Industry Day

Terrie Callahan, Contracting Officer

May 14, 2015

DISCLAIMER

The following presentation contains a brief overview of the draft request for proposals and FirstNet's potential acquisition strategy. Any discussion of requirements or potential future procurements does not constitute a commitment by FirstNet and should not be relied upon in planning future courses of action.

The Government will provide public notice of any procurements using the Federal Business Opportunities website (https://www.fbo.gov/) in accordance with applicable laws and regulations.

In the event that there is a conflict between any future request for proposals' terms and conditions and the information contained herein or disseminated during today's meeting, the request for proposals' terms and conditions shall control. The request for proposals and any formal amendments are the only documents that should be relied upon in determining the Government's requirements and ultimate acquisition approach.

Industry Day Logistics & Ground Rules

- Ensure you have signed in at the registration desk
- Hold all questions until the end of the presentation
  - Answer as many as possible time allowing
  - May defer to a formal written response
  - Please come to the microphone when asking questions and introduce yourself
- Place cell phones/devices on silent

FirstNet Released a Special Notice with Draft Documents

- FirstNet is working to maximize feedback and input through the acquisition process
- The Special Notice contains instructions for industry and Public Safety to provide feedback around:
  - FirstNet's approach to serving public safety
  - Deployment and operation of the network
  - Early collaboration and teaming

Highlights of the Special Notice and Draft RFP Documents

- **Special Notice with Draft RFP Documents**
  - Overview of contents of draft of RFP documents
  - Request for feedback on the approaches
  - Submission of capabilities statements
- **Section B Supplies or services and prices/costs**
- **Section C Statement of Objectives (SOO)**
  - C-1 Baseline Coverage Objective Map
  - C-3 Recommendations of the Interoperability Board (aka FCC Technology Advisory Board Report)
  - C-4 System View and Standard Views (SV-1 and StdV-1)
  - C-5 FirstNet Final Operational Capability– Features Standards Forecast (StdV-2)
  - C-6 Quality Assurance Surveillance Plan (QASP)
  - C-7 Operational Architecture Functional Descriptions
  - C-8 Initial and Final Operation Capability Target Timeline
  - C-9 NPSBN Use Case Definitions
- **Section J, Attachment J-3, Terms of Reference**

Industry Day Goals

- Convey FirstNet Mission and Vision
- Explain the Special Notice
  - Explain Category 1 and Category 2 Acquisition Approach
  - Review Draft RFP Technical Documents Overview
  - Discuss FirstNet's Proposed Operational Architecture
  - Discuss Coverage Objectives Development and Stakeholder Input
  - Review FirstNet Business Model Key Concepts

Mission and Vision for the NPSBN

TJ Kennedy
Acting Executive Director

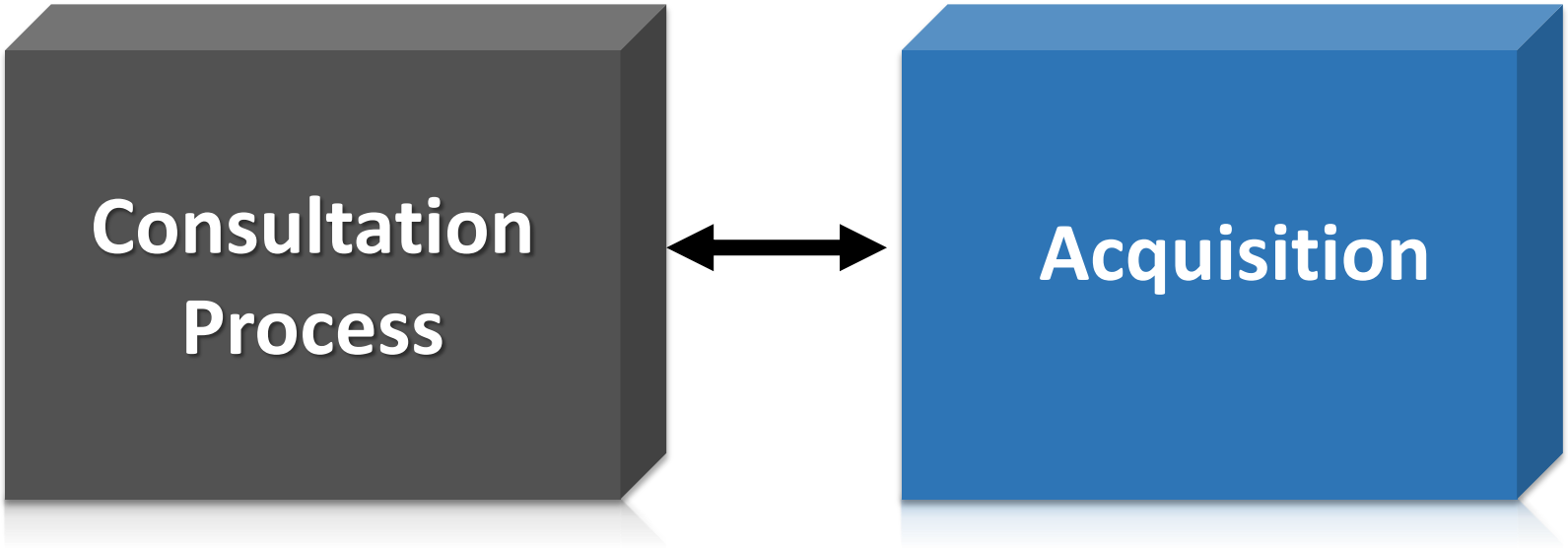
Our Mission

The First Responder Network Authority shall hold the single public safety wireless license and take all actions necessary to ensure the building, deployment, and operation of the nationwide public safety broadband network (NPSBN)

The Network

- Provide nationwide coverage, including rural and remote areas
- Meet public safety requirements
  - provide priority and preemption during emergencies
- Build in resiliency and reliability
- Evolve with technology to provide access to applications and innovative services

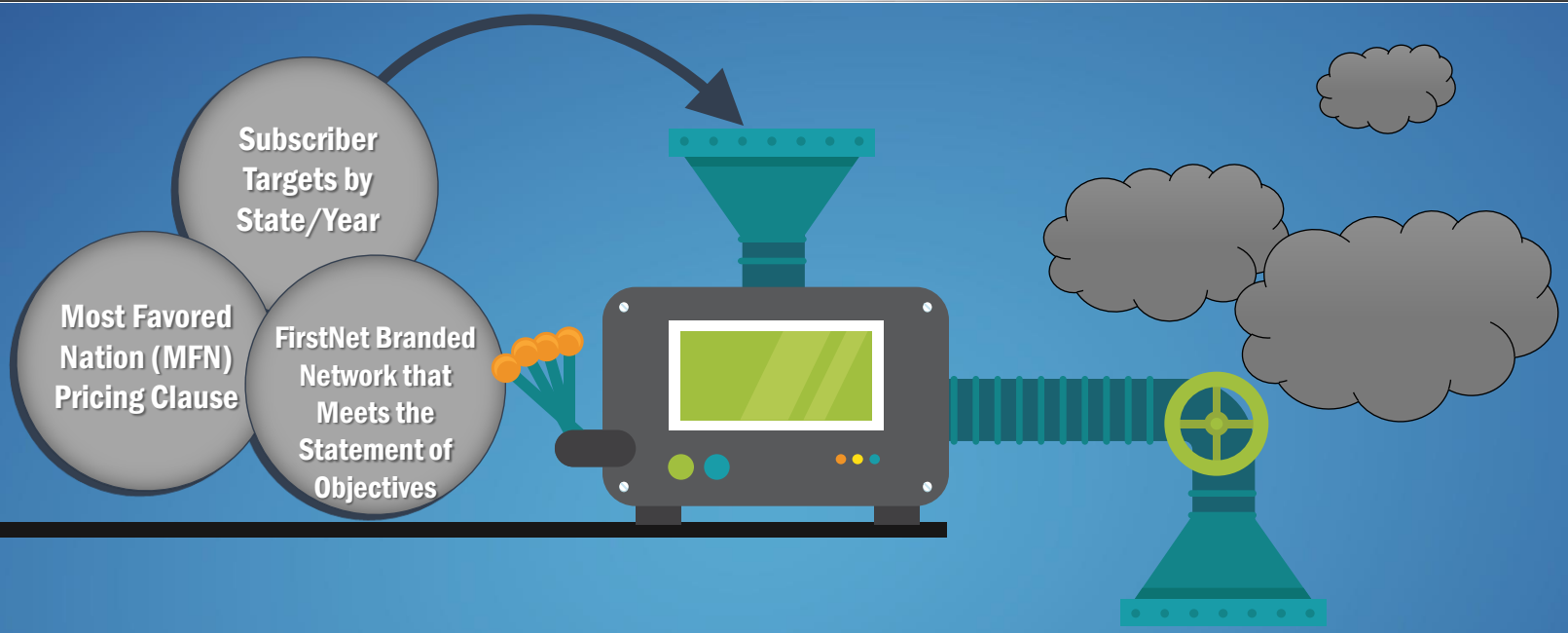
Consultation Feeds the Acquisition



Statement of Objectives

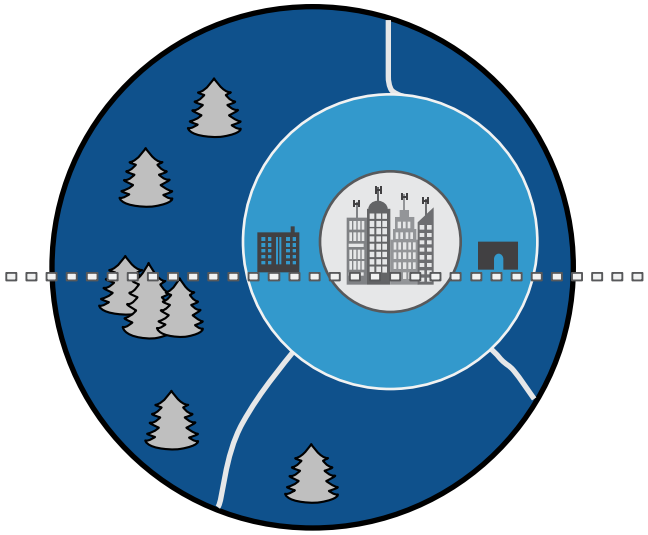
- Build, Deploy, Operate and Maintain the NPSBN
- Financial Sustainability
- Compelling and Competitively Priced Services
- Device Ecosystem
- Application Ecosystem
- Accelerate Speed to Market
- User Service Availability
- Service Capacity
- Cyber Security
- Priority Services
- Integration Of Opt-out State RANs
- Integrate Existing State/Local/Commercial/Federal Infrastructure To Support NPSBN Services
- Lifecycle Innovation
- Program and Business Management
- Customer Care and Marketing
- Facilitate FirstNet's Compliance With the Act and Other Laws

FirstNet's Vision is to Deliver a Nationwide Network that Public Safety will Embrace

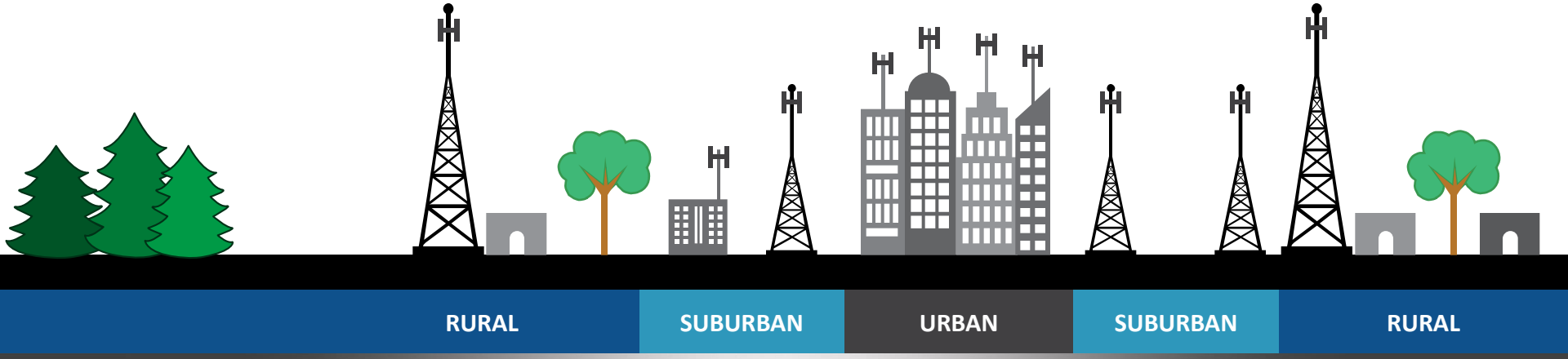


Public Safety Adoption and NPSBN Usage

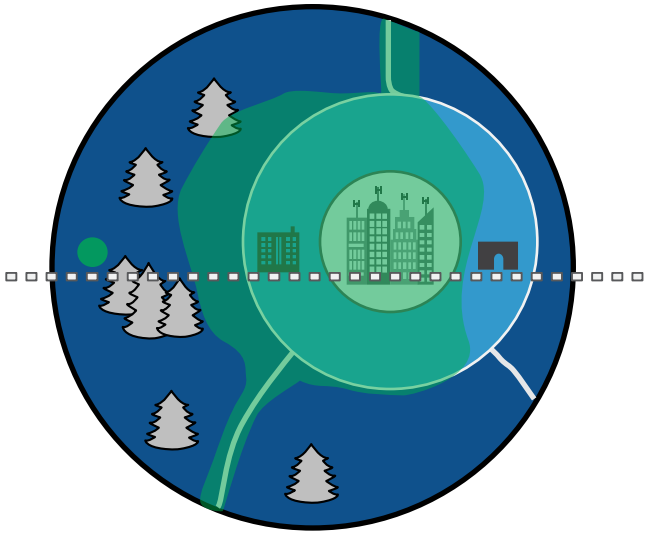
Notional FirstNet Approach in the Draft RFP Documents – Current State



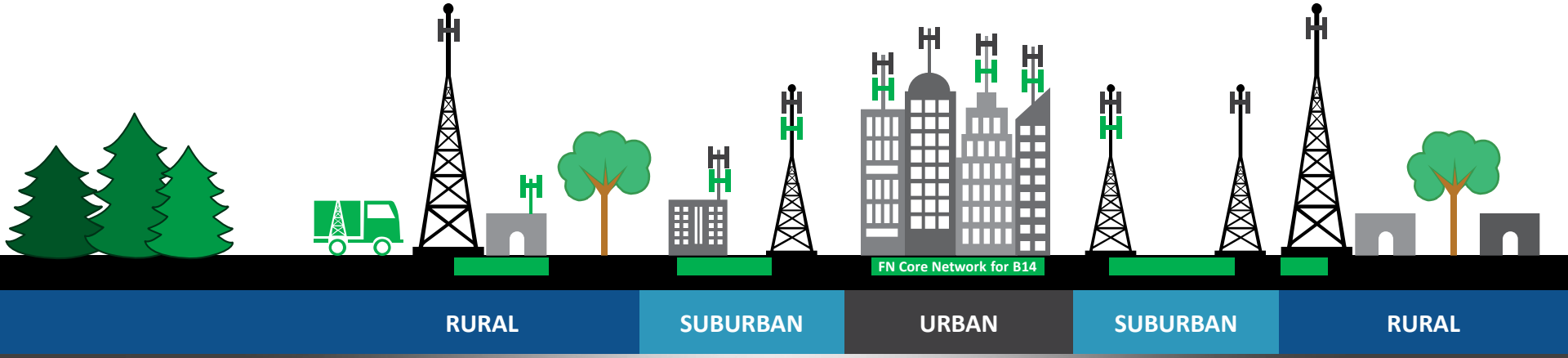
	Expansion 2
	Expansion 1
Contract Coverage	Phase 5
	Phase 3-4
	Phase 1-2



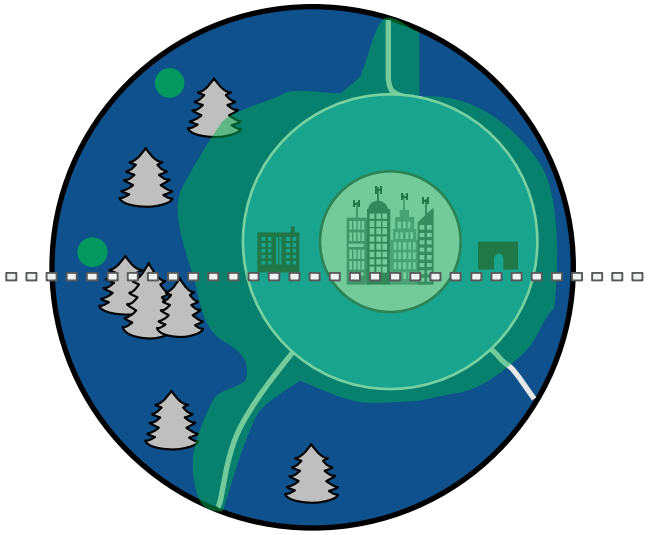
Notional FirstNet Approach in the Draft RFP Documents– Phase 1-2



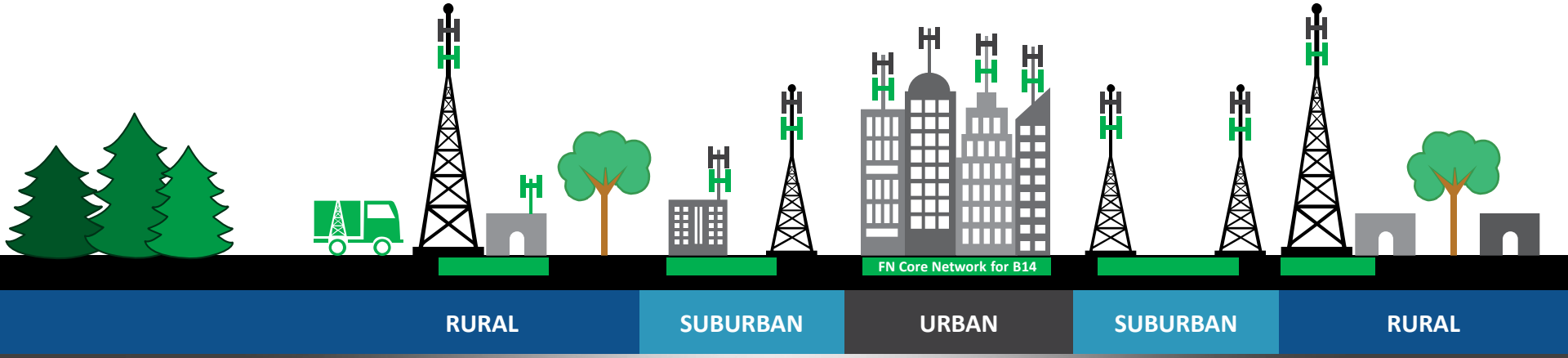
	Expansion 2
	Expansion 1
Contract Coverage	Phase 5
	Phase 3-4
	Phase 1-2



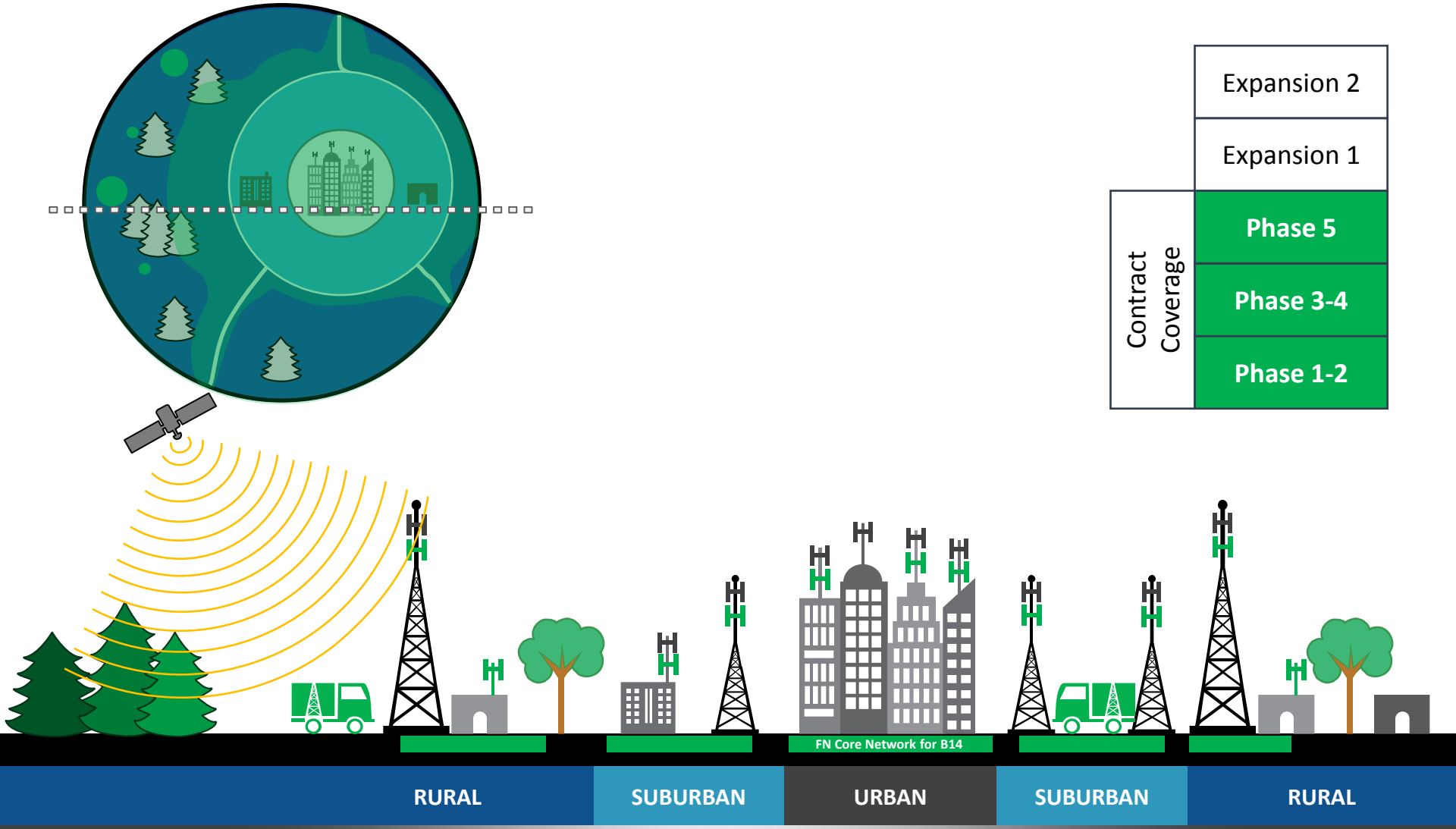
Notional FirstNet Approach in the Draft RFP Documents– Phase 3-4



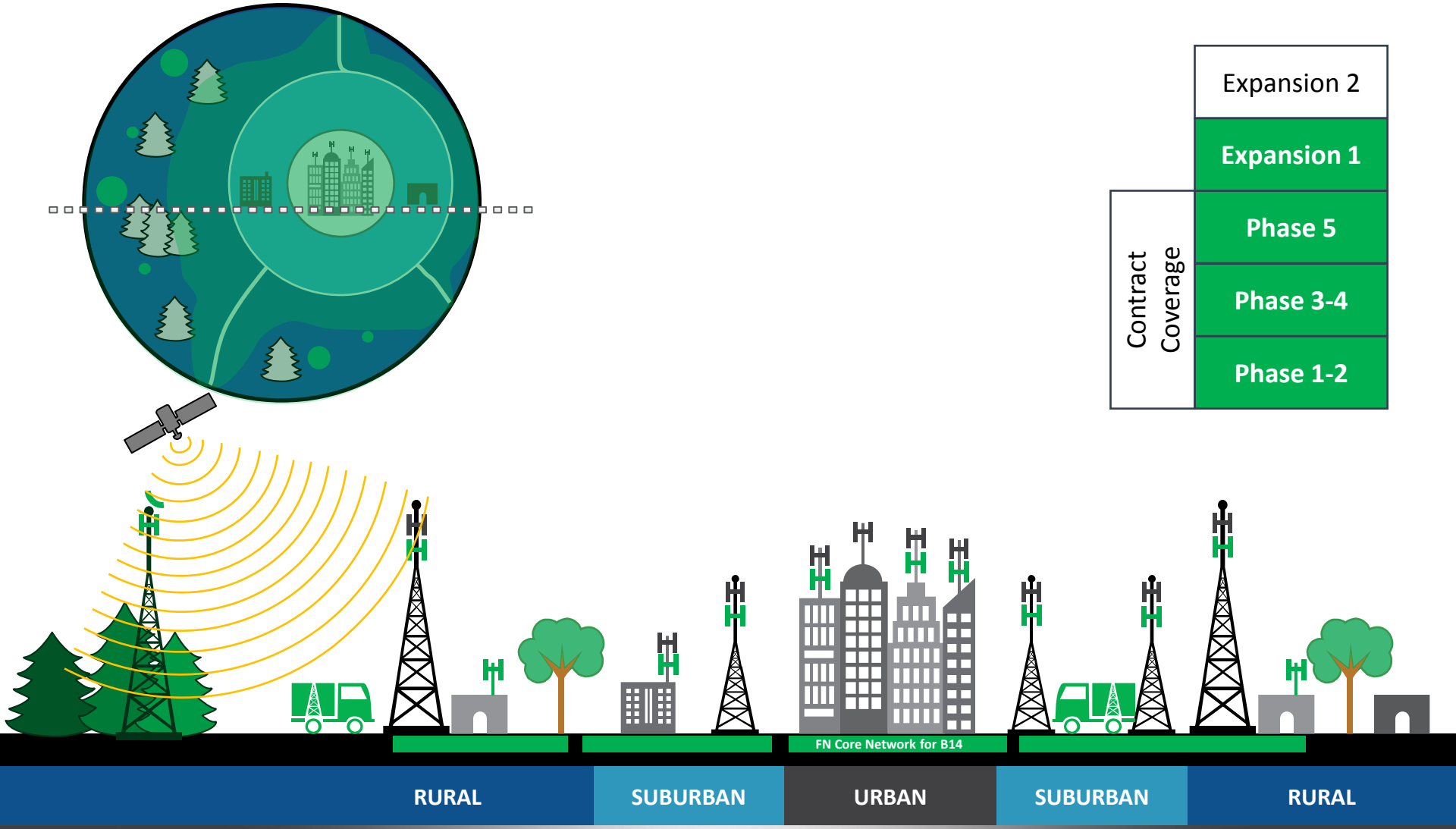
	Expansion 2
	Expansion 1
Contract Coverage	Phase 5
	Phase 3-4
	Phase 1-2



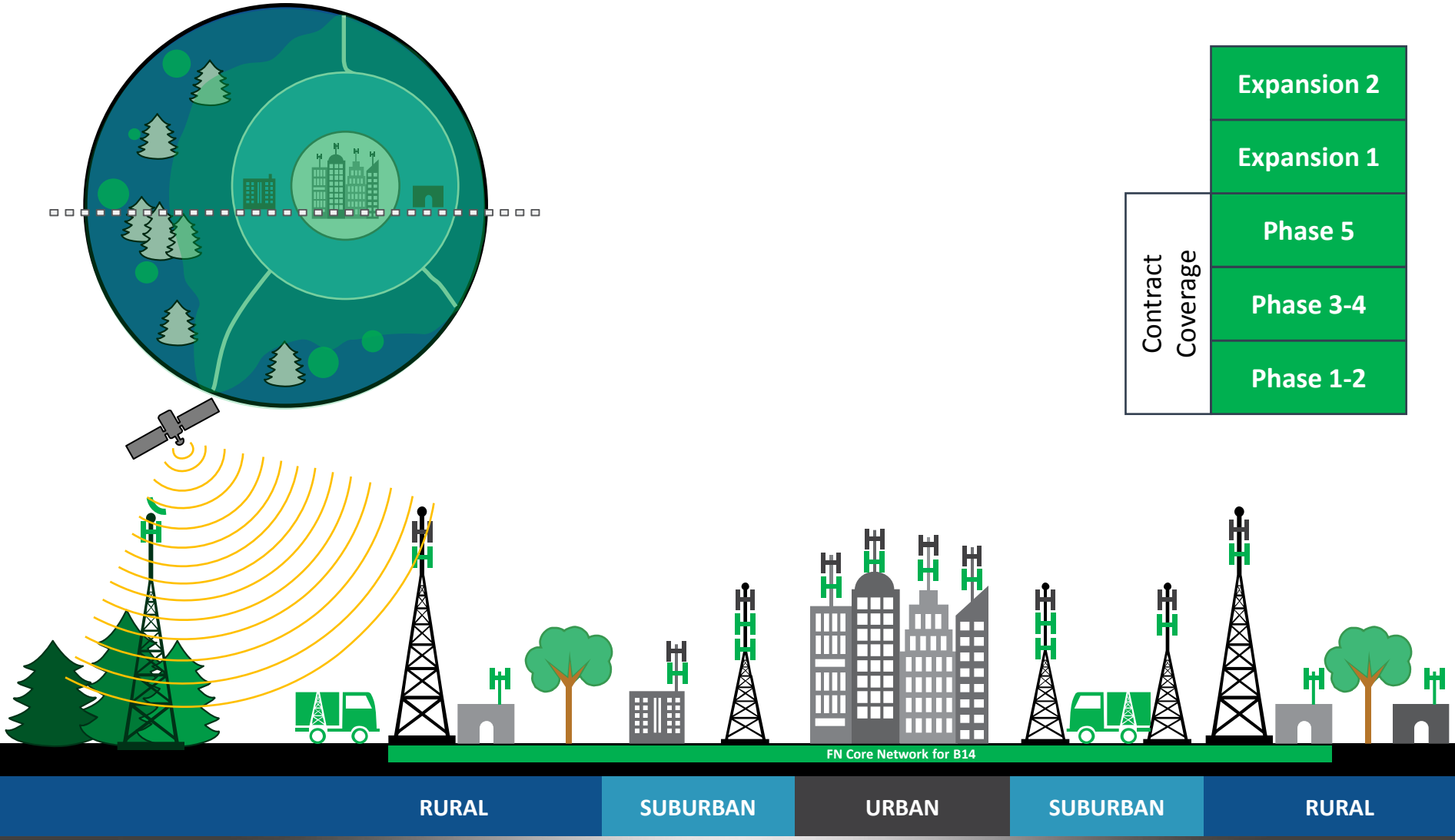
Notional FirstNet Approach in the Draft RFP Documents– Phase 5



Notional FirstNet Approach in the Draft RFP Documents– Expansion 1



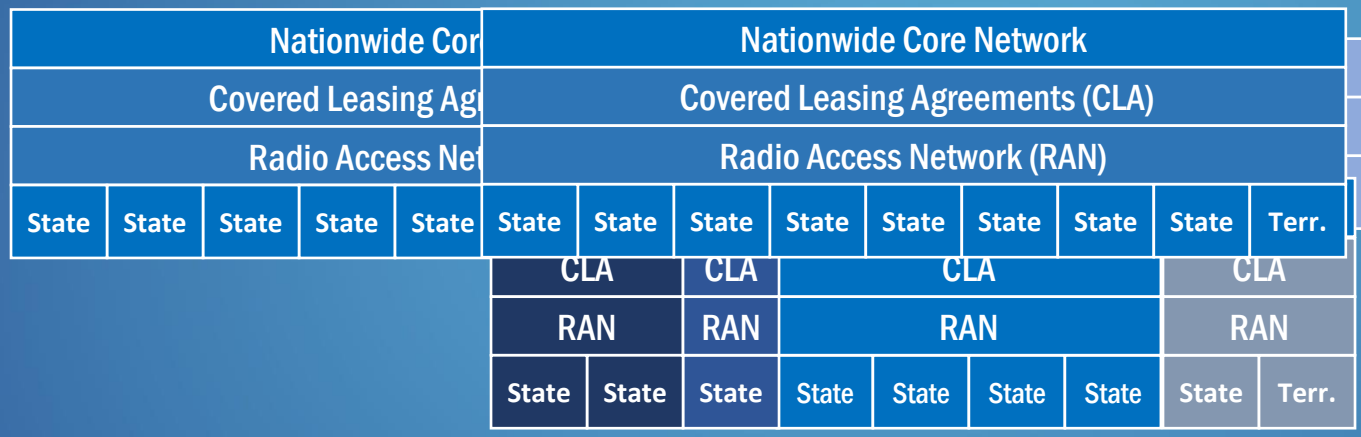
Notional FirstNet Approach in the Draft RFP Documents– Expansion 2



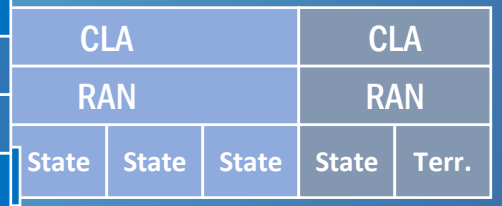
The Special Notice Identifies Potential Nationwide and Regional RAN Approaches

PROPOSED ACQUISITION APPROACH

Nationwide Proposal Category 1



Regional RAN Proposal Category 2



Technical Briefing

Jeff Bratcher
Acting Chief Technical Officer

Technical Documents Released with the Special Notice

FirstNet

- Within the SOO, key technical objectives are outlined with regard to coverage, service availability, and key public safety features

C: Statement of Objectives

- Coverage objectives maps in both image format and shape files. Coverage priorities are shown in a 1 mile grid.

C-1 Coverage Objectives

- Formally titled "*Recommended Minimum Technical Requirements to Ensure Nationwide Interoperability* for the NPSBN"

C-3 FCC-TAB

- SV-1 is systems/services interfaces
- StdV-1 technical standards description of interfaces at IOC-1

C-4 System and Std View

- Detailed description of the architecture and standards that the NPSBN must include at FOC

C-5 Standard View StdV-2

- Monitors perf. metrics to ensure offerors meeting objectives of final contract
- Draft limited to representative metrics

C-6 QASP

- High level summary of operational architecture for NPSBN
- Notes FirstNet and contractor responsibilities

C-7 Oper. Architecture

- Timeline for FirstNet features and functionalities
- Correlates with the 3GPP release timelines
- Phases of deployment

C-8 IOC/FOC Timeline

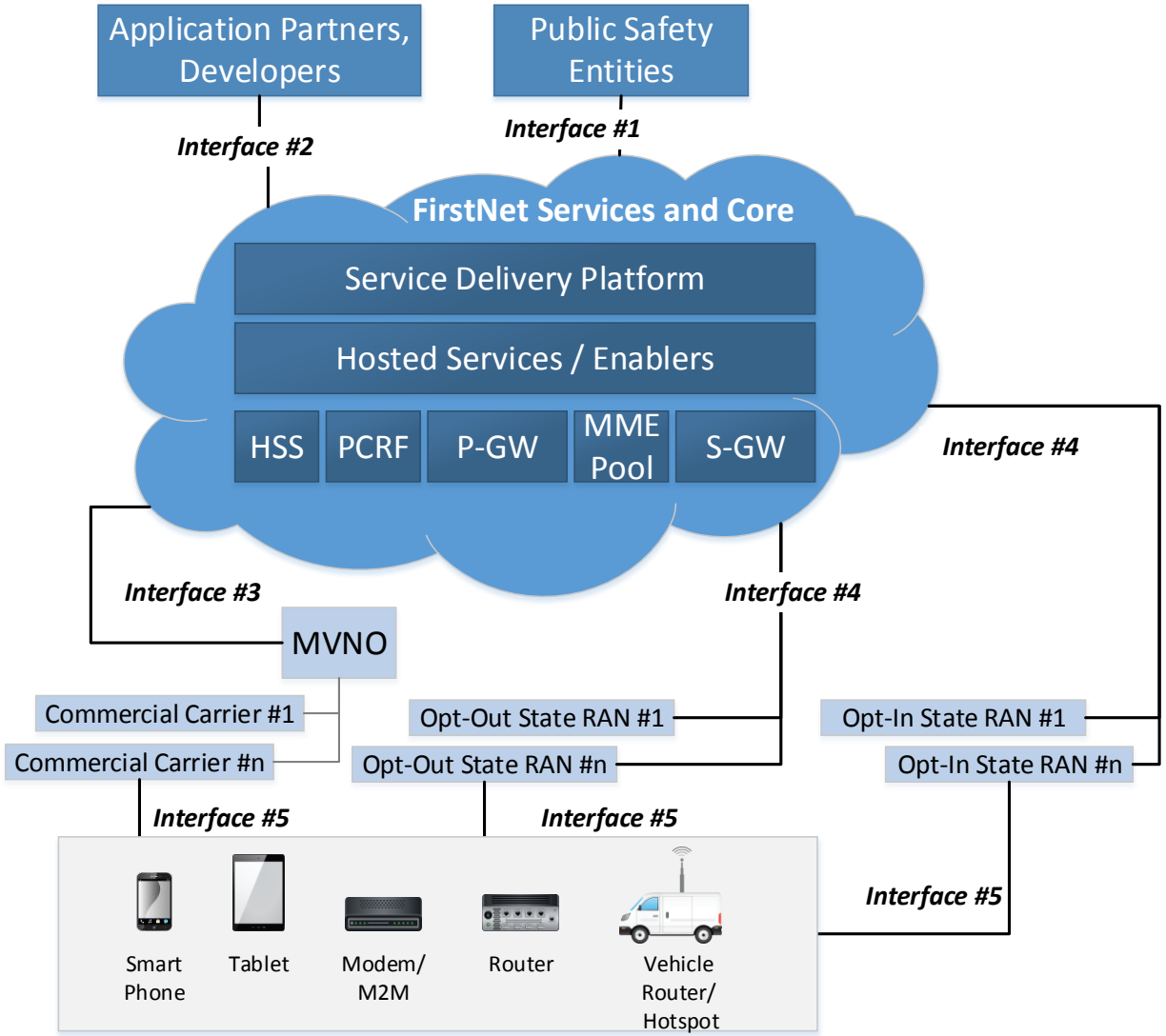
- Illustrative use cases
- Outlines scenarios that highlight features, functions, and operational responsibilities

C-9 Use Cases

- Defines acronyms and key terms used throughout the RFP

Terms of Reference

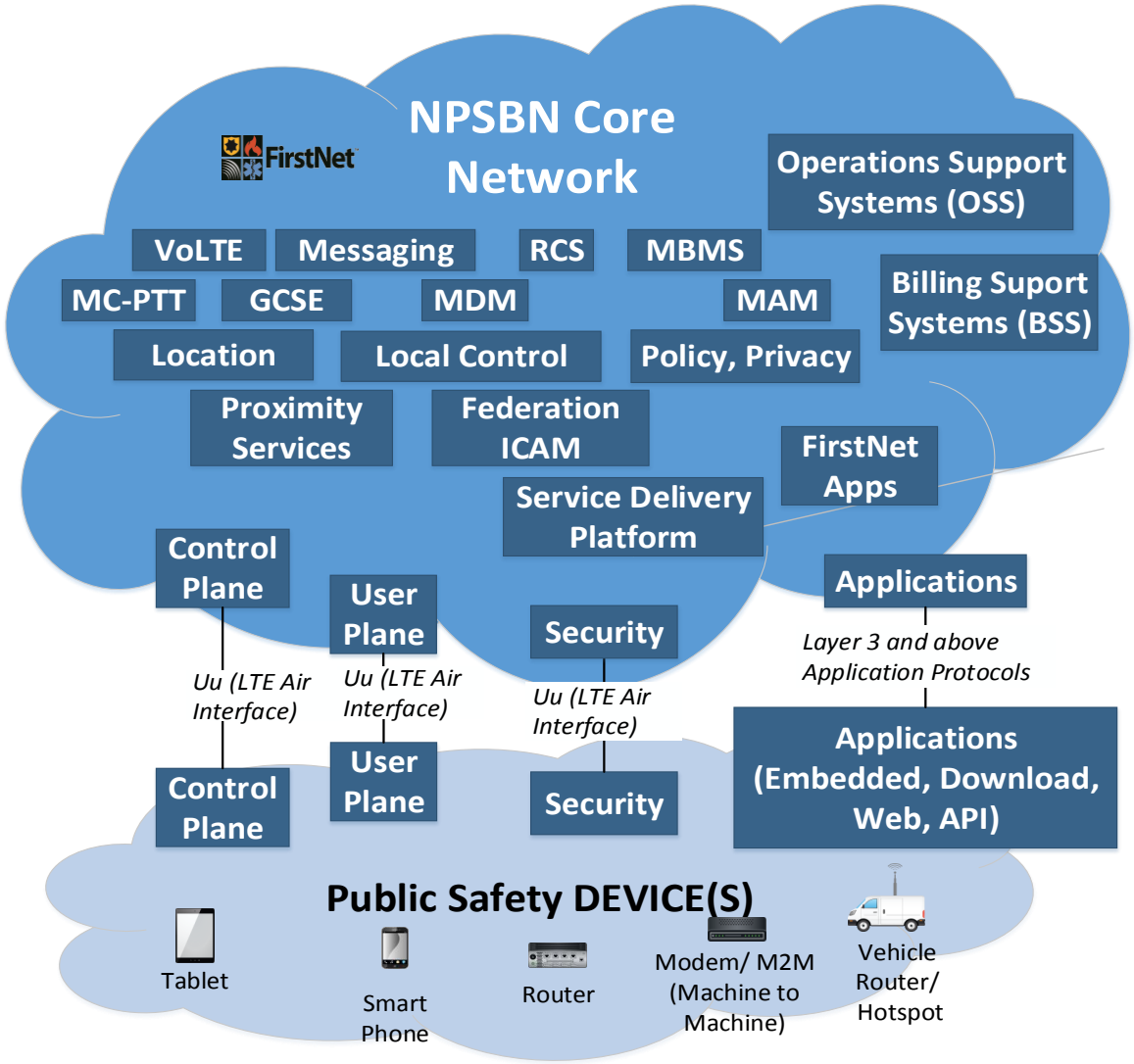
System View



Draft RFP Doc Ref

C-4 System Views and Standards Views

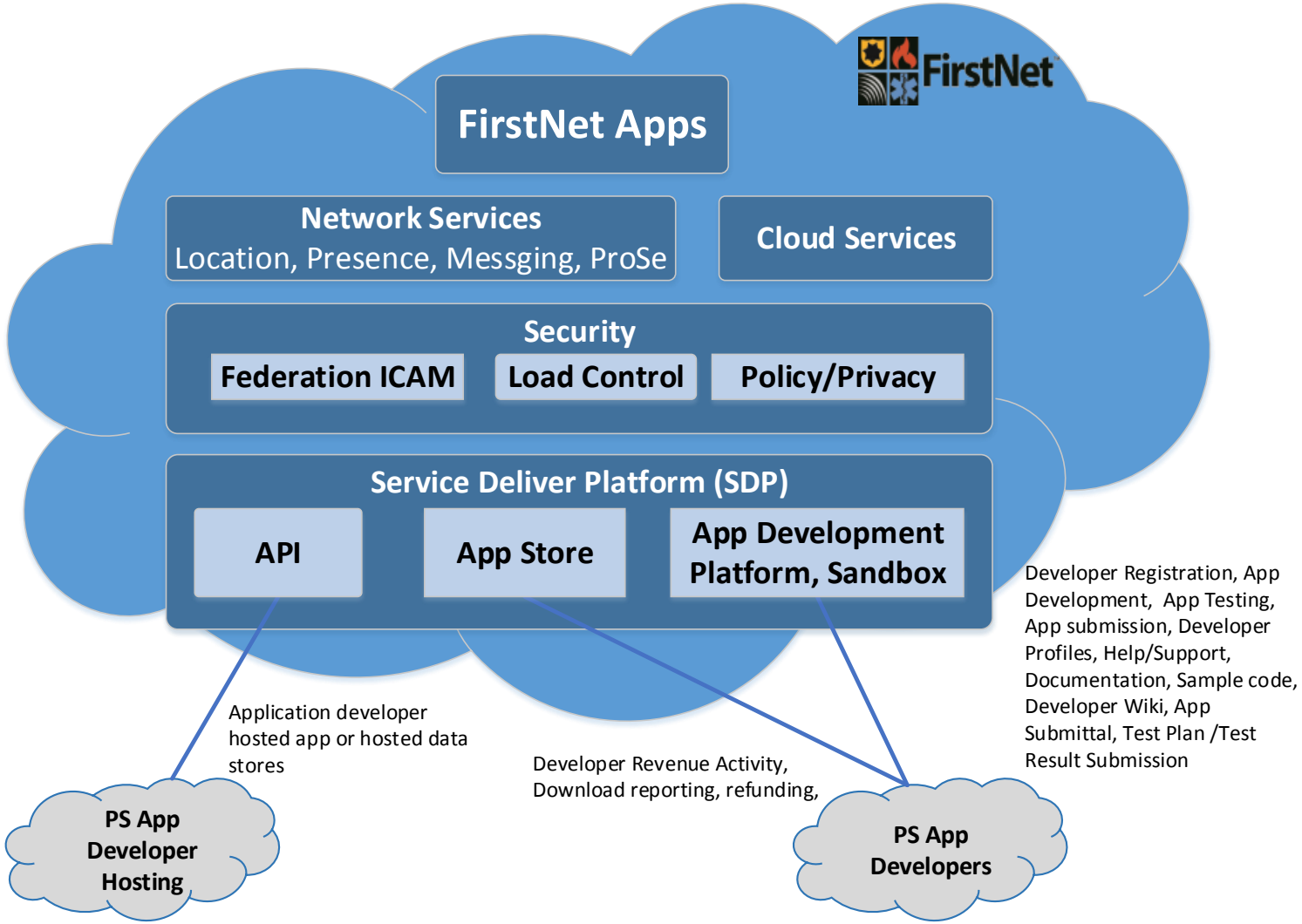
System View: Devices



Draft RFP Doc Ref

C-4 System Views and Standards Views

System View: App Ecosystem



Draft RFP Doc Ref

C-4 System Views and Standards Views

Operational Architecture

James Mitchell
Senior Program Manager for Operations

FirstNet Will Collaborate with Industry to Deliver a World Class Network to Public Safety

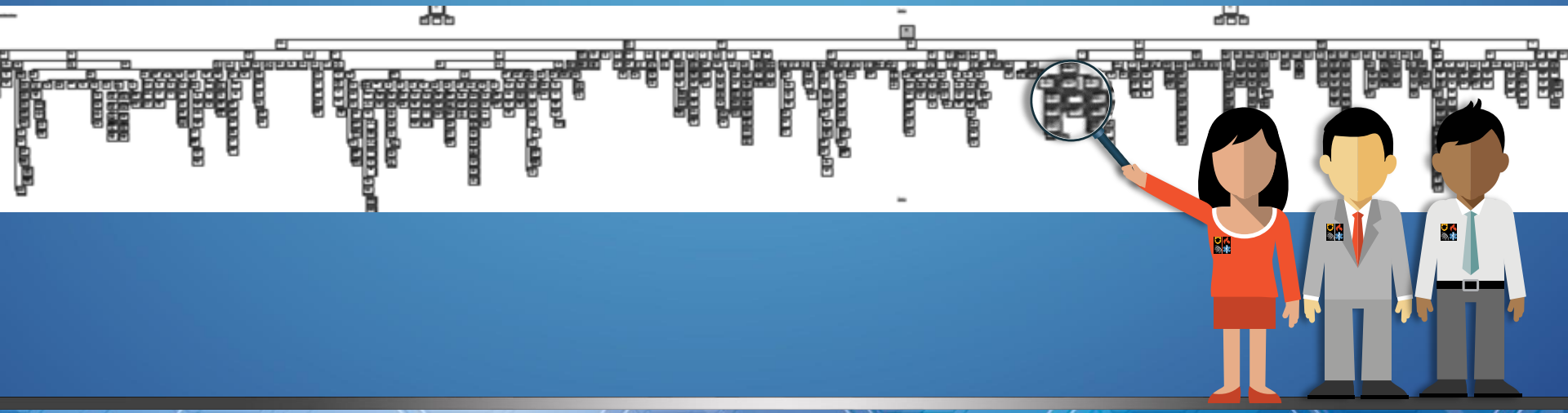
- Informs FirstNet by articulating needs and providing FirstNet with valuable feedback

- Drives accountability through governance and program management
- Sets performance standards
  - Monitors performance
  - Remediates issues through contractual terms

- Delivers network services to Public Safety
- Meets contractual and performance standards set by FirstNet

The Operational Architecture is Provided in the Special Notice & Draft RFP Documents

- Through the Special Notice, FirstNet will:
  - Propose certain key functions over which it may exercise control or maintain operational responsibility
  - Seek feedback on those and other identified functions or identify omissions
- Provides opportunity for early feedback on program scope

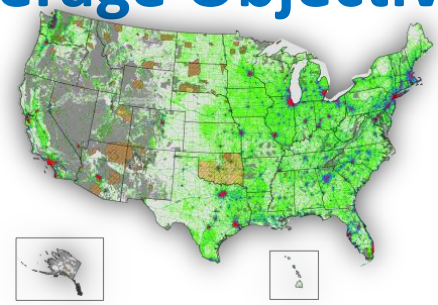


Coverage Objectives Development and Stakeholder Inputs

Rich Reed
Director State Plans

Data Collection Categories

Coverage Objectives



- Coverage
- Phased Deployment

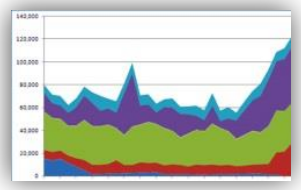
Users and Operations

- Public Safety Entity Info
- Devices
- Operational Areas

State / Territory

Demand

- Applications
- Data Usage



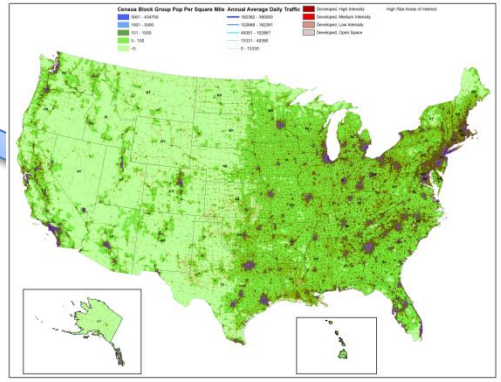
Current Service

- Procurement Vehicles
- Service Plans / Costs
- Barriers

Starting Coverage Objectives Data

1. Public Safety User Population (*Source: HSIP, OEC provided*)

- **Public Safety User Density** based on jurisdiction (OEC data to start)
- ***Common response areas (CAD data)*** *– as it's made available with State collection*



2. Public Safety High Risk / Areas of Interest (*Source: HSIP*)

- **Key facilities** – PS agencies, corrections, airports, EOCs, hospitals, PSAPs, schools, etc.
- **Critical infrastructure** – manufacturing , energy, dams, etc.
- **Large Public Venues** – stadiums, theme parks, malls
- **Other major event locations** – if provided with initial consultation submission
- ***Area for feedback** – tourist/recreational destinations (parks, hiking, waterways, etc.)*

3. US Population (*Source: 2010 US Census*)

- **Population density**

4. Developed Areas / Buildings (*Source: 2011 National Land Cover Database*)

- **Dense / Medium / Light**

5. Roadways (*Source: Federal Highway Administration*)

- **National Highway System**
- **Average Daily Traffic Counts** to identify significant secondary roadways

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6. Tribal Land

7. Rural Metrics

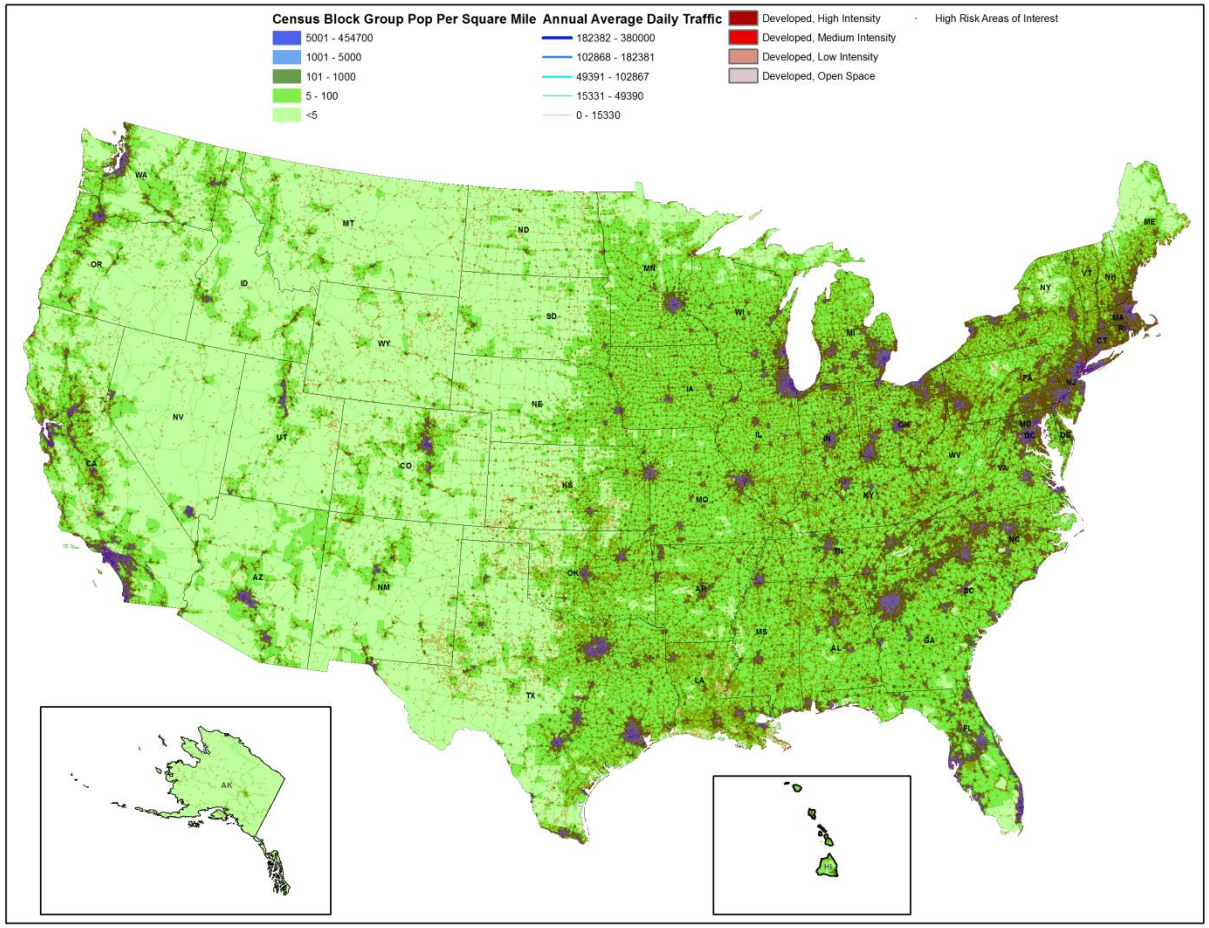
8. Federal Land

These will be incorporated with additional considerations (i.e. FirstNet rural milestones) or via separate consultation (i.e. Federal)

Nationwide Approach

1. Employee count of Law Enforcement (LE), Fire, EMS agencies
2. Public Safety High Risk / Areas of Interest
3. US Population
4. Developed Areas / Buildings
5. Roadways / Avg. Daily Traffic

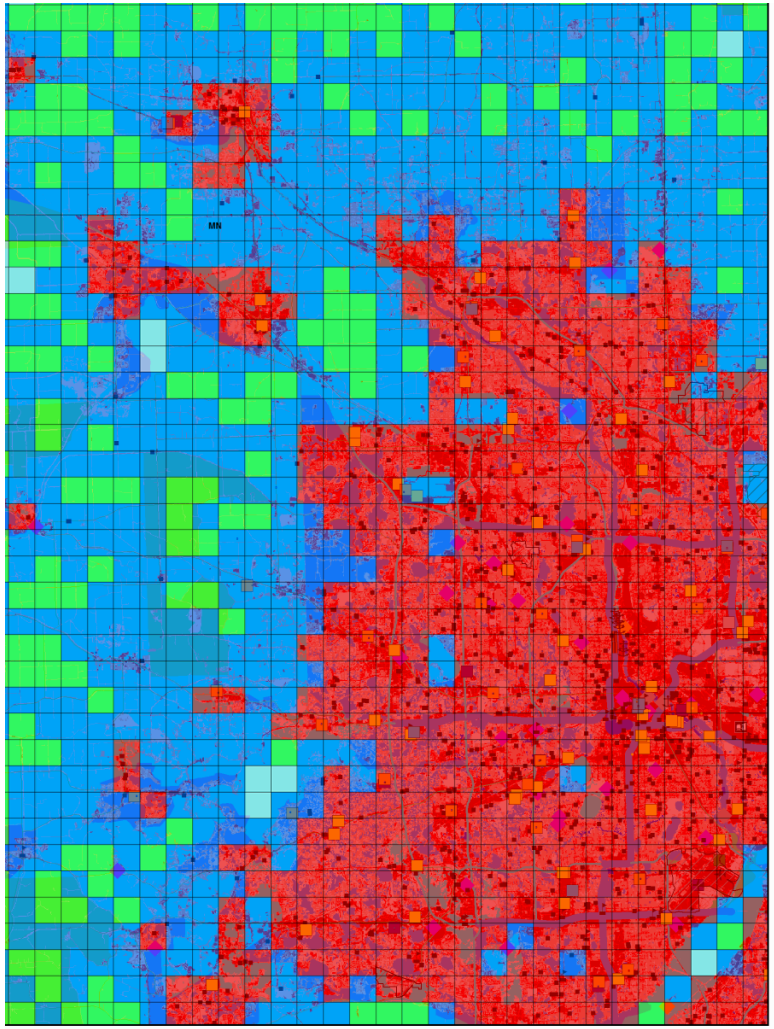
Resulting Combined Map =>



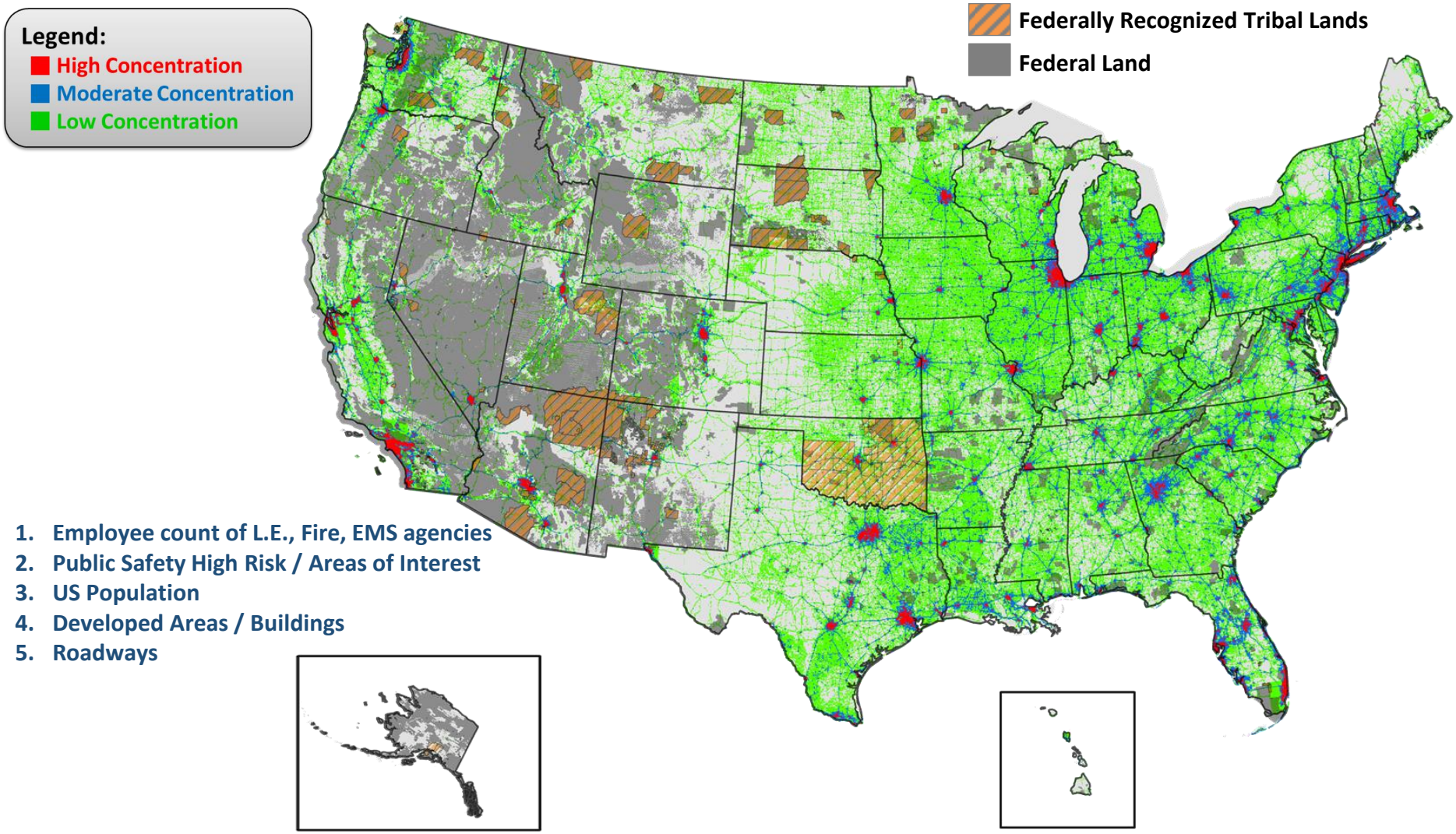
Converting Data into Coverage Objectives

1. Employee count of Law Enforcement, Fire, EMS agencies
2. Public Safety High Risk / Areas of Interest
3. US Population
4. Developed Areas / Buildings
5. Roadways

- A lot of data in different formats
  - Points, lines, polygons, etc.
- To evaluate these broad datasets, applied a 1x1 mile grid for uniformity
- Evaluated all data by grid to:
  1) Identify areas that had data of interest to Public Safety
  2) Show concentration areas



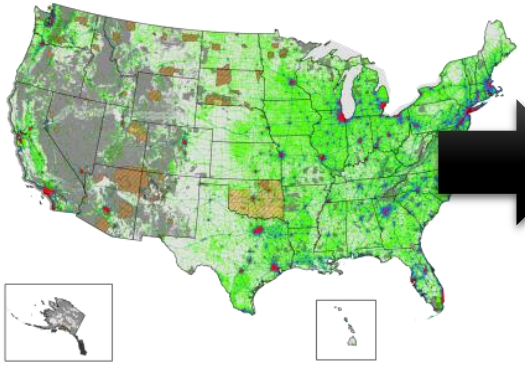
Nationwide Coverage Objective



1. Employee count of L.E., Fire, EMS agencies
2. Public Safety High Risk / Areas of Interest
3. US Population
4. Developed Areas / Buildings
5. Roadways

Where are Changes Needed?

Starting Coverage Objective



State to Modify During Consultation:

- End User Local Knowledge
- Calls for Service Data
- Tourist/Recreational Areas
- Evacuation Routes
- Large Temporary Venues
- Mass Transit Routes
- Highly Navigable Waterways
- Etc.

Modified Coverage Objective

?

Business Model

John Quinlan
Deputy CFO for Strategic Planning

FirstNet's Equation for Financial Sustainability

$7B + Fees + Synergies + Excess Network Capacity − Costs = Financial Sustainability

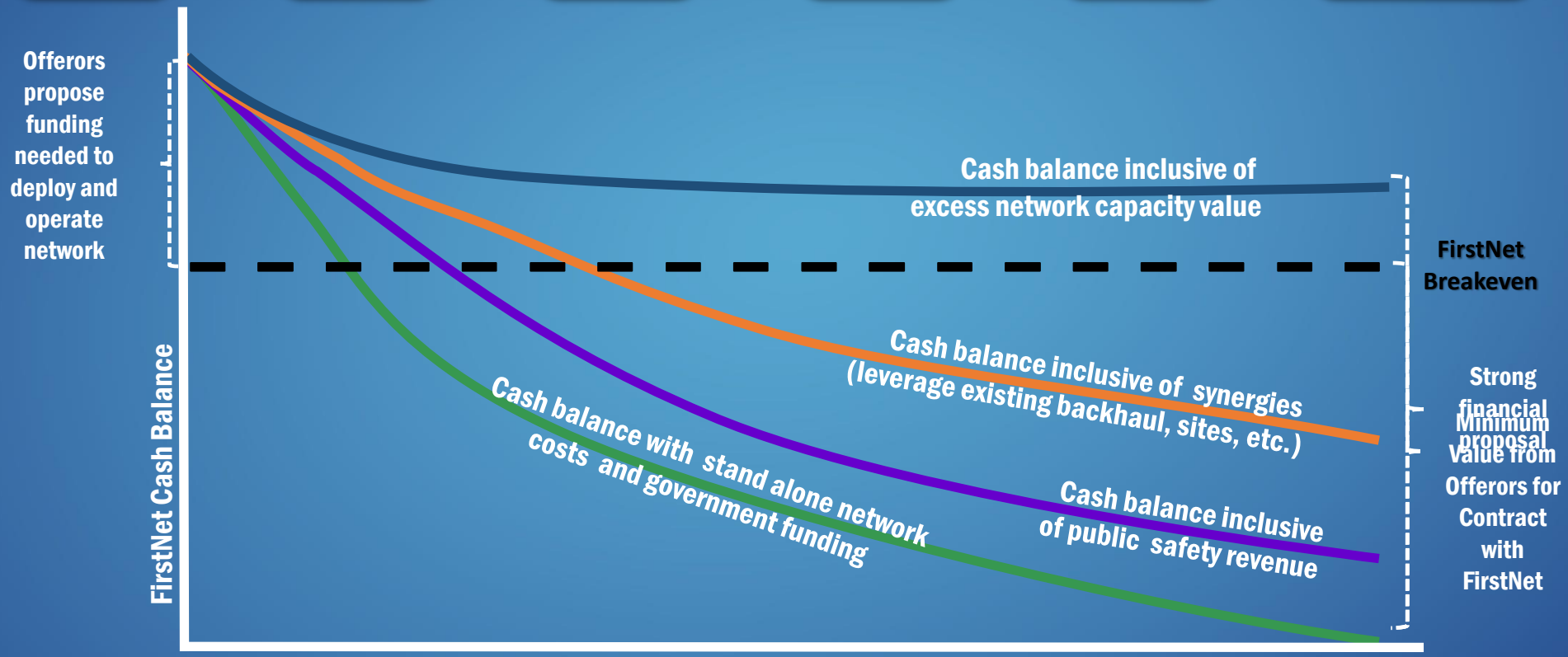
Financial Sustainability

- Network acquisition fees
- Core fees
- Back-haul
- Customer support
- Etc.

- Sink adjustments
- Tower infrastructure
- Deal propagation characteristics
- Existing 700 MHz network ecosystem

FirstNet Financial Sustainability

$7B + Fees + Synergies + Excess Network Capacity − Costs = Financial Sustainability

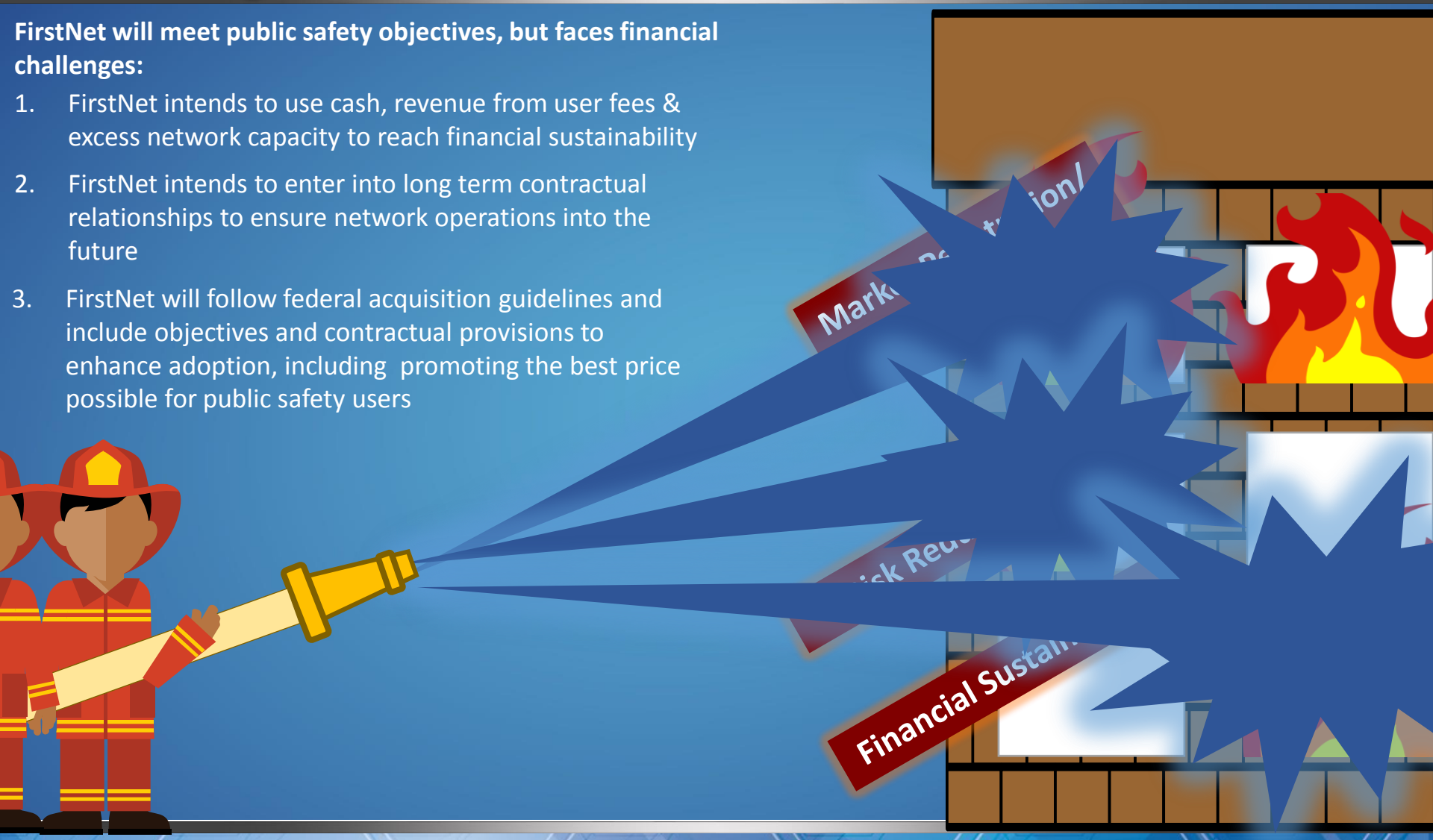


The Special Notice Describes Potential Financial Structure of Proposals

The Special Notice Identifies Mechanisms for Overcoming FirstNet's Challenges

FirstNet will meet public safety objectives, but faces financial challenges:

1. FirstNet intends to use cash, revenue from user fees & excess network capacity to reach financial sustainability
2. FirstNet intends to enter into long term contractual relationships to ensure network operations into the future
3. FirstNet will follow federal acquisition guidelines and include objectives and contractual provisions to enhance adoption, including promoting the best price possible for public safety users



Recap, Teaming, and Closing Remarks

Terrie Callahan
FirstNet Contracting Officer

Industry Day Recap

- Convey FirstNet Vision
- Explain the Special Notice
  - Explain Category 1 and Category 2 Acquisition Approach
  - Review Draft RFP Technical Documents Overview
  - Discuss FirstNet's Proposed Operational Architecture
  - Discuss Coverage Objectives Development and Stakeholder Input
  - Review FirstNet Business Model Key Concepts

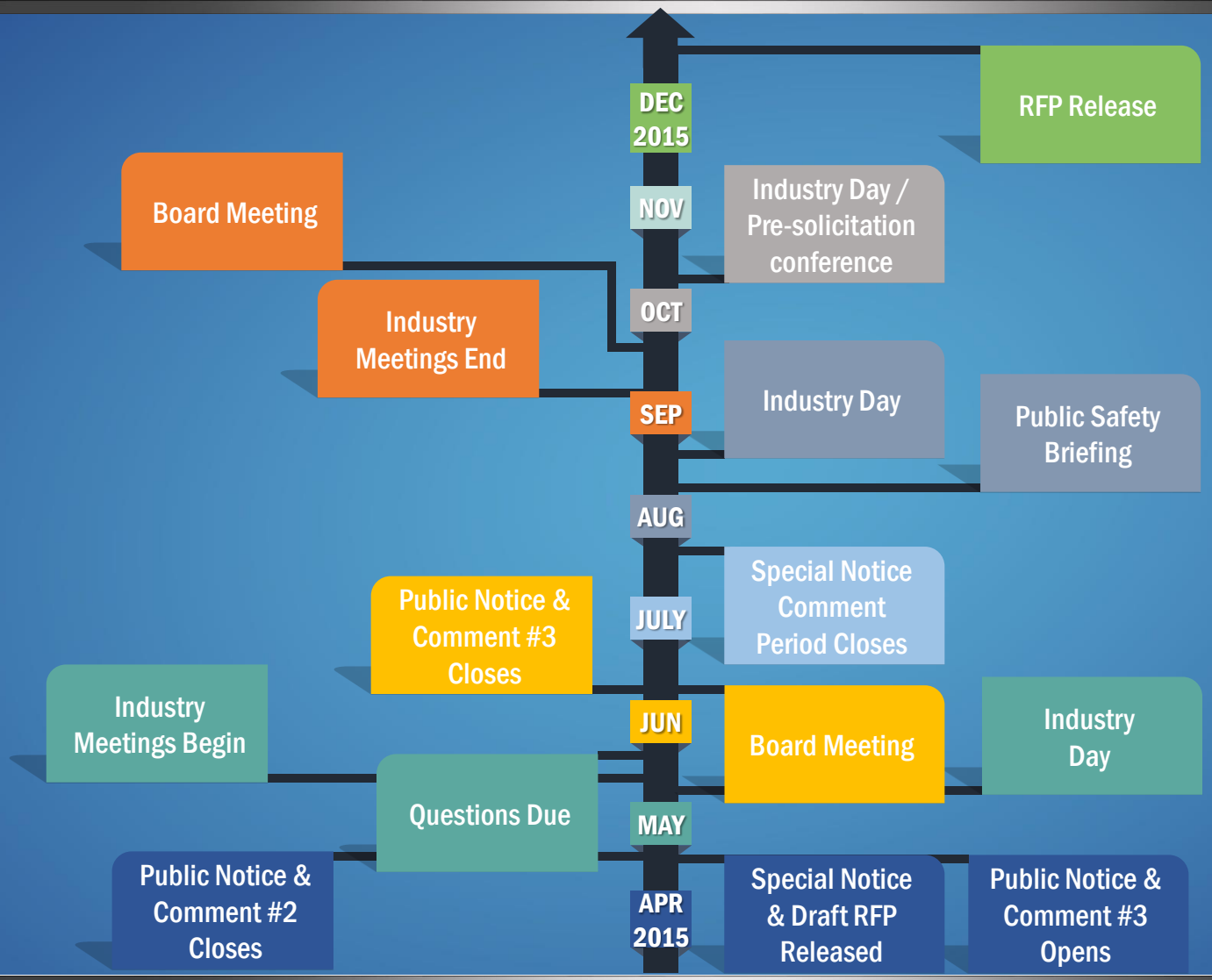
To Maximize Industry Participation, FirstNet Encourages Teaming to Meet all Program Objectives

- Due to the complexity of the acquisition, in order to achieve the "nationwide" objectives established by FirstNet it may be beneficial for potential offerors to consider partnering/teaming opportunities
  - Partnering/teaming may assist those offerors who do not have the capabilities to meet all of the objectives on their own

- FirstNet is compiling a list of potential offerors who may be interested in subcontracting and partnering opportunities with other potential offerors
  - It is not required to be included on this list in order to submit a proposal to any resultant RFP
  - This process is optional and solely intended to be an avenue to facilitate potential subcontracting and partnering opportunities
  - FirstNet accepts no liability for any resultant outcomes
  - Detailed instructions are in the Special Notice on FBO

- Key objective for the FirstNet acquisition is to promote competition and ensure a fair opportunity for all potential offerors

Potential Opportunities for Industry Engagement in the Year Ahead



Events subject to change

Special Notice Constraints

- Interested parties are instructed to contact only the Contracting Officer
- Interested parties and/or prospective offerors are cautioned against contacting any Government personnel, or any other personnel supporting this acquisition process
- If such a contact occurs and is found to be prejudicial to competing offerors, the party making such a contact may be excluded from further consideration and/or subsequent award consideration
- Accordingly, all communications prior to any subsequent award(s) must be directed to the Contracting Officer or as stated in any subsequent instructions
- Where possible, inquiries must be submitted in writing and sent via e-mail. Questions should be worded so as to avoid disclosing any proposed and/or considered strategies or proprietary information and/or solutions.

Instructions for the Special Notice

QUESTIONS to: SpecialNoticeQuestions@firstnet.gov
Title D15PS00295 Questions on NPSBN Approach
Due NLT: **May 27, 2015**

COMMENTS to: SpecialNoticeComments@firstnet.gov
Title D15PS00295 Comments on NPSBN Approach
Due NLT: **July 27, 2015**

CAPABILITIES STATEMENT to: VendorCapabilitiesStatements@firstnet.gov
Title D15PS00295 Capabilities Statement on NPSBN Approach
Due NLT: **July 27, 2015**

TEAMING/PARTNERING REQUESTS to: terrie_callahan@ibc.doi.gov

Thank You