

12 King County PSAPs

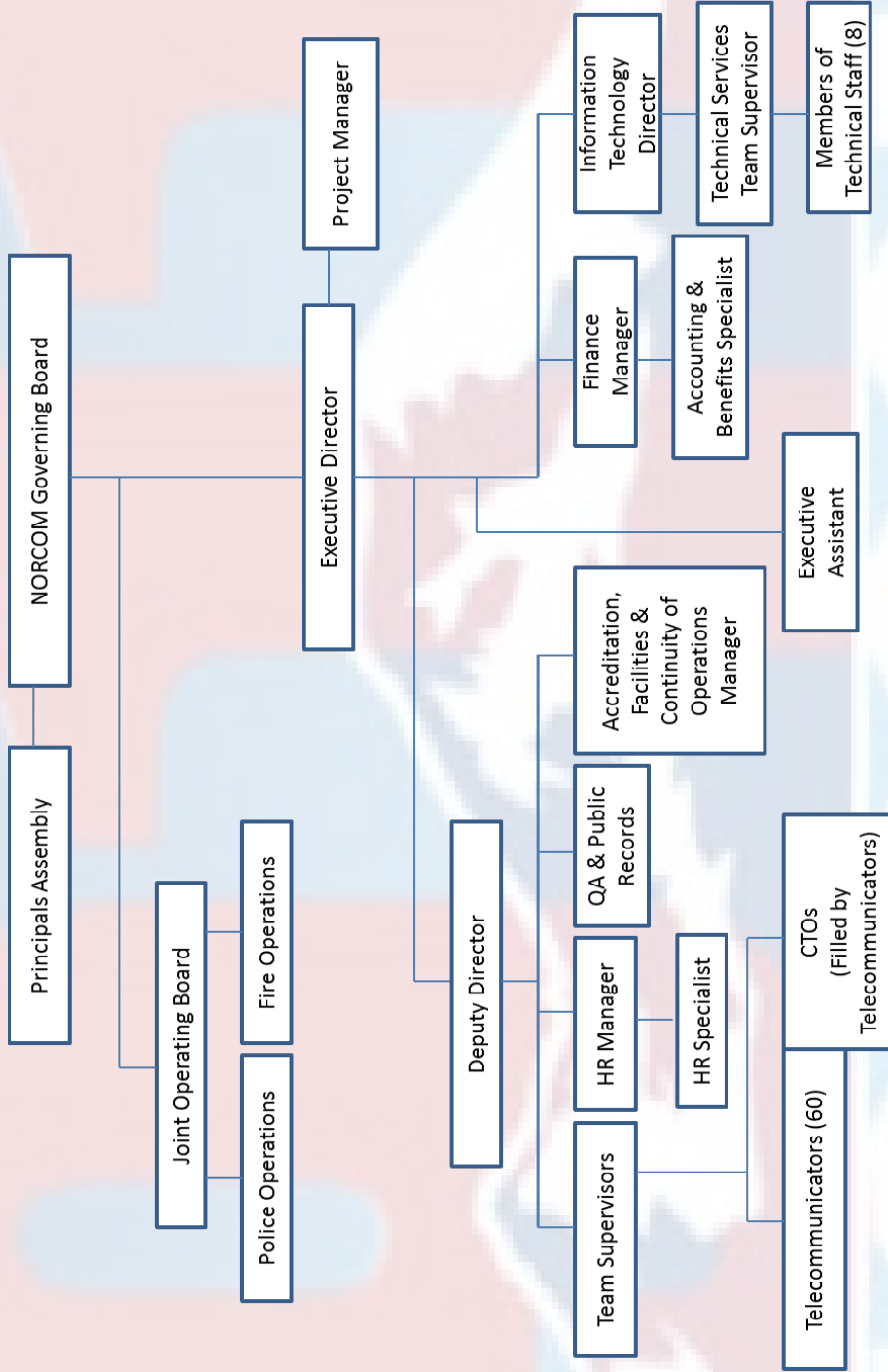
PSAP Name	Population Served	Total Incoming Calls (Source: KC E-911 Office)	No. of Jurisdictions Served	Police/Fire/Both	Square Miles	Agencies Served
Valley Communications	735,694	678,724	22	Both Fire and Police	380	9 Police Agencies: Renton, Tukwila, Kent, Auburn, Pacific, Federal Way, Black Diamond, Algona, Des Moines 13 Fire Departments/Districts: Kent, Valley Regional Fire Authority (Auburn, Algona, Pacific), Renton, Tukwila, South King Fire (Federal Way/Des Moines) Burien/Normandy Park, Skyway, Maple Valley, Mountain View Fire & Rescue, Palmer/Seleck, KC Medic One, North Highline, Sea Tac.
NORCOM	640,000	332,513	19	Both Fire and Police	1400	5 Police Agencies: Bellevue, Kirkland, Mercer Island, Clyde Hill, Medina 14 total Fire/EMS Agencies/Districts: Bellevue, Kirkland, Mercer Island, Bothell, Redmond, Snoqualmie, Eastside Fire & Rescue, Duvall Fire, Fall City Fire, Shoreline Fire, Northshore Fire, Woodinville Fire, Snoqualmie Pass Fire & Rescue, and Skykomish Fire & Rescue.
Redmond	66,924	58,523	2	Police	19.43	Redmond, Duvall
Bothell	54,721	57,705	2	Police	17.35	Bothell, Lake Forest Park, UW Bothell Campus Police Officers when requested
Issaquah	46,835	48,141	3	Police	22.2	Issaquah, Snoqualmie, North Bend
Univ. of Washington	70,000	35,179	1	Police	2	University of Washington
Enumclaw	31,479	25,471	3	Both Fire and Police	85.1	City of Enumclaw, Fire District 28, National Park Service - Mt. Rainier (after hours)
Wash. State Patrol (Bellevue)	2,044,000	252,715	19	Police	2,307	11 State Agencies serving Seattle & all of King County: Washington State Patrol, WA Dept. of Fish & Wildlife, DOT, State Parks, DSHS, DNR, WA Forest Service, Gambling Commission, Liquor Control Board,
Port of Seattle	65,000	54,777	3	Both Fire and Police	15	Normandy Park, SEATAC International Airport, Port of Seattle International Marina/Port
Seattle Police/Fire	662,400	936,996	2	Both Fire and Police	89	City of Seattle
King County Sheriff	473,425	566,787	18	Police	1,821	Unincorporated King County, Carnation, Sammamish, Skykomish, Woodinville, Beaux Arts Village, Covington, Maple Valley, Muckleshoot Tribe, Newcastle, Burien, SeaTac, Kenmore, Shoreline, King County Int'l Airport, King County Metro, Sound Transit
TOTALS	4,890,478	3,047,531	94		6,158	

- North East King County Regional Public Safety Communications Agency - NORCOM

- Began operation July 1, 2009
- Current dispatch area was previously covered by:
 - ✓ Kirkland Police Communications:
 - Kirkland PD
 - Mercer Island PD
 - Medina PD
 - ✓ Eastside Communications:
 - All fire agencies
 - Bellevue PD
 - Clyde Hill PD



What is NORCOM



Updated 02/12/2014

Norcom Organization

- **Over 600,000 permanent residents**

- 200,000 or more calls per year
- 500 or more emergency calls per day
- 368 9-1-1 calls

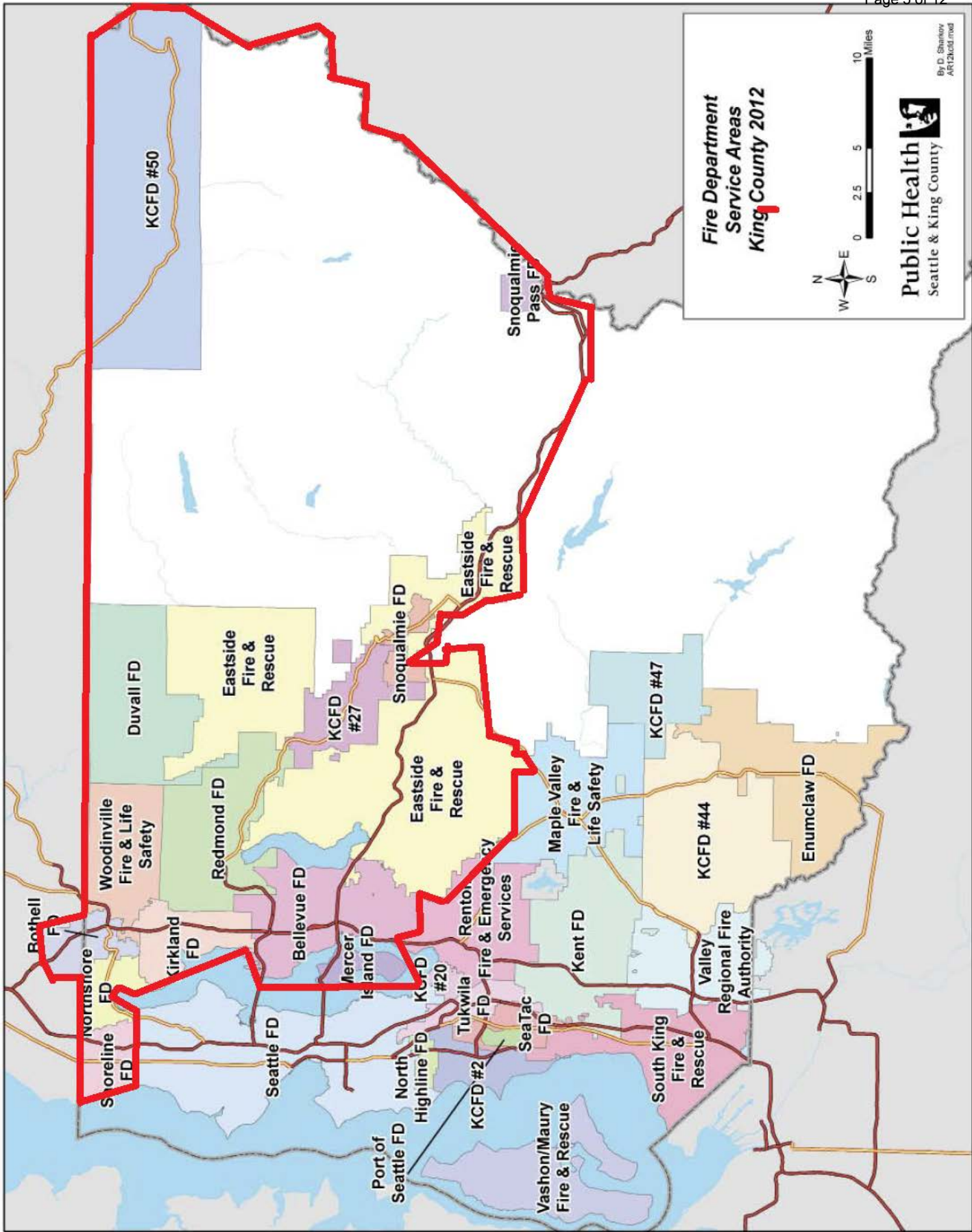
- **Performance Standards - Quantity**

- APCO, NENA, NFPA, King County Standards
- 90% of 911 Calls Answered in 10 seconds or less

- **Quality Assurance**

- Internal
- King County EMS and King County E-911
- APCO & NENA National Standards

NORCOM Calls



**Fire Department
Service Areas
King County 2012**

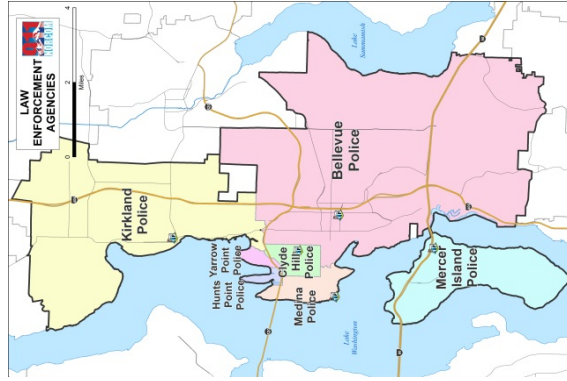


By D. Shankov
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NORCOM Facts

GIS Support Requirements

- Geographic datasets for 2 CAD systems.
- Over 600,000 address points.
- 4,000 total road miles
- 8,000 road miles maintained
- 25 Map layer datasets

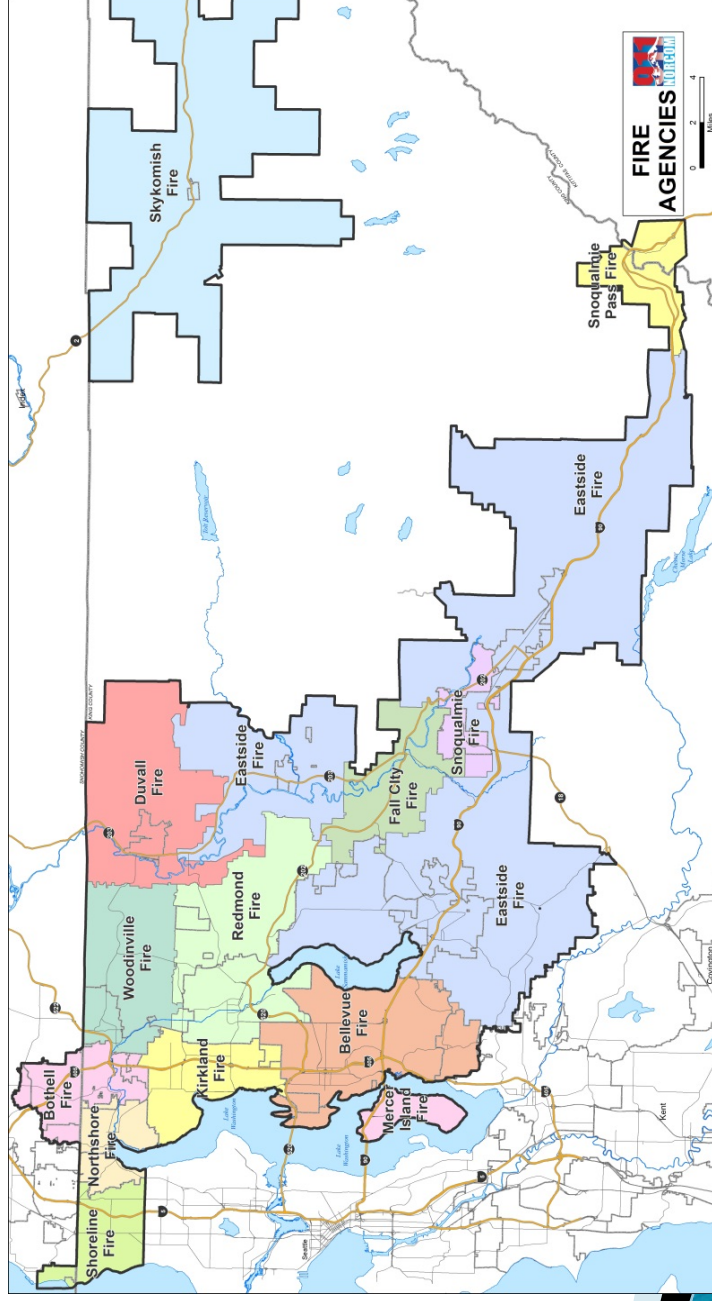


Police Services

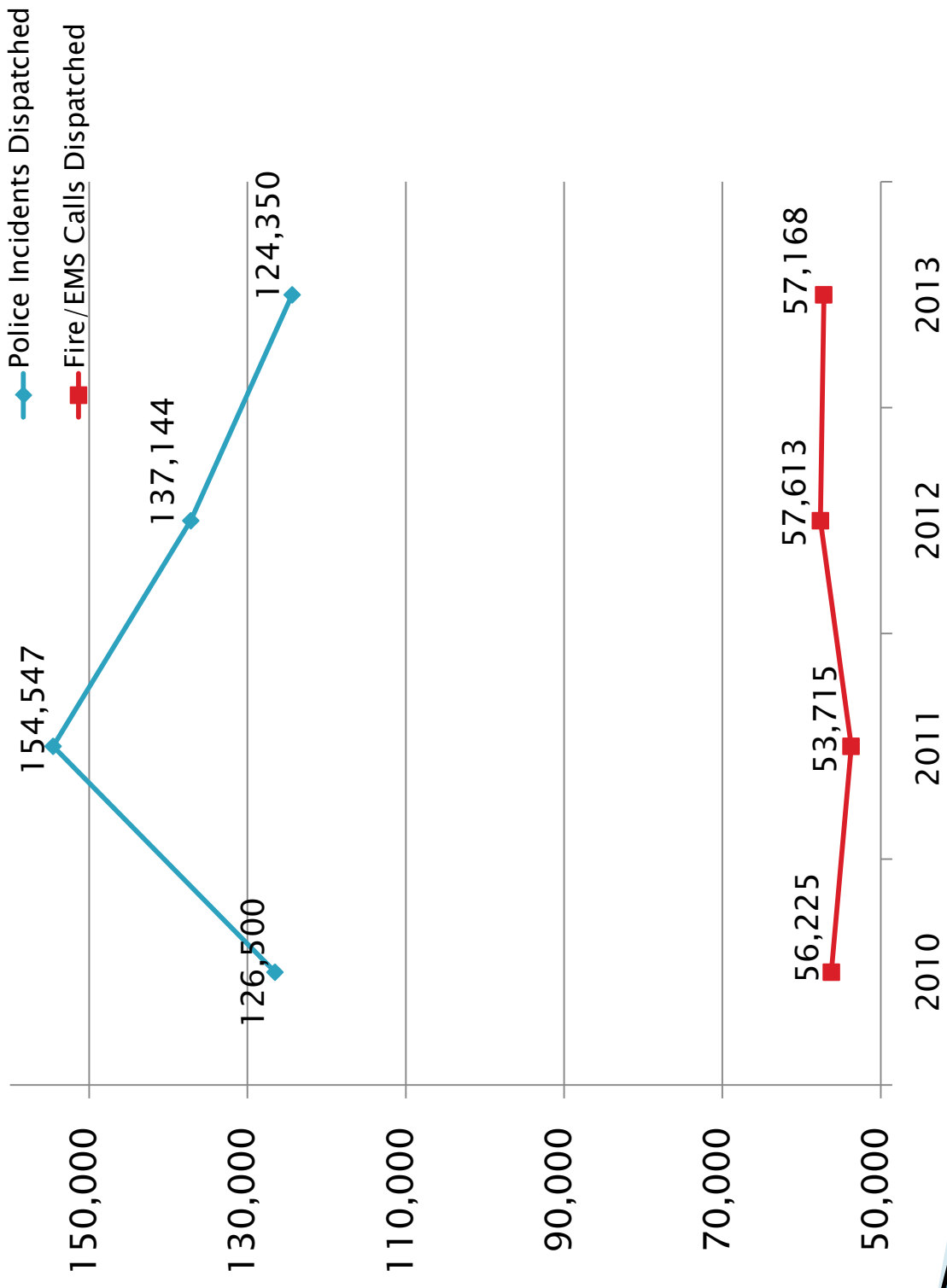
- Total address points: 92,884
- Total square miles: 62
- Total road miles: 1044

Fire Services

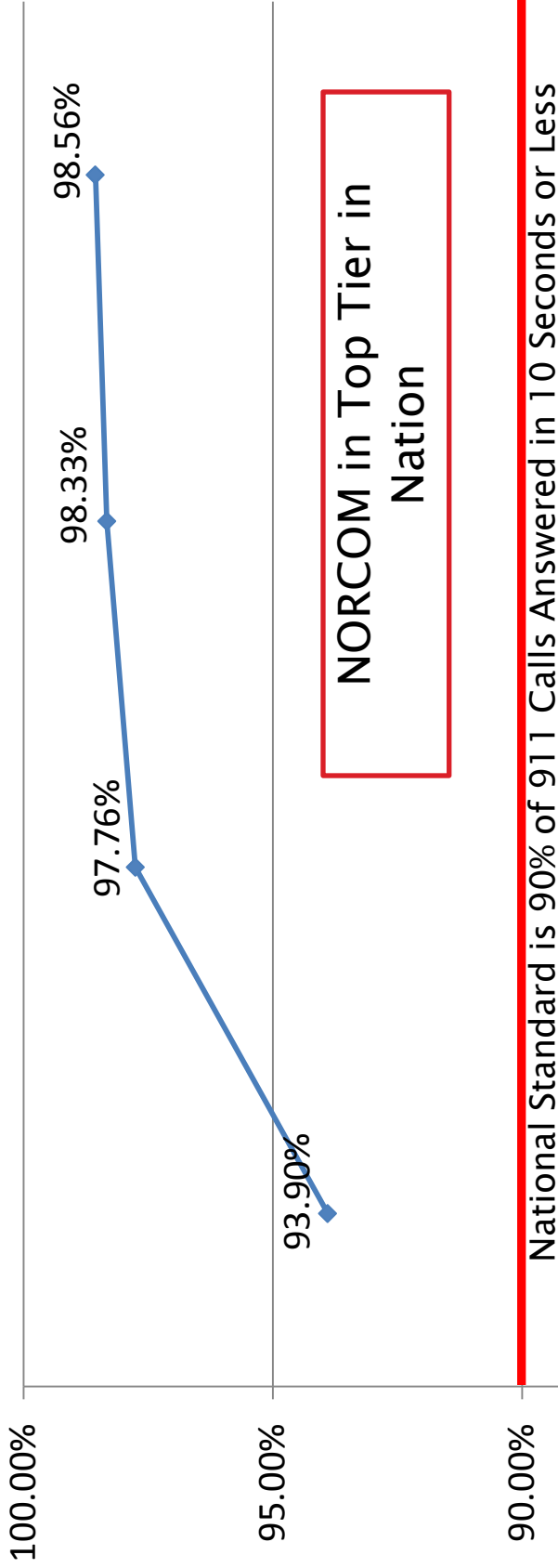
- Total address points: 273,686
- Total square miles: 620
- Total road miles: 3992



Fire & Police Calls Dispatched



Total Calls with Call Answering Percentage

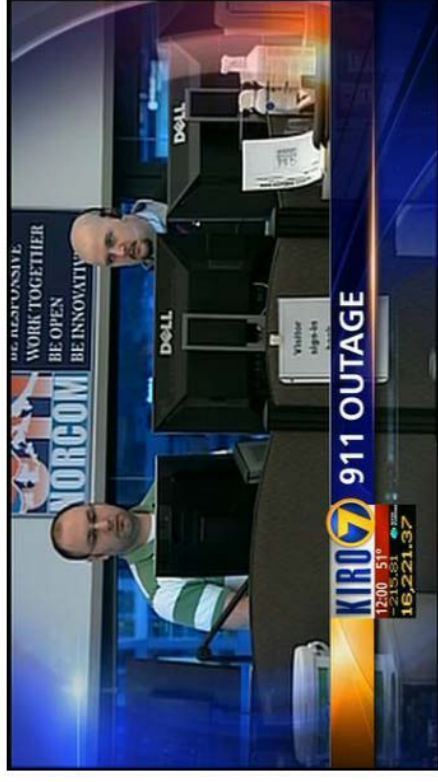


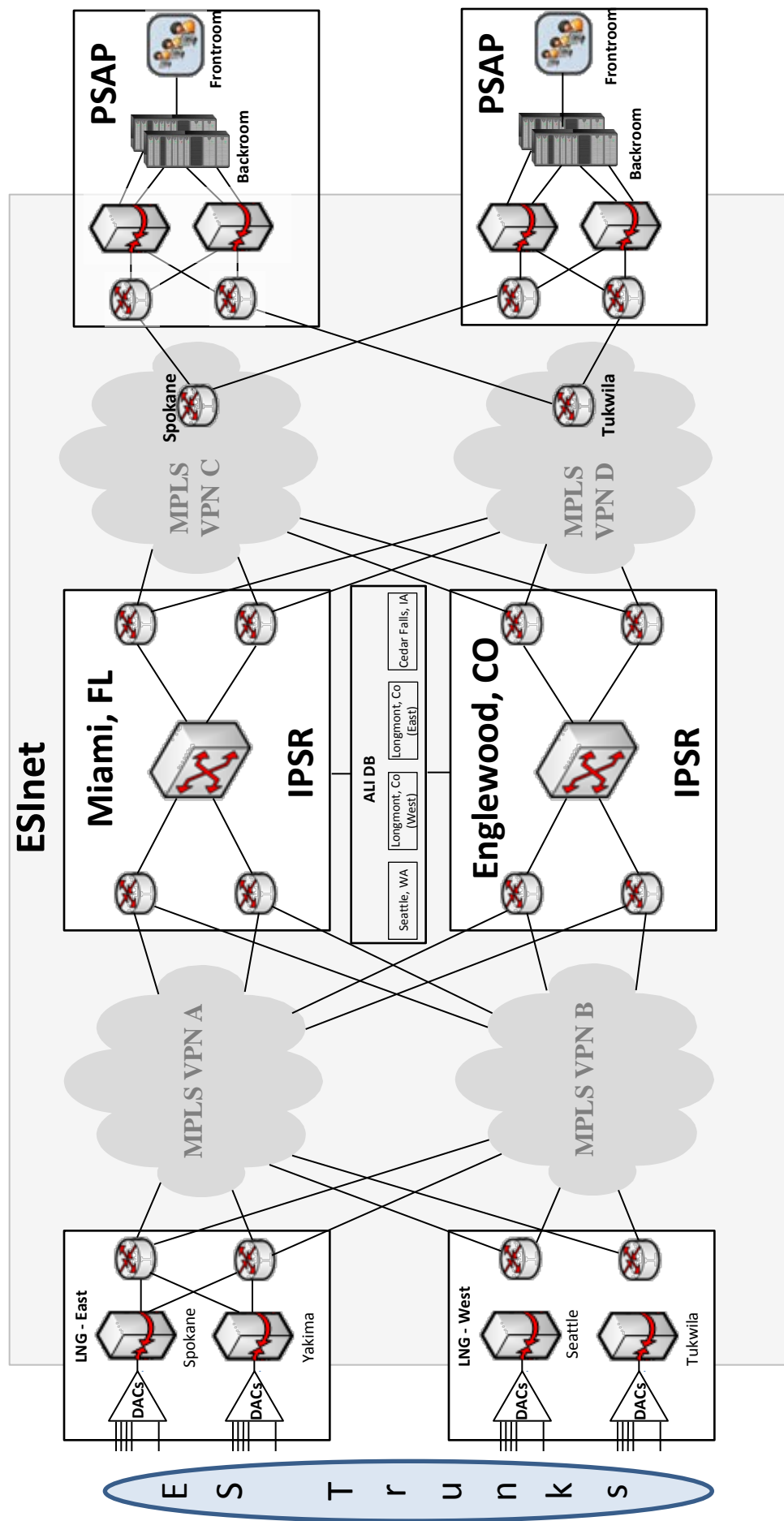
Year	Call Answer %	911 Calls	7 digit Emergency Calls	Secondary Queue	Business Lines	Total Calls
2010	93.90%	134,431	61,397	15,989		211,817
2011	97.76%	134,523	75,758	28,072	25,368	263,721
2012	98.33%	153,330	80,840	30,834	21,269	286,273
2013	98.56%	152,095	20,906	32,388	19,952	225,341



Fresh from the Headlines

- 911 Outage
 - NORCOM had 50% reduction in 911 calls
 - Affected Washington, Minnesota, North Carolina
 - Oregon also suffered outage from other cause
 - May 15: State-level Post Incident Review
 - State Utilities & Transportation Committee Invest.
- **Many questions remained unresolved**
 - CenturyLink is 911 provider
 - CenturyLink subcontracts with Intrado for
 - NG 911 infrastructure
 - Flaws in infrastructure
 - State to issue new RFP
 - May change County technology already purchased

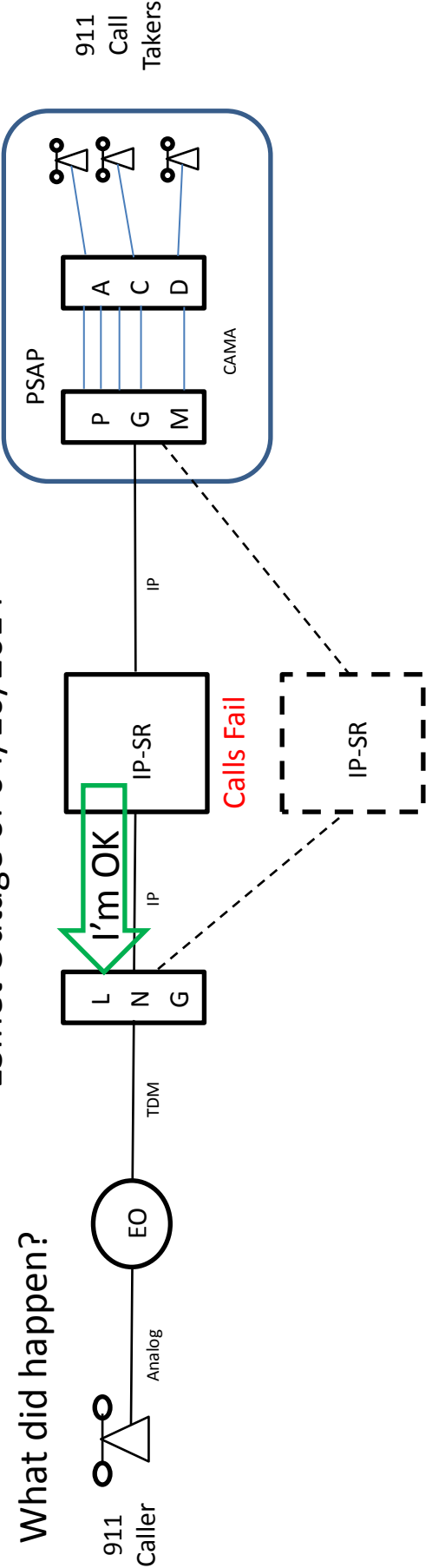




System Overview 3/2014

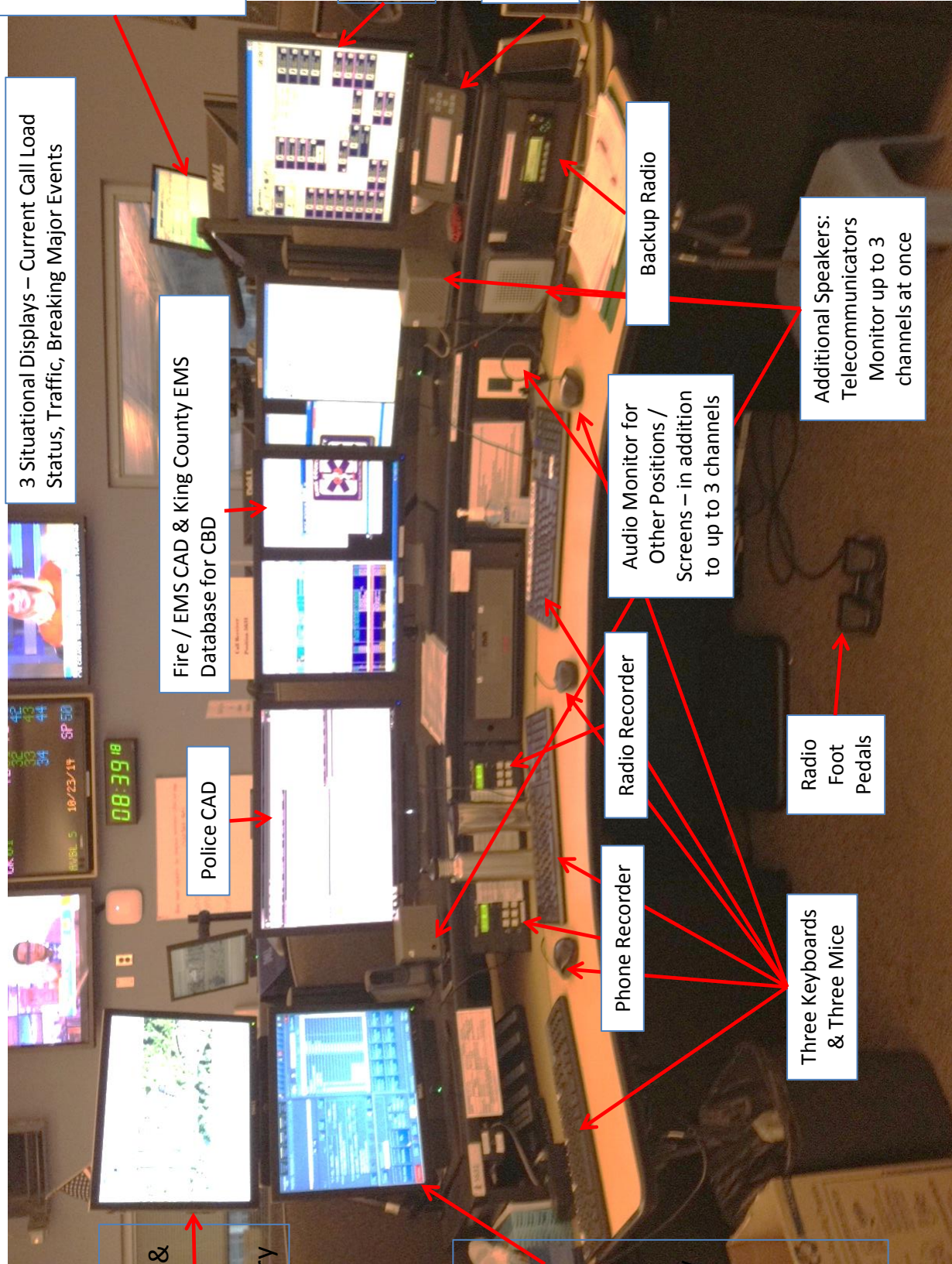
ESInet Outage of 04/10/2014

What did happen?



- 911 call arrived at LNG that had Inglewood (IP-SR) as Primary
 - Call sent to Inglewood (IP-SR)
- Call arrived at Inglewood IP-SR
 - IP-SR determined PSAP and CAMA trunk to use (for this call)
 - Assigned 40,000,001 as the "unique key"
 - Tried to write "40,000,001 to DataBase"
 - Database responded with "40,000,001 is too big to write to me " error"
 - Error message (alarm) sent to NOC
 - Very low level alarm
 - **BUT**, more importantly, call processing was stopped (hung)
 - All subsequent calls were assigned keys > 40,000,001 and encountered same condition
- Eventually (seconds) the call leg between the LNG and the IP-SR timed out and caller was provided with either "busy", "ringback" or "fast busy" (Question pending to Intrado as to which was returned and on what basis)
- BECAUSE the IP-SR did not realize it was failing (or had failed), it kept sending messages (heartbeats) to the LNG that it was OK.
 - LNG kept sending calls to "Primary" (Inglewood)
 - And "around and around we go"
- Once problem was determined, LNGs were **manually** instructed to send traffic only to Miami

Current 911 Technology Multi-Tasking Complexity



Location
- 57 fire
stations
control
of
stoves,
garage
doors,
etc.

800
MHz
Radio

Other
Agency
Pager

3 Situational Displays – Current Call Load
Status, Traffic, Breaking Major Events

Fire / EMS CAD & King County EMS
Database for CBD

Police CAD

Call
Mapping &
Locating,
Xtraker,
Pictometry

Phone
Screen
with
Caller ID,
Emergen
cy Phone
Directory
Call
Taking/
TTY/
Texting
TBD

Backup Radio

Audio Monitor for
Other Positions /
Screens – in addition
to up to 3 channels

Radio Recorder

Phone Recorder

Radio
Foot
Pedals

Three Keyboards
& Three Mice

Additional Speakers:
Telecommunicators
Monitor up to 3
channels at once