



2026 ISSA Preservation Performance Award

Nominee:

Alabama Department of
Transportation

Nominated by:

Ergon Asphalt & Emulsions



DOUBLING THE SERVICE LIFE OF HEAVILY TRAFFICKED ALABAMA ROADWAYS

Alabama's Commitment to Long-Term Pavement Preservation with Highly Modified Micro Surfacing

Ergon Asphalt & Emulsions (Ergon A&E) is honored to nominate the Alabama Department of Transportation (ALDOT) for the ISSA Preservation Performance Award.

ALDOT's work along Interstate 59 (I-59) showcases their dedication to cost-effective and efficient ways to keep local communities safe. Their initial 2017 trials of highly modified micro surfacing launched widespread use of the treatment across the entire state and is expected to extend the service life of the road by 10 years.

One particular highlight is a 2024 project that involved treating all lanes of an 18-mile stretch of I-59. With an average daily traffic of about 23,000 vehicles and with large trucks accounting for roughly 45% of that number, ALDOT recognized the need for an exceptionally durable treatment — and knew they had an answer thanks to their earlier pavement preservation research.



ALDOT has adopted a proactive approach to pavement preservation. As stated on their website, the ALDOT team adheres to the following principles:

“1 *Demand excellence in transportation by being involved in promoting adequate funding to advance and maintain Alabama’s transportation infrastructure.*

2 *Promote prosperity and economic/social development by efficient movement of commuters and goods through intermodal connections within Alabama.*

3 *Build trust by demonstrating our core values of integrity, competence and service both individually and organizationally.* **”**

“ *The ALDOT team is always willing to collaborate with contractors and suppliers to find the best solution for their communities.*

They’re always looking to innovate, to keep roads in good condition and drivers safe. They look ahead, and there’s a real commitment to pavement preservation in everything they do. **”**

Matt Jeffers, Technical Marketing Manager, Ergon A&E

Preservation that Protects Drivers – and Budgets

- Above all else, driver safety is *the* pillar of ALDOT's pavement preservation program. ALDOT has successfully used Open Graded Friction Courses (OGFC's) as a finishing safety layer for high-volume roadways and continues to utilize them today.
- OGFC's provide significant surface friction and serve as a porous pavement layer to help water drain to the sides of a roadway – rather than collecting on the surface.
- While OGFC's make roads safer, replacing them with fresh OGFC treatments can be an expensive solution due to mix cost and maintenance.
- In 2017, an oxidized OGFC surface along I-59 began to ravel and needed maintenance.
- ALDOT's Preventative Maintenance (PM) methods fall into PM1 or PM2 categories, depending on the needs of the roadway. The I-59 project fell under PM1, where a roadway must be micro milled followed by a safety layer of OGFC or micro surfacing as the surface course.

Researching A Solution That Lasts

In 2017, as part of their efforts to expand their pavement preservation toolbox and in order to stay under budget for the year, ALDOT worked with Ergon A&E to test highly modified micro surfacing as a cost-effective alternative to OGFCs.

“Micro surfacing has a long history of use on high-volume roads. It dates back to the 1970s, where it was used on the Autobahn. ALDOT wanted to try some on the interstate to see how it held up. They’d already had success with high polymer micro surfacing on other high-volume routes, so they decided to make that upgrade for the interstate, too.”

Matt Jeffers, Technical Marketing Manager, Ergon A&E



THE INITIAL DEMO: Preventing Raveling, Restoring Surface Friction and Extending Service Life



Location

I-59 in Alabama, Mile
Markers 19-21



Traffic

Principal arterial
interstate traffic



Emulsion Product

Highly Modified Micro
Surfacing (CSS-1EP)



Contractor

Whitaker Contracting

- Developed initially for city applications that experience frequent starting, stopping and turning movements — where increased durability is essential — CSS-1EP highly modified micro surfacing has found continued success in heavy traffic environments.
- ALDOT turned to this treatment as a longer-lasting way to maintain surface friction and durability for the busy I-59.



ENSURING LASTING PERFORMANCE

- In August 2017 — following successful micro milling of the existing OGFC surface — ALDOT worked with Whitaker Contracting to apply CSS-1EP in two lifts.
- For the FIRST LIFT, treatment was applied at 22 pounds per square yard using CSS-1EP (highly modified micro surfacing) and Type III aggregate.
- For the SECOND LIFT, micro surfacing was applied at 23 pounds per square yard utilizing CSS-1EP (highly modified micro surfacing) and Type III aggregate.
- Traffic was returned to each treated section within **AN HOUR AFTER THE APPLICATION.**



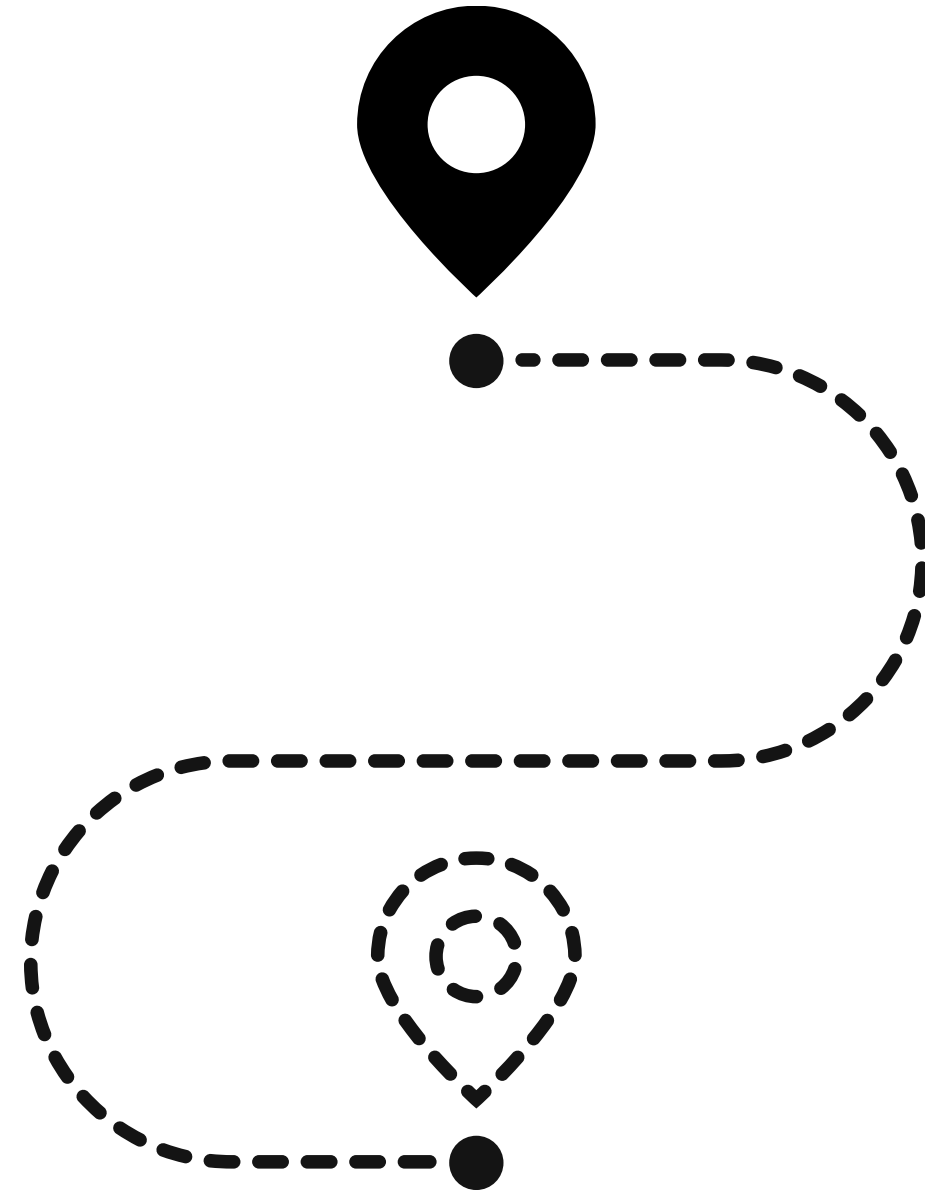
**Whitaker Contracting was purchased by Vulcan Materials Company in 2024.*





PAVING THE WAY FOR FUTURE PROJECTS

- ALDOT's 2017 project was the first time highly modified micro surfacing had been applied to an interstate surface in Alabama.
- Following the resounding success of their initial project, ALDOT looked for other opportunities to strengthen the state's roadway network with highly modified micro surfacing.
- ALDOT found that the highly modified micro surfacing was still holding up well after seven years, which influenced their decision to implement the treatment on a larger section of I-59.



THE NEXT STEPS: Addressing 18 Miles Worth of Oxidation and Raveling on I-59



Location

I-59 in Alabama, Mile Markers 1-19



Traffic

Average ADT of 22,000- 23,000, including heavy truck and 18-wheeler traffic



Emulsion Product

Highly modified micro surfacing (CSS-1EP)



Contractor

Wiregrass Construction Company Inc.

APPLYING A TRIED-AND-TRUE TREATMENT

- After micro milling the existing OGFC surface on **I-59 Mile Markers 1-19**, Wiregrass Construction applied highly modified micro surfacing in two lifts at 22 pounds per square yard for both.
- The mix design specified Type III aggregate for the first lift and Type II for the second.
- For both eastbound and westbound applications, crews shifted traffic to one lane while the other received treatment, returning traffic to the surface within only 1 to 1 ½ hours following each application.

ALDOT'S COMMITMENT TO PERFECTING PARTNERSHIPS

With nearly 18 miles of work to be done, it was critical that all parties involved were on the same page.

“This large-scale micro surfacing initiative required exceptional teamwork — not only within Wiregrass Construction but also in collaboration with the agency and suppliers. The strong communication and coordination between ALDOT, our suppliers and our team ensured that the final product met expectations.”

Matt Sony, Pavement Preservation Manager for Wiregrass Construction

BUILT TO LAST

- To date, the section of Interstate 59 treated in the 2017 demo is holding up well – ALDOT expects to gain 10 additional years of service life from the highly modified micro surfacing treatment applied in 2017. With these strong results as evidence, they expect the 2024 project to perform just as well.
- “Where we are anticipating the advantage is the performance longevity of the micro surfacing over the OGFC,” says Lyndi Blackburn, Assistant Region Engineer – West Central Region of ALDOT. “So far, it appears to be performing as anticipated and we are happy with the results!”
- ALDOT has maintained the same reliable surface friction and durability of I-59 all while enjoying the benefits of longer-lasting treatment. Given the heavily trafficked nature of the interstate, keeping it safe and smooth while delaying the need for more disruptive heavy maintenance is critical for the trucks and cars that use it.

“ALDOT wants to do more of their interstates with premium micro surfacing. ALDOT found what works for them, and they want to utilize it as much as possible to support their community with roads that last a lot longer.”

Matt Jeffers, Technical Marketing Manager, Ergon A&E

PROTECTING COMMUNITIES FOR YEARS TO COME

- We believe ALDOT is deserving of the ISSA Preservation Performance Award for their commitment to continued innovation which has led to the **long-lasting durability**, reduced oxidation and raveling and overall safe driving conditions they achieved in their initial micro surfacing trial project.
- Given what they've already achieved, we're equally as optimistic as they are about the future of their other highly modified micro surfacing projects — including the recent 18-mile Interstate 59 project.
- **ALDOT has shown their dedication to pursuing quality solutions that last and keep Alabama's roads — and, in turn, their communities — safer for longer.**



PROTECTING COMMUNITIES FOR YEARS TO COME

- ALDOT's approach to pavement preservation has led to more use of highly modified micro surfacing statewide.
- This approach has proven reliably cost-effective and will allow ALDOT to multiply this approach across their entire network. Increased savings due to longer service life lead to more opportunities to apply pavement preservation treatments that keep the roads in great condition. This, in turn, ultimately leads to a longer-lasting, safe driving experience for the communities that use these roads.



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Contractor:

Whitaker Construction
No longer in business

