Vision for the Future

Regional Workshop

May 29, 2013

Craig Farrill

Acting CTO

FirstNet Board Member

Jeffrey D. Johnson, Chief (Ret.)

CEO Western Fire Chiefs Association

Acting Customer Advocacy Officer

FirstNet Board Member

What We'll Cover

VISION AND GUIDING PRINCIPLES

LEARNING FROM PUBLIC SAFETY

THE STATE & LOCAL CONSULTATION PROCESS

RESEARCH AND ANALYSIS

PROJECT PHASES

CLOSE

FirstNet

What is the vision of FirstNet?

VISION

To provide emergency responders with the first nationwide, high-speed, wireless broadband network dedicated to public safety

" FirstNet will be a force multiplier, enabling collaboration to help save more lives, solve more crimes and keep communities safer. "

Jeffrey D. Johnson, Chief (Ret.)
Chief Executive Officer — Western Fire Chiefs Association
FirstNet Board Member

FirstNet exists to serve public safety.

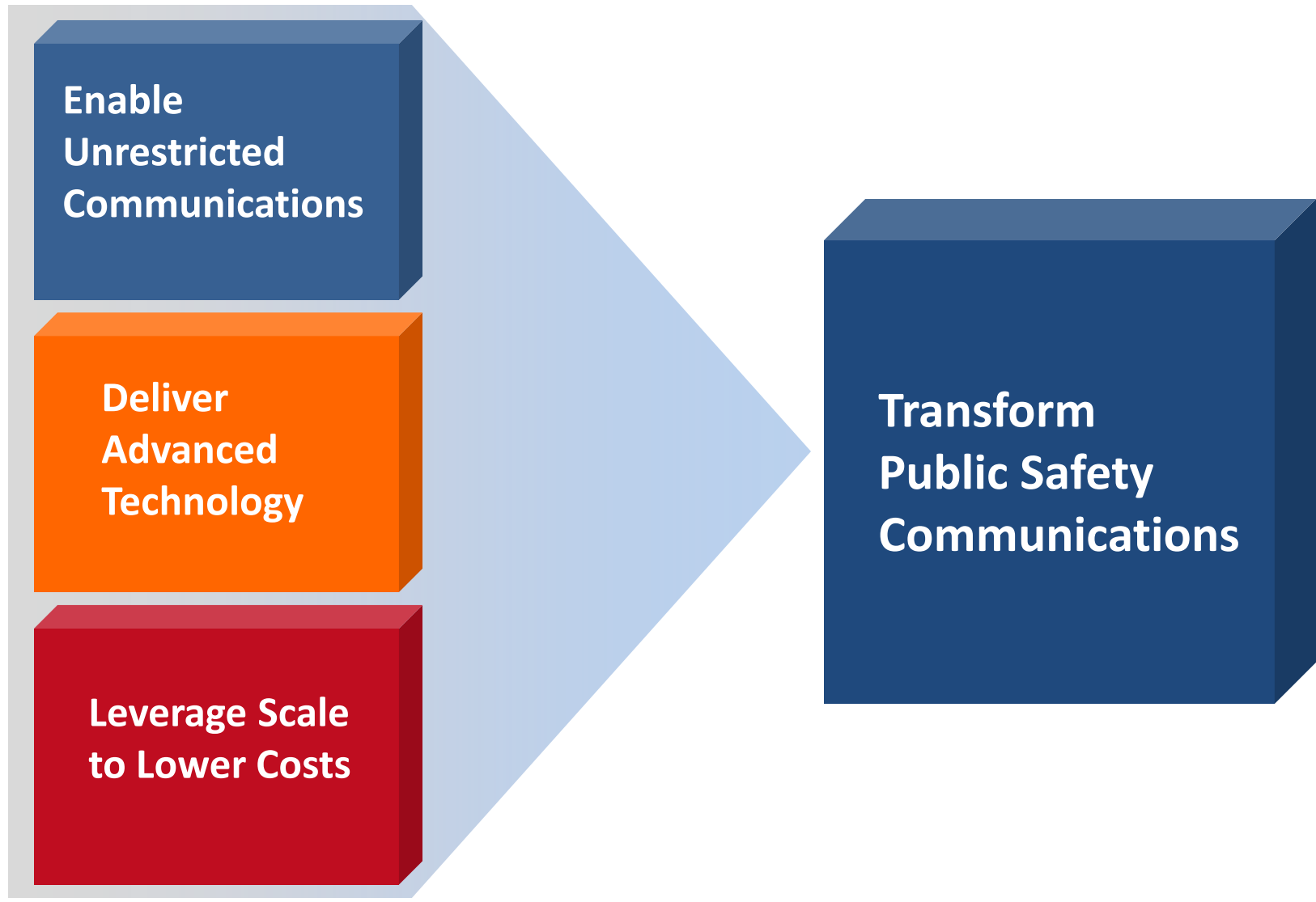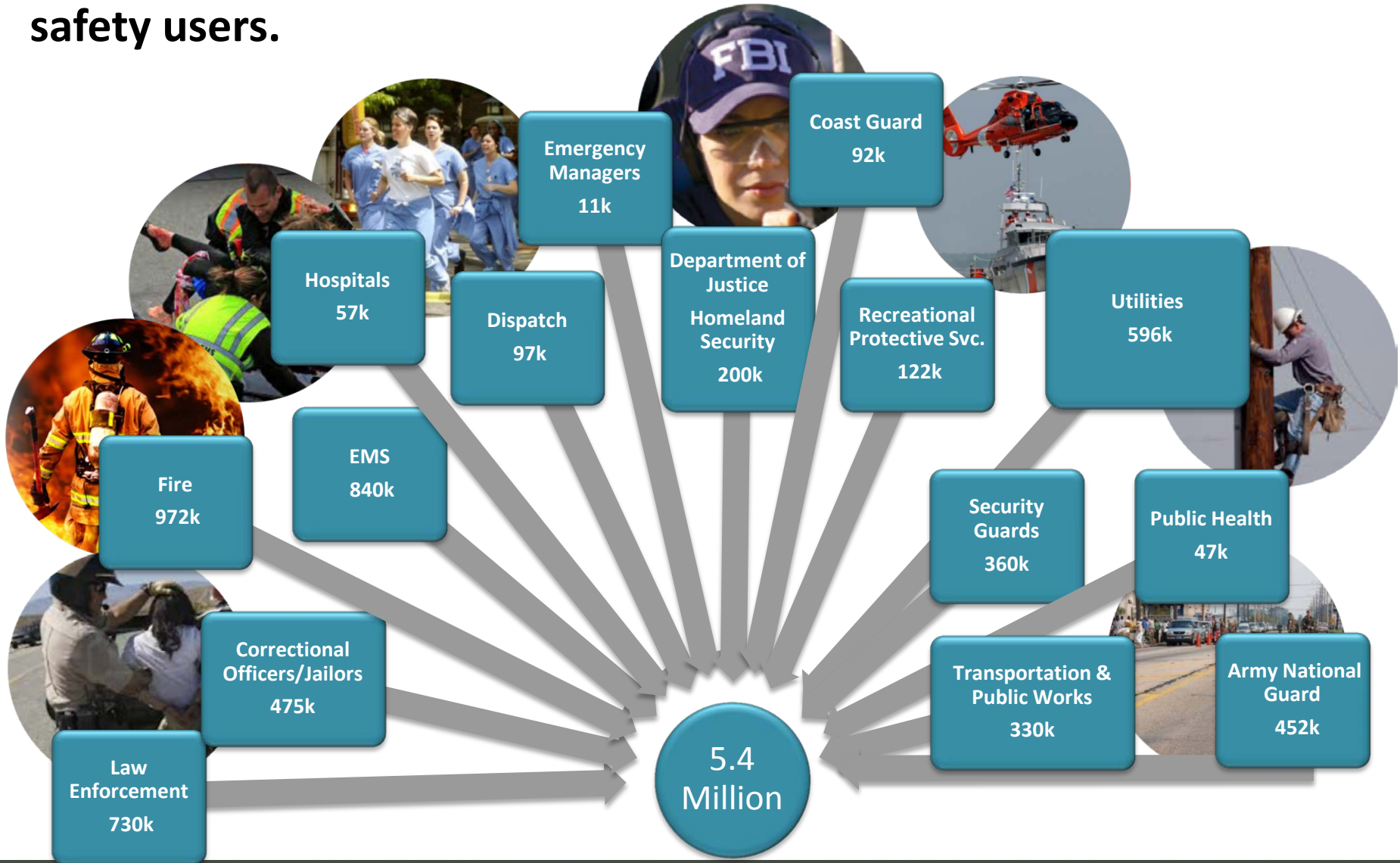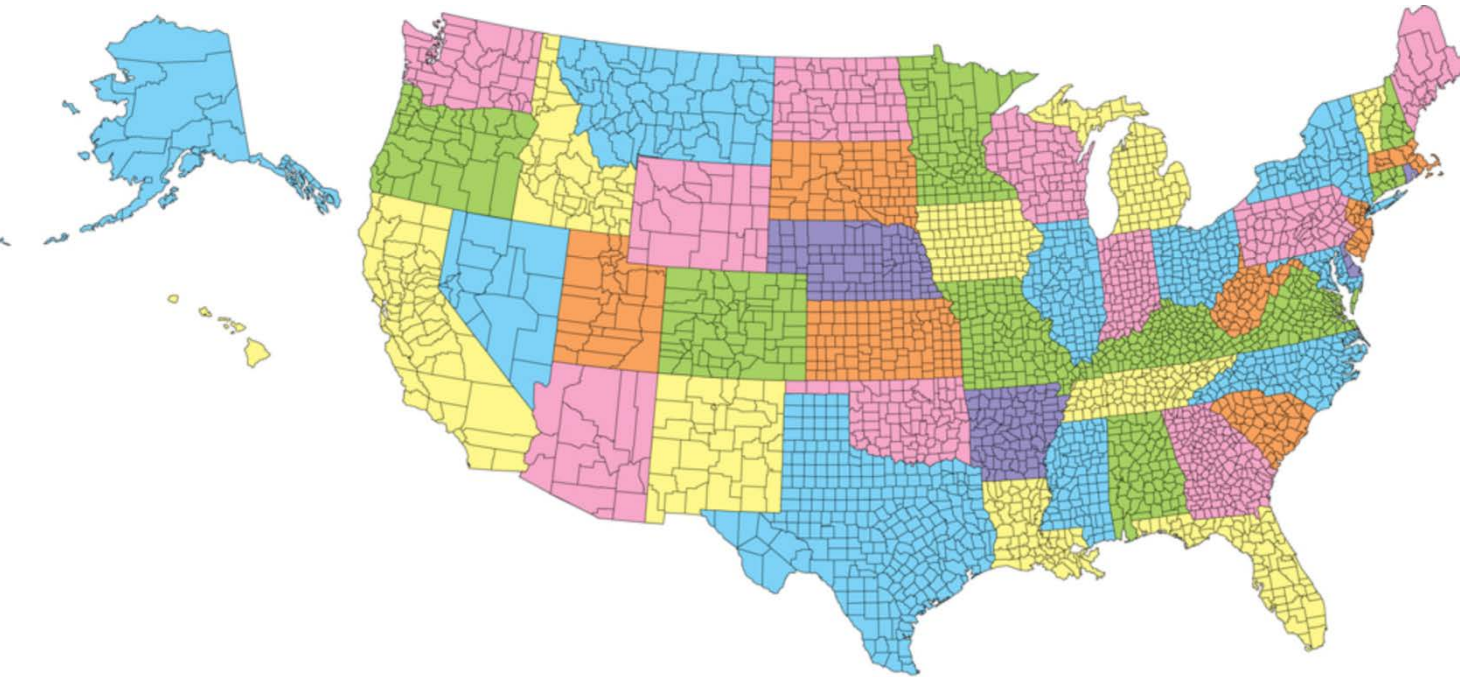| PERCEPTION		REALITY
Public safety may have to give up autonomy and control.	→	FirstNet will be a nationwide platform; Public safety sets rules locally.
Public safety will lose management of devices, users and talk groups.	→	Public safety will maintain local management.
FirstNet will cost too much to build and operate.	→	FirstNet has substantial opportunities to partner to lower construction and operating costs.
States can use FirstNet spectrum to generate revenue.	→	Fees from the use of FirstNet spectrum must , by law, be reinvested to build, operate, maintain, and improve the network.
FirstNet will replace LMR networks.	→	FirstNet will augment LMR for many years.
FirstNet has already begun designing the network.	→	FirstNet is in the research and analysis phase and must have input from states and territories to design the network.

FirstNet will provide tools that emergency responders need and deserve.

Enable Unrestricted Communications

Deliver Advanced Technology

Leverage Scale to Lower Costs

Transform Public Safety Communications

FirstNet

FirstNet has the potential to support a broadly defined set of public safety users.

Emergency Managers
11k

Coast Guard
92k

Hospitals
57k

Dispatch
97k

Department of Justice
Homeland Security
200k

Recreational Protective Svc.
122k

Utilities
596k

Fire
972k

EMS
840k

Security Guards
360k

Public Health
47k

Correctional Officers/Jailors
475k

Transportation & Public Works
330k

Army National Guard
452k

Law Enforcement
730k

5.4 Million

FirstNet

FirstNet will work toward supporting first responders wherever their need is.

That includes 3,252 counties across 50 states and 6 commonwealths/territories.

DC

Puerto Rico

Virgin Islands

American Samoa

Guam

Northern Mariana Islands

FirstNet will provide dedicated spectrum, a single technology and funding to create a nationwide network dedicated to public safety.

Public Safety Effectiveness
- Dynamic Priority Access
  - Force Multiplier

Public Safety Grade
- Reliable
- Hardened
- Redundant
- Security

Public Safety Applications
- 4G data for video and web
- Non mission-critical voice

4G LTE: A Proven Next Generation Technology

- Fastest data speeds
- A bigger pipe
- Field-tested across the country
- Global technology standard
- Being adopted as a standard for public safety
- Non-mission critical voice

" **First responders need a network they can rely on and trust to get the job done, even in the worst of circumstances. That's what FirstNet will build.** "

Chuck Dowd
Assistant Chief of Police, New York City
FirstNet Board Member

FirstNet Will Augment LMR

- Public safety will rely on LMR for mission-critical voice for many years
- FirstNet can be co-located on existing LMR infrastructure
- Sharing infrastructure will keep costs down and enhance coverage
- Our goal is to allow voice to pass between the two networks

What is the FirstNet business model?

Break even and build a self-sustaining network
- Fee for service
- Leverage value of the spectrum
- Reflect value of contributed assets and partnerships

" **FirstNet intends to offer public safety grade services at a cost that's compelling to users.** "

— FirstNet Tenet

LEARNING FROM PUBLIC SAFETY

The Foundation of our Planning

FirstNet

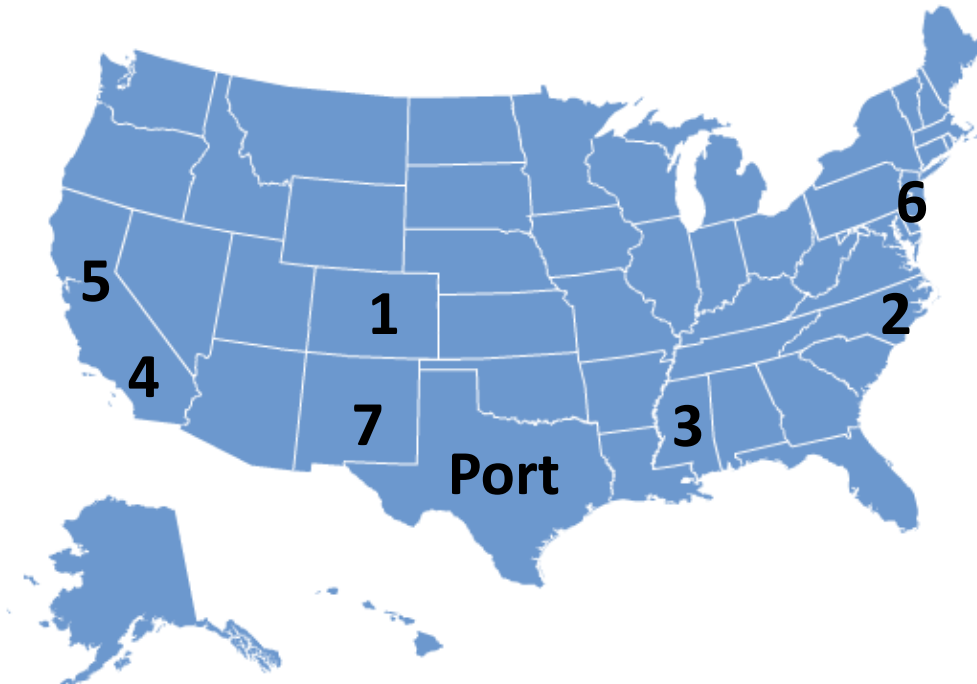# Public Safety Input To Date: More than 1,300 Baseline Requirements

NPSTC Requirements	# of Req's
User Services	312
Network Services	209
Transport Requirements	154
System Design	66
User Equipment	60
Local Operations Support	157
Migration and Evolution	60
Governance	10
Policies and Procedures	94

FCC Minimum Interoperability Specifications	# of Req's
Requirements (Must)	46
Considerations (Should)	55
Interfaces (Architectural)	11
Recommended Interfaces Requirements	9

FirstNet will:

- Build on the foundation of early work done by public safety groups
- Seek vendors who will meet or exceed these requirements
- Address the 375 requirements approved by the NPSTC Executive Committee
- Broaden the requirements to increase flexibility and decrease costs

FirstNet Pilot Projects* will provide broad learning opportunities.

* Seven current BTOP projects, and Texas

BTOP Grantees
1. Adams County, CO
2. Charlotte, NC
3. Mississippi
4. LA-RICS (Los Angeles)
5. Bay-RICS (San Francisco)
6. New Jersey
7. New Mexico
Ports
Harris County, TX

- International interference
  - Operational issues
    - Applications

Public Safety Advisory Committee (PSAC) activities

- 40+ member organization

- Executive Committee had a two-day briefing with FirstNet technical team in March

- Executive committee will meet monthly for updates with the General Manager

- Outreach for conferences

- Handling specific projects

STATE & LOCAL CONSULTATION PROCESS

Input and Requirements

FirstNet

Workshops are just the start.

FirstNet will continue to consult with the states, tribes, territories and localities until we have the information we need to develop state network build-out plans.

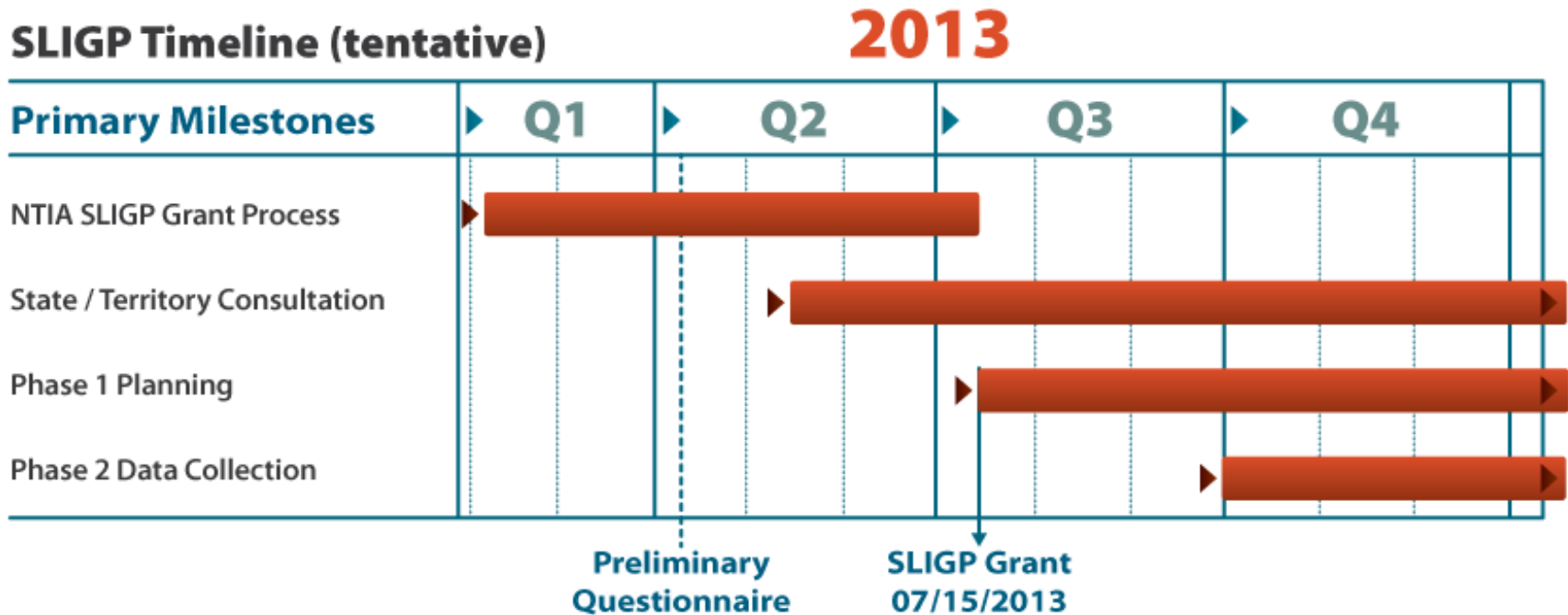| Activities	When
Nationwide, Regional Workshops	May – June 2013
Individual State Meetings	Beginning June 2013
Data Gathering	Commencing with Phase 2 SLIGP Funds Release

FirstNet

Information and data needed.

- **Only what's needed:** The data request will be structured to be as efficient as possible.

- **What is needed:** FirstNet requires input and requirements from state, local and tribal entities to prepare network plans for state review. Examples include:

  - Architecture of an evolved packet core and radio access network
  - Required coverage areas of the network
  - Hardening, security, reliability, and resiliency requirements
  - Assignment of priority users and selection of secondary users
  - Training needs
  - Availability of assets that may be utilized

FirstNet

Resources and help.

- **Funding:** State and Local Implementation Grant Program (SLIGP) funds will enable states to plan and collect data for the nationwide public safety broadband network.

- **Ability to preview the data elements:** FirstNet will share preliminary data needs with workshop participants for state feedback. The FirstNet team will use these consultations to finalize a full data request supporting the formal SLIGP effort.

- **Time to prepare:** FirstNet anticipates releasing the full data request sometime during the summer of 2013.

- **Additional tools and support:** DHS Office of Emergency Communications has planning tools and some previously collected data that states can choose to use upon request.

SLIGP Timeline (tentative) — **2013**

- The SLIGP program runs for three years. FirstNet anticipates a significant amount of data will be collected early in the process.
- SLIGP Phase 2 is tentatively scheduled to start shortly after Phase 1.

FIRSTNET IS COMMITTED TO:

Seeking out scale economy advantages.

Balancing the need for input with the desire to make progress.

Following the requirements mandated by law that govern how we operate.

Operating with transparency without jeopardizing our ability to negotiate

Offering public safety-grade services at a cost that's compelling

Listening to you and what your state needs.