



## 2018-2019 State of 911 Report Summary

### Requirements of § 40-2-131, C.R.S.

- Requires the PUC to deliver a report to the legislature on the State of 9-1-1 annually by September 15, and provide an in-person presentation in January.
- Today marks the second annual presentation.
- Requires coverage of seven general topic areas.
- Requires the report be developed with stakeholder input.



## Today's Topics

- The Current State of 9-1-1 Service in Colorado
- The State of our Transition to Next Generation 9-1-1
- 9-1-1 Network Diversity and Resiliency
- Funding Structure and Status
- Challenges Facing 9-1-1 in Colorado



## 82 Primary Answering Points

*Public Safety Answering Points that take 911 calls directly from the public.*

## 4 Secondary

*Public Safety Answering Points that only take 911 calls when transferred from a primary answering point.*

## 59 911 governing bodies

*Local governments or special districts that collect emergency telephone charges.*

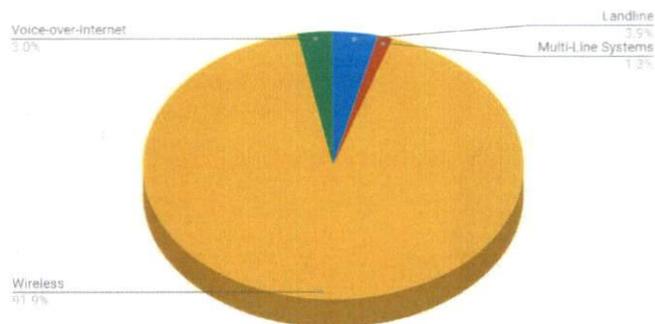


## The Current State of 9-1-1

- 100% coverage of 9-1-1 service anywhere in the state that a 9-1-1 call can be made.
- Enhanced 9-1-1 for landline in every county.
- Enhanced 9-1-1 for wireless and Voice-over-Internet-Protocol service in every county except one.



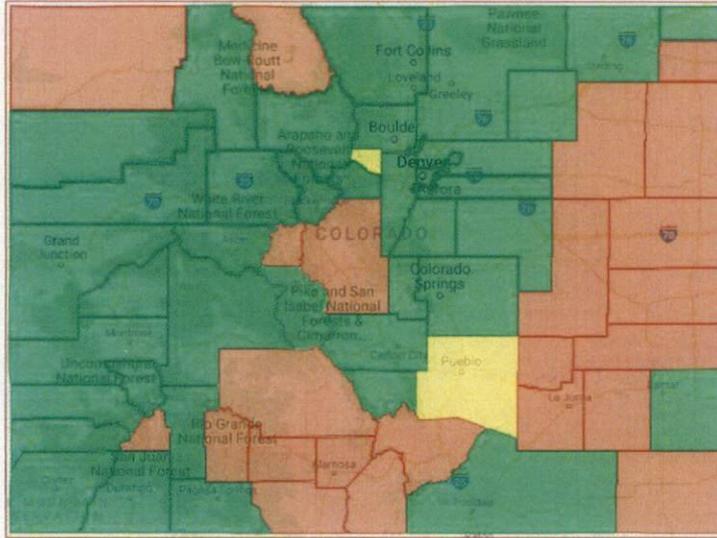
## 9-1-1 Call Volume, Statewide



2018 State-wide 9-1-1 Location Requests by General Category of Service - 6,429,755 total location requests, adjusted to remove duplicates



# Text-to-911



Green - text-to-911 available at all PSAPs serving this county

Yellow - text-to-911 available for some PSAPs serving this county

Red- text-to-911 not available at any PSAPs serving this county

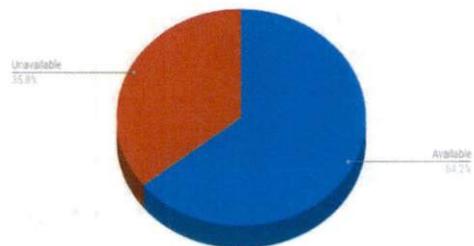


# Text-to-911

Text-to-911 Service in Colorado by Population



Text-to-911 Service in Colorado by Area



## Desired Technology - Next Generation 9-1-1

- Standards-based Internet Protocol network
- More resilient and flexible
- Capable of delivering any type of data to the call center
- Able to incorporate new types of communication technology
- Able to provide a more consistent experience to callers



## Migration to ESInet

- Emergency Services IP-Network - first step toward Next Generation 9-1-1
- ESInet tariff approved by Commission in December 2018 after year-long negotiation between parties and settlement filed
- Migration of call centers scheduled beginning in January 2020, continuing to February 2021



## The Cost of ESInet Implementation

- Statewide cost of the existing “legacy” 9-1-1 service: \$2.9 million per year.
- Statewide cost of the ESInet service: \$5.9 million per year.
- About \$4 million in non-recurring costs and project management fees.
- **All** costs are billed to local 9-1-1 governing bodies.



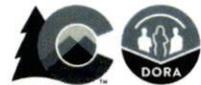
## 9-1-1 Grant Program

- Colorado received \$2.4 million in federal grant funds for 9-1-1.
- Commission designated \$1.6 million from Colorado Performance Assurance Plan fund to serve as the matching funds.
- Cost of tariffed fees for migration will be 100% funded by this program.



## Ongoing Costs

- Cost of call delivery to the PSAP nearly doubled, statewide.
- Unit of pricing also changed, resulting in stronger impact on small PSAPs and rural 9-1-1 governing bodies.
- Every 9-1-1 governing body will see an increase in costs.
- Some rural 9-1-1 governing bodies to see an increase of as much as 1,600%.

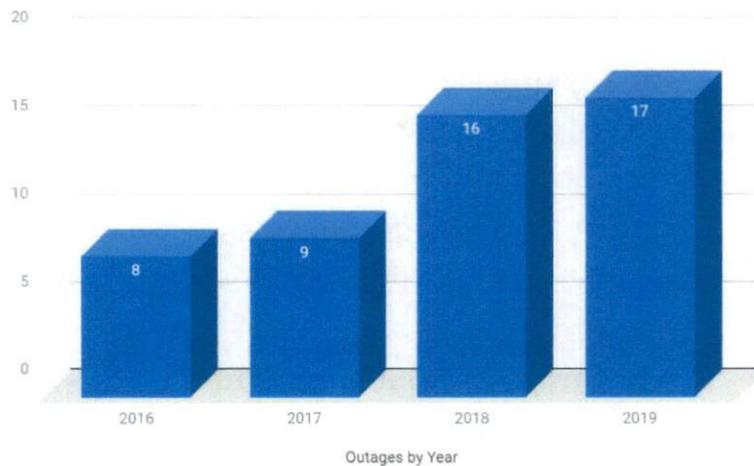


## 9-1-1 Network Diversity

- January 2019: CenturyLink files a required 9-1-1 network diversity report with the Commission.
- Estimated cost for making network fully diverse and redundant: \$98 million
- The Commission created a working group to examine the details of the report filed by CenturyLink.



## 9-1-1 Network Reliability



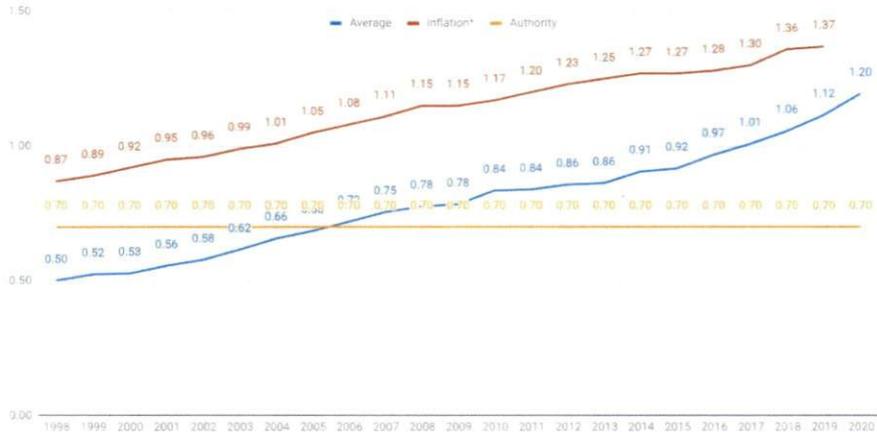
## Outage Special Investigations

- 9-1-1 Advisory Task Force has begun conducting special investigations into outages that meet specific threshold criteria to look for commonalities and make recommendations to the Commission.
- CenturyLink has been cooperative with these investigations.
- May result in recommendations to the Commission.



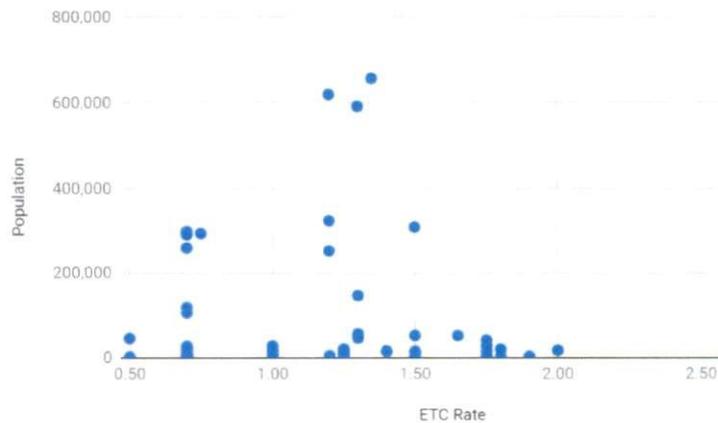
# Surcharge Rates Over Time

Average Emergency Telephone Charges Statewide (Colorado) vs. Inflation



# Population vs. Rates

Population vs. Emergency Telephone Charge Rate



## Challenges Facing 9-1-1 in Colorado

1. Local funding model insufficient for Next Generation 9-1-1 deployment.
2. Single points of failure in the 9-1-1 network.
3. Lack of funding accountability.
4. No minimum training standards.
5. No public safety answering point performance and service standards.
6. No requirements for emergency medical pre-arrival instructions or quality assurance.



Thank you!

# Questions?



Public Utilities Commission