



# Low-Cost Pavement Solutions

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South Area Engineer



## Who is Tensar and what do we do?

- Tensar is the inventor and manufacturer of geogrid.
- We help our customers achieve more cost-effective, reliable solutions for roadways, pavements and other site development challenges.
- Our products are backed by extensive research
- Team of engineers and scientists deliver design and construction support unequaled in our industry.
- 1.2 billion SY of product installed to date



# Where We Operate

- **50+**

Years Experience

- **4**

Global Manufacturing  
Facilities

- **110**

Patents Held

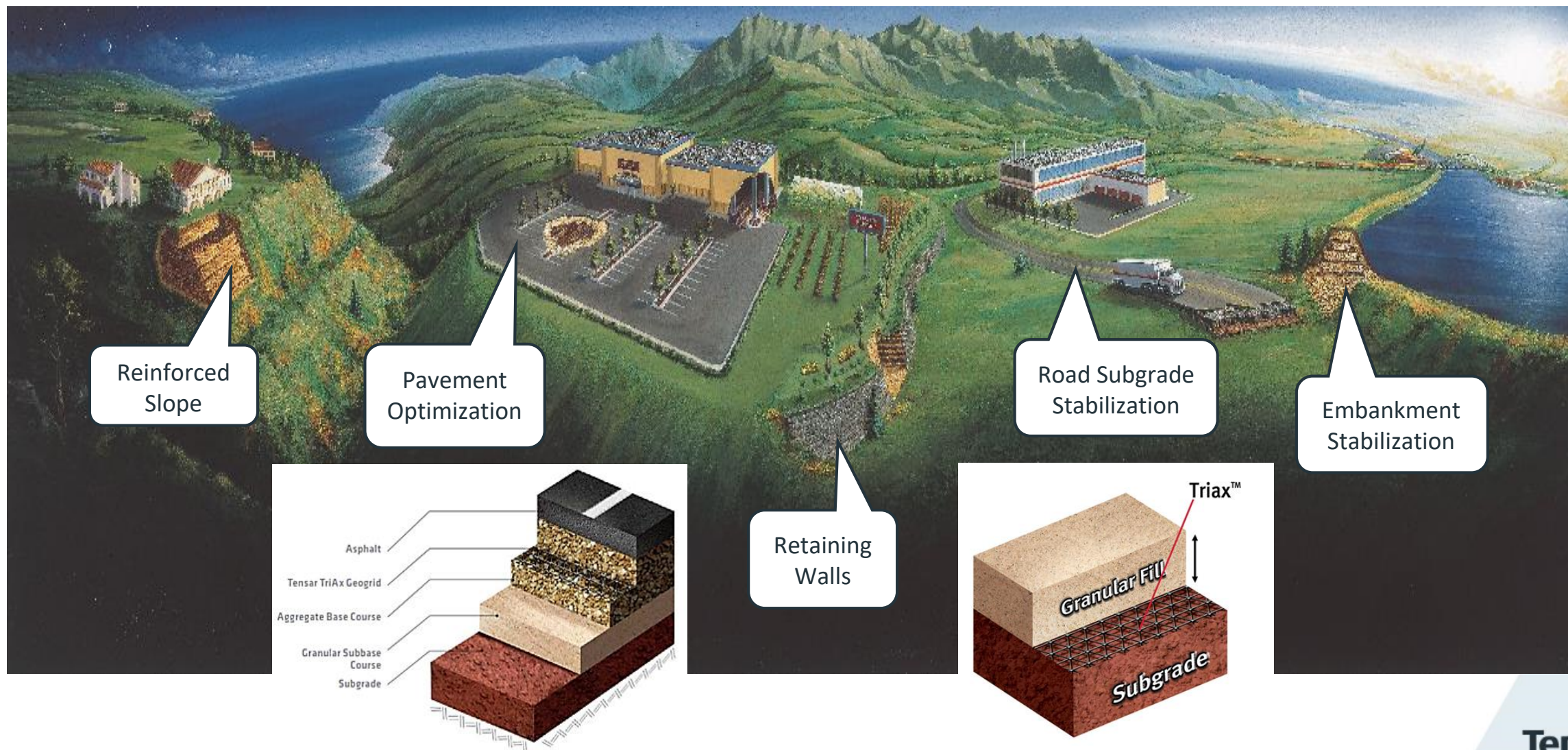
- **1,000+**

Worldwide Employees & Distributors





# Different ways in which we can help our customers

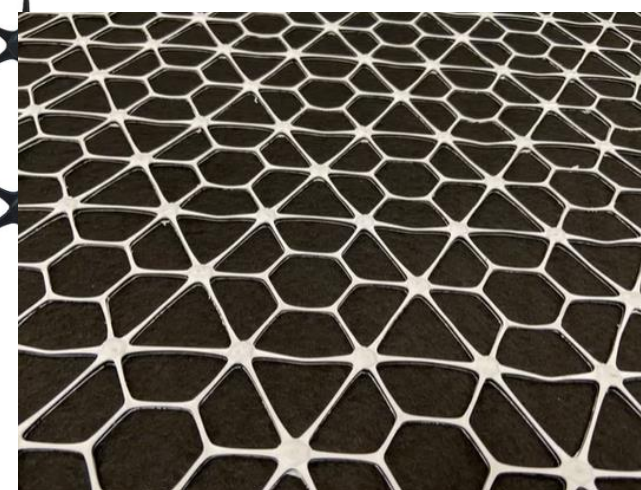




# Next Generation Stabilization Geogrids From Tensar

## InterAx (NX) Geogrid

Biaxial (B)  
Geogrid



surrounding aggregate

0  
the in-  
duct in

formed  
how  
forces

to  
to which  
with the



# InterAx™ - Next Generation Stabilization Geogrids

## Key Product Features



New, optimized  
geometry



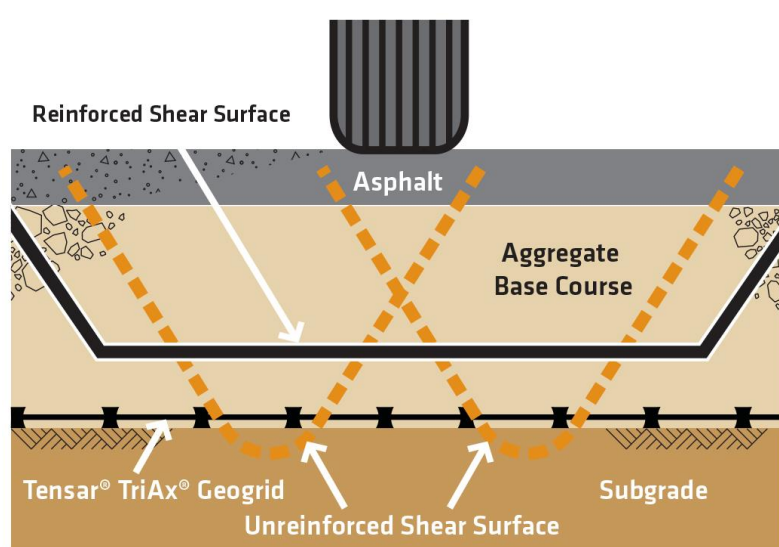
Engineered Sheet with  
Advanced Material Science



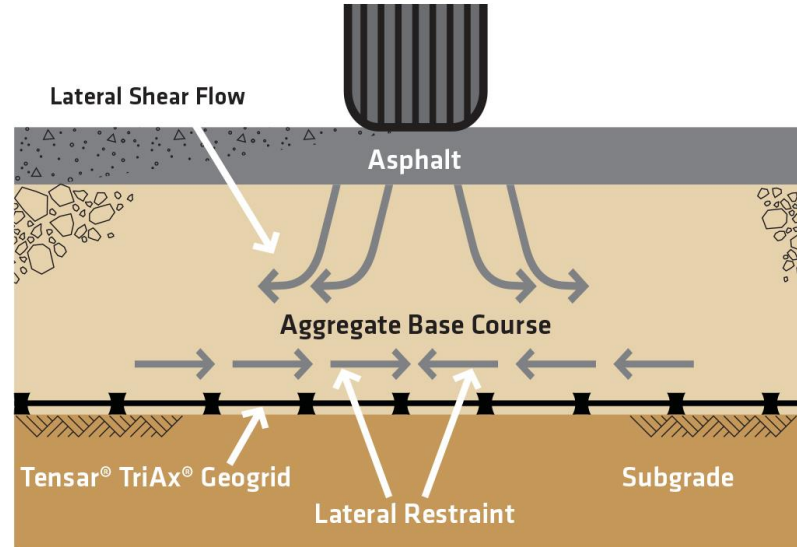
Tensor's Most Advanced  
Geogrid Technology

InterAx combines advanced material science with an optimized geometry to **improve soil interaction and trafficking performance** and provide **greater value** vs. TriAx and other available technologies.

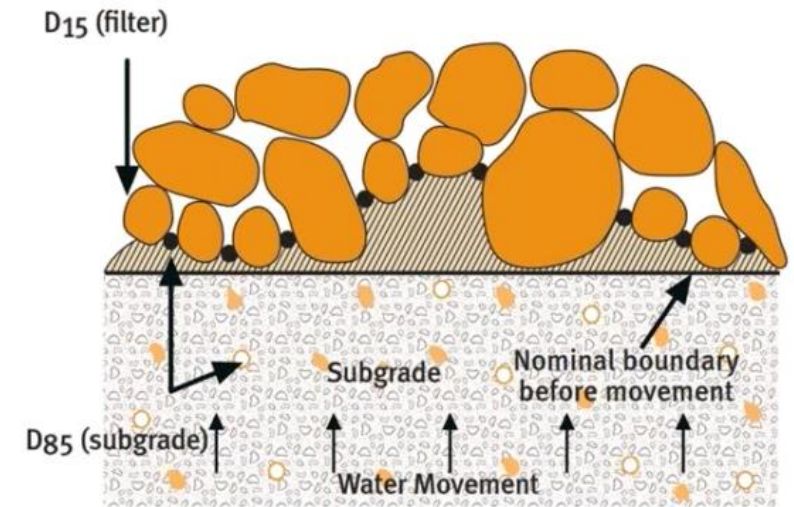
# Geogrid Mechanisms



Improved Bearing Capacity



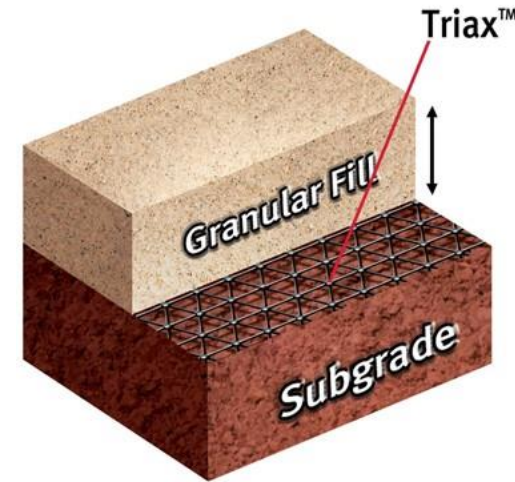
Lateral Restraint



Filtration & Separation

# Geogrid Applications: Subgrade Stabilization

- Subgrade Stabilization (Unpaved)
  - Bridge over soft soils
  - Establish working surface
  - Reduce fill thickness
  - Reduce or eliminate undercut
  - Replace mechanical mixing
  - Replace chemical stabilization
  - Provide uniform support condition
  - Reduce maintenance



*Unpaved Surfaces/  
Construction Platforms*





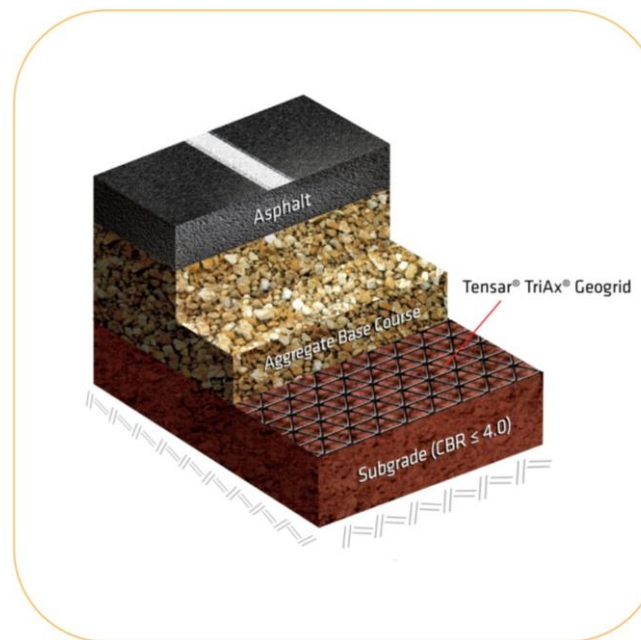
# Unpaved Haul/Access Road Example



These costs do not account for time savings. In addition, value associated with dump truck trips, fuel consumption, cost of traffic delay, etc. has not been reflected in the evaluation.

# Geogrid Applications: Pavement Optimization

- Pavement Optimization (paved)
  - Stiffen aggregate base material
  - Reduce aggregate/asphalt thickness
  - Replace mechanical mixing
  - Provide increased reliability
  - Reduce maintenance
  - Extend roadway life



*Paved Roads (Flexible OR Rigid)*



# Pavement Optimization with MSL

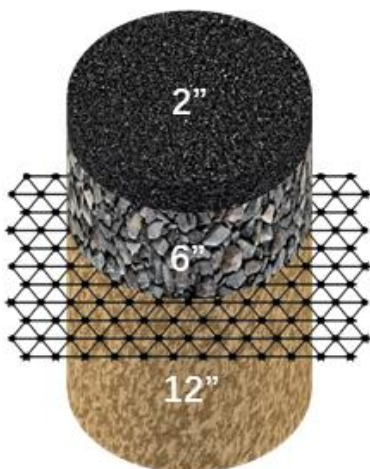
## CONVENTIONAL PAVEMENT SECTION



1,000,000 ESALs

Original design life

## OPTION ONE LOWEST INITIAL COST



TriAx® GEOGRID

1,000,000 ESALs

Same as original design life,  
significantly reduced asphalt  
and aggregate thickness

## OPTION TWO LOWER INITIAL COST

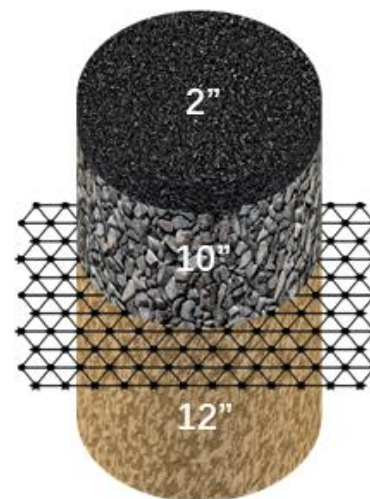


TriAx® GEOGRID

1,000,000 ESALs

Same as original design life,  
complete elimination of Type B  
Stabilization (LBR 40)

## OPTION THREE SAME INITIAL COST



TriAx® GEOGRID

4,000,000 ESALs

4x original design life, reduced  
pavement thickness

## OPTION FOUR LOWEST LIFE CYCLE COST



TriAx® GEOGRID

7,000,000 ESALs

7x original design life

# Tensar+<sup>®</sup>

- ✓ Powerful
- ✓ Valuable
- ✓ Reliable
- ✓ Versatile



Tensar+ is a free, cloud-based software that allows engineers, contractors, and owners to design with geogrid in a variety of applications, including pavements, working platforms, haul roads, and soft soil stabilization.

You can calculate the total value of the Tensar solution compared to conventional construction alternatives. And now, you can create, save, and access designs across multiple devices.

Sign up & start  
designing today at:  
[www.TensarPlus.com](http://www.TensarPlus.com)



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- Field Data
- Resources

## Hello, David!

Welcome to Tensor+! If you need help, just click the Live Chat button in the bottom right corner. We will ensure your project is a success!

We're pleased to launch an enhanced experience along with the ability to design with InterAx, Tensor's highest performing geogrid to date. Based on your feedback, we are continuing to develop new design methods, applications, and modules to make your job easier. Please sign up to be notified as tools are released by interacting with the new module names in the navigation bar.

[Watch Tutorial](#)

### Recent Designs

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	Subgrade	3/29/2022
	SS	3/21/2022
	Pavement Section Comparison	2/4/2022
	LR1300 Travel	1/20/2022
	TX Option	1/18/2022
	Stormwater System Foundation	1/18/2022

### Recent Projects

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	Almond NC Rail	3/29/2022
	Amazon DKY9	3/7/2022
	Interbay Residential Development	2/4/2022
	Savannah Convention Center	1/20/2022
	Ventress Solar	1/18/2022
	Celebration School Heli Pad	1/12/2022

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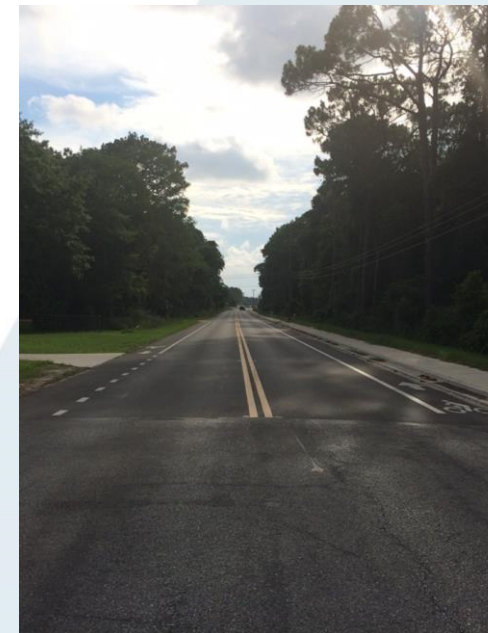
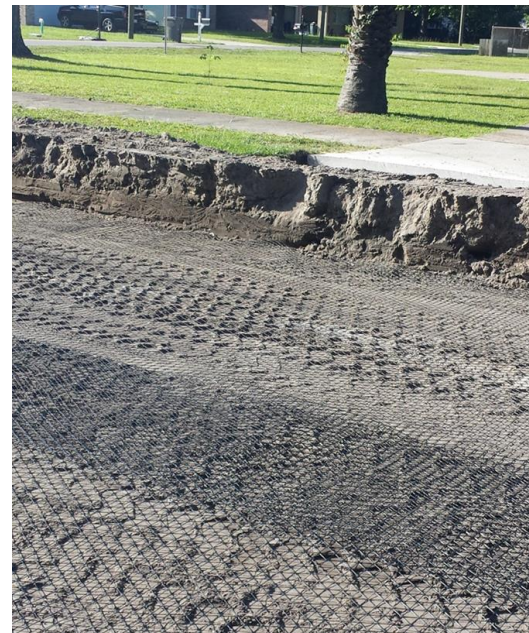
**Earn PDHs with Tensor Education**

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# County Road Reconstruction

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## Access Road Construction over Soft Soils





# Fire Access Road







Other Products

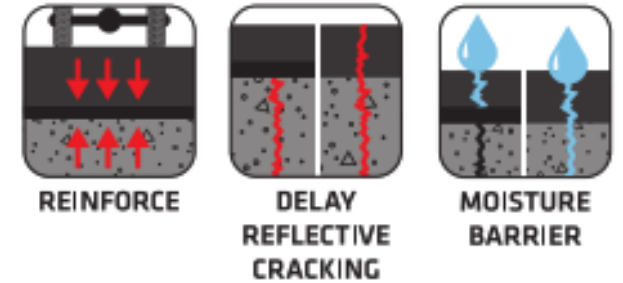
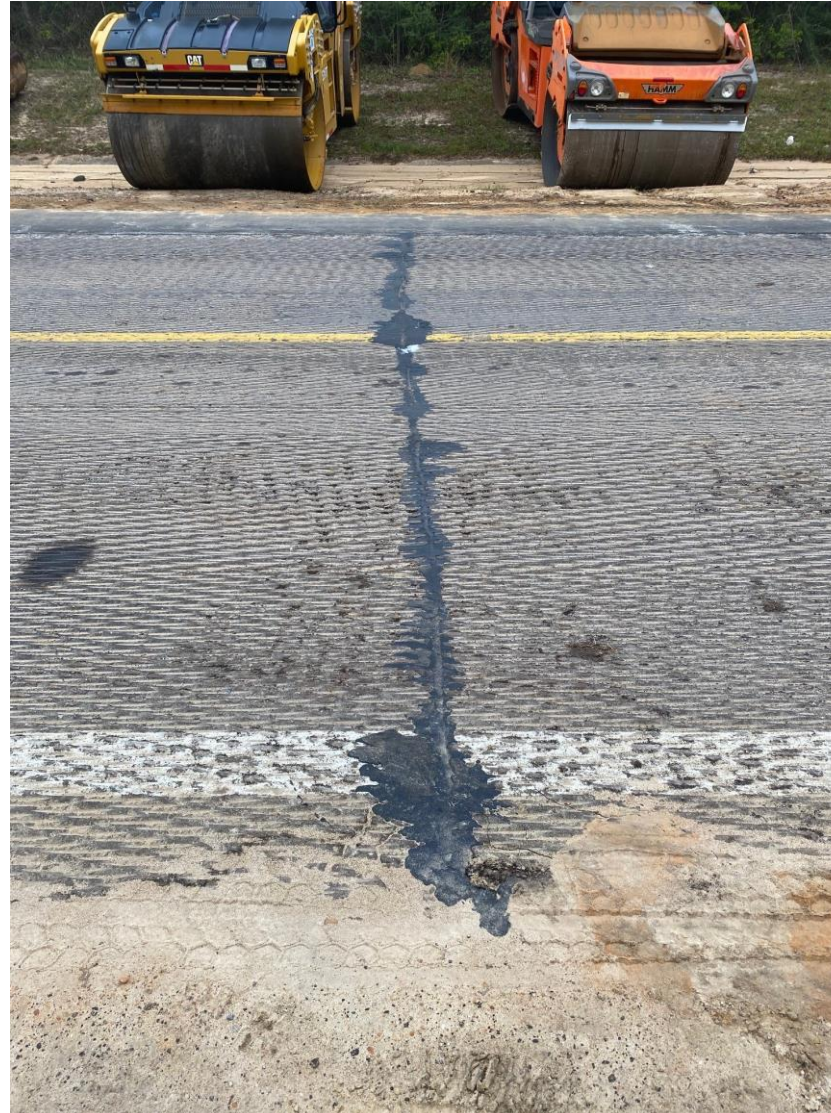


# Why Just Mill & Fill or Overlay?

Add Performance to Existing Pavements by Designing with Interlayers



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- Increase Traffic Capacity 2X
- Delay Cracks up to 6X
- Create Moisture Barrier

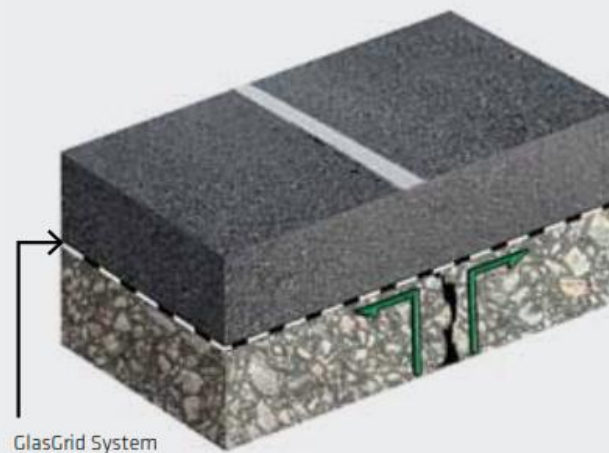


# How does it work?

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**FIGURE 1:** Cracks migrate toward surface in an unreinforced overlay.



**FIGURE 2:** Cracks are redirected in a GlasGrid reinforced overlay.



