



Burke County Public Health Builds a Culture of Continuous Improvement Through Lean and Kaizen

For most people, Lean manufacturing and Kaizen events are associated with factory floors and production lines—not public health agencies.



But at **Burke County Public Health**, leaders saw an opportunity to think differently.

Driven by a commitment to strengthen quality improvement efforts and better serve their community, Burke County Public Health partnered with NC State Industry Extension Services to implement Lean training and facilitate a Kaizen event—an uncommon but transformative step for a government agency.

The result? A dramatic reduction in permit turnaround times, stronger team collaboration and a new way of thinking about efficiency across the organization.

Building a Foundation for Quality Improvement

Burke County Public Health had already begun investing in a culture of quality improvement, but leaders recognized they needed a more structured approach.

“We had been working on our culture of quality improvement for a while,” said Ashley Jarrett, interim public health director. “But we were doing things based on our own baseline knowledge, and expertise varied across the organization. If we were truly going to embrace quality improvement, we had to understand the tools.”

At the time, the department was restructuring its Quality Improvement (QI) Council and exploring ways to embed continuous improvement practices into everyday operations. When one-time state funding for performance management became available, the timing aligned perfectly to pursue formal Lean training.

The agency partnered with NC State Industry Extension Services to deliver Lean training in two phases:

- › **Lean 200 training** for supervisors and leadership to build a common understanding of Lean principles and quality improvement
- › **Lean 300 training** for a core team of employees who would lead change efforts and facilitate improvement projects across the department

While Lean concepts are commonly used in manufacturing, applying them in public health presented a unique challenge.

“Trying to apply Lean in a public health setting was difficult at first,” Jarrett explained. “Public health is fluid and complex. We had to figure out how these tools worked in our environment.”

Turning Challenges into Measurable Results

The team chose to focus its Kaizen event on a critical environmental health process: improving permit turnaround times for onsite wastewater applications.

By reframing permits as a “product” moving through a process, the team began identifying waste, duplication, delays, and opportunities for improvement.

Using Lean tools such as fishbone diagrams, flowcharting, SWOT analysis, and process mapping, the team spent four intensive days examining every step of the workflow.

The work paid off.

“We went from an eight-to-twelve-week turnaround for permits to four-to-five weeks,” said Jackson Stump, onsite program coordinator for environmental health. “I honestly didn’t think that kind of outcome was possible.”

The improvements weren’t driven by one sweeping change. Instead, the team learned how multiple smaller improvements—eliminating unnecessary site visits, reducing duplicated work, and improving workflows—could compound into meaningful results.

“It showed us we didn’t always need a big, flashy intervention,” Jarrett said. “Small changes stacked together can have a major impact.”



More Than Process Improvement: A Culture Shift

Beyond operational gains, the Kaizen process transformed how teams worked together.

Participants described stronger communication, increased collaboration, and a renewed openness to change.

“By day two, people felt comfortable challenging ideas and pushing each other to think differently,” Jarrett said. “By the end of the event, the environmental health team looked stronger.”

Stump agreed.

“It really became about working smarter, not harder,” he said. “We all knew we were there for a reason—to come out more efficient and better able to use our time wisely.”

The experience also created momentum beyond the original project. Today, Burke County Public Health continues applying Lean thinking to quality assurance,

program evaluation, and future planning—including the design and operation of a new facility.

“We still ask ourselves, ‘Is this effective? Are there ways we can improve this?’” said Miranda Smith, public information officer. “The thinking and tools we learned still influence how we approach problems.”

Lessons for Other Public Agencies

For organizations hesitant to pursue Lean or Kaizen because of the time commitment, Burke County Public Health offers simple advice: keep an open mind.

“Just because you’ve been doing something the same way for 20 years doesn’t mean it’s still the right way,” Stump said. “If you stay open to change, efficiency goes up, morale goes up.”

The team also emphasized the importance of commitment and preparation.

“A Kaizen event is not something you can just throw together,” Jarrett said. “You have to dedicate the time to it. But the reward on the other side is worth it.”

For Burke County Public Health, investing in Lean wasn’t just about improving one process—it was about building

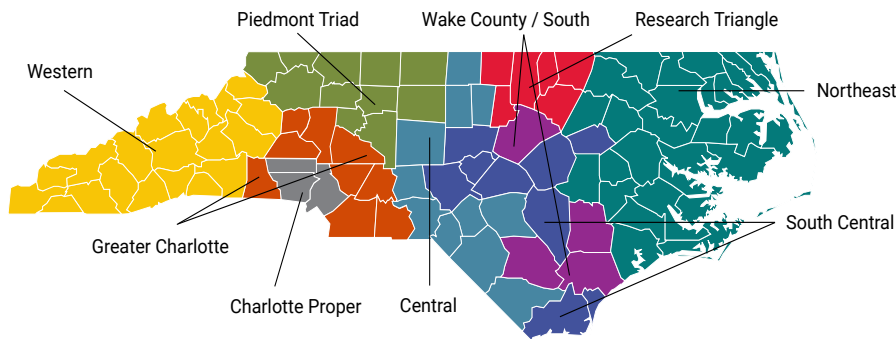


the skills and mindset to continually improve how it serves its community.

“In public health, we have to be adaptable,” Jarrett said. “If we don’t learn how to evaluate our processes and improve them, we’re missing an opportunity to better serve the people who depend on us.”



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