

State of Nevada FirstNet Statewide Data Collection Webinar

September 23, 2015





Agenda

- Introductions
- FirstNet Overview
- NV FirstNet Project Overview
- Capacity and Coverage Requirements Overview
- Data Collection & Survey Submission Session
- Questions &Answers





Vision for Public Safety





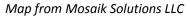


Nationwide Vision



PUBLIC SAFETY NEEDS

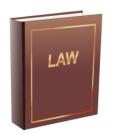
- ✓ Dedicated Spectrum
- ✓ Priority / Preemption
- ✓ Public Safety Grade
- ✓ Cybersecurity
- ✓ Public Safety Applications







Implementing the Vision



THE LAW 2.22.12

FirstNet becomes law PL 112-96

GOVERNANCE



The FirstNet Board has **15** members, including those with telecommunications and public safety backgrounds

Each Governor appoints 1 Single Point of Contact (SPOC) and governing body to represent the state's interests to FirstNet

40 member Public Safety Advisory Committee (PSAC) advises FirstNet on public safety intergovernmental matters

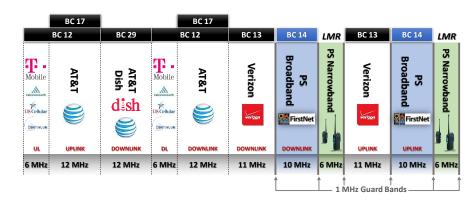




\$7B authorized to build the FirstNet network. Funded by spectrum auctions through 2022

BAND CLASS (BC) 14

20MHz of bandwidth has been dedicated to public safety in the prime upper **700MHz** frequency range







FirstNet Organization

Board

Sue Swenson, Chair
Jeff Johnson, Vice Chair
Barry Boniface
Chris Burbank
Neil Cox
Ron Davis
James Douglas
Edward Horowitz
David Mader
Kevin McGinnis
Annise Parker
Ed Reynolds
Suzanne Spaulding

Richard Stanek

Teri Takai

Chief Executive Officer
Michael Poth

President
TJ KENNEDY

Chief User Advocacy Officer
TJ KENNEDY

Chief Technical Officer (CTO)
JEFF BRATCHER (Acting)

Chief Admin. Officer (CAO)
FRANK FREEMAN

Chief Financial Officer (CFO)

RANDY LYON

Chief Information Officer (CIO)

JIM GWINN

Acting Chief Counsel (OCC)

Jason Karp



Director of
State Consultation
DAVE BUCHANAN

Claudia Wayne

Director of
State Plans
RICHARD REED

Brian Hobson Doug Harder

Director of Outreach AMANDA HILLIARD

Jeremy Zollo (State/Local)
Carl Rebstock (Tribal)
Chris Algiere (Federal)
Kristi Wilde (SPOCs)

Vicki Lee (Associations)

Director of
Government Affairs
ED PARKINSON

Justin Shore Thomas Shull Director of Communications (Acting)

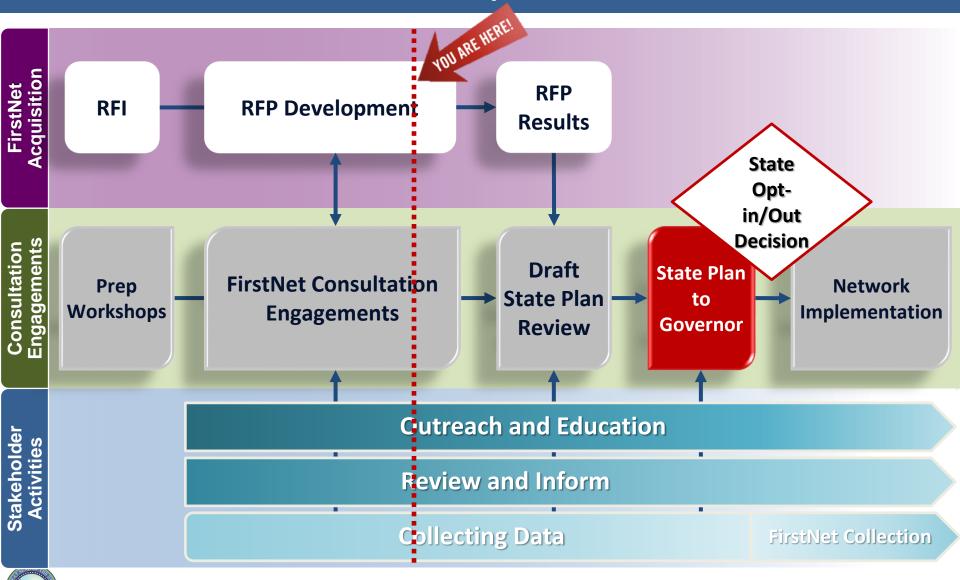
RYAN OREMLAND

Kyle Richardson





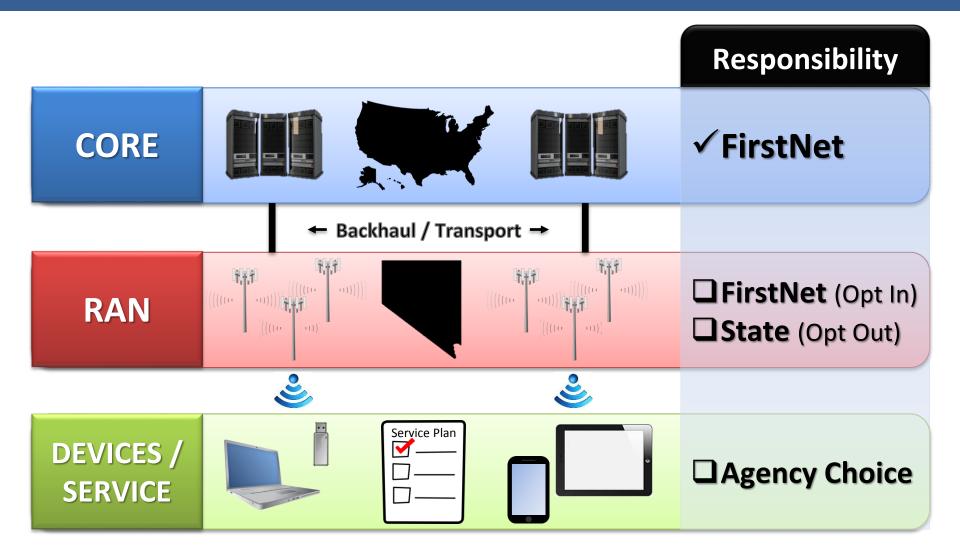
FirstNet Development Process



Digital Decision

Nevada FirstNet

Network Components and Choices







Need Inputs to Get Answers





Hardening
Costs
Available
Devices

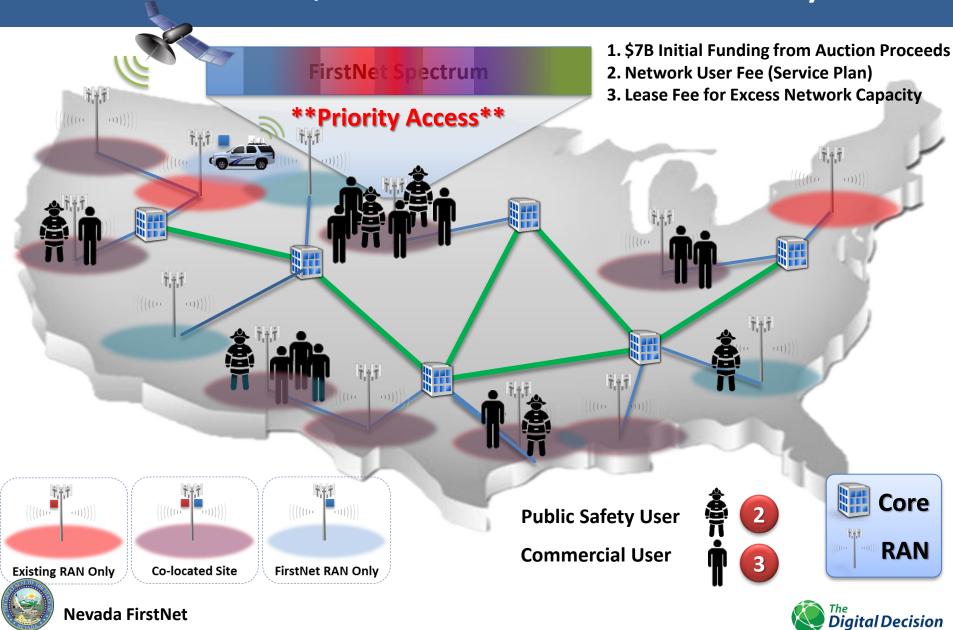
FirstNet Acquisition

Adoption Estimates

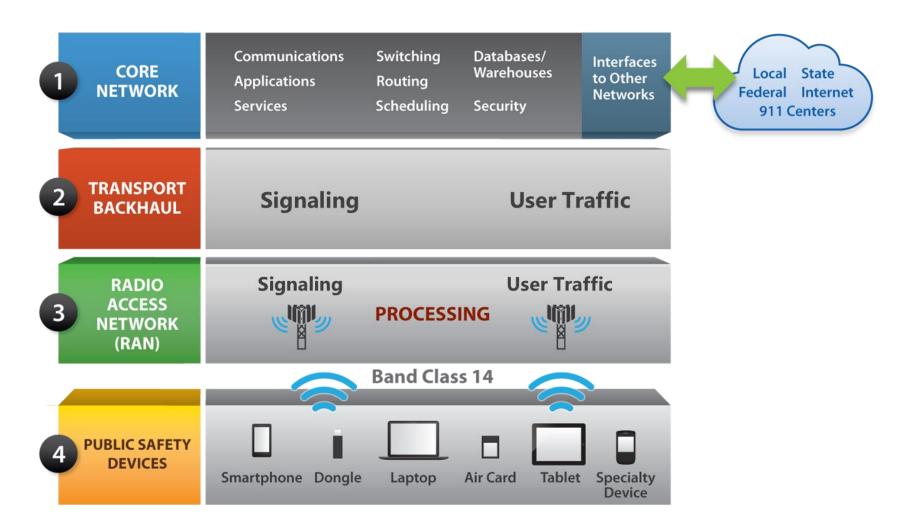




Revenue, Architecture & Priority



LTE Architecture







Rural Deployment

Requirements of the Act

"...shall require deployment phases with substantial rural coverage milestones as part of each phase of the construction and deployment of the network"

 State Consultation Topic – identifying coverage objectives and inputs on a phased deployment

Fiscal Approach

Nationwide Reinvestment of Revenues

(As proposed in 2nd public notice)

Potential Technical Options

- High power tower sites
- High power devices
- Deployable solutions (including SATCOM)



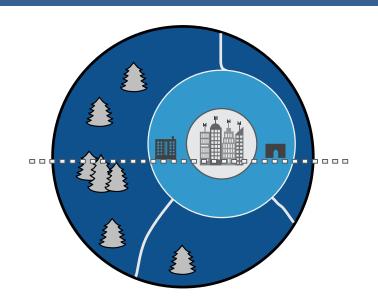
Contractual Measures

- Considering RFP incentives for rural
- Network policies with partner(s) to evaluate existing infrastructure beyond initial deployment

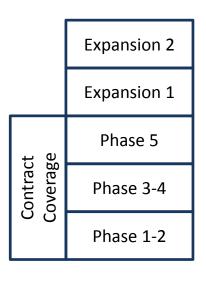
Note: The definition of rural does not determine coverage, our resources will determine coverage. The definition of rural will be used to measure whether substantial rural milestones have been included in each phase of deployment. Being included in the definition of rural does not guarantee coverage, nor does being excluded from it deny coverage.







RURAL





URBAN

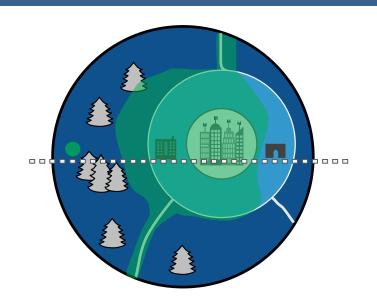
SUBURBAN

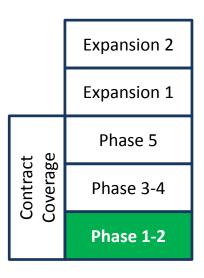
SUBURBAN

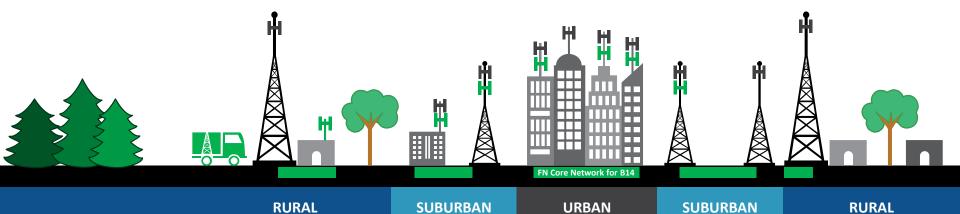




RURAL

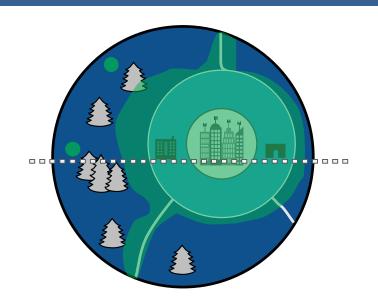


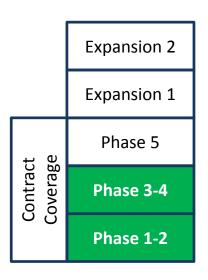


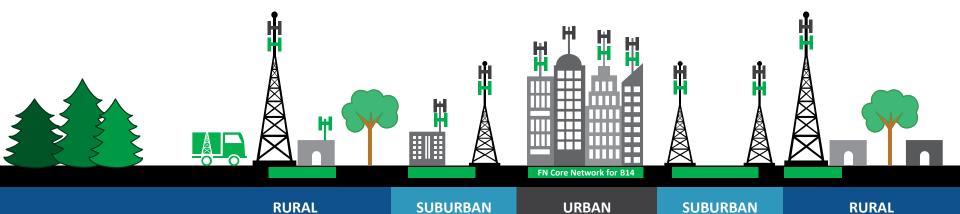


Nevada FirstNet



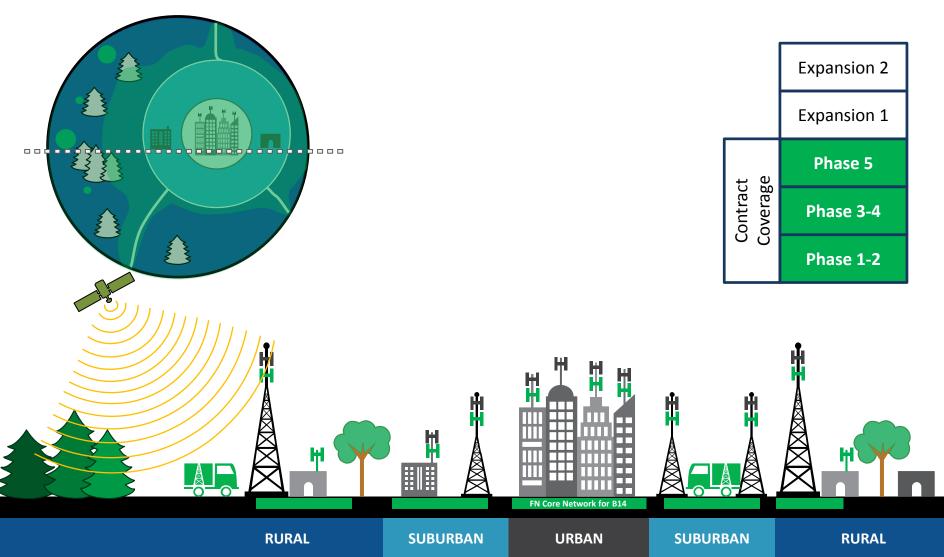






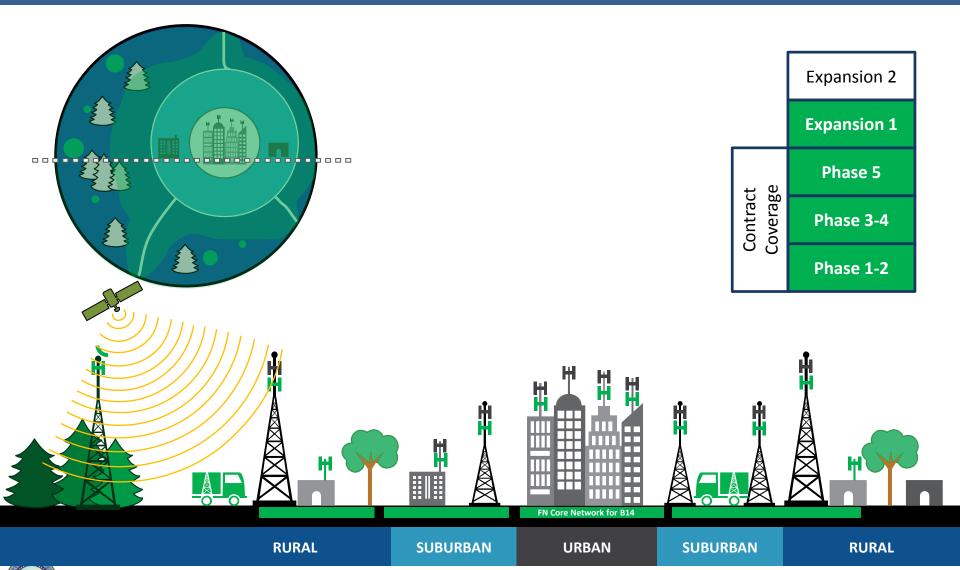
Nevada FirstNet



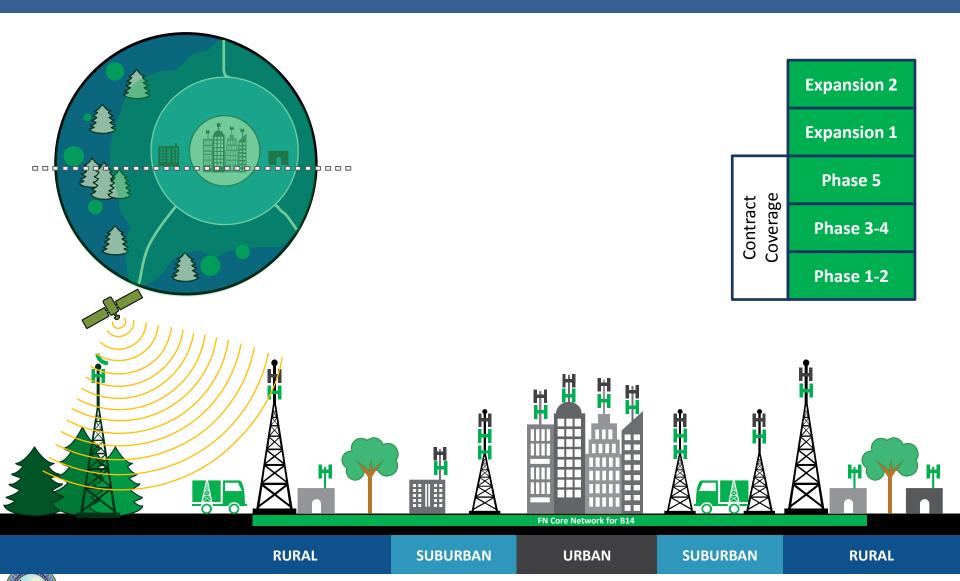














FirstNet Network Benefits



Dedicated to Public Safety



Public Safety
Apps /
Services

QoS, Priority & Preemption (QPP)

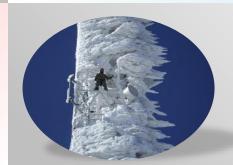


Situational Awareness





Local Control



Public Safety Grade





"FirstNet must provide a service that is compelling to public safety in order to earn your business."

Sue SwensonChairwoman, FirstNet

WHY: There is NO Federal or State Mandate to use the Network...





Outreach and Education

S Your SPOC or

Twitter (@FirstNetGov)

Section 1
Google+ (+FirstNetGov)

YouTube (FirstNetGov)

Flickr (FirstNetGov)

in LinkedIn

SPOC List:

www.firstnet.gov/consultation

PSAC:

<u>www.firstnet.gov/about/public-</u> <u>safety-advisory-committee</u>

www.firstnet.gov

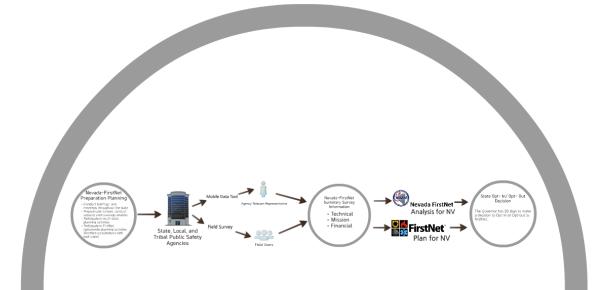
- Fact Sheets
- Blogs
- Presentations
- Current Events
- Board meetings and materials



- State Consultation
- State/Local Outreach Activities
- Public Comment
- Environmental & Historic/Cultural Topics (PEIScomments@firstnet.gov)







Nevada-FirstNet Preparation Plan





Nevada-FirstNet Preparation Planning

- Conduct briefings and meetings throughout the state
- Prepare user surveys, conduct capacity and coverage analysis
- Participate in multi-state planning activities
- Participate in FirstNet nationwide planning activities (FirstNet consultations with each state)



State, Local, and Tribal Public Safety Agencies



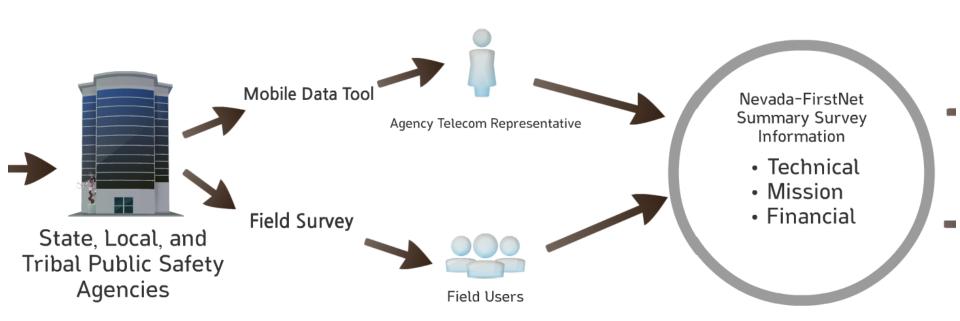


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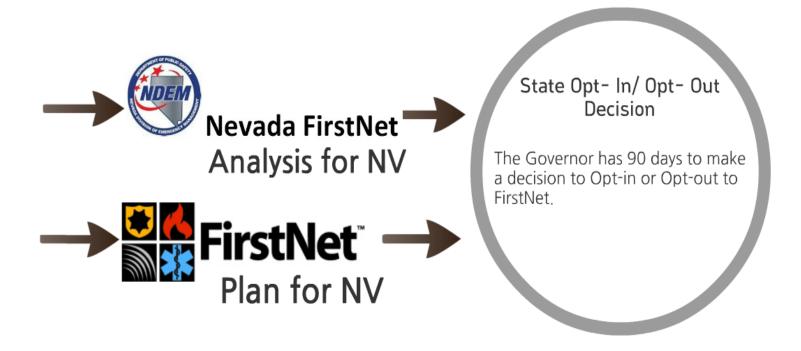


















State Opt- In/ Opt- Out Decision

The Governor has 90 days to make a decision to Opt-in or Opt-out to FirstNet.





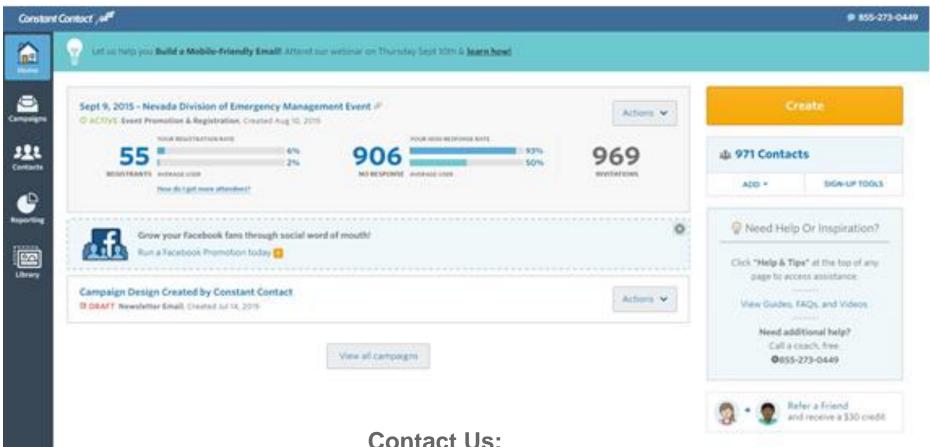


NV-FirstNet Stakeholder Outreach and Education (O&E) Efforts Col. Ken Morckel (Ret.) NV-FirstNet, PS O&E SME





Stakeholder Communications



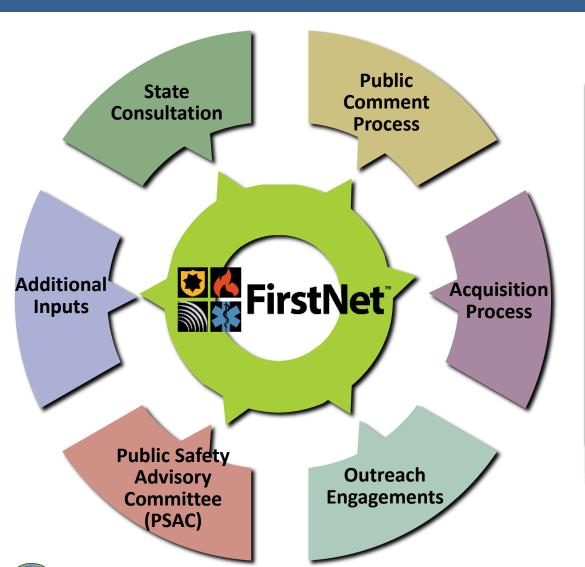
DHSGrants@dps.state.nv.us

We also have a Text to Join option; Text "NVFIRSTNET" to 22828 to join our communications list.





Stakeholder Inputs



State Consultation

- 1. Construction of a Core and RAN build out
- 2. Placement of towers
- 3. Coverage areas of the network
- 4. Adequacy of hardening, security, reliability, and resiliency
- 5. Assignment of priority to local users
- 6. Assignment of priority and selection of entities seeking access to or use of the network
- 7. Training needs of local users

Capacity and Coverage Overview

Coverage

Where?

- Where Needed (Objectives)
- Different Device Types
- Throughput levels

apacity

How Much?

- # of Users and Devices
- Application Usage
- Data Consumption

FirstNet Financial Team

- Request for Proposals (RFP)
 Development/Evaluation
- Economic Modeling



FirstNet Baseline

FirstNet Engineering Team

- RFP Development/Evaluation
- Core, radio access network (RAN) and Devices





Our Stakeholders are the Key to Our Success

The ability to make the best decision depends on the amount of information gathered





NV-FirstNet Data Collection Session Ayrielle LeGrande NV-FirstNet, Data Collection SME





Data Collection

Nevada-FirstNet Preparation Online Survey

- Information will gathered by Mobile Data Tool and User Survey
- Designed to collect the essential information for Nevada in preparation for state consultation
- Questions are focused on gathering the current and future requirements for Public Safety Data Communications, as well as current coverage information.

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Status of NV-FirstNet Data Collection

Total Responses: 39

- Demographics:
 - Respondent Levels of Government:
 - Federal: 3
 - State: 9
 - Tribal: 3
 - County: 12
 - Local: 10
 - Other: 2
 - Respondent Public Safety Disciplines:
 - Emergency Management: 3
 - Emergency Medical Services: 2
 - Fire Service: 8
 - Law Enforcement: 13
 - Other Governmental Agencies: 3
 - Other Non-Specified: 3
 - Public Administration & Support Services:
 - Public Health: 1
 - Public Safety Communications: 4

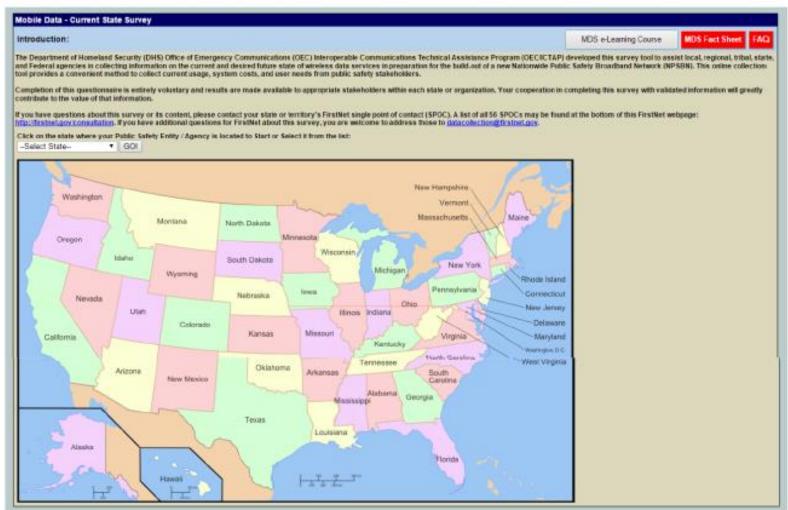
	Total:	Major Cities:
Employees:	Full Time: 10,448 Part Time: 566 Volunteer: 1,296 Total: 11,060	Full Time: 5,475 Part Time: 275 Volunteer: 208 Total: 5,886
Devices:	Voice/Data Devices: 2,777 Data Only Devices: 1,547 Other Devices: 500	Voice/Data Devices: 1,487 Data Only Devices: 806 Other Devices: 400
Vehicles:	Vehicles: 4,599 Vehicular Devices: 4,664	Vehicles: 2,311 Vehicular Devices: 3,934
Monthly User Fees:	Voice Data: \$1,461.35 Data Only: \$612	Voice Data: 942 Data Only: 318
Greatest Barriers For Network:	Yes, Coverage Is a Barrier: 23 No, Coverage Is NOT a Barrier: 3	Yes, Coverage Is a Barrier: 5 No, Coverage Is NOT a Barrier: 2





Data Collection

http://publicsafetytools.info/mobile_data_survey/







NV-FirstNet MDT Workshop







NV-FirstNet MDT Workshop

Mobile Data - Current State Survey

Introduction:

The questions included in this survey are listed on the page below. Before continuing with the survey, please review these questions to ensure that you have the necessary information to complete the survey. A complete list of questions and answer selections is available through this <u>link</u>.

Organization type

State, County, City

Number of full time, part time employees and volunteers

Number of response or operations vehicles in your agency

Number of Voice/Data devices assigned to personnel

Number of Data only devices assigned to personnel

Use of personal devices for agency business and compensation

Use of Machine to Machine Devices (cameras, sensors)

Frequency of use and primary application used in each of 12 application categories:

Single or multiple service providers

Procurement process used

Relationship with sales/account manager for provider

Other specialized services or support from provider

Monthly cost per device for data/voice plan

Plan information, fixed/variable rate, data caps

Cost

Security

Expertise

Quit Survey

Take Survey

Agency Information

Agency Discipline

Agency Name

Your name and contact information

Devices

Number of Voice/Data devices assigned to vehicles

Number of Data only devices assigned to vehicles

Number of Other devices assigned to vehicles

Planned changes in the numbers of devices used

Applications

Communications, Voice over IP, AVL, Locations Services, CAD, Database Inquiries, Internet/Email, Field Based

Reporting, Video, Telemetry

Service Plans

Use of commercial or shared paging systems

Other available procurement options

Relationship with technical support staff for provider

Contract duration

Monthly cost per device for data only plan

Average monthly data usage per device

Barriers

Network Reliability

Coverage





NV-FirstNet MDT Workshop

Single or multiple service providers

Procurement process used

Relationship with sales/account manager for provider

Other specialized services or support from provider

Monthly cost per device for data/voice plan

Plan information, fixed/variable rate, data caps

Cost

Security

Expertise

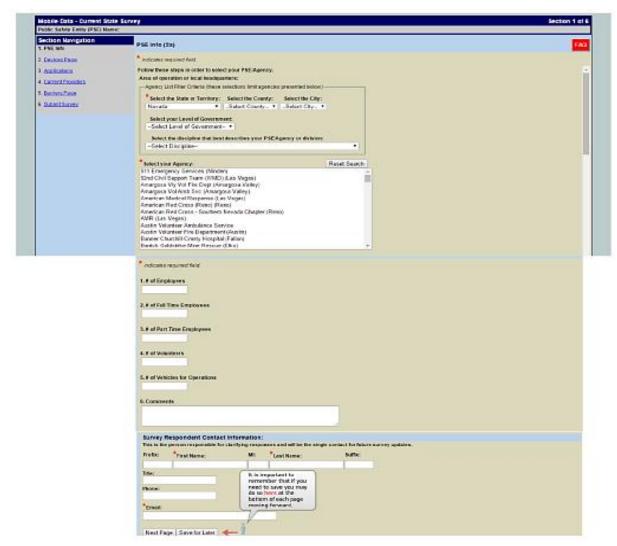
Quit Survey

Take Survey





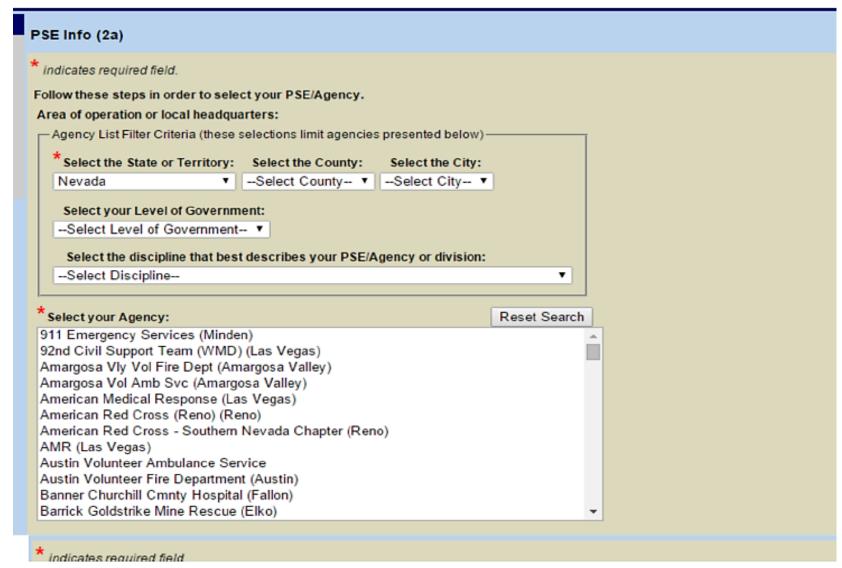
NV-FirstNet MDT Workshop – PSE Info







NV-FirstNet MDT Workshop – PSE Info







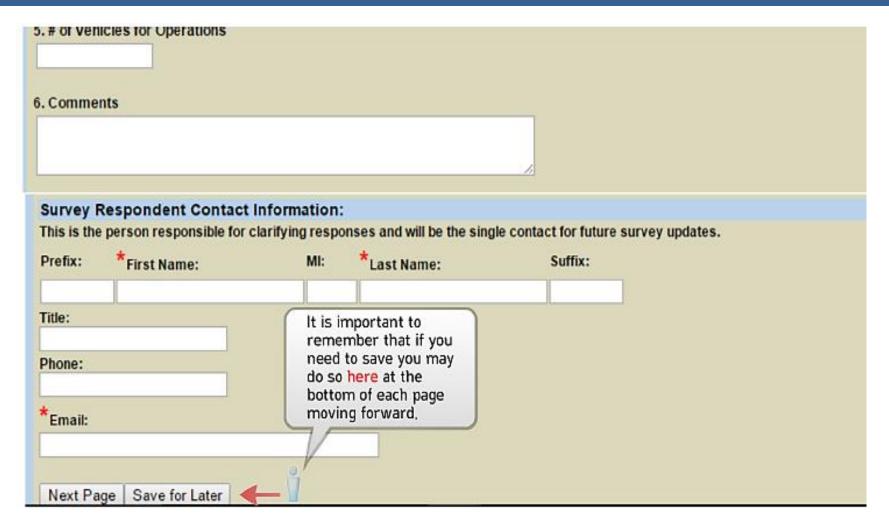
NV-FirstNet MDT Workshop – PSE Info

Austin Volunteer Fire Department (Austin Banner Churchill Cmnty Hospital (Fallon)				
Barrick Goldstrike Mine Rescue (Elko)	1		•	
* indicates required field.				
1. # of Employees				
2. # of Full Time Employees				
3. # of Part Time Employees				
4. # of Volunteers				
5. # of Vehicles for Operations				
6. Comments				
			4	
Cumay Dannandont Control Inform				
Survey Respondent Contact Information: This is the person responsible for clarifying responses and will be the single contact for future survey updates.				
Prefix: *First Name:	MI:	*Last Name:	Suffix:	





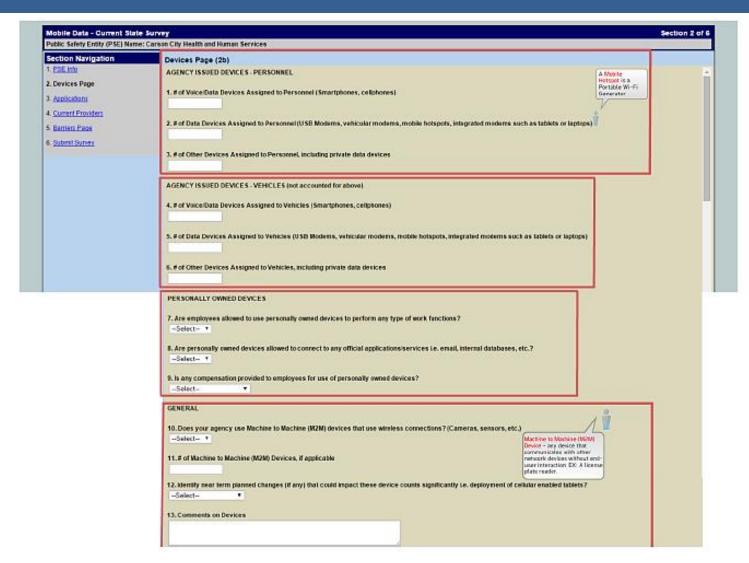
NV-FirstNet MDT Workshop – PSE Info (Survey Respondent Contact Information)







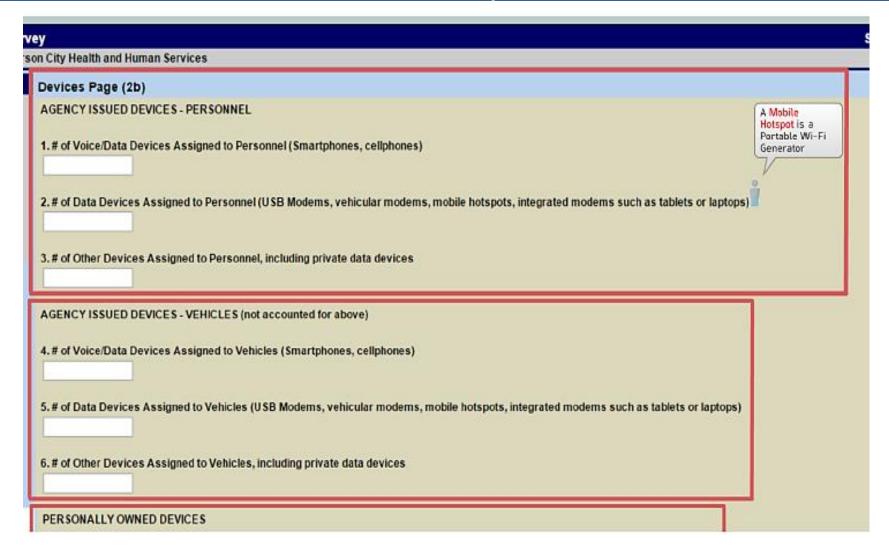
NV-FirstNet MDT Workshop – Devices







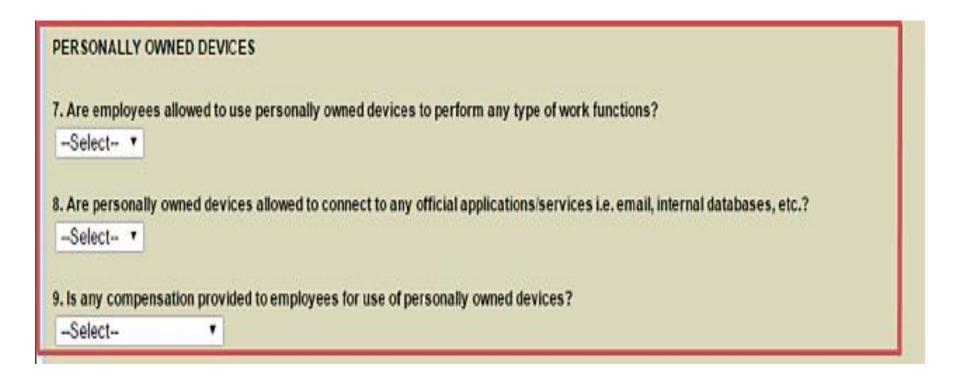
NV-FirstNet MDT Workshop – Devices (Personnel & Vehicles)







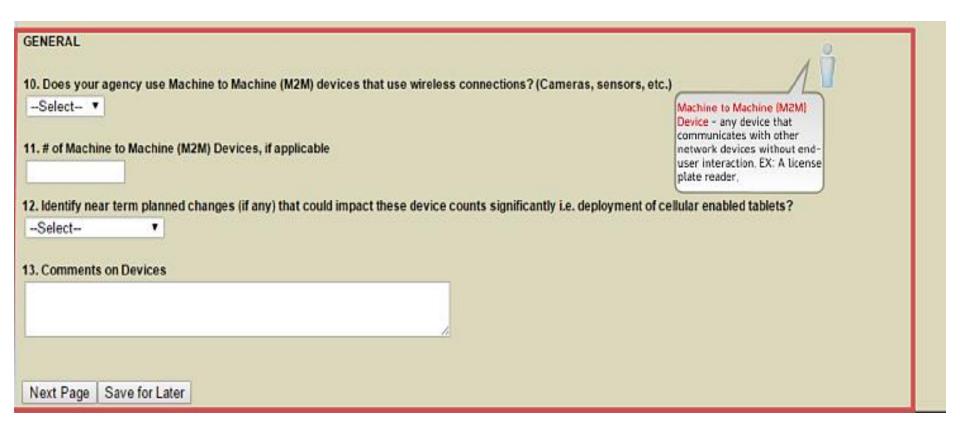
NV-FirstNet MDT Workshop – Devices (Personally Owned Devices)





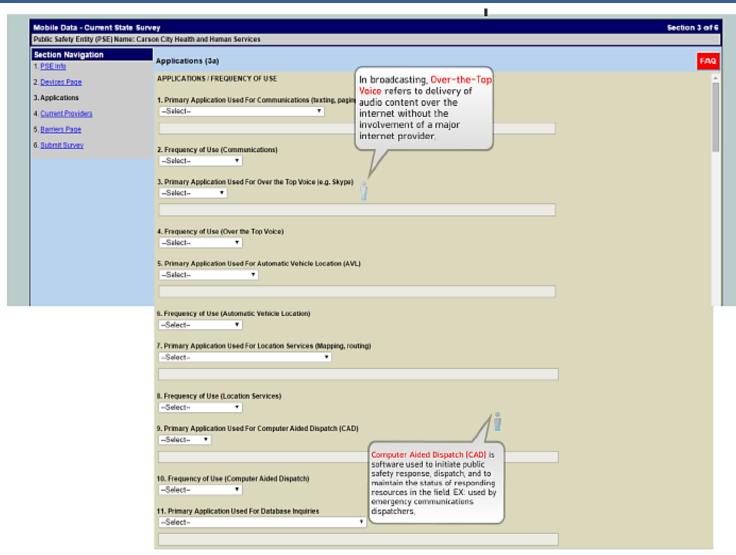


NV-FirstNet MDT Workshop – Devices (General)









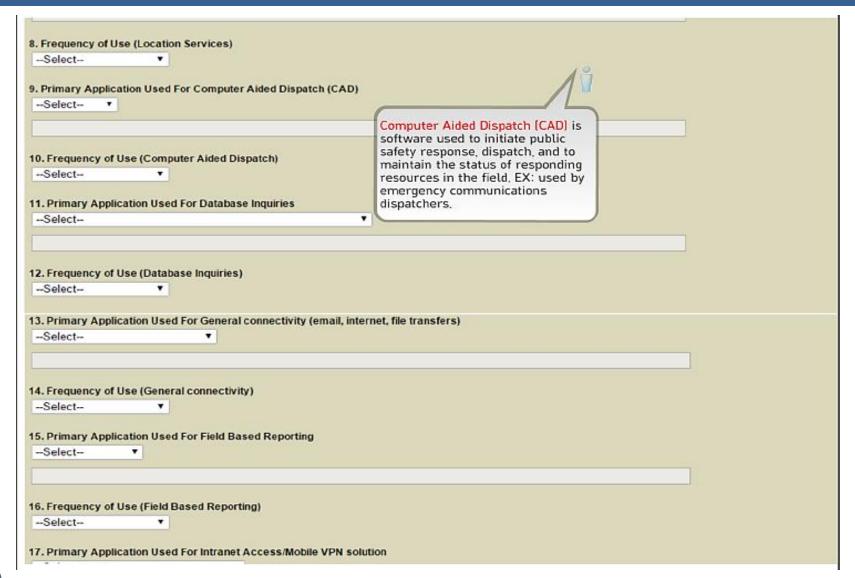






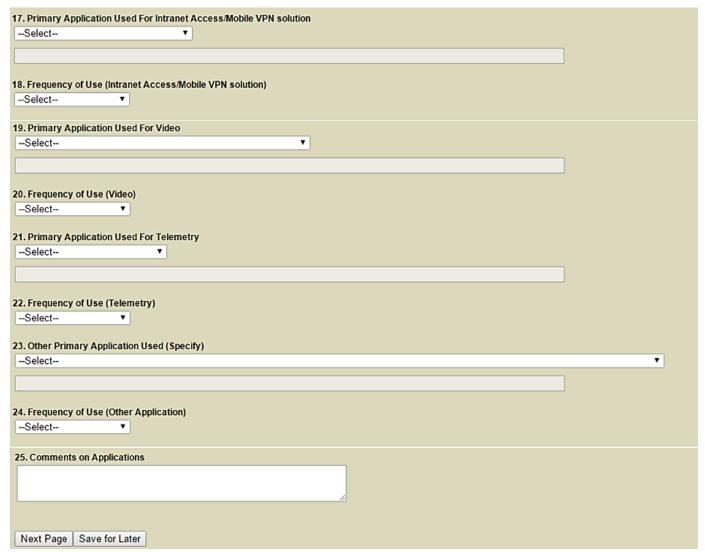








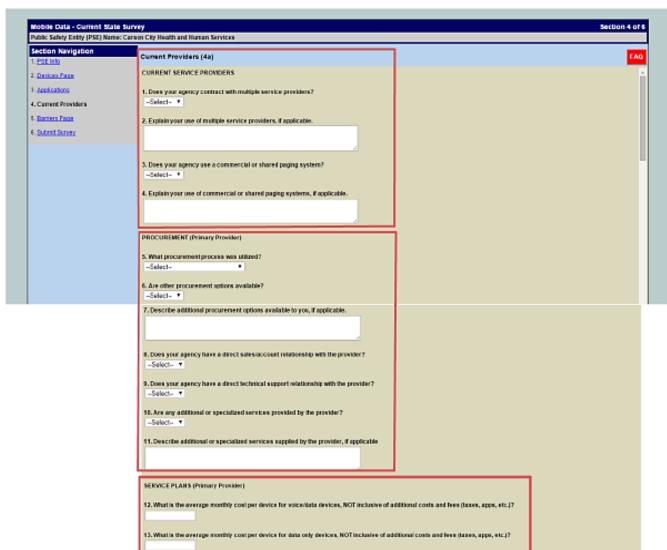








NV-FirstNet MDT Workshop – Current Providers







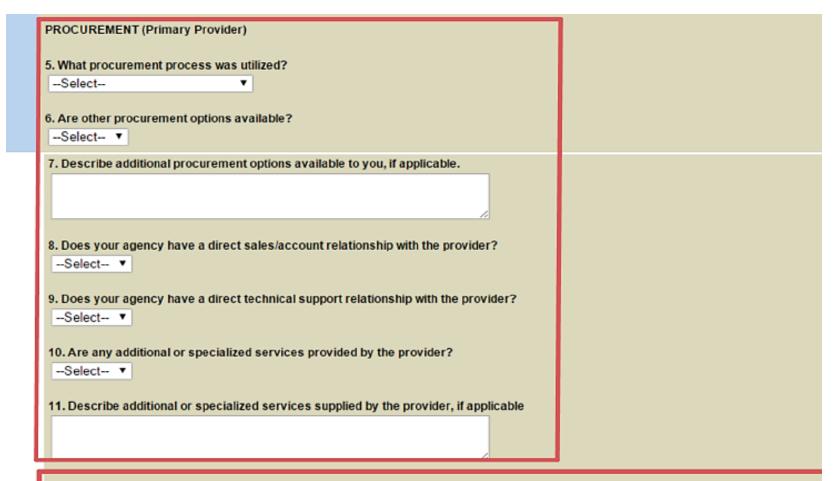
NV-FirstNet MDT Workshop – Current Providers (Current Service Providers)

urvey arson City Health and Human Services **Current Providers (4a)** CURRENT SERVICE PROVIDERS 1. Does your agency contract with multiple service providers? -Select- ▼ 2. Explain your use of multiple service providers, if applicable. 3. Does your agency use a commercial or shared paging system? --Select-- ▼ 4. Explain your use of commercial or shared paging systems, if applicable. PROCUREMENT (Primary Provider) 5. What procurement process was utilized? --Select--





NV-FirstNet MDT Workshop – Current Providers (Procurement)



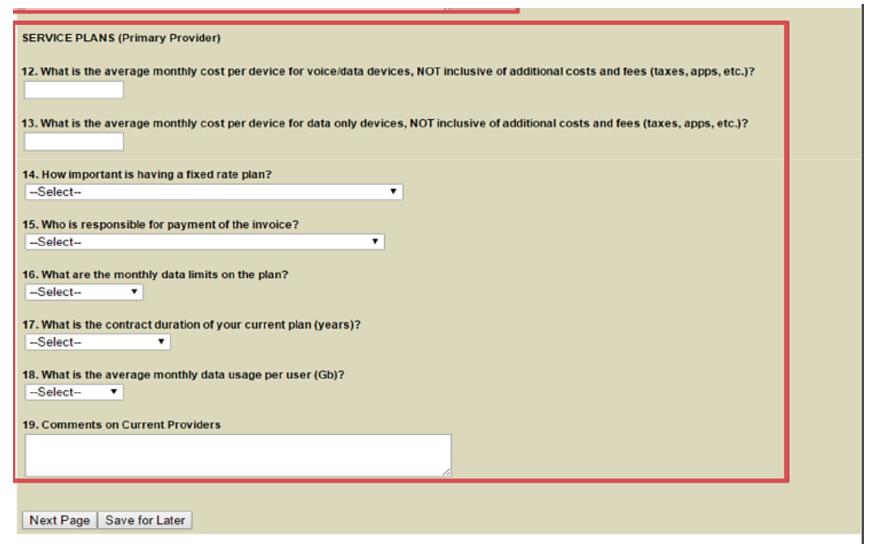
SERVICE PLANS (Primary Provider)

12. What is the average monthly cost per device for voice/data devices, NOT inclusive of additional costs and fees (taxes, apps, etc.)?





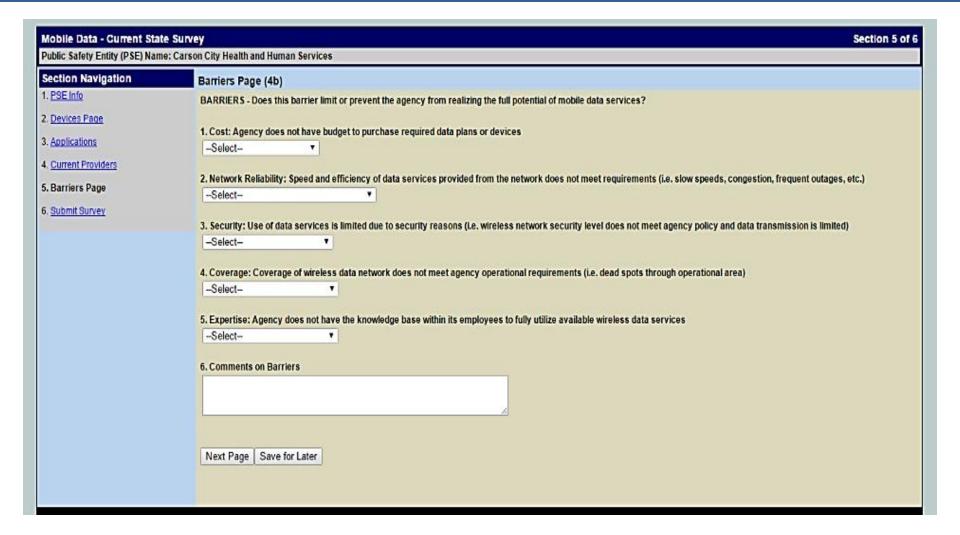
NV-FirstNet MDT Workshop – Current Providers (Service Plans)







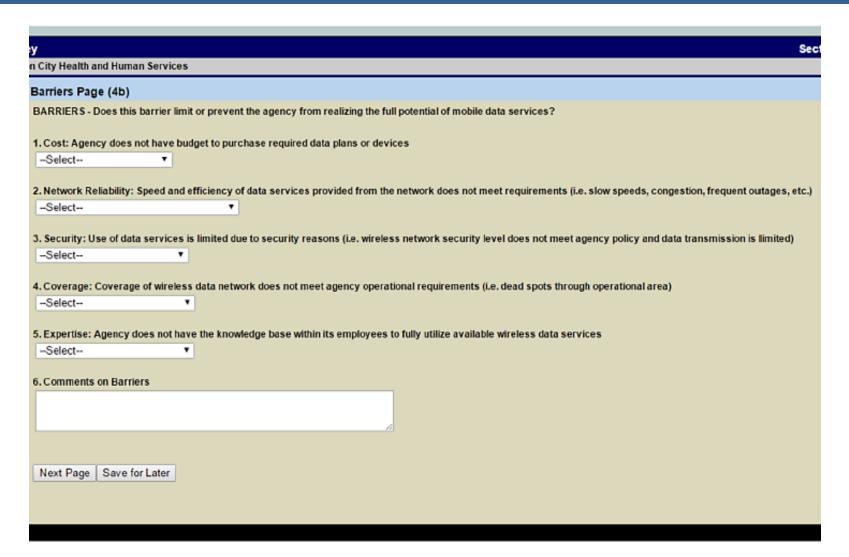
NV-FirstNet MDT Workshop – Barriers Section







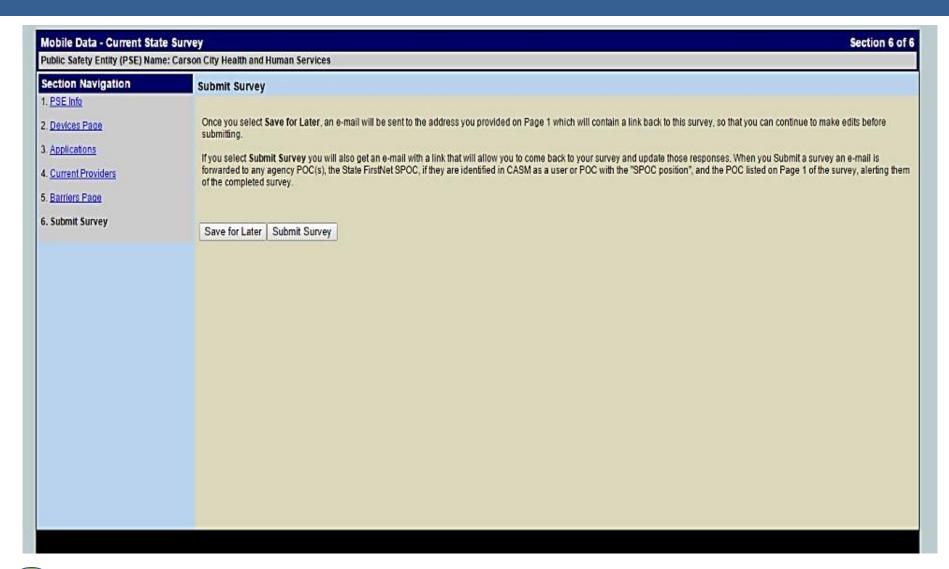
NV-FirstNet MDT Workshop – Barriers Section







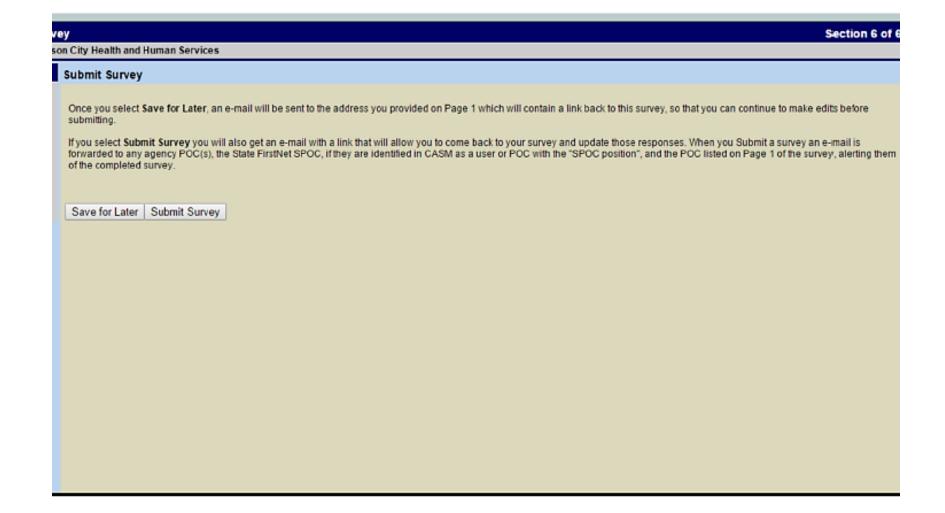
NV-FirstNet MDT Workshop – Submit Survey







NV-FirstNet MDT Workshop – Submit Survey







Contact Us

by Email

DHSGrants@dps.state.nv.us

Sign up for updates

http://tinyurl.com/nv-firstnet

Website

http://dem.nv.gov

We also have a Text to Join option; Text "NVFIRSTNET" to 22828 to join our communications list.





Questions and Answers





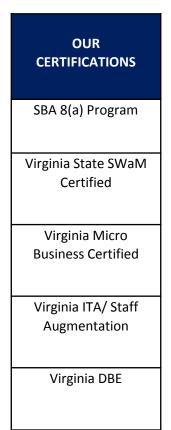


The Digital Decision - Black & Veatch Team



About The Digital Decision

The Digital Decision was founded in 2007 with the mission of establishing true nationwide interoperable communications for our nation's first responders. We led <u>America's first two public safety broadband network deployments</u>, negotiated state-wide governance agreements for four states, and over 67 local jurisdictions, and provided expert consultant services to the world's largest commercial carriers and equipment manufacturers. These combined experiences are unparalleled in the marketplace and enables us to provide unique, groundbreaking intelligence that best positions our state and local customers to make their public safety broadband communications decision.





FIRSTNET RELATED SERVICE OFFERINGS

Customizable SLIGP
Phase 1 (Outreach &
Education) & Phase 2
(Data Collection)
Strategies

State and Local Requirements and Design

Custom Mobile Applications

The Decision: OPT-In/OPT-Out/ Commercial

Network Build, Operations and Stakeholder Training



The Digital Decision – Black & Veatch Team



About Black & Veatch

- Black & Veatch is an employee-owned, global leader in building Critical Human Infrastructure™ in Energy, Water, Telecommunications and Government Services.
- Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and program management. In 2012 revenues were U\$\$3.3 billion.

Team accomplishments include:

- Developing LTE business-models for governments, carriers, and equipment manufacturers
- Developing multi-jurisdictional public safety broadband governance models
- Facilitating multi-jurisdictional public safety broadband operational agreements
- Leading national and international advocacy efforts to secure 700 MHz spectrum and funding for public safety broadband communications
- Designing and deploying LTE networks for national and international commercial carriers
- Designing and deploying public safety broadband networks for local and state governments

Company Achievements:

- Ranked #1 in Telecom by ENR for 5 years running
- Serviced over 100,000 Wireless Sites
- 30,000 Miles of Fiber-Optic Network

GLOBAL FOOTPRINT

