The "State of 911" Webinar Series

National 911 Program
March 14, 2013
12:00 PM

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- The National 911 Program designed this webinar series to provide a unique combination of useful tools, information about Federal and State participation in the NG911 process, and real experiences from early adopters about the NG911 transition process underway in regions around the country

- Webinars will be held bimonthly and consist of presentations from a Federal-level 911 stakeholder and state-level 911 stakeholder, each followed by a 10 minute question and answer period

- For more information on future events, past webinar recordings and presentations, and to learn more about the National 911 Program, please visit www.911.gov

"State of 911" Webinar Series

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- 12:00 – 12:20 PM
  - Laurie Flaherty, Coordinator, National 911 Program
    - 2011 National 911 Progress Report

- 12:20 – 12:30 PM
  - Q&A

- 12:30 – 12:50 PM
  - Marlys Davis, King County E911 Program Manager
    - NG911 Early Adoption in King County, WA

- 12:50 – 1:00 PM
  - Q&A

Agenda

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2011 National 911 Progress Report

- Why
- How
- Who
- What
- When
- So what?

Agenda

- The National 911 Profile Database is a uniform set of data elements and definitions, to be collected from states and aggregated at the national level
- It includes two kinds of data:
  - Baseline data (demographics): administrative, system, fiscal
  - Progress benchmarks (NG911): planning, procurement (23 components), installation/testing, transition, operation

What is it?

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9 1 1.gov   **‹9-1-1** POLICE · MEDICAL · FIRE EMERGENCY **NENA** | **National Emergency Number Association**   **9 1 1**.gov

- Basic Demographics

- No 911
- Basic 911
- E911 – Phase I
- E911 – Phase II

- NG911

How does it compare with what exists?

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- Minimal national 911 data currently available
  - Need for basic demographic 911 data
  - Need for data on NG911 implementation
- Designed to produce a national 911 profile
- Fills a need to objectively measure and characterize the status of 9-1-1 services in terms of both technology and operation
- Data collected will draw attention to gaps, roadblocks and solutions
- Data collected will target future activities of the National 911 Program
- Data can be used to:
  - Identify problems,
  - Refine problems, and
  - Define the questions that lead to solutions
- Public policy makers are more likely to make effective decisions if they are supported by data
- If agencies want to improve program effectiveness and efficiency, they need to manage performance, and to do so, they have to measure it.
- The value of the data comes from the story it tells

Why?

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Public Safety Answering Points in Europe

112

SOS

A Publication of the European Emergency Number Association

2012

Table of contents

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Austria

Number of PSAPs:

There are 96 district and municipal Police PSAPs handling 112 and 133 emergency calls (for t... Districts and the 13 Cities except Vienna).

Austria has 8 Provincial PSAPs with overflow capacity and a provincial PSAP for the capital city Vi...

Technology:

In the Stage 1 PSAPs in Vienna and the province of Vorarlberg there is a C.A.D. system in oper... For the Stage 2 PSAPs, fire and ambulance services are partly integrated in dispatch centre... common C.A.D. systems.

There is no data interconnection between stage 1 and stage 2 PSAPs, but a nationwide C.A.D s... development is foreseen.

Caller Location in support of emergency services:

Method of providing mobile caller location and the time needed to provide it on request (
Pull – verbal/written request to the respective network operator
Estimated time: 10 min

Type of caller location information
Cell ID or location of base station Sector ID if available

Accessibility for people with disabilities:

- For persons that are hearing and/or speaking challenged, a national toll free number exists: 133 133.
- The citizen can send an SMS that is transferred to a dedicated Telefax server (block-free comm... tion guaranteed).
- There is also a possibility to send an email to a dedicated address gehoerlosennotruf@polizei.g...
- All messages are centrally received by Police HQ Vienna.

112 available from handsets without SIM cards:

Yes

Public warning

- Main system with sirens
- Participation in EU Cell Broadcast Project

Projects and/or Reforms and/or Upgrades

- Improve service to the public (less PSAPs, more professional staff, multilingual service)
- New functionalities i.e. SMS
- Roll-Out of new technology (call-centre technology, CAD, etc.)
- Data exchange with PSAPs stage 2
- Prepare for eCall

Technology providers

n.a.

Austria

Population: 8.4 million

Area: 83,871 km²

Organisation Handling 112 calls: Ministry of Interior, Federal Police

**National legislative / regulatory acts on 112 references:**

- Telecommunications Act 2003 Communications
  www.rtr.at/en/tk/TKG2003 (English)
  http://www.rtr.at/de/tk/TKG2003 (German)

- Parameter, Fees and Value-Added Services Regulation 2009
  http://www.rtr.at/de/tk/KEMV

Other available emergency numbers:

122 Fire Brigade – under the responsibility of municipalities and some province administrations
128 Emergency Number for Gas Breakdowns - Gas Utility Companies responsibility
133 Police - Ministry of Interior, Federal Police
140 Alpine Rescue - Provincial Administrations
141 Medical Emergency Service - Provincial Administrations
142 Religious Welfare - Catholic Dioceses
144 Ambulance - Provincial Administrations
147 Emergency Service for Kids and Juvenile - Austrian Radio/TV Broadcast

112 Model:

112 calls are received by the police in the local PSAP. If the intervention of other emergency services is needed, the call is forwarded to them.
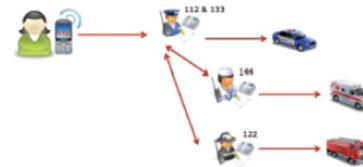
Non-Police calls are forwarded to the operationally and geographically responsible organisation (forward and/or conference call). Police and non-police PSAP's are organisationally and geographically separated.
Police province dispatch centres can act as PSAPs in case of overflow of other PSAPs. Calls are then automatically forwarded to Police's Province Dispatch Centre via the internal phone network.
In case of massive amounts of calls (crisis, disaster, state visit), they are transferred to special call-centres within the Ministry of Interior (0800-number published via media) or province governments.

National
911
Program

National Association
of State
911 Administrators

National
911
Resource Center

List of Data Elements

- Data Dictionary
- Web-based Tool

How the National 911 Profile Database was formed

- Baseline Data (Demographics)
  - Administrative
  - System
  - Fiscal

What it Contains

- Progress Benchmarks (NG911)
  - Planning
  - Procurement (23 components identified)
  - Installation & Testing
  - Transition
  - Operations

What it Contains

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28 Green States
27 complete
1 partial

60.5% of population

44.8% of total land area

2011 Data

- Operations
  - 911 Authorities (state, sub-state)
  - # of Primary / Secondary PSAPs
  - Call volume (wireline, cellular, VoIP, MLTS, telematics, other)
  - % of population served by levels of service
  - % of land area served by levels of service
- Fiscal
  - Annual Revenue / Annual Costs

Data Collected

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Figure 1: State-by-State Progress toward NG911

Nationwide Progress Toward NG911

- Planning
  - 11 states: defined NG911 architecture
  - 9 states: completed a Concept of Operations
- Procurement
  - 10 states: issued an RFP
  - 7 states: contract awarded

Progress Toward Deploying NG911

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- Installation & Testing
  - 7 states: I & T of components has occurred
- 1 state: 100% of population served with NG911 infrastructure
- 1 state: 45% of population served with NG911 infrastructure

Progress Toward Deploying NG911

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- Data are incomplete – 28 states reporting

- Inconsistent

- Limited ability of states to collect data:

  – Lack of funding, staff, collection mechanism

  – Lack of authority

- Agreement with states to report aggregate only

Limitations

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Summary of Recommendations

National Information Tools for Tracking NG911 Progress

- Congress should support enhancements to the Master PSAP Registry and the 911 Profile Database to enable collection, updating, and timely tracking of additional information regarding PSAPs and their progress towards NG911implementation.
- Congress should authorize information collection of aggregate NG911 implementation data and should provide incentives for states and PSAPs to provide data, for example, by conditioning NG911 grant funding on participation in the database effort. Congress should also support the development of web-based data filing mechanisms to minimize the burden on entities submitting NG911 information.

FCC Report to Congress

- Report available @ www.911.gov >
  Announcements > 2011 National 911
  Progress Report

- Will continue to work with NASNA

- Data not collected during 2012

- Data will be collected in 2013

Next Steps

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Laurie Flaherty

Coordinator, National 911 Program

202-366-2705

laurie.flaherty@dot.gov

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Please dial *1 to ask a question.

Questions? Comments?

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Enhanced 911

Next Generation 911 (NG911) Plan
Marlys Davis

King County, Washington

- Population of over 1.9 million people
- 2,134 square miles
- Includes the large urban city of Seattle, as well as suburban, rural, and mountainous areas
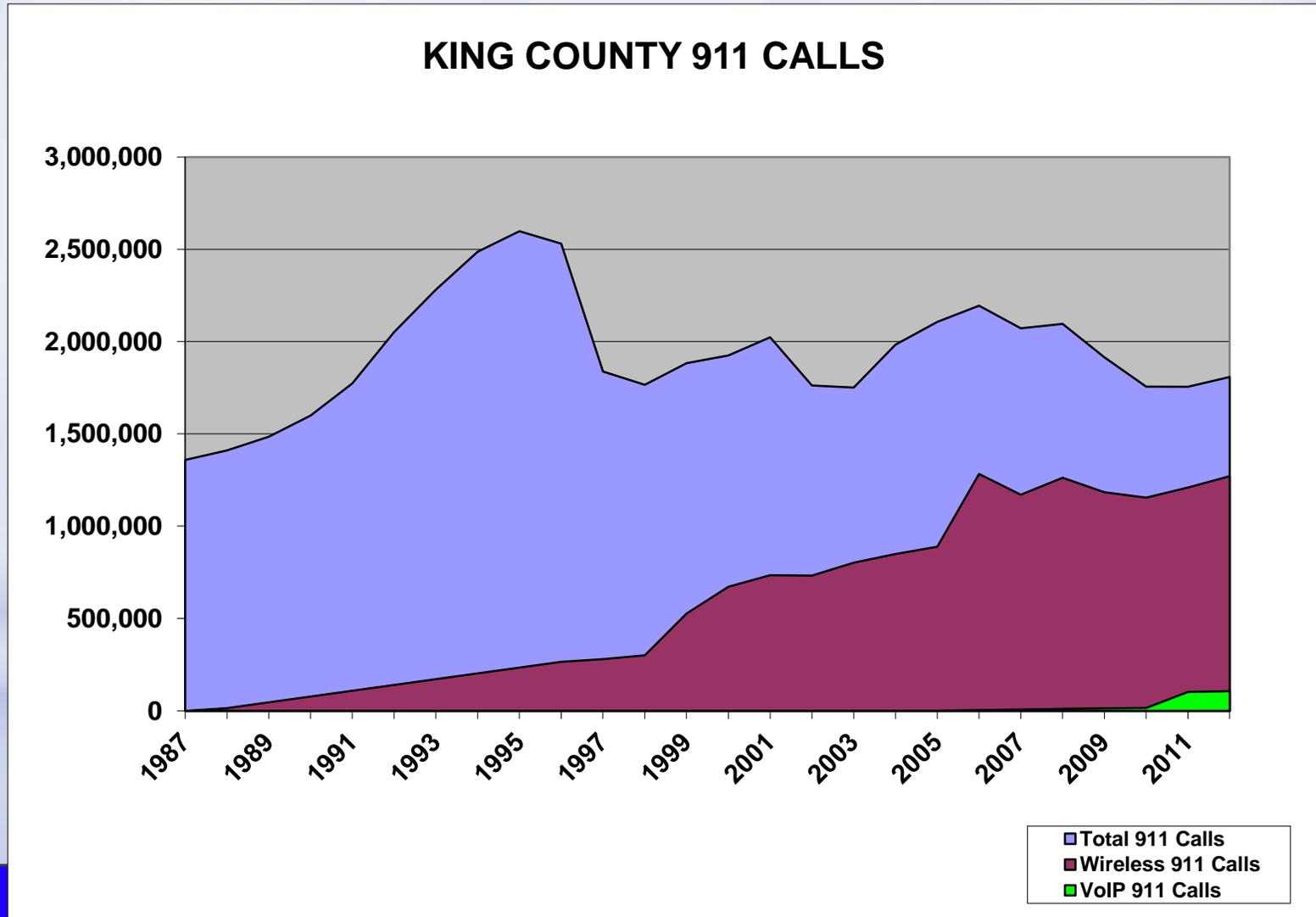
King County, Washington

- Implemented E911 countywide in 1985

  - Started with 27 Public Safety Answering Points (PSAPs)

  - Consolidated down to 12 PSAPs

- Phase II Wireless service implemented in 2003

- 1.8 million 911 calls annually

King County, Washington

70% Wireless, 24% Wireline, 6% VoIP 911 calls

KING COUNTY 911 CALLS

2005 - 2006

- ALI Database Upgraded to NENA Version 4.0 XML Standard
  - NENA Standard Finalized – No development by providers because no orders.
  - Sent an official request for service to CenturyLink/Intrado.
- Intrado Intelligent Emergency Network (IEN) Data Service

# NG911 Implementation Plan – GIS Address Data

2005 - 2007

- Added latitude/longitude of every address in King County to the GIS Data in the PSAP Mapping System
  - ➤ 700,000 addresses
  - ➤ MicroData brought in to collect the data
    - ❖ Project manager and 3 field technicians
  - ➤ Added full-time GIS Specialist
  - ➤ Used orthophotography and site visits

2007

- Pictometry 3-D orthophotography imagery added to PSAP Mapping System
  - Urban areas: 6" imagery
  - Rural areas: 12" imagery
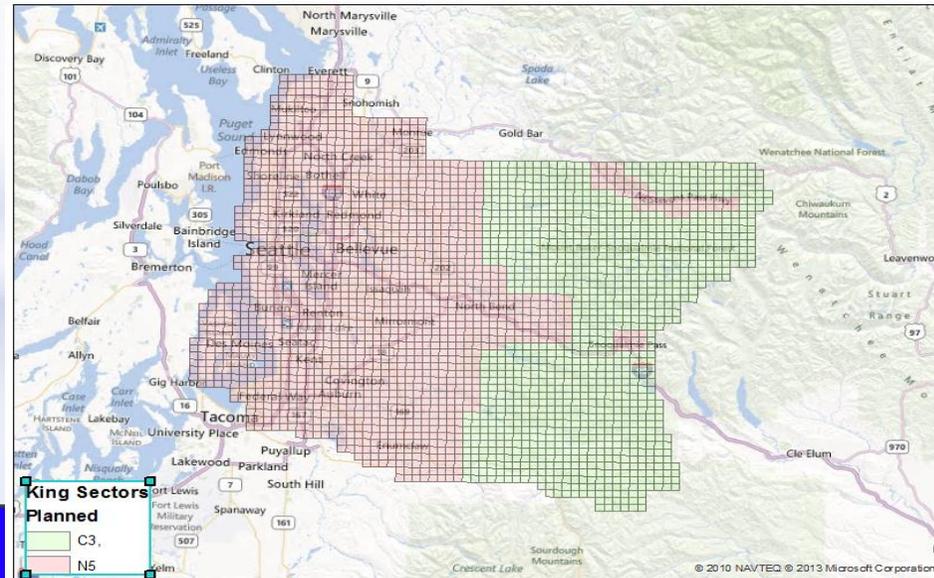
NG911 Implementation Plan – 3-D Imagery

2007

- Pictometry 3-D orthophotography imagery
  - ➢ New imagery obtained every 2 years
  - ➢ Imagery integrates into PSAP Mapping System
  - ➢ Upgrading to 3" and 6" imagery

2008 - 2009

- IP-capable backroom equipment installed at PSAPs
  - Replaced Intrado Lifelines with VIPERs
    - ❖ Could keep same workstation software
  - At the time, serving multiple PSAPs from a single VIPER was just being developed
  - Cost was the same, so went with a VIPER in every PSAP
    - ❖ Today, options for hosting in network, etc.

2008

- Participated as 1 of 5 PSAPs in U.S. Department of Transportation NG911 System Initiative: Concept of Operations

NG911 Implementation Plan – Synchronize ALI & GIS

2009 - Present

- Addresses in ALI database synchronized with GIS Address data
  - Increased ALI Database maintenance to   full-time
  - Coordination with GIS Specialist
  - Now maintain address site point GIS layer for the county
  - GIS data was recently approved as NG911 ready

2009

- E911 initiated funding of a CAD GIS and IT System Specialist in the PSAPs
  - Large PSAPs – 1 of each for a total of 2 FTEs
  - Small PSAPs – ½ of each for a total of 1 FTEs
  - Salary, benefits, hardware, software, training
  - Work location must be in the PSAP, work 100% on E911 and PSAP support
  - Point of contact for E911 Program Office

2011

- Statewide NG911 ESInet and Database
  - State E911 Office with E911 Advisory Committee issued an RFP
  - CenturyLink/Intrado were selected providers
  - All PSAPs in the state now connected to ESInet
  - Currently connecting all End Offices to IP Gateways
    - Legacy Selective Routers will be removed

# Washington State NG911 ESInet and Database
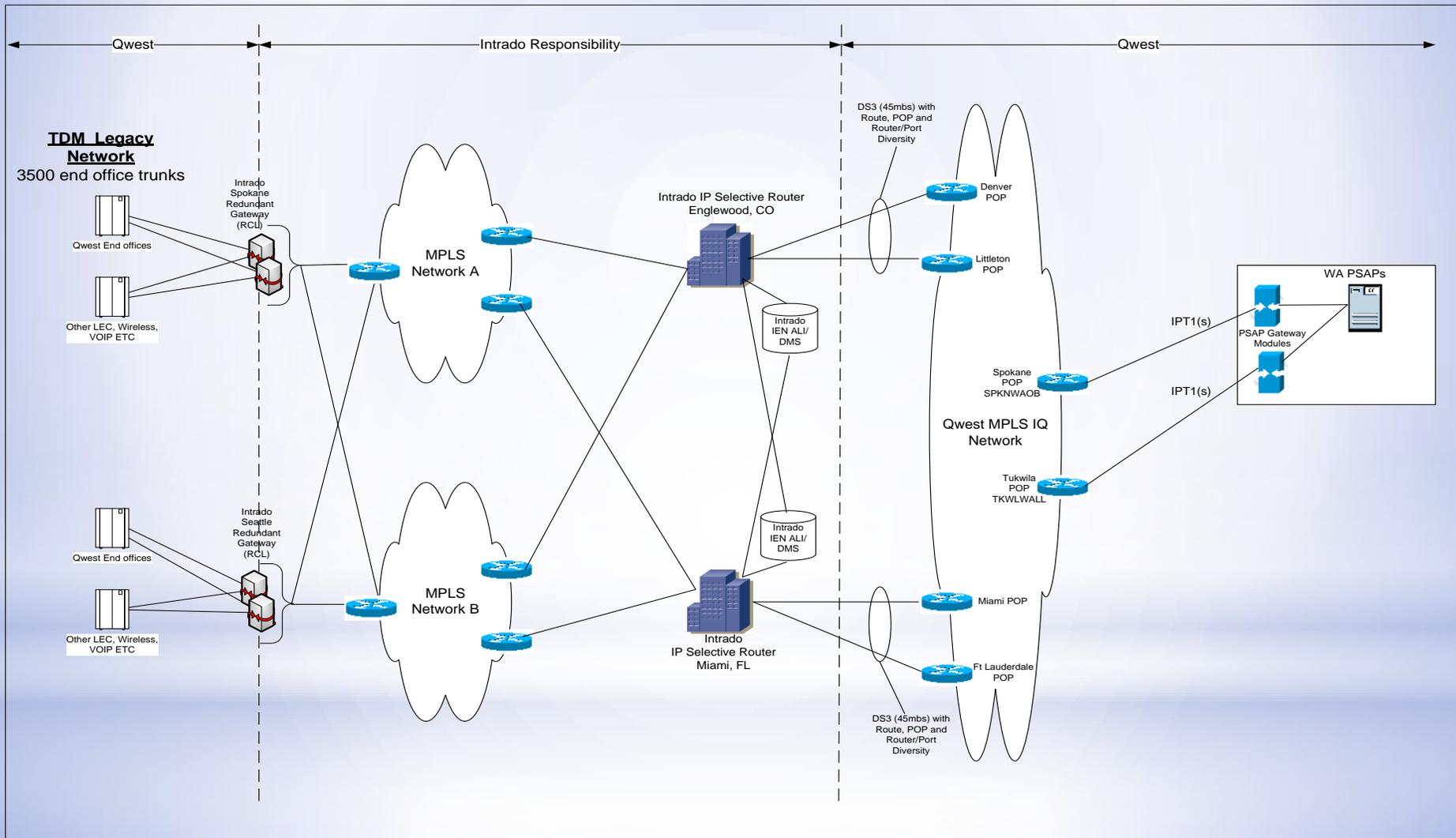
2011

- GIS data in PSAP Mapping System updated at PSAPs through PSAP Data Network
  - PSAP Data Network connects E911 Program Office and all PSAPs
  - GIS data uploads to all PSAPs' Mapping Systems from the E911 Program Office
  - Allows for daily GIS data updates so the data the PSAPs use is always current

NG911 Implementation Plan – Texting Capability

2011 - 2012

- 911 Call Answering workstation software upgraded with Texting Capabilities at all PSAPs
  - ➢ Power911 ~~~~ of receiving
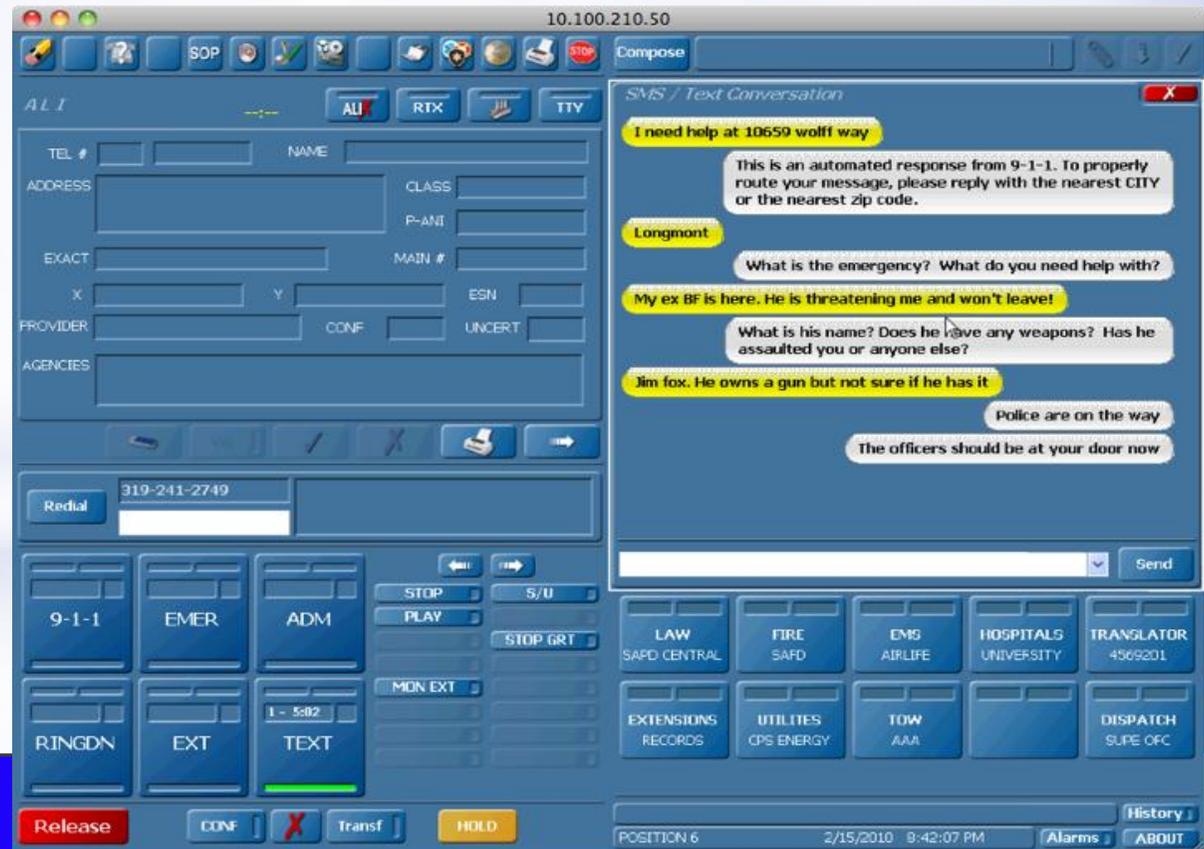
Planned for 2012

- Currently, SIP is being delivered to the PSAP VIPERs and then converted back to CAMA
  - ➤ Had planned to remove CAMA gateways and deploy SIP to all PSAPs
    - ❖ Problem: 5 largest PSAPs have PBXs with Automatic Call Distribution that are not NENA i3 SIP capable

NG911 Implementation Plan – Smart911

2012 - 2013

- Implementing Smart911 in all PSAPs
  - 70% of 911 calls are Wireless with no address
    - People can register their phone numbers and enter their home, work, and school addresses
    - If Phase II location is near 1 of those addresses, can dispatch to the address
  - PSAP can initiate SMS chat with people who have registered as deaf, hard of hearing, or speech impaired

NG911 Implementation Plan – Smart911

2012 - 2013

- Some PSAPs chose to display pop-up on CAD screen
- Other PSAPs wanted to display on E911 equipment
  - ➢ Smart911 requires internet connectivity to communicate with the Smart911 database
    - ❖ This created a security risk for the PSAPs
    - ❖ Have developed a security solution that will protect the PSAPs from risk created by internet connectivity to Smart911 and other NG911 services

2012 - 2013

- i3 Pilot Project with CenturyLink/Intrado
  - ➤ Test all components of full i3 functionality in the ESInet and the Test PSAP
    - ❖ Includes LNG, LIS, CIDB, ESRP, ECRF, BCF, SIF, and LVF
    - ❖ Includes testing of text and media, graphic MSAG and coordinate based routing, and spatial routing based on GIS

2012 - 2013

- Advanced Automatic Collision Notification (AACN) pilot project with Harborview Medical Center and King County Emergency Medical Services
  - ➢ NHTSA Office of Emergency Medical Services, CIREN sites
    - ❖ Phase 1: Delivery of AACN data from telematics providers through ESInet to E911 equipment at the 3 largest EMS PSAPs
    - ❖ Phase 2: Integrate with CAD system, EMS system

NG911 Implementation Plan – Impact of NG911

- All of the additional data and the need to distribute the data will increase staffing needs at the PSAPs
  - ➢ Text and data have different requirements than voice calls
  - ➢ Challenging for small PSAPs with 1 call taker/ dispatcher to handle NG911
- NG911 will be more expensive than E-911
  - ➢ Technology costs
  - ➢ Costs of additional services
  - ➢ Operational costs

PSAP Consolidation Assessment

- Formed a PSAP Consolidation Steering Committee
  - ➢ Directors of all 12 PSAPs
  - ➢ Police Chiefs' Assn., Fire Chiefs' Assn., and EMS
- Issued an RFP for an experienced, qualified firm to provide a high quality professional PSAP consolidation assessment of the King County E-911 system
  - ➢ GeoComm selected
- Identify different options for PSAP configurations and consolidations
- Recommend Optimum PSAP Configuration for the future

PSAP Consolidation Assessment – Next Steps

- PSAP Future Configuration Recommendation Committee
  - ➢ Committee of policy-makers to make recommendations on the configuration of PSAPs in King County
  - ➢ Directors of all 12 PSAPs and Police, Fire, and EMS Reps.
  - ➢ Policy-maker from each PSAP agency
- Committee will meet April - December
  - ➢ Identify and evaluate options
  - ➢ Develop a transition plan for moving from the current to the future PSAP configuration
- Reach consensus on recommendations, actions and timelines

Contact Information

Marlys Davis
E-911 Program Manager
King County E-911 Program Office
7300 Perimeter Road S., Rm. 128
Seattle, WA 98108-3825
Phone: (206)296-3911
Fax: (206)296-3909
Email: marlys.davis@kingcounty.gov

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Please dial *1 to ask a question.

Questions

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- Thank you to all of today's presenters and participants and we look forward to seeing you at our next "State of 911" webinar

Date	Presenters	Registration
Wednesday, May 8, 2013	• **National Level Participant - TBD** • **Vermont – Text-to-911 Case Study** (Presenter: David Tucker)	Registration will open April 8, 2013
Wednesday, July 10, 2013	TBD	Registration will open June 10, 2013
Wednesday, September 4, 2013	TBD	Registration will open July 29, 2013

Future "State of 911" Webinars

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Laurie Flaherty

National 911 Program Coordinator

202-366-2705

laurie.flaherty@dot.gov

For questions regarding future webinars, please contact NG911wg@bah.com

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