



PRELIMINARY PHASED COVERAGE REQUIREMENTS FOR FIRSTNET

AFRWC Meeting November 17, 2015

Alabama Law Enforcement Agency



Purpose



We developed maps and GIS shapefiles to represent Alabama's **preliminary phased coverage requirements** as submitted to FirstNet on September 30, 2015.

Maps are based on a **purely mathematical model** without stakeholder input.

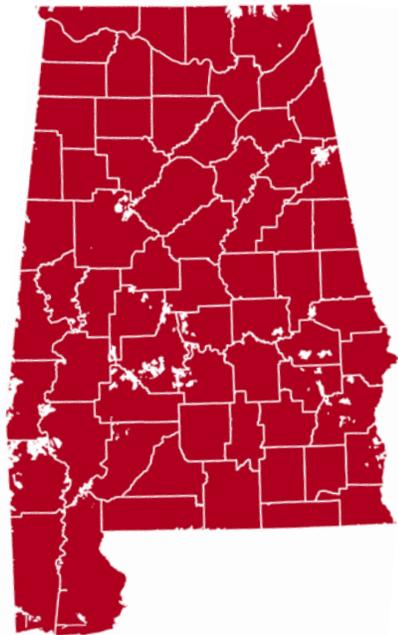
We will update these coverage requirements with stakeholder feedback once we have performed our coverage reviews under the APSB project.

Project Key Dates



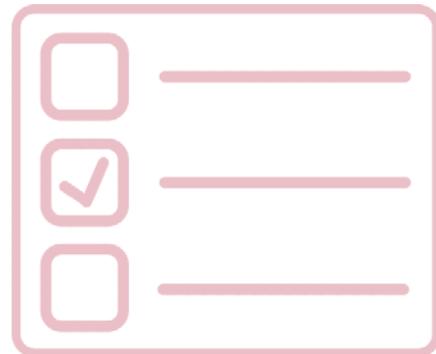
Nov 2015

Preliminary Phased
Coverage
Requirements



Dec 2015

Issue Web Surveys



Jan-Jun
2016

Perform Coverage
Interviews



Feb 2016

Initial Report:
Early Survey
Findings

Apr 2016

Governance
Reports

Jul 2016

Final Report:
Survey Findings and
Coverage Reviews

FirstNet's Baseline

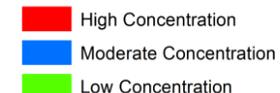
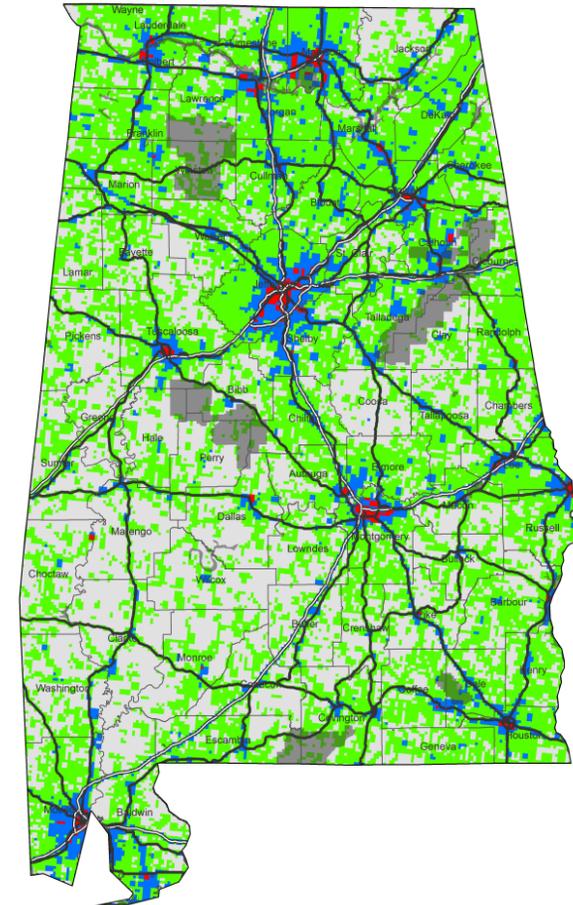


1. Employee count of L.E., Fire, EMS agencies
2. Public Safety High Risk / Areas of Interest
3. US Population
4. Development
5. Roadways

FirstNet seeks input on their baseline model.

Our objective:

Provide a set of preliminary coverage requirements that better meet stakeholder requirements in five annual phases.



Coverage Requirements vs. Map



These are **coverage requirements**.

They are not coverage maps.

They depict where coverage is needed in five phases for the FirstNet consultation process.

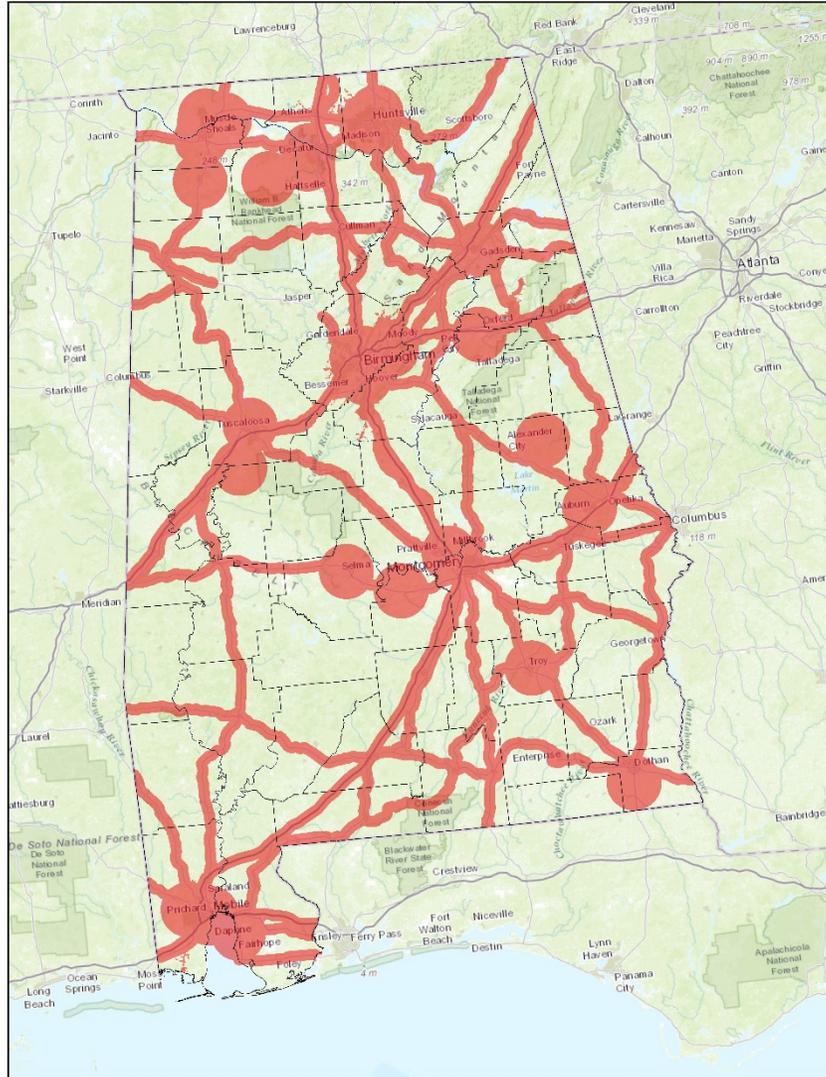
They do not depict where FirstNet coverage is guaranteed.

Objectives Submitted to FirstNet



- **Phase 1:** Major Cities and Freeways; Critical Federal, State & Local Infrastructure; half of major public gathering venues
- **Phase 2:** Major thoroughfares (Interstates, US Hwys, some State Hwys) via RAN; remaining public gathering venues
- **Phase 3:** Match existing 4G LTE coverage Statewide via RAN
- **Phase 4:** Rail and navigable waterways
- **Phase 5:** Complete state RAN coverage

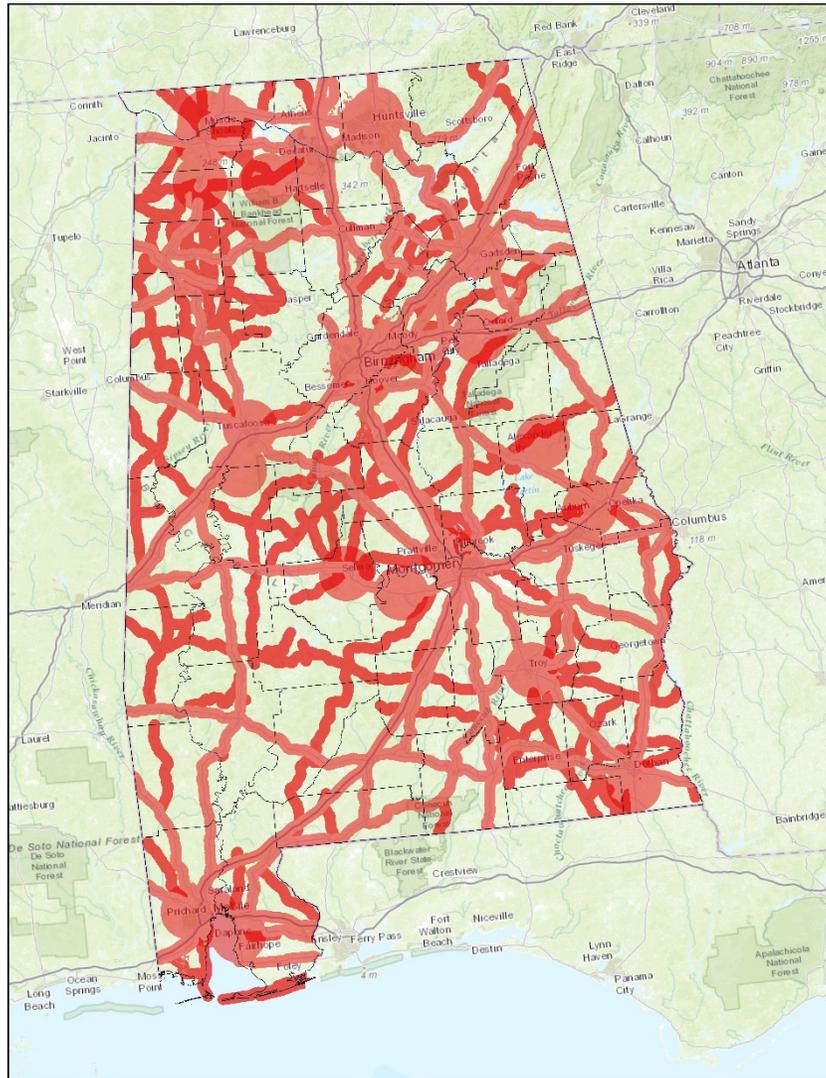
Phase 1



- Major urban areas that intersect interstate roads
- Entire Interstate road network (3 mi)
- Entire US Highway network (3 mi)
- 50% of venues for events with over 150,000 people (10 mi)

Variable	Area (sq mi)	Population
Urban Area (Critical)	1,976	2,229,342
Interstate	2,671	182,407
US Highway	9,165	1,045,157
Total	13,812 (25%)	3,456,906 (71%)

Phase 2



- Remaining 50% of venues for events with over 150,000 people (10 mi)
- Part 1 of state highways based on AADT (3 mi)

Variable	Area (sq mi)	Population
State Roads	11,653	541,388
Total	11,653 (22%)	541,388(13%)

Phase 3



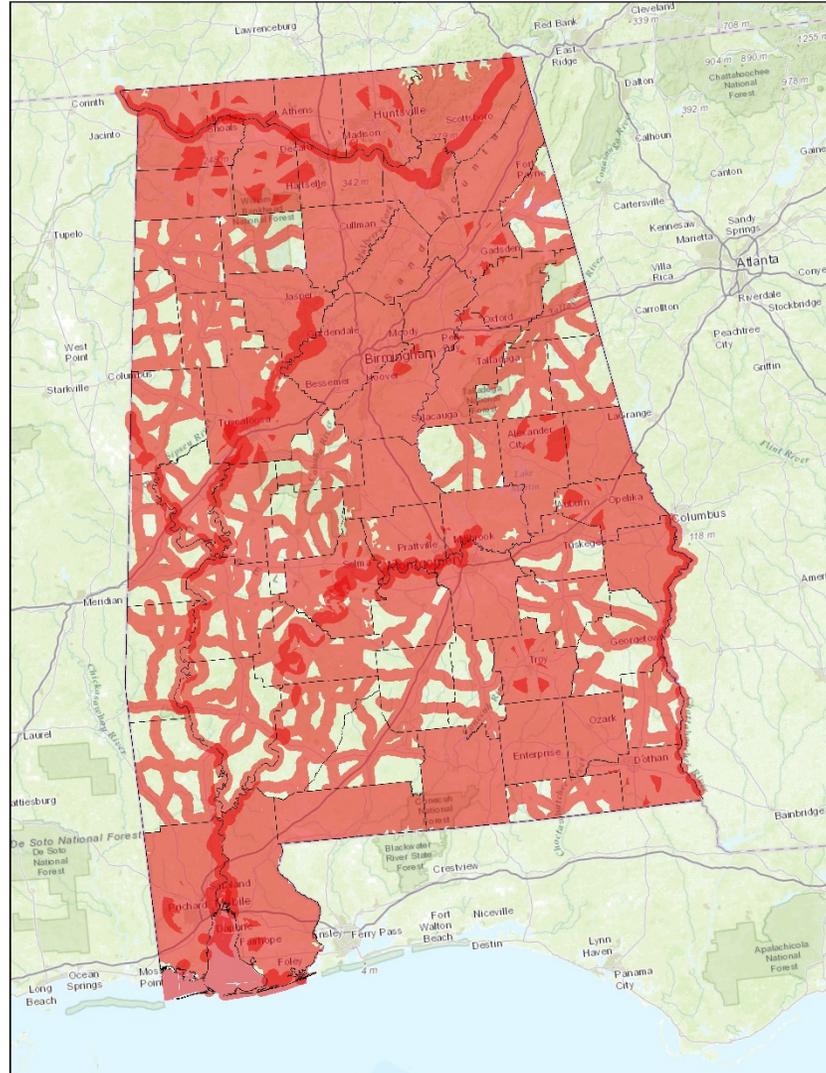
- Part 1 of state highways based on AADT (3 mi)
- Rail lines in the state (3 mi)
 - Note—most rail lines are already covered based on proximity to highways

Variable	Area (sq mi)	Population
State Roads	6,354	287,244
Rail Lines	3,036	92,171
Total	9,390 (18%)	379,415 (8%)

Phase 4

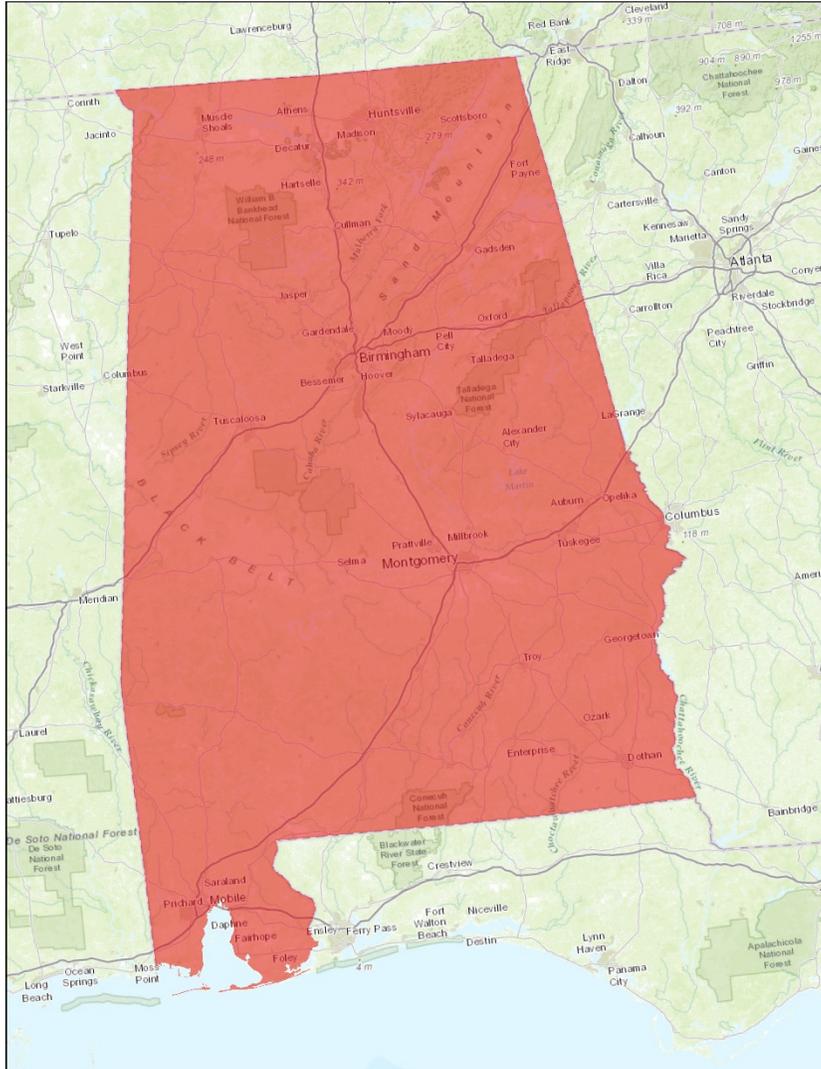


- Part 1 of remaining “rural” area by census block
- All highly navigable waterways



Variable	Area (sq mi)	Population
Rural Areas & Waterways	9,785	506,789
Total	9,785 (18%)	506,789 (10%)

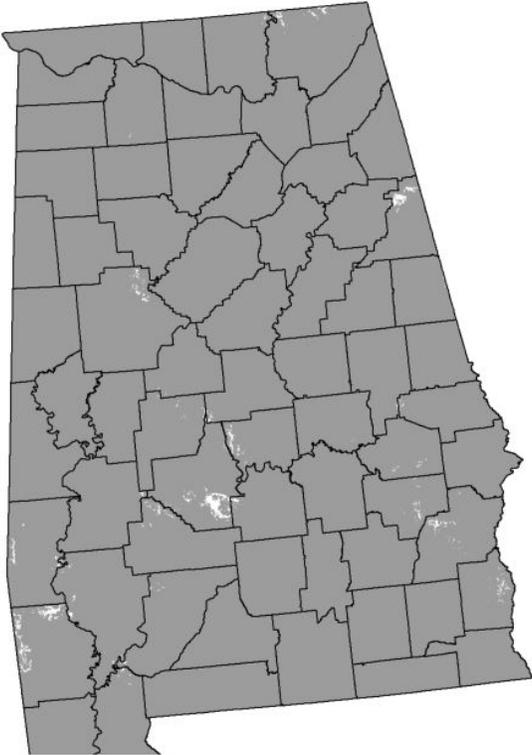
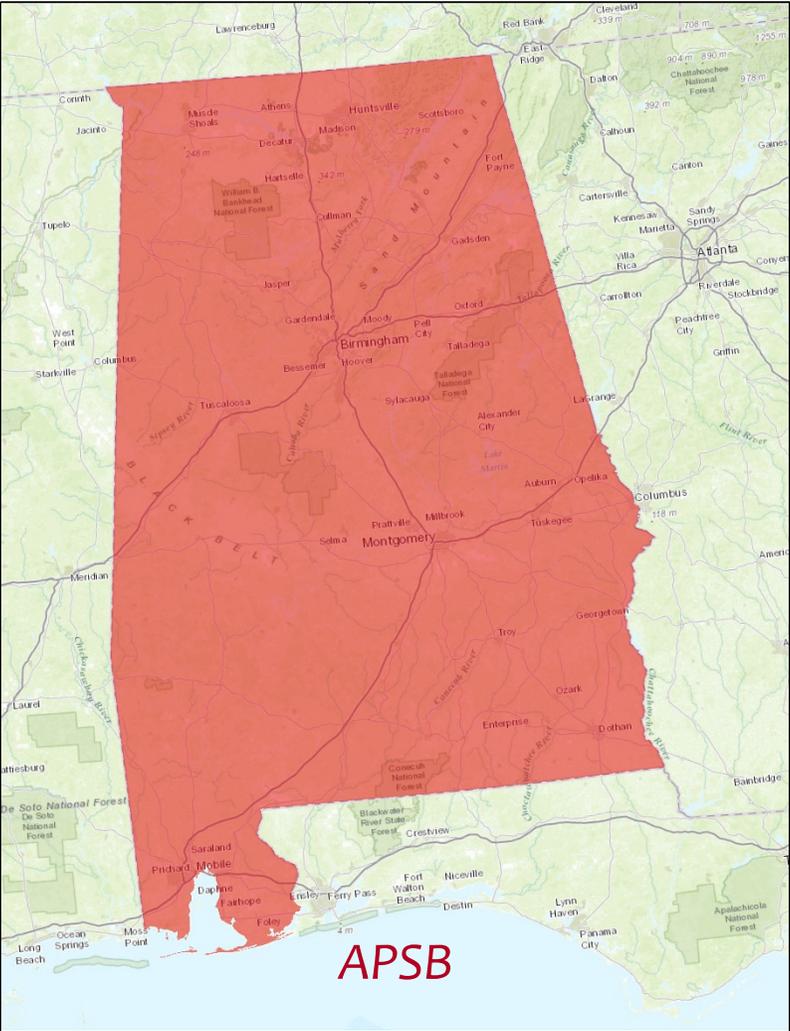
Phase 5



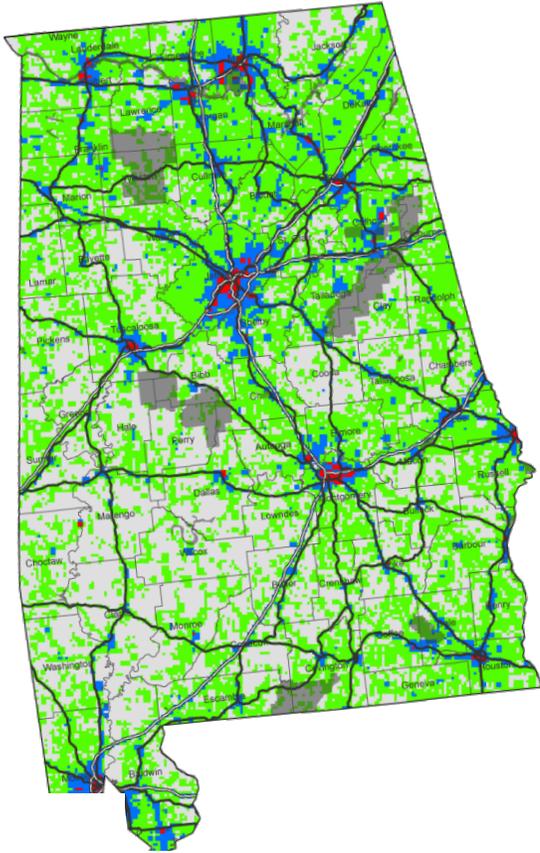
- 100% of the state of Alabama

Variable	Area (sq mi)	Population
State	52,419	4,849,000
Total	52,419 (100%)	4,849,000 (100%)

Comparisons



Carrier Aggregate (claimed)



FirstNet Baseline

What's Next?



We will submit these preliminary phased coverage requirements to FirstNet on November 20, 2015.

We will schedule coverage interviews beginning in January 2016.

We will submit requirements to FirstNet at regular intervals throughout, but plan to be complete by July 2016.

THANK YOU!

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