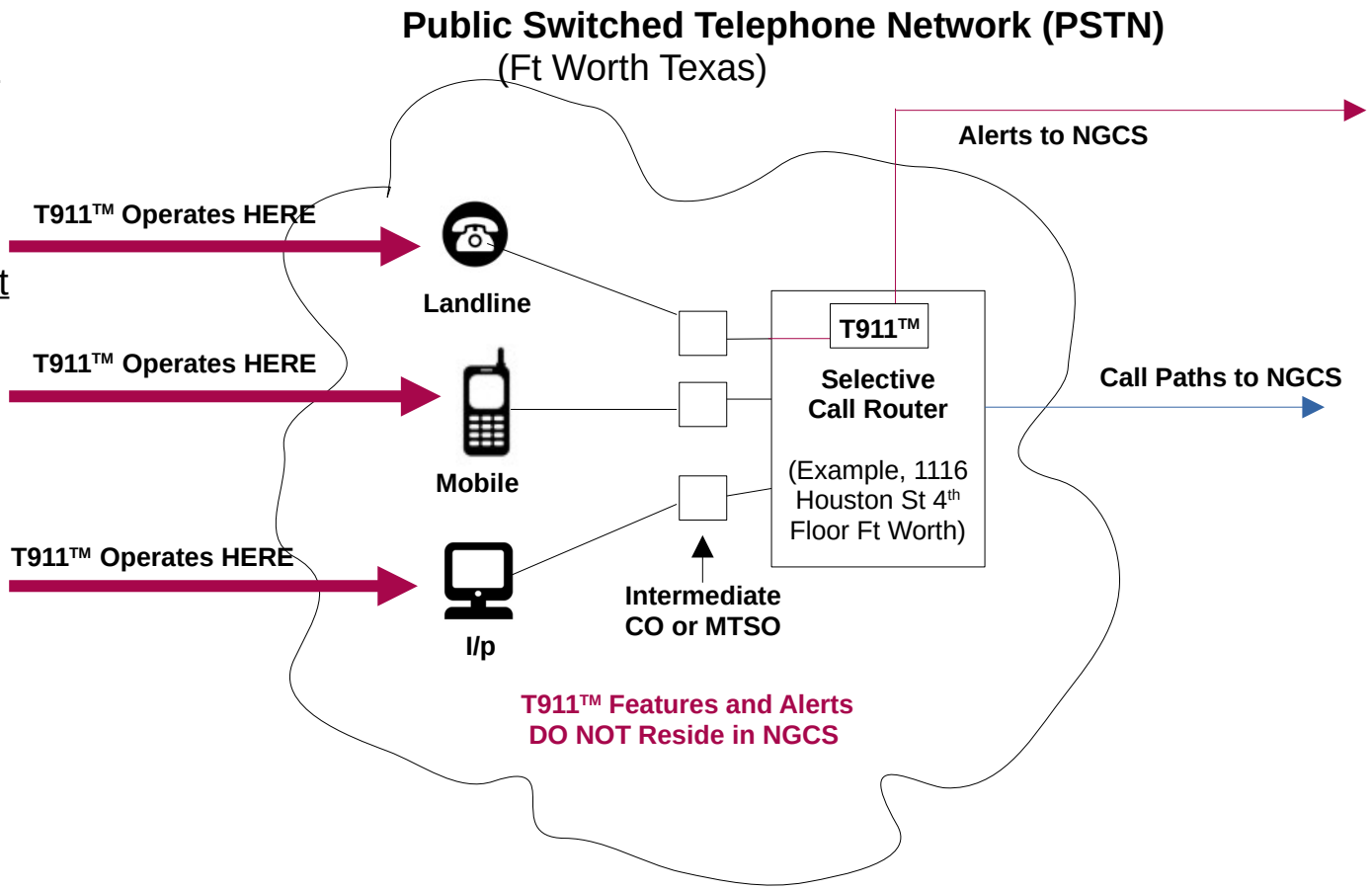
NGCS Cannot See Unsuccessful Callers

Visibility to unsuccessful 911 callers. This is a capability that NGCS presently lacks.

The present NGCS depends on callers actually reaching it to issue alerts.

The present NGCS depends on the "honor system" by carriers for 22-88 outage reports.

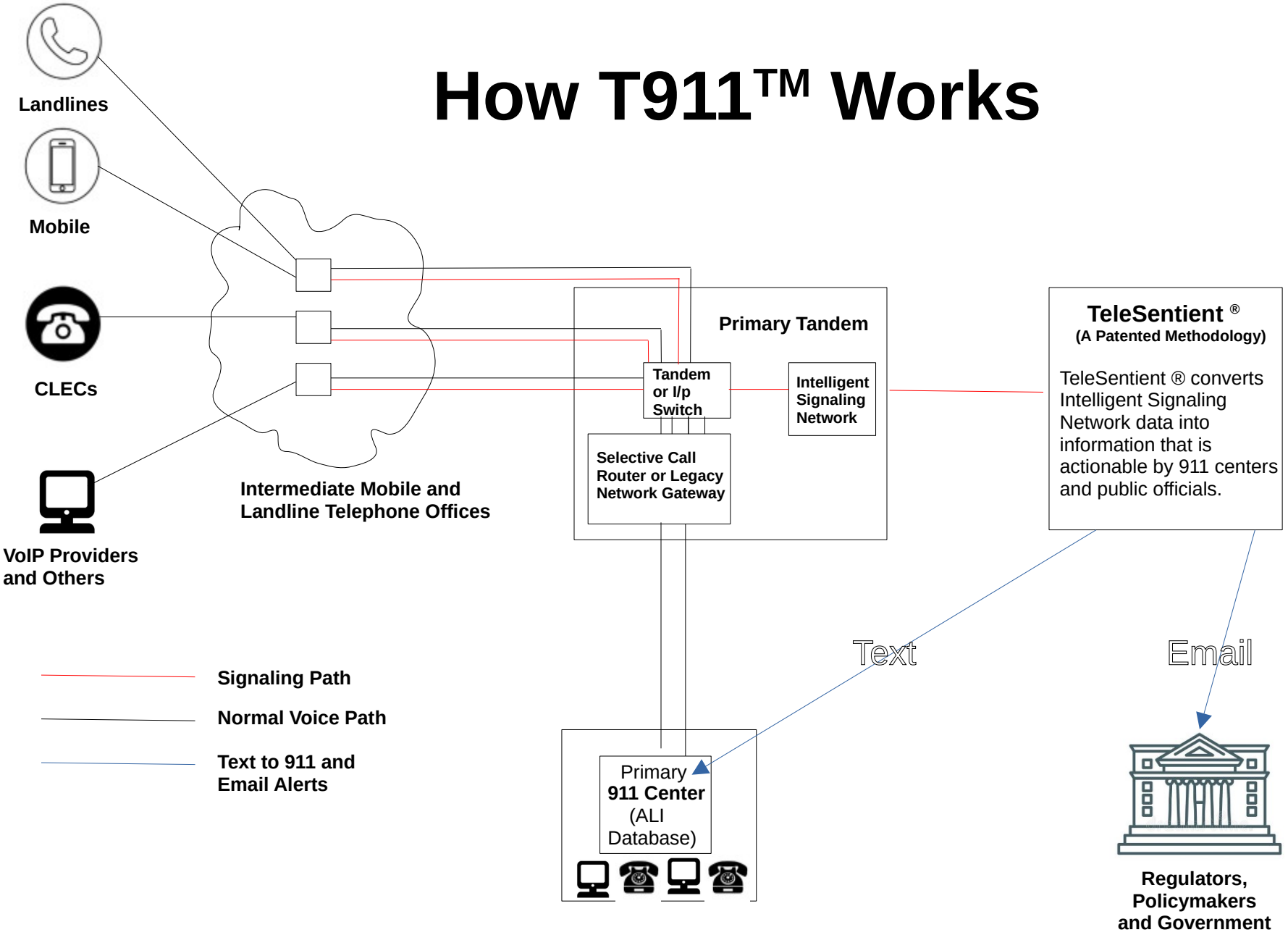
T911™ allows Responders and Officials to see what is occurring in the PSTN first hand.



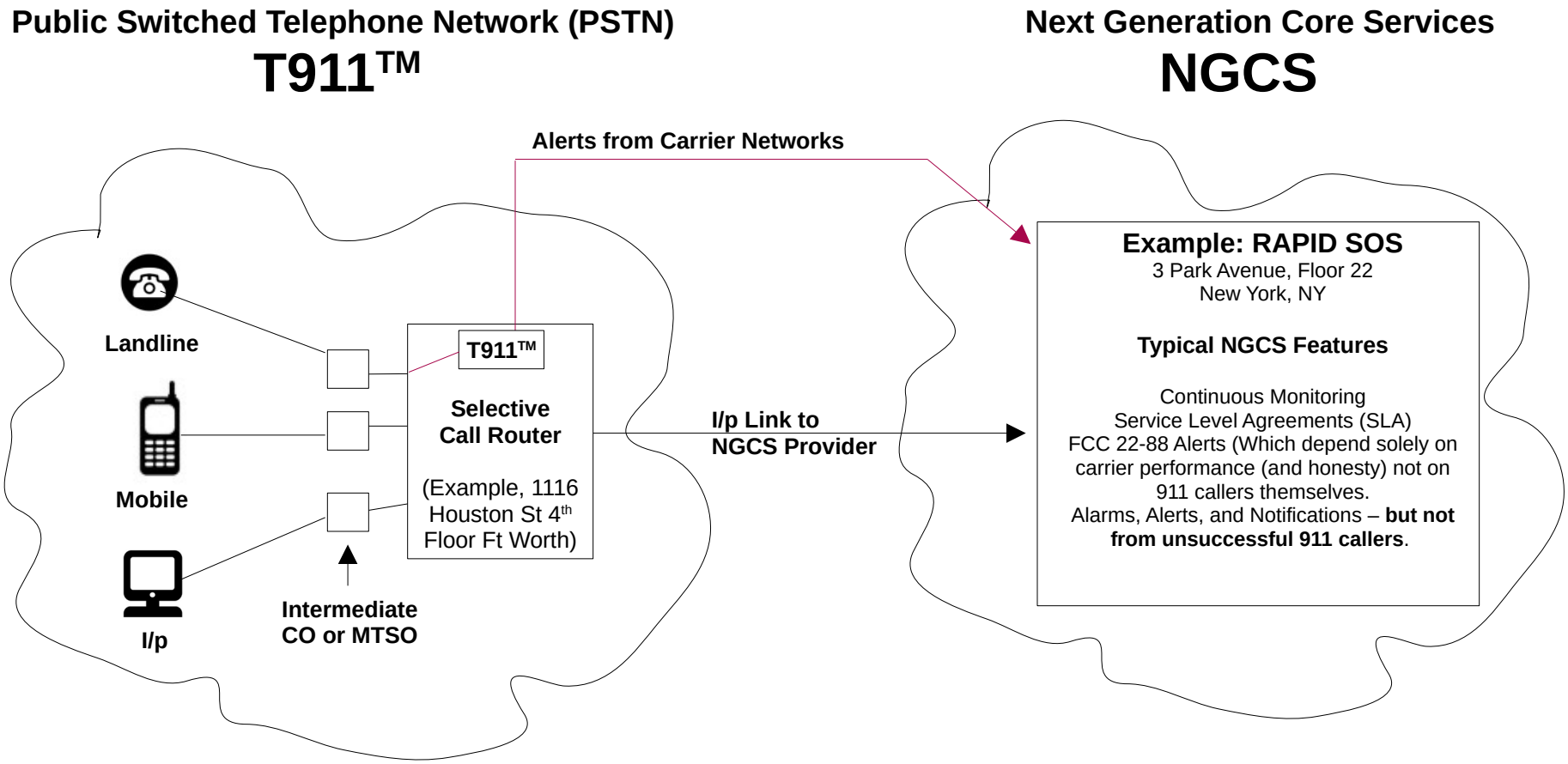
Important: Alerts about unsuccessful callers to 911 depend solely on callers getting through to NGCS.

FailSafe Communications Inc.
"Because Lives Are On The Line"™

How T911™ Works



A Companion to NGCS / Next Gen 911



T911™ resides in the phone networks, not the NGCS provider. (T911™ Alerts depend on signaling data based on actual failed calls)

NO OVERLAP OR DUPLICATION

NGCS Alerts depend solely on completed calls. (Service Provider Alerts depend on estimates, alertness, and honesty)

FailSafe Communications Inc.
"Because Lives Are On The Line"™

Reports, Alerts, and Reliability in a Multi-Vendor 911 Environment

NGCS allows digital information (voice, photos, videos, text messages) to flow seamlessly from the public. The Commission has supported the development of this advancement in public safety. Even the most ardent supporter of NGCS however must admit that the roll-out has not been seamless. This is why the Commission seeks *"five nines"* availability in 911 systems. Five nines is a term used in a variety of complex systems to determine reliability. It describes a system that is available 99.999% of the time." [6] Achieving this goal in the NGCS environment will require some time, as well as the full efforts of the Commission and all industry stakeholders. T911™ will expedite this goal because Intelligent Signaling Networks and T911™ already boast this level of reliability.

T911™ is immune to the most common causes of "Sunny Day Outages" because it is diverse from both NGCS and the "talk paths" of CSP networks. For example, during the Massachusetts 911 failure last June, T911™ operated when other systems failed. In a live test while the outage was still going on, some Massachusetts users were instructed by us to dial a T911™ number. Those callers generated text Alerts to us and received confirmation texts back from us. We received email alerts that contained the information for the caller and a summary report each time more than five dialed the number. The root cause of the statewide outage was a firewall engineered into the "talk path," a human error. Since T911™ uses a diverse signaling network it was not affected. Other examples of where T911™ would have mitigated major 911 outages are contained in Exhibit 1 and in the remainder of these Comments.

In 2014, this Commission first introduced concepts such as dynamic routing, load balancing, automatic re-routing, and geographic facility diversity as best practices for I/p networks. These are all features integrated into Intelligent Signaling Networks over 30 years ago following a signaling network outage in 1990 that blocked 65 million calls! History repeats itself, but this time with I/p networks.

We offer T911™ to the NGCS environment as the next step in this Commission's efforts. The cost is manageable because CSPs have employed signaling networks for over 30 years that do the job. It provides interoperability between different kinds of NGCS systems. Although the signaling systems used by CSPs may differ, they are all compatible with each other through long-established methods of conversion. Otherwise a wireless phone would literally not be able to call a land line!

It is not every day that an opportunity presents itself like T911™ which offers a host of benefits at a manageable cost and with ease of deployment. Some of the benefits include:

6 FPNRM, Footnote 121.

- The ability to “See” unsuccessful callers to NGCS in real time based on actual calls.
- A text alert sent directly to a 911 caller when 911 services are temporarily not available, in order to assure them that their call has been seen and help is forthcoming. [7]
- Real-time reports to public officials so they are never last to know.
- Better and more empirical real-time information allowing citizens to make alternative decisions and ECCs to be more aware of issues directly affecting 911 callers.
- Real-time data that can be integrated into NGCS alert systems to allow 911 managers and public officials to make real-time decisions, and feed alerts to crisis teams.
- Valuable historical information about actual 911 callers (not just CSP reports) for use in after action meetings following major outages.
- Real-time data about which areas are down - useful before reciprocal aid agreements are invoked since the backup 911 center may be down too!
- Carrier Alerts to 911 / 988 centers that are based on empirical data from actual callers, which avoids unnecessary and duplicative “sympathy reports” cited by this Commission whereby Service Providers report problems of other carriers. Using T911™ a Service Provider can immediately determine whether the problem is theirs or not.
- Executive Alerts to legal and regulatory personnel for faster FCC alerts. The FCC and State Commissions are invited to sign up for the reports, as well as CSP Legal Departments.

The Commission’s Interoperability Objectives for NGCS

Landline, 4G, 5G, Diameter, CDMA, I/p… Among all of these technologies there is really only one standard that represents true interoperability between CSPs and ESInets and that is the Intelligent Signaling Network. T911™ contributes to the goal of interoperability between systems by focusing on the only true universal standard in the production of 911 Alerts.

911 Consolidation and Multi Vendor Environments Impact on NGCS

Given the capabilities of the Intelligent Signaling Network to identify specific CSPs, we generally agree with the Commission’s conclusions concerning CSPs that aggregate or consolidate 911 traffic. T911™ may be useful to identify service providers in these situations. Intelligent Signaling Network “point codes”and other data can be used in many cases to identify specific CSPs.

7 Dial **1(202) 920-9008** from your wireless phone to see a sample of this Alert. The Alert can be customized.

Historical Precedent Meets Future Opportunity

There is a historical precedent to justify T911.™ Note the similarities between T911™ and **E**911. (See Exhibit 1 Page 5 of 18) In 2003, this Commission mandated Automatic Number Identification (ANI) information must be sent by CSPs to the 911 center. At that point ANI was (and still is) correlated by the 911 center with ALI (Automatic Location Identification), a database that has more detailed caller information. ANI was used by CSPs for years before E911 came along. It was used to identify wire centers and to bill calls. ANI eventually moved out of the phone company and into 911 by order of this Commission. T911™ may employ a similar process to revolutionize the industry just like E911 did. During conversions from legacy to NGCS environments, T911™ offers a lifeline to 911 and 988 callers in times when NGCS or legacy systems cannot help them.[8] Like E911, T911™ is not even a "service" as such. We sell licenses to any public or elected official, 911 agency, or NGCS vendor. Like ANI and ALI, T911™ is a *supplement* to NGCS to turn data from phone networks into actionable Alerts. The *licensee* determines when and which Alerts are issued for elected officials and other recipients, as well as exactly how T911™ integrates into *their specific* NGCS.

Web Portal and Future Applications for T911™

Imagine a national weather service radar map that shows 911 callers, including unsuccessful attempts. See Exhibit 1 Page 12 of 18. In this FNPRM the Commission asked for comment as to whether it should establish a dedicated consumer portal or website to improve the Commission's ability to identify risks to NG911 reliability, while empowering consumers to play a more active role in public safety. The Commission invited input on the benefits of such a proposal and how it could complement existing reporting mechanisms. We think this is a great idea.

This Commission is obviously aware of websites such as downdetector.com. T911™ could populate such a site in real time based on actual calling patterns and outages. Commission Staff will recall that we mapped signaling network data over a severe weather warning by the Pacific Disaster Center (PDC) last year because we filed it here. What the FCC is asking about is clearly possible to do and the PDC would embrace the opportunity. If this Commission decided to pursue such an effort we could re-introduce it to the PDC where we would provide a T911™ test number for an extended trial. [9]

8 The "T" in T911™ stands for TeleSentient,™ a trade name for this lifesaving and patented methodology.

9 The PDC is a $50 million federally funded platform based in Hawaii so part of this effort may already be funded. Note also that Honolulu also experienced a widespread 911 outage last December.

Why We Believe The Commission Should Endorse T911™

In 2018, the Public Safety and Homeland Security Bureau (Bureau) issued a public notice seeking comment on the effectiveness of the 911 reliability rules. The Bureau received comments from industry, government, and the public safety communities. It subsequently disseminated lessons learned from major network outages. Based on the Bureau's analysis, staff determined that a large spate of network outages affecting 911 could have been likely prevented or mitigated by employing certain network reliability best practices.[10]

In 2019, the Communications Security Reliability and Interoperability Council (CSRIC) issued a report in CSRIC VI that recommended numerous reliability and resiliency improvements for both Legacy and Next Generation 911. These included the ability to monitor for events resulting in loss of service, to improve call delivery, to enhance location and callback information, to incorporate outage detection tools, and to collaborate between stakeholders. [11] In particular CSRIC VI recommended that:

(1) "Service Providers consider incorporating network detection tools, as appropriate, to assist network operations in detecting or deterring threats to 9-1-1 before they reach the ESInet perimeter," and,

(2) "Service Providers and other stakeholders work together to ensure that the system monitoring information that is needed to mitigate risks, monitor elements of the NG9-1-1 infrastructure and identify 9-1-1 outages is shared between providers and that the information is available to stakeholders when needed." (Emphasis Added)

In November 2022 the Commission strengthened reporting requirements based on the best method available at that time, which was carrier outage reports. All of these actions took place before the before the advent of T911.™ Today T911™ is available to CSPs and ECCs to dramatically change the face of outage reporting and public safety. In fact, in July 2024, when this Commission adopted the *NG911 Transition Order*, it also noted the fact that some commenters had urged it to consider specific reliability and interoperability requirements. While the Commission deferred consideration of these issues at that time, it recognized that some warranted further scrutiny.[12] We like to believe we may have been part of that comment.

---

10 See Public Safety and Homeland Security Bureau Encourages Communications Service Providers to Follow Best Practices to Help Ensure Network Reliability, Public Notice, 33 FCC Rcd 3776, 3776 (PSHSB 2018)

11 Working Group 1 also assessed the use of tools for Network Monitoring/Reporting to address the FCC's question: "Are there tools commercially available that can detect or deter to mitigate an outage?" CSRIC VI, WG1 Report at 70.

12 Notice of Ex Parte Letter, PS Docket No. 15-80, PS Docket No. 13-75 and ET Docket No. 04-35

Since this Commission adopted 911 reliability rules for CSPs in 2013, there have been many more outages affecting 911. These have often affected multi-state regions due to the industry practice of aggregating traffic from widespread areas and then transporting it to geographically distant locations. The FNPRM repeatedly stresses the need for adequate operating and security standards to protect these critical choke points. We agree that the industry needs standards and practices that are reflective of these changes and consolidations. Here is one good reason why. In this Commission's proposed rules the following statements were made.

> *"Some of these recent 911 outages have exposed possible gaps in the coverage of the existing 911 reliability rules applicable to CSPs. The current rules relating to "critical 911 circuits" require CSPs to certify whether they have eliminated all single points of failure between the selective router, ALI/ANI databases, or equivalent NG911 components, and the central office serving each PSAP. However, in some of the multistate outages noted above, the vulnerabilities contributing to the outage were found to exist at points in the 911 call flow downstream from the OSP (which is already required under § 9.4, 9.10, or 9.11 to transmit all 911 calls to PSAPs) but upstream from either the selective router in legacy 911 environments or the ESInet in transitional or NG911 environments. In many cases, those points are operated by third parties that transport 911 traffic over high-capacity fiber from OSP networks to the ESInets that directly serve PSAPs. In other cases, OSPs segregate their 911 traffic and hand it off to 911 aggregation services, which deliver 911 traffic consolidated from multiple OSPs to PSAPs and ESInets. When these transport and aggregation components fail, they can interrupt 911 call flow to many PSAPs. Yet, because these components do not deliver calls directly to PSAPs at the local level, providers can argue that the components fall outside of the scope of the current reliability rules, particularly in the NG911 environment. We therefore believe Commission action is needed to address the reliability of these critical facilities in NG911 ecosystems. We seek comment on this analysis."*[13]

The biggest "gaps" concerning 911 outages are addressed in this single statement. When considered in the context of what T911™ provides:

- Every provider is "upstream" from the NGCS provider in numerous different legacy or I/p environments
- Every provider is an independent third party.
- Every provider may or may not further aggregate their traffic via other subcontracting carriers before sending it to the NGCS provider.

13 FNPRM page 23773 as published in the Federal Register.

- Every provider may, or may not, deliver calls directly to the NGCS provider. There is no way to be sure if they are aggregating or consolidating their traffic.
- The NGCS provider is blind to activity in the many diverse networks that serve these providers.
- One thing is certain. In times of trouble or enforcement action the finger pointing between providers is rampant.
- Do we believe "*Commission action is needed to address the reliability of these critical facilities in NG911 ecosystems"*? The answer is YES.

Here is what the Commission can do now to rectify many of these issues. Once again it comes down to T911™ and looking at the Intelligent Signaling Network data. In addition to spotting "gaps" in coverage by providing visibility to the actual caller data in real time, the following is also possible:

- Eliminate single points of failure by offering a means for callers to alert authorities even if everything else fails.
- Intelligent Signaling Network triggers by unsuccessful 911 callers generate texts and emails. The texts in turn trigger the same ALI database as if the customer texted or called directly. The emails will assure that persons responsible for the public welfare know about issues as soon as they begin.
- It does not matter whether the 911 center is NGCS or Legacy 911. Signaling data is agnostic and works in either system.
- The high capacity fiber systems used for consolidated call traffic operate independently of signaling networks. Diversity is engineered into the system.
- Even if an OC- 48 facility failed (never mind an OC-3) a single T1 circuit in the signaling network is enough capacity to handle ALL of the alerts in text format.
- Consider Diagram 1 Page 6 of 18. Note that the voice network pictured at the bottom is completely independent of the signaling network. The signaling network in turn is a mesh configuration where each individual link (per established standards) is engineered at only 40% capacity. This is so any link can take over for any other failed link.
- Also note that each message indicating a failed caller contains less than 40 bytes of data. This is why when Intelligent Signaling Network data is converted to T911™ alerts it takes only a tiny fraction of the capacity needed for voice calls. That tiny morsel though is enough to send an "SOS" to responders with the caller's information.

- This is also why texts could have easily been sent to 911 operators in Lahaina during the fire. The Intelligent Signaling Networks would have diverted signaling messages to Honolulu, San Francisco, or for that matter Singapore (worldwide standard) and still generated an SOS to 911 authorities in Maui.
- The text back to the caller (on the same SMS network) could have assuaged his or her concerns and helped reduce the repeated call attempts that further contributed to the whole Lahaina emergency situation.
- Signaling messages contain point codes that assist in identifying the carrier(s) experiencing the problem. This avoids the "Sympathy Reports" cited by this Commission and helps the CSPs avoid chasing another carrier's trouble.[14]

When the Commission adopted the 911 reliability rules for CSPs, it committed itself to review the rules in the future *''to determine whether those rules are still technologically appropriate, adequate, and necessary to ensure reliability and resiliency of 911."* We believe the Comments in this section further justify why T911™ should be a nationwide standard, or at least offered as a means to show "presumptive reliability" and "reasonable reliability compliance expectations" as defined by this Commission.[15]

The Commission cited many outages in the FNPRM. Without question, T911™ would have allowed callers in almost all of the 911 outages the Commission cited to reach help. In each of these outages, even though voice calls were not possible, the *Intelligent Signaling Network* still worked and could have been the lifeline. [16] We realize bold claims require detailed proof. The following Comments describe the methodology we encourage the Commission to adopt for a safer America.

(1) First, in each case cited by the Commission in the FNPRM it's important to understand that it was the 911 system and network responsible for terminating the 911 calls that was down.

14 Based on the FNPRM, the Commission noted "Based on the data available in NORS, there have been at least 92 reported ''sympathetic,'' multistate outages in 2024 alone.

15 2014 Reliability NPRM, 29 FCC Rcd at 14223–24, para. 37 (['']W]e seek to ensure that the Commission remains equipped, consistent with its statutory mandates and existing legal authority, with the proper regulatory tools to enforce continued and clear lines of accountability for reliable 911 call completion, including as the nation transitions to an IP-based NG911 architecture.''). The Commission noted, for example, the April 2014 multistate 911 outage resulted from a software coding error that disrupted routing of 911 calls and inadequate alarm management, which resulted in ''significant delays in determining the software fault and restoring 911 service to full functionality.'' 2014 Reliability NPRM, 29 FCC Rcd at 14226, para. 43, citing 2014 Multistate Outage Report at 3.

16 As an example, we were in Hawaii the second day of the "North Korean Missile Scare". Those that we interviewed reported that no calls got through statewide for a period of approximately 6 hours. However, text worked the entire time because it utilizes the Intelligent Signaling Network.

(2) All of the originating users trying to call were still out there calling, using their respective providers. (Unless of course it was their primary carrier that was down.)

(3) All *other* landline, wireless, and VoIP CSPs were still generating requests over the Signaling Network directed to the affected CSP and attempting to connect their customers to 911.

(4) The unaffected CSPs either received Signaling Network messages back that the affected CSP could not accept their call, or the call simply failed. The originating customer received a busy signal or recording as a result.

Here is how the originating caller could have received help:

(5) In each and every case described, the originating CSP still received a Signaling Network message of the failed calls.

(6) Signaling Messages contain the caller's phone number.

(7) If the affected CSP had set up hunting in advance to T911™ the originating CSP would have sent a Signaling Network Message to T911™ when the primary path was down. The message would ask if T911™ could accept the call.

(8) We always answer no. But now we know who *tried to call.*

(9) We convert these Signaling Network requests to an actionable ALERTS. We send those ALERTS to both the 911 center and to designated elected and public officials.

(10) We send a text message (via the Signaling Network) BACK to the unsuccessful caller so the 911 caller understands that responders know they need help.

(11) When we send the text to the 911 center, it triggers the same ALI database as if that citizen had called or texted directly. It is handled per normal procedures.

(12) Bottom Line: Everyone stays informed. That means CSPs, 911 Centers, Elected / Public Officials, Federal and State Regulators, and most important, the unsuccessful caller.

Elected, Public and CSP Officials can sign up immediately and have several options:

Option 1: A 10 digit backup number (for example on a water bill) that callers dial when 911 is unavailable. This avoids issues like the ones experienced in Massachusetts last year when officials had to broadcast new numbers on TV during the statewide failure. The alternate number generates texts and reports described above. Convenient methods can be used for constituents such as the refrigerator magnet below. A better option is to make the transfer "automatic" as described below in Option 2.

Option 2: Direct transfer from 911. By adding a simple call hunting option available from any CSP, a Public Official can make the whole process automatic. In this case call hunting is added to the last line of the 911 center's inbound trunk group. When all lines to the 911 center are busy or out of service, inbound callers automatically roll over to the secondary T911™ number. No call is set up. We turn the Signaling Network messages into actionable Alerts and send them to those most responsible for public well-being.

Cost vs Benefit

This Commission has requested input in the FNPRM on cost. It's all pretty simple.

- Executive / Elected Official Reports Only: $599 billed monthly (major credit card)
- Small CSPs up to 5000 subscribers: $699 per month billed annually (major credit card)
- CSPs Over 5000 Lines: ICB[17] (Individual Case Basis)
- Municipalities and 911 Districts Over 5000 Lines: ICB

Summary and Conclusions

As the migration to Next Generation 911 continues, an often rocky transition can expose life threatening vulnerabilities. NGCS stands to gain many unrealized benefits at little to no cost to CSPs, including the ability to help callers when adverse conditions in the PSTN could cost lives.

FailSafe has been an open book at this Commission and across the country for the past two years by openly displaying our methodology and by setting up live demonstrations for industry, government, and regulatory officials who share our desire to improve emergency services and save lives. We congratulate the Federal Communications Commission for over a decade of leadership in fostering a safer America. We invite your questions in the spirit of the great Nikola Tesla:

> *"The Scientific man does not aim at an immediate result…*
> *His duty is to lay the foundation for those who are to come,*
> *and point the way."*

Respectfully,

Leo A. Wrobel
Chairman and Founder
FailSafe Communications Inc.
Inventor of T911™

17 Pricing on ICBs for both CSPs and Public Officials begins at $1.00 per month set up fee and then $0.10 per resident or subscriber. Volume discounts and reseller agreements are available.

Exhibit 1 (18 Pages)

FailSafe Communications Inc.

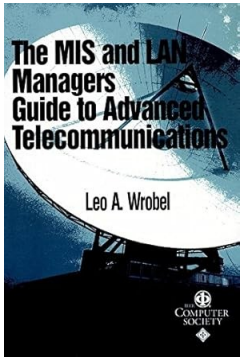
"Because Lives Are On The Line" ™

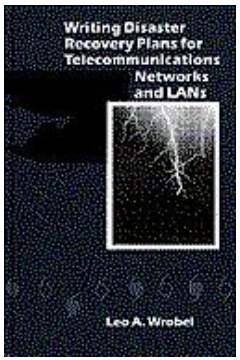
History and General Overview of
TeleSentient® and T911™
for Licensees and Resellers

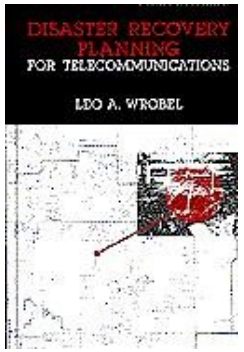
Non-Confidential Version
January 1, 2025

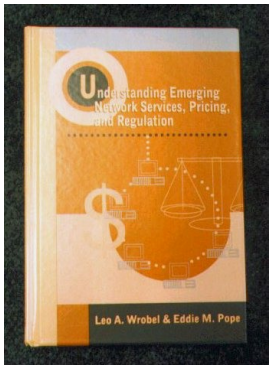
About The Inventor

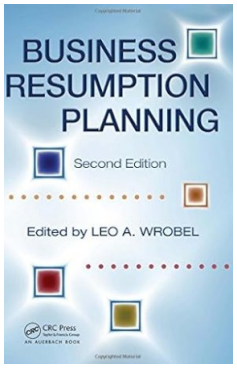
- Recognized Worldwide as Disaster Recovery Expert Since 1986
- Built the First Disaster Recovery Center in a Telephone Office
- First in Texas to run phone calls over a Cable TV System
- 12 Books, 1600 Articles, 30,000 Seminar Attendees Worldwide
- Wrote Disaster Plans for some 100 Fortune Companies
- Former Mayor and City Councilman











Detailed biography at www.leowrobel.com

Our Purpose, Mission, and Team

On November 22, 2022 the FCC enacted Order FCC 22-88, the biggest change in federal law governing 911 services in 20 years.

Our Team formed in January 2023 to help carriers comply with these federal laws.

T911™ is an outgrowth of our efforts on behalf of telecommunications carriers.

Since April 2024 we have been demonstrating T911™ to regulators and industry due to our methodology's life-saving potential.

It Boils Down to Two Questions:

1. **If Someone Dials 911 But Does Not Get Through, Does It Matter?**

2. **Should Public Officials Know Before Channel 4 Knows?**

We Are Here Today Because Concerned Public Officials Have Answered “Yes” to Both Questions

The “Next New Thing” in 911

911 service began in 1968 with the first three-digit emergency call.

E911 was mandated by the FCC in 2003 as the next step, which passed the phone number to the 911 center in order to aid in location of the caller. (Can anyone even *imagine* 911 calls today without this capability?)

T911™ is the next logical step. It is used to identify people who call 911 but do not get through during carrier failures, or mass calling events triggered by weather, accidents, school shootings, or other causes.

We convert the *Intelligent Signaling Network* data that accompanies every wireless, landline and I/p call into *actionable 911 alerts.*

Here is how:

For Verbal Discussion in Ex Parte

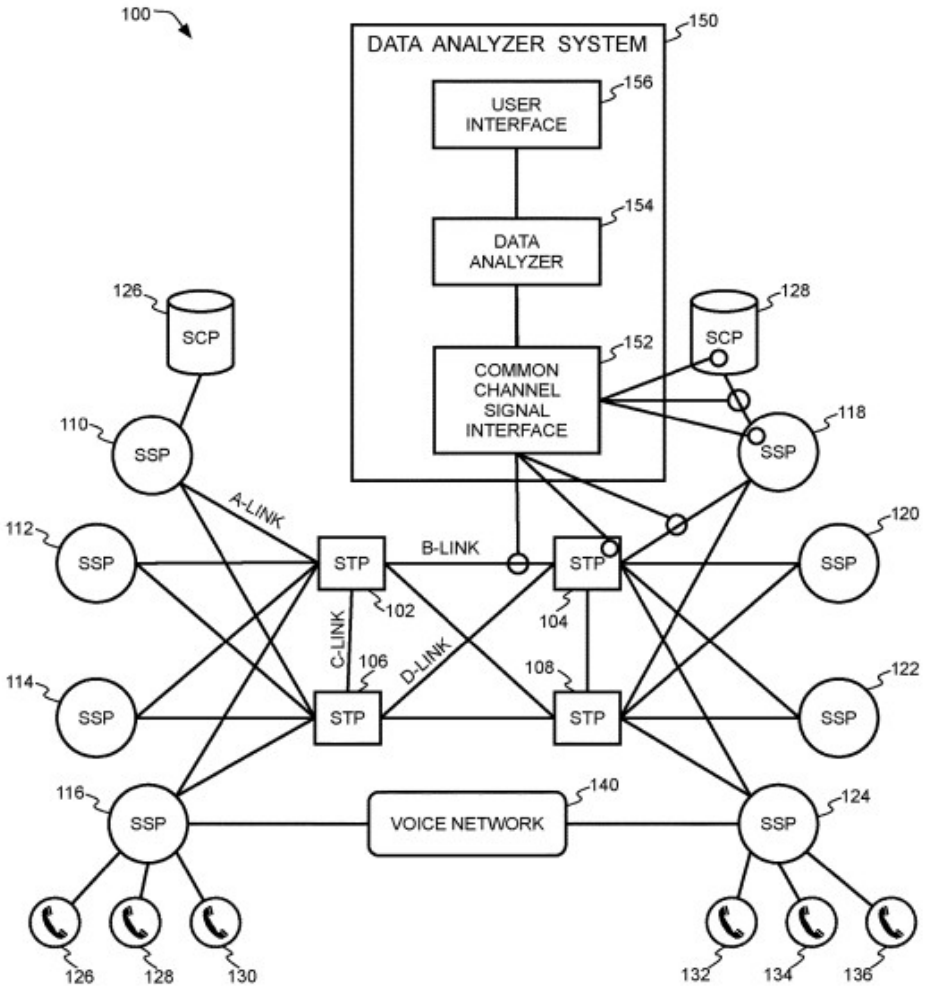


Fig. 1

“Five Nines” Reliability

Hosted I/p Services

“Three Nines” availability or 99.9% is the industry standard for many web hosted services.

This translates to over 8 hours of outage per year.

A “Four Nines” 99.99% up-time percentage is still almost an hour of downtime per year.

Carrier-Grade Signaling Networks

Carrier Signaling Networks meet **“Five Nines”** or 99.999% availability.

"Five Nines" equates to only 5.26 minutes of downtime per year.

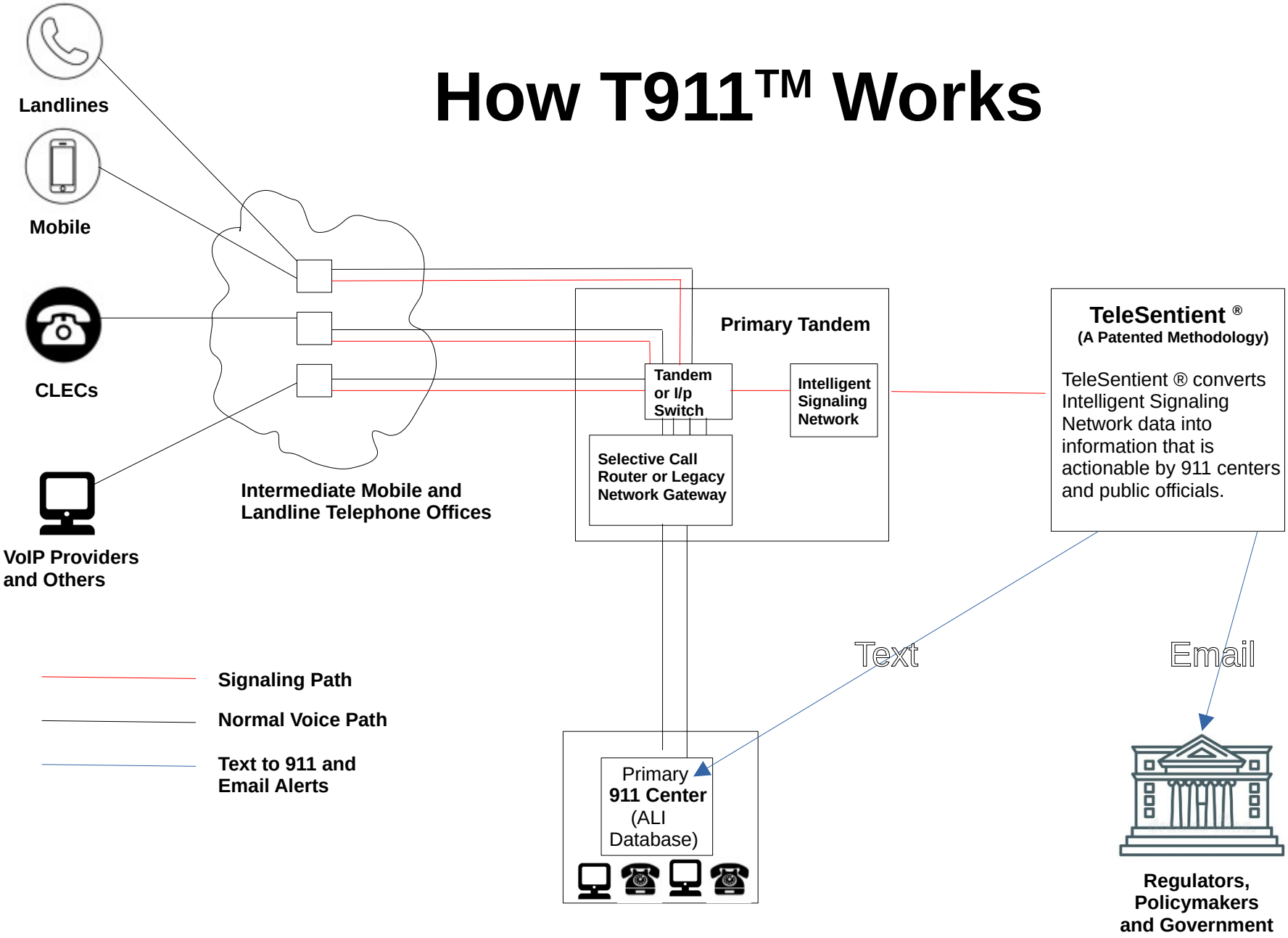
“SS7/C7 might well be the most robust and reliable network in existence.” [1]

“It took 100 years to achieve “Five Nines” in telecom networks, so Next Generation 911 will not achieve the same level of resiliency overnight. This makes Carrier Signaling Networks the logical companion to NG911.” [2]

1 Source: ***Signaling System No. 7: The Role of SS7*** © Cisco Press by Lee Dryburgh, Jeff Hewett

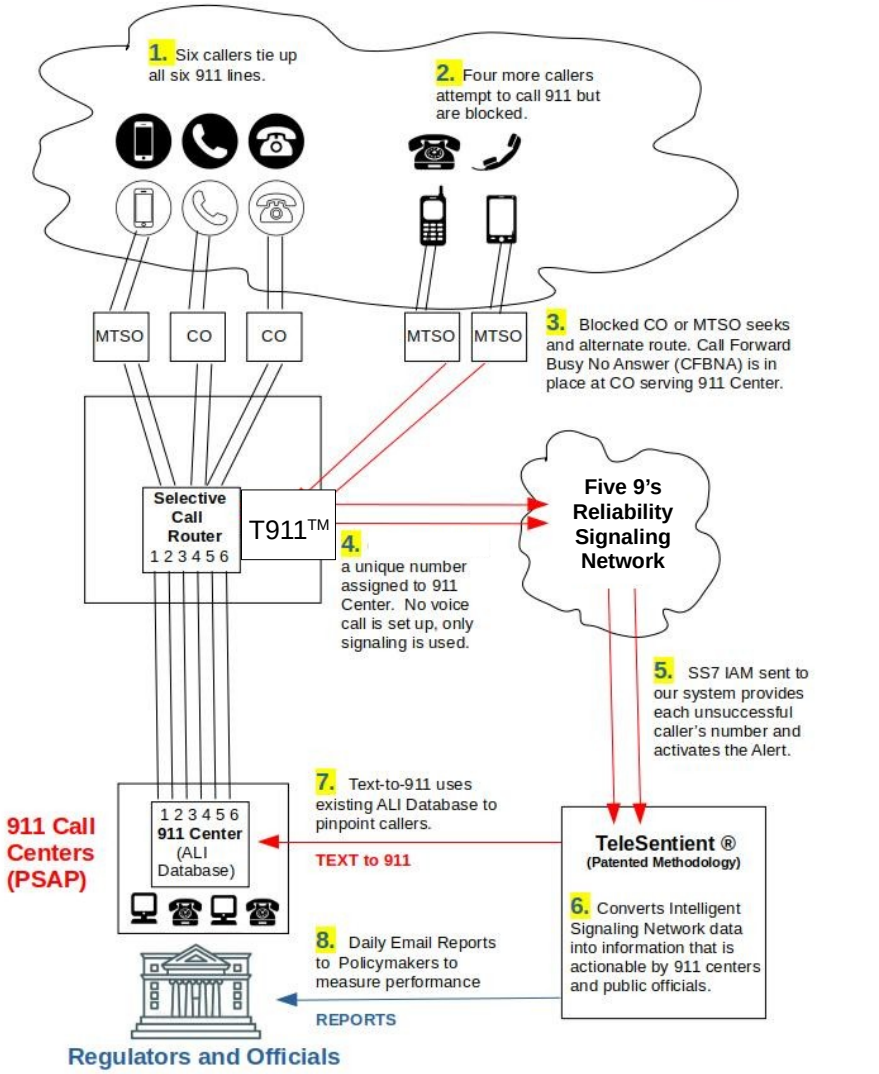
2 Source: FailSafe Communications founder and inventor Leo A. Wrobel

How T911™ Works



Why Does It Matter?

It Matters When All Circuits Are Busy



* **NOTE:** RED ARROWS Signify the use of Intelligent Signaling Network **ONLY**

It Matters When EVERYTHING Fails

Case Study: The Lahaina Hawaii Wildfires

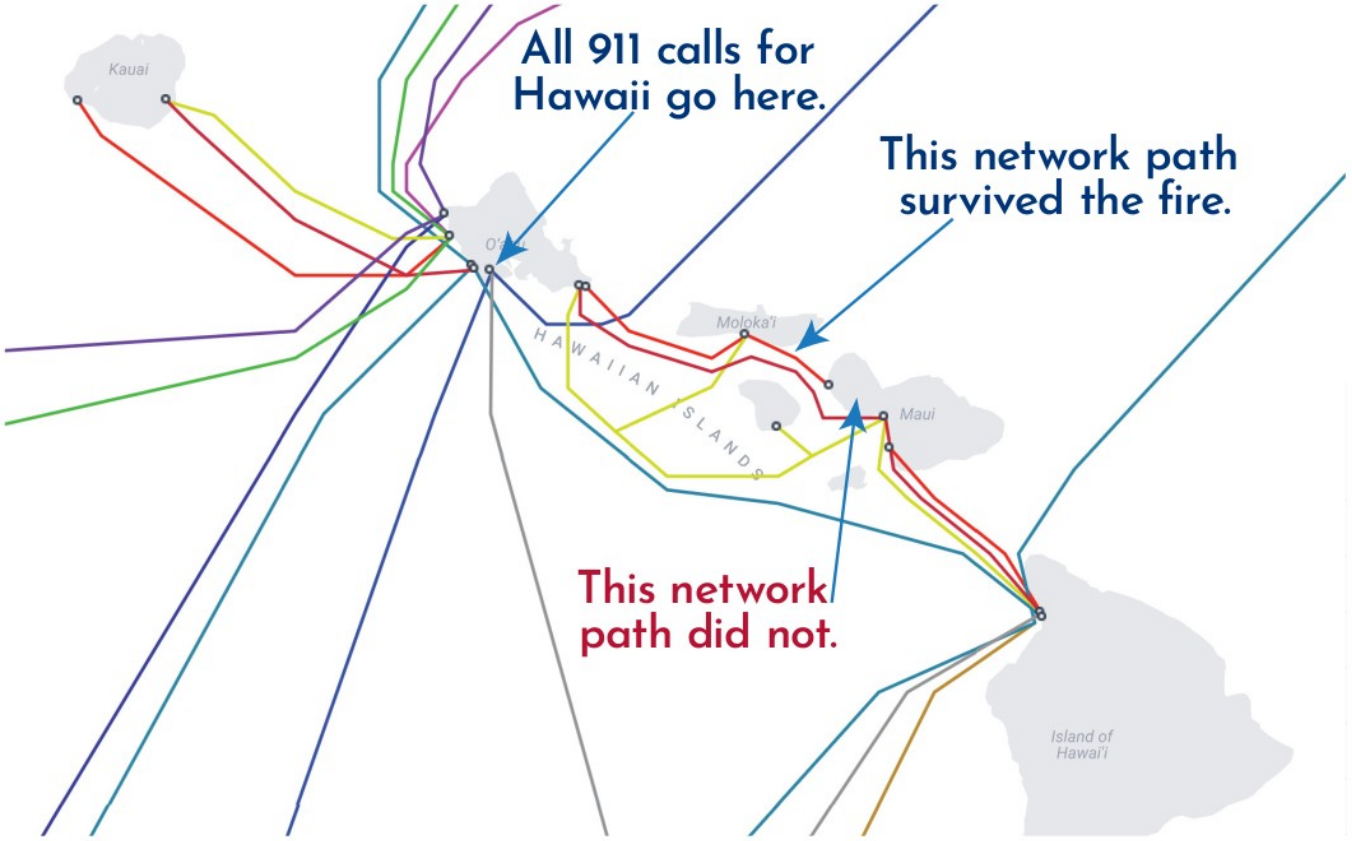
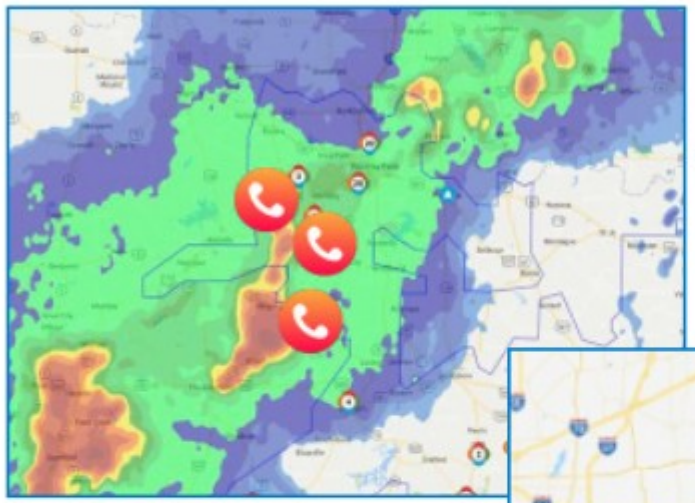


Image courtesy of submarinecablemap.com. Accessed on October 24, 2023.

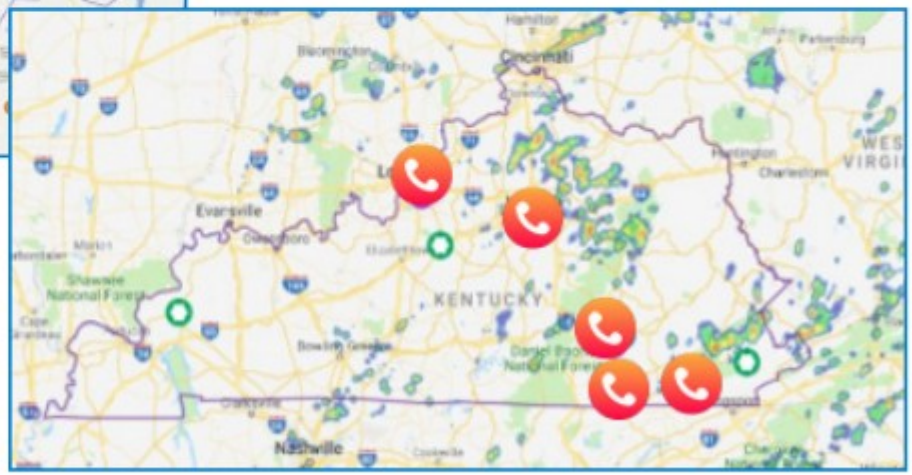
It Matters When You Want to Know *Why*

Users are Correlated with the Cause of Trouble and/or Outage

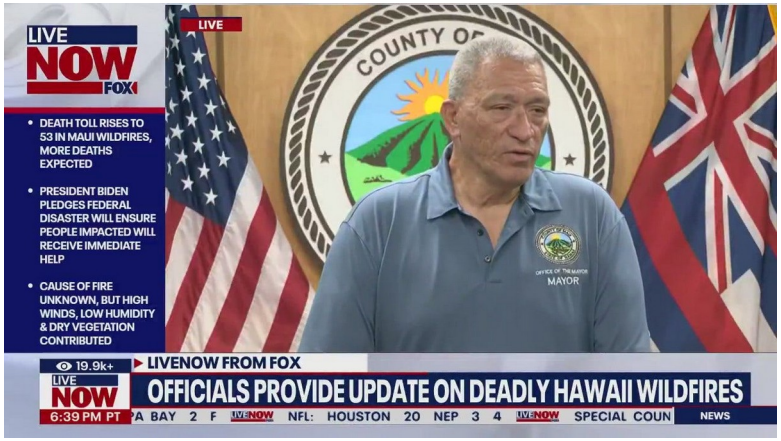


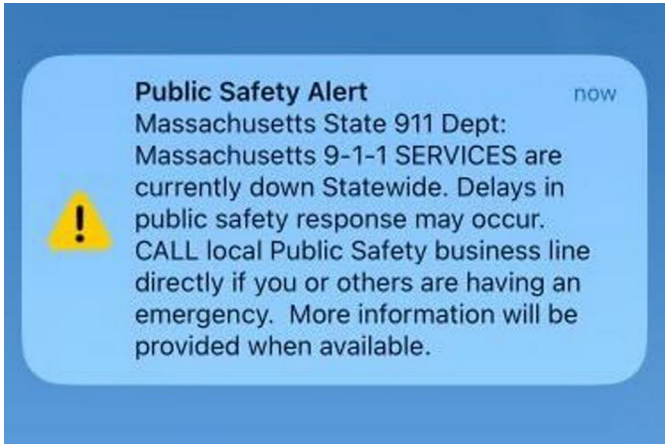
< Phone users in trouble, on the same display with the causes of disaster.

911 callers, including the callers that are not getting through. >



It Matters If You Are *Last to Know*





In each case above T911™ either worked, or would have had it been in place.

It Matters to Elected Officials

State of Texas | Resolution 2025-01 | County of Ellis

A Non-Binding Resolution by the Ellis County Commissioners' Court Endorsing a 9-1-1 Update to Identify Unsuccessful Callers

WHEREAS, on December 12th, 2024, former Ovilla Mayor Leo A. Wrobel appeared before this body to describe and demonstrate how recent 911 outages have occurred in the United States, including a case in Massachusetts that left municipal authorities unprepared; and

WHEREAS, the Federal Communications Commission (FCC), which has recently issued over $100 million in fines to service providers for miscarried 911 calls, stated on April 18th, 2024 that *"When you call 911 in an emergency, it is vital that call goes through. The FCC has already begun investigating the 911 multi-state outages...;"* and

WHEREAS, Wrobel described how to identify 911 callers who do not get through due to overloaded phone lines, as well as the means to alert public officials and policymakers when such situations occur; and

WHEREAS, Wrobel and his staff, desiring to implement this potentially life-saving system in North Texas, have reached out to the North Central Texas Council of Governments (NCTCOG) and other responsible entities that have expressed interest in this capability upon request by any municipality or other official entity likewise expressing interest and support;

NOW THEREFORE BE IT RESOLVED:

1) That the Ellis County Commissioners' Court endorses the concept of a 911 emergency telephone enhancement to give 911 centers the ability to identify callers that cannot get through due to overloaded phone lines, and which also automatically notify elected officials and other policymakers when such incidents occur;

2) That this resolution in no way binds Ellis County to any expense or commitment, but only signifies interest in and support of enhanced 911 tracing capabilities in North Texas;

3) That the Ellis County Commissioners' Court respectfully requests that the North Central Texas Council of Governments and/or other responsible entities explore options to implement such a service, insofar as making it available and affordable to counties, municipalities, districts, 911 call centers, and other official entities.

In witness thereof, signed the 7th of January, 2025 –

Todd Little, Ellis County Judge

Randy Stinson, Commissioner, Precinct 1

Lane Grayson, Commissioner, Precinct 2

Louis Ponder, Commissioner, Precinct 3

Kyle Butler, Commissioner, Precinct 4

Attest: Krystal Valdez, County Clerk

COMMISSIONERS COURT ★ ELLIS COUNTY, TEXAS ★

Works With All 911 Systems

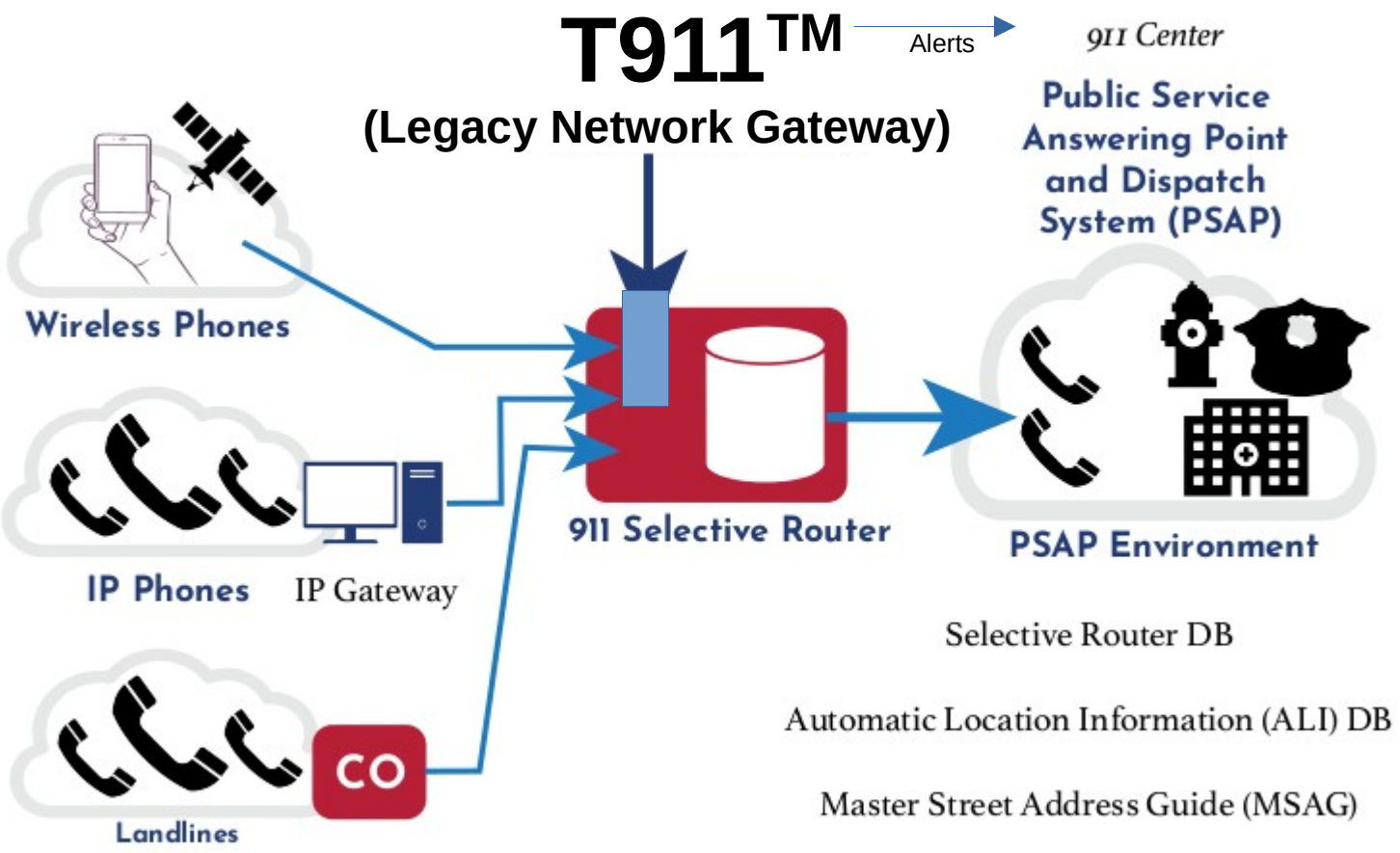
FOR 9-1-1 EMERGENCIES IN MASSACHUSETTS:

CALL IF YOU CAN;
TEXT IF YOU CAN'T.

Source: MA State 911 Department and the Executive Office of Public Safety and Security

www.mass.gov/e911

The Logical Companion to Next Generation 911 Systems



In Summary:

T911™ Matters When All Circuits Are Busy

T911™ Matters When EVERYTHING Fails

T911™ Matters When You Want to Know Why

T911™ Matters If You are Last to Know

An Indispensable Companion for Next Gen 911

T911™ Matters to Elected Officials

FailSafe Communications Inc.

"Because Lives Are On The Line" ™

Thank You

For a **Live Demonstration.**

Please Dial (202) 920-9008 Now

Exhibit 2 911 Municipal Marketing Brochure

A Revolutionary 911 and Next Generation 911 System <u>Upgrade</u> to *Identify Unsuccessful Callers*

"Because Lives Are On The Line" ™

- **Identify *Unsuccessful* Callers to 911 and 988**
- **Know About Calling Issues *Before the Phone Company***
- **Know About Problems *Before the News Media***

An Appeal from a Former Mayor and Inventor of T911™

Who Is Calling 911 or 988 But Not Getting Through?

Over 75% of America's Public Service Answering Points (PSAPS) have reported outages that block or impede 911 calls. 911 in North Texas recently failed due to a crew working on a light pole in another state. A statewide failure of the 911 system in Massachusetts exemplified the disastrous consequences of when public officials are surprised and uninformed about outages. The CrowdStrike outage knocked out 911 call centers across the country. Thousands of other 911 outages have occurred and continue despite over $120 million in fines by the FCC for miscarried 911 calls. The reoccurring nightmare of callers that cannot get through during disasters and other mass calling events is getting worse. Don't wait until Channel 4 calls you for a statement. Do something right now.

Be Informed. Stay in Control. Consider T911™

My name is **Leo A. Wrobel** and I am a former Mayor and widely published disaster recovery expert. I have designed emergency communications systems for dozens of Fortune companies such as American Airlines, Fidelity Investments, and USAA. Read more about our team on the last two pages.

I seek your support in bringing a revolutionary capability to all 50 states. The trade name is **T911™** and the methodology (a) pinpoints unsuccessful 911 callers to 911 and 988 and (b) notifies elected officials in major failures or when all 911 lines are busy. It's available now nationwide. You can try it for yourself right now or set up a custom trial. Just follow the instructions on the following pages.

Public officials everywhere are evaluating T911™ to stay informed and to better protect citizens. Please consider sponsoring the Non-Binding Resolution inside. It's the first step to safeguarding constituents making the most important call of their lives.

Warm Regards,

Leo A. Wrobel, Inventor, Founder and Chairman of the Board
FailSafe Communications Inc.
"Because Lives Are On The Line" ™
inventor@telesentient.com / 1(214) 214-SAFE (7233)

Try It For Yourself Right Now

We are showcasing this capability to the Federal Communications Commission (FCC) and the industry at the time of this writing. Participants in our public demonstration may dial **1-202-920-9008** (Washington DC) or **1- 808-978-9379** (Hawaii). When you dial either number you will hear a busy signal, just like an unsuccessful 911 caller. Behind the scenes T911™ will send a Text Alert to your phone anywhere in North America. We even have a T911™ number working in London England.

After signing up you will receive a number assigned only to your organization. When a blocked 911 caller hits that number, Alerts are sent to the 911 / 988 center as well as to designated public officials. Each day a detailed summary report of all failed 911 /988 calls is emailed to public officials as well. Everyone always stays informed.

Public officials never want to be surprised when systems fail. We urge your support for a system that not only keeps policymakers informed, but most importantly, protects property and saves lives.

Possible 911 / 988 Outage in Your Area

You are receiving this **Alert** because the TeleSentient® system has detected a possible service-affecting outage in your area. Like the "Check Engine" light on your car, these indications merit further investigation by your company.

If your organization is a TeleSentient® licensee, please consult the outage detail report that was sent to it minutes ago. If you are not a current licensee call 1 **(214) 214-SAFE** for further instructions, or visit www.failsafecommunications.com to sign up.

* THIS IS A TIME-SENSITIVE NOTIFICATION. Pursuant to regulations by the Federal Communications Commission your organization is required to report outages that affect 911 and 988 services within 30 minutes.
Failure to report these outages may result in significant fines or other sanctions to your company. If you are not sure what to do, please forward this Alert to your legal and regulatory department immediately.

FailSafe Communications Inc.
"Because Lives Are On The Line"™

Public Officials Hate to Be Surprised

The New York Times

'We Just Always Expect It to Work': 911 Outage Shows System's Perils

The failure of the Massachusetts 911 system on Tuesday was the latest reminder of the potential problems faced by an emergency network that many say needs to be upgraded.

Listen to this article · 4:29 min Learn more

Share full article

Mayor Michelle Wu of Boston discussed a major 911 outage on Tuesday. WPRI

Don’t Be Last to Know!

Please Consider Passing This Non-Binding Resolution

Resolution #_____

A non-binding resolution by the _____ in support of a 911 update to identify unsuccessful callers during disasters and mass calling events, as well as to issue timely alerts to public officials, policymakers, and first responders.

WHEREAS former Mayor of the City of Ovilla Texas, Leo A. Wrobel (Wrobel) appeared before this body, and,

WHEREAS 911 systems have experienced and continue to experience hundreds of outages every year, and,

WHEREAS the Federal Communications Commission (FCC) stated on April 18, 2024 *“When you call 911 in an emergency, it is vital that call goes through. The FCC has already begun investigating the 911 multi-state outages that occurred last night to get to the bottom of the cause and impact.”* and,

WHEREAS the FCC has issued $120 million in fines to service providers for miscarried 911 calls, and,

WHEREAS Wrobel described how to *identify* 911 callers who do not get through due to overloaded phone lines, as well as the means to *alert* public officials and policymakers when such situations occur, and,

WHEREAS this capability has drawn interest from and is being presented to the FCC, and,

WHEREAS public officials, councils, and municipalities are invited to participate in this demonstration as proof of the concept of pinpointing lost 911 callers, and,

WHEREAS Wrobel and his staff desire to implement this potentially lifesaving approach nationwide, and,

WHEREAS this non-binding resolution in no way binds the City to any expense or commitment, but only signifies its interest in the capability to respond to blocked 911 callers in time of emergency, subject to terms negotiated by the municipality, phone company or other responsible entity.

NOW THEREFORE BE IT RESOLVED,

a. that this governing body endorses the concept of a '9-1-1' emergency telephone enhancement to allow 911 centers the ability to identify callers that cannot get through due to overloaded phone lines, and, which automatically notifies elected officials and policymakers when those conditions occur;

b. that it respectfully requests that responsible entities evaluate T911™ insofar as making it available and affordable to municipalities, districts, and 911 centers under their purveyance.

Passed and Approved by the _____ on this, the ____ day of _____ 20___.

_____
Signature

_____
Printed Name and Title

Meet the Inventor and Team

Leo A. Wrobel, Inventor and Chairman of the Board

Wrobel's talent for exploiting changes in laws, technology and regulations has earned him broad acceptance and acclaim. Leo built the first computer disaster recovery center in a telephone central office in 1986. He was the first in Texas to run telephone traffic over a cable television system. In 1997 he founded his own phone company which was the first in the US to become certified in all 50 states. He is the author of 12 books and over 1600 trade articles. He has lectured in most of the 50 states and overseas in locations such as Santiago Chile, Tel Aviv Israel, and as a guest speaker for the Chinese Academy of Sciences in Beijing. A former Mayor and City Councilman, Leo is an expert in complex technology having written disaster recovery plans and designed disaster recovery systems for dozens of Fortune 100 companies in the airline, manufacturing, education, financial services and government services industries. He holds degrees in Business and Public Policy, Telecommunications Systems and Electronics Systems Technology and is a Vietnam Era US Air Force veteran.

Sharon Wrobel – Board Member and Corporate Secretary

Sharon M. (Ford) Wrobel has authored more than a dozen trade articles and co-authored a book, *Disaster Recovery for Communications and Critical Infrastructure* with husband Leo and the Pacific Disaster Center. She served as a Director and Secretary to the Board of the Network and Systems Professionals Association (NaSPA) a 38 year old 501(c)6. Sharon attended the University of Maryland and El Centro College, where she trained as a registered nurse before joining Leo in his businesses. Sharon also served as a public official, accepting appointments to the City of Ovilla Planning and Zoning Commission and Historical Commission. Sharon volunteers as a Christian dance fitness instructor.

Michael Hatfield – Board Member, President and COO

Michael Hatfield is an experienced executive with a demonstrated history in the management consulting industry, with specialization in finance, business planning, telecommunications network management and national distribution networks for various firms and product lines. He has been President of Greenway Communications since 2016. His broad business acumen has aided clients by skillfully organizing business plans to bring their companies from conceptual ideas to sound profitability. Michael's analytical, team building, sales force management, recruiting and strategic planning skills have proven to be insightful and extraordinary for a wide variety of demanding clients. He specializes in "Out of the Box," non-traditional thinking that energizes new opportunities.

Philip Diehl – Board Member

Philip Diehl is an American businessman and former monetary policy advisor who served as the 35th director of the United States Mint. He is the president of U.S. Money Reserve, a published analyst of gold markets and a member of the boards of the Industry Council for Tangible Assets, the Coalition for Equitable Regulation and Taxation and the Gold and Silver Political Action Committee. He served as director of telephone regulation at the Public Utility Commission of Texas (PUC). Diehl has been recognized by Advertising Age as among its Top 100 in Marketing and received the American Society for Public Administration Government Executive Leadership Award, the Faith and Politics Institute's St. Joseph's Day Award for values-based leadership, and the Treasury Medal for Outstanding Public Service awarded by Treasury Secretary Lawrence Summers.

Donald Benson – Board Member

Don Benson positions have ranged from being manager of command and control systems for the Pentagon, the White House, and the Pacific Theater to senior executive positions in defense, insurance, financial services, healthcare and real estate management. He is skilled in guiding companies through operations consolidations, greenfield start-ups, organization design, change management, culture integration and turnaround situations. Benson has held senior executive positions for such Fortune 500 companies as CIGNA, Aetna, Coventry Health Care and Connecticut General. He holds a Bachelor of Science in Management from Central Connecticut University and also completed continuing studies at The Wharton School, University of Pennsylvania, The Darden School, University of Virginia and Cornell University. He was awarded a Doctor of Humane Letters (Honorary) from Strayer University.

Kathy G. Benson – Board Member

Kathy G. Benson graduated from the University of Connecticut at Storrs magma cum laude and has held various management positions during her career, including Aetna Life & Casualty, Travelers Insurance, Northeast Utilities, Connecticut General Insurance (later CIGNA) Storage Technology, Programming Resources, and finally Synercom, where she was promoted to General Manager. As Founder and Principal of Prosource she oversaw three divisions including software product development, marketing, and financial management. She has extensive experience researching, recommending, and developing new technologies, methods, and standards to help keep her employers competitive in rapidly changing marketplaces.

Mark Allison – Board Member

Mark Allison studied Electrical Engineering at The University of Texas at Arlington. He was employed as an internationally known live sound engineer who provided sound engineering services for, among others, Billy Joel, Barry Manilow, The Beach Boys, The Grateful Dead, Willie Nelson, Bob Dylan, Fleetwood Mac, Elvis, The Boston Pops Orchestra and US Presidents Ford and Carter. After switching careers, he then spent 22 years in avionics engineering at Lockheed Martin Tactical Aircraft Systems in Fort Worth, Texas working on the F-16 program where he retired.

Debra K. Smyth – CFO

Ms. Smyth has an MBA from the Keller Graduate School of Management and over 35 years experience. She has been a key member on many management teams and has played an integral role in the implementation of many company visions including systems development, financial and profitability analysis, planning, tax returns, contract negotiations, benefit plans, exit strategies and insurance plans to suit a specific business need.

Eddie M. Pope – General Counsel

Mr. Pope's experience spans 40 years as an attorney, including the Oklahoma Corporation Commission and Texas Public Utility Commission (PUC). He co-authored *Understanding Emerging Network Services, Pricing and Regulation* ©Artech House Books. The people who know Eddie best appreciate the lasting impact he had on telecommunications. As Chief of Staff to the Chairman of the Texas PUC he was one of the final editors on the first "guide book" governing telecommunications competition. The Texas T2A Interconnection Agreement would go on to become a "gold standard" governing competition in the telecom industry nationwide.

Learn More by Visiting

www.telesentient.net or www.failsafecommunications.com

Request a 30 Day Trial

A **Letter of Authorization** (LOA) protects your interests and allows FailSafe to act on your behalf in providing T911™ or Service Provider Regulatory Alerts. A LOA is commonly used in situations such as when a user wants to add enhanced services to an existing line or simply change a wireless phone account from AT&T to T-Mobile. By using this simplified process, you are five minutes away from protecting your organization against millions in regulatory fines, and you will always know who is trying to call 911 or 988 but not getting through.

Set up a free trial in only 5 minutes at www.failsafecommunications.com

What Happens Next?

1. **We will assign you a T911™ number shortly after you request a trial or purchase.**
2. **911 and 988 Centers.** The party calling the T911™ number (simulating an unsuccessful 911 caller) will receive an immediate text telling them that emergency service personnel know they are in trouble – even though they just heard a busy signal. At the same instant, a second text and email are sent to you (simulating the 911 center, public official, or both) with a message that callers are not reaching help.
3. **Service Providers and Carriers.** You can now base **FCC Regulatory Alerts** on empirical data from actual 911 callers. Is an outage even your issue? Now you can know for sure. When you receive a text and email from T911™ you will know about issues instantly, allowing for faster investigation. Safeguard against millions of dollars in FCC fines. Service providers are eligible for the free 30 day trial as well as 911/988 centers and resale agreements are available.
4. All Plans require the $599 Elected Official / Executive Alert Option and are billed automatically to a credit card. Once the trial ends you may also select and pay for one of the optional plans listed. At the conclusion of the trial, you are free to publish this number in a newsletter, on a website, on a water bill, or on virtually anything your constituents will see. We can even provide a refrigerator magnet for each constituent for a small additional fee, or just make the rollover “automatic” without the need to dial a separate number. Small entities (under 5000) can sign up immediately and bill to a credit card. Custom Plans for larger entities start at only $1.00 per resident one-time set up fee, and then $0.10 per month per resident. Of course any public official can simply keep the $599 reports private, allowing a new and useful budgetary tool, assuring you will always know about trouble before Channel 4 calls.

FailSafe Communications Inc.
“Because Lives Are On The Line” ™

Become a T911™ Reseller or
Start a 30 Day Trial in Just 5 Minutes by Visiting
www.telesentient.net or www.failsafecommunications.com