# An Innovative Approach to Pre-Hospital Performance Improvement & Education

**Northeast Georgia Health System**

## Challenge

Northeast Georgia Medical Center (NGMC) is the only American College of Surgeons (ACS) verified level II trauma center in the northeast Georgia region, which covers 13 predominantly rural counties.

- During the trauma center's 2018 ACS verification visit, the surveyors identified an opportunity for improvement related to performance improvement activities in the pre-hospital environment.

- In response to the noted weakness, NGMC's Trauma Outreach and Injury Prevention Coordinator continued to review all level one trauma activations, but with more scrutiny to identify potential opportunities for improvement and educational gaps for the pre-hospital providers.

- As opportunities were identified, feedback was relayed to the pre-hospital personnel; however, due to proximity, geographic area and other factors, face to face educational opportunities, led by the trauma center, were limited.

- This opportunity led the Trauma Outreach and Injury Prevention Coordinator to collaborate with the mobile simulation lab team to develop trauma scenarios that pre-hospital providers could simulate.
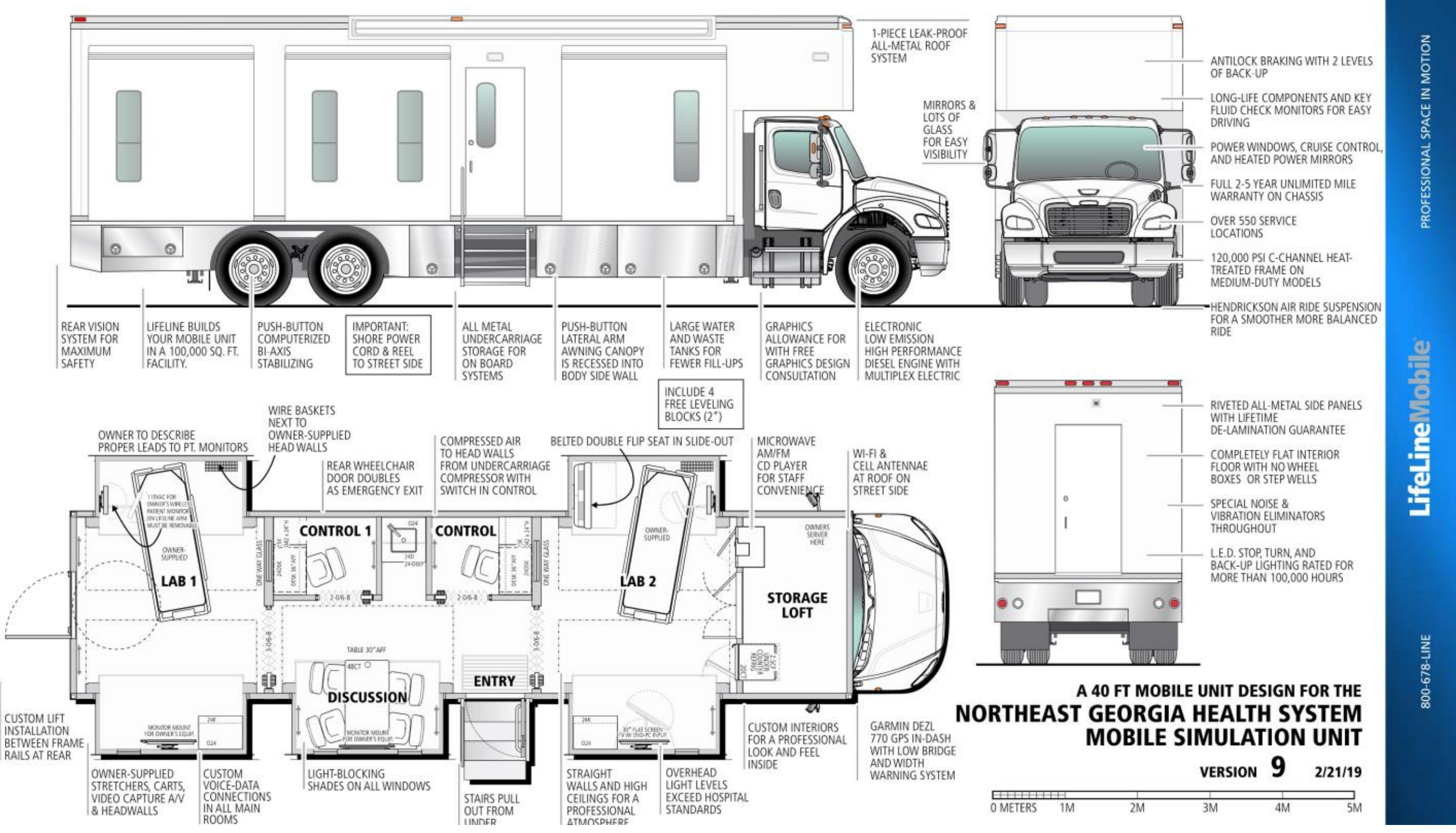
## Objectives

The overall purpose of utilizing the mobile simulation lab for trauma education was to take real-life scenarios to the pre-hospital personnel and to allow simulation opportunities to improve their knowledge, while staying in their county and eliminating the need to travel for education.
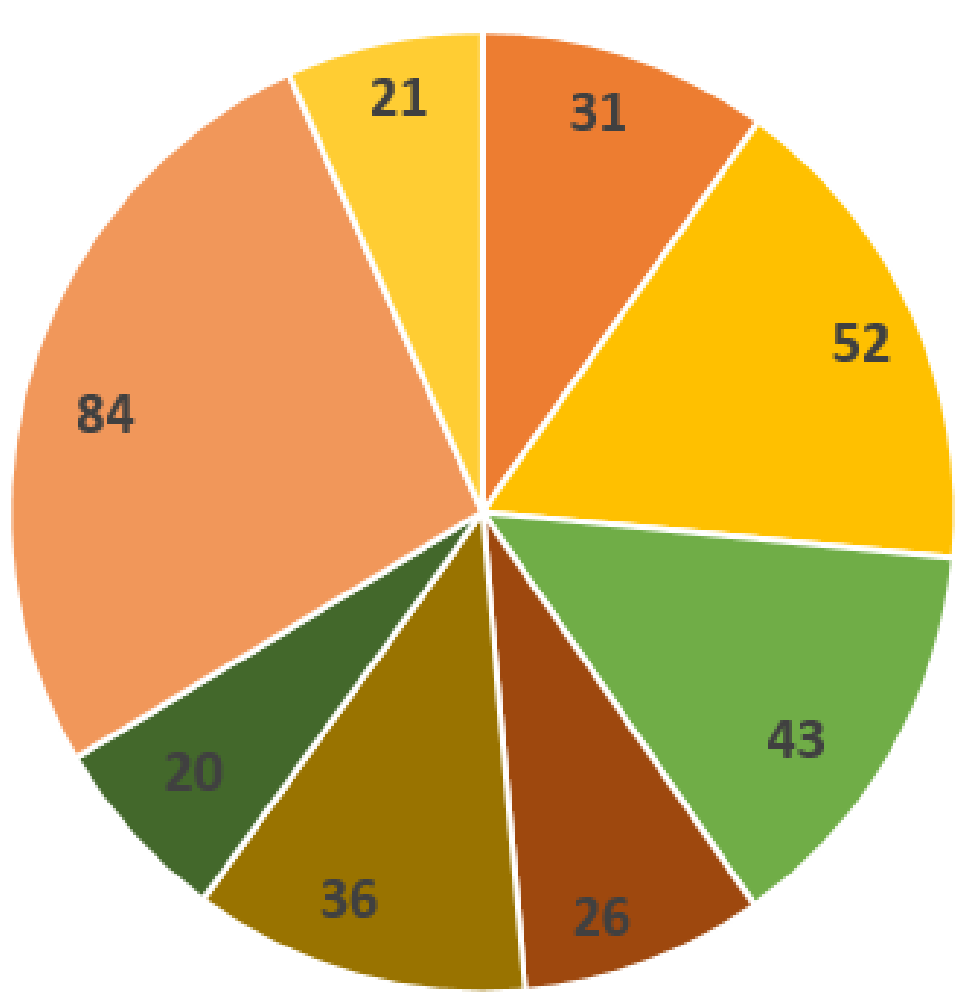
## Project Design

To gain interest from the various EMS counties, the Trauma Outreach and Injury Prevention Coordinator networked through the Regional Trauma Advisory Committee (RTAC).

- Before taking the mobile education to the different services, a learning needs assessment was conducted for each EMS county with the development of a personalized education plan.

- In addition to trauma specific education, services could request education on obstetric delivery, neonatal resuscitation, stroke or other high risk clinical scenarios.

- Once plans were agreed upon by the mobile simulation team and the EMS county leadership team, logistics were finalized.

- For each county, the mobile simulation team, which includes subject matter experts, brought the mobile simulation lab to the service and conducted education over two to three days to cover each shift.

- During the simulation, pre-hospital personnel, in teams of 2-3, rotated through the simulation and standardized patient scenarios.

- The pre-hospital crews were debriefed after each simulation scenario and were provided feedback on what they did well and areas requiring further education.



A 40 FT MOBILE UNIT DESIGN FOR THE NORTHEAST GEORGIA HEALTH SYSTEM MOBILE SIMULATION UNIT — VERSION 9   2/21/19



## Results



Banks 84, Central 52, Dawson 43, Franklin 26, Habersham 36, Jackson 20, Lumpkin 31, Stevens 21

**Total Number Participants= 313**

- 100% strongly agreed or agreed that the mobile simulation met their professional needs and recommended mobile simulation education.

- Strengths
  - Use of high-fidelity simulation and standardized patients, hands-on experience, instructor knowledge

- Opportunities
  - Extend time for each scenario
  - Addition of medical scenarios
  - Increase the frequency of mobile simulation education

## Conclusions

With the addition of the mobile simulation bus to the toolkit of trauma education resources, this change can be sustained through advanced planning collaboration, pertinent topics and continuous evaluation to improve the mobile simulation experience.

## Team Members

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