

How AI is Revolutionizing the Asphalt Industry:

Real World Applications
in Times of Change



SEAUPG
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**Bryce
Wuori**

CEO/Co-Founder
Pavewise

20+ Years
Industry
Experience

3000+ miles
Roads Paved
across 43 states



Change will Happen



Factors Driving Change in Construction

Manual Process

Pen and Paper create a slower process for decision-making and can lead to errors for accuracy

Time to Data

Access to critical data through outdated methods decreases the ability to produce changes for quality

Non-Geospatial

Data that lacks an associated location fails to deliver value beyond the scope of the project

Transparency

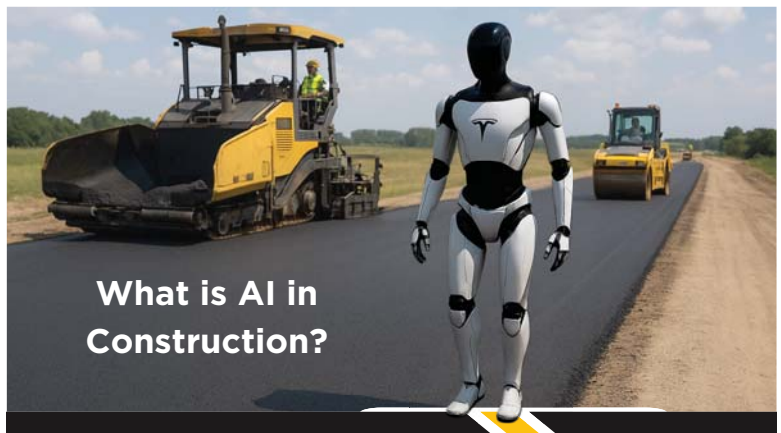
Current processes fail to centralize data for the teams involved in the project, hindering their ability to act as a unified team to enhance quality standards



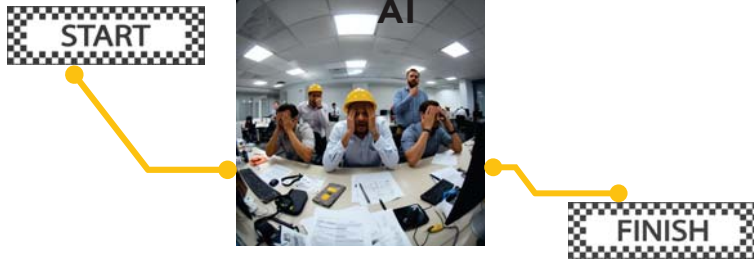
Biggest Driver of Change



What is AI in
Construction?



The Case Against Fearing



People have to start and end the process

AI is a New Age Tool

- Accelerate decision-making
- Automate the “Busy Work”
- Work smarter, not longer
- Increase precision and speed
- Empower lean teams

Why AI is Good for Construction



- Seasonal industry → short windows, high pressure
- Uncontrolled environment → weather, equipment, variables
- Tons of data → little structure or consistency
- AI brings order → turns information into action

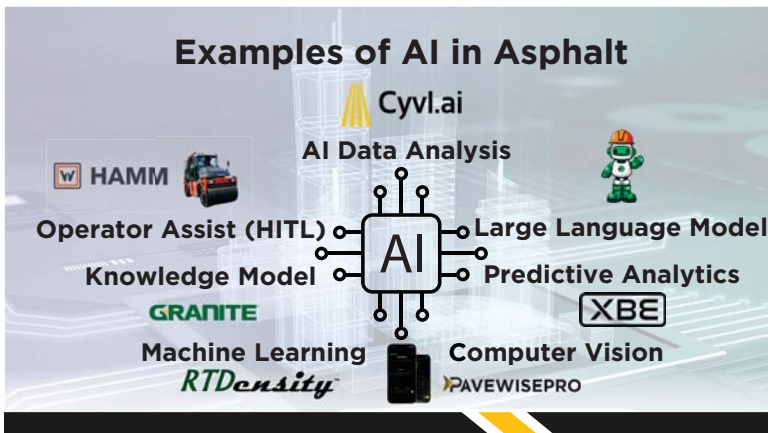
How Can we Effectively Utilize AI?



What does **success** look like for this implementation?

- ✓ Saving time on manual tasks
- ✓ Boosting quality incentives and profits
- ✓ Improved density and quality incentives
- ✓ Hours saved per week

Examples of AI in Asphalt



Large Language Model



Hey NAPA simplifies complex topics and offers step-by-step guidance based on best practices.



<https://heynapa.com>

Business Operations Software for Heavy Materials, Logistics, and Construction
AI-powered tools that connect people, data, and decisions across the heavy materials lifecycle

Predictive Analysis Model

Where AI Meets Real-World Operations

- Ready-mix dispatch assignment suggestions
- Trucking lineup assignment optimization
- Natural language driver, tractor, and trailer assignment restrictions
- Routing strategy and location suggestions
- Automated trucking event status actualization
- Natural language equipment maintenance schedule policies and maintenance requirement generation
- Attribute extraction from ticket images
- Automated time card approval auditing
- Safety risk and safety meeting content generation
- Chatbot assistant with platform expertise

Don't suffer from uncertainty and competition.

Profit from it.
www.x-b-e.com

XBE

Computer Vision

Density+

Communication
Centralized data sharing between office and field.

Weather
Project-specific updates, impacts, and recommendations.

Requirements
Key production and quality specs for crew success.

Data Link
Instant access to plans and verified work docs.

Density+
AI-driven compaction insights in real time.

RTDensity™
Real-Time Asphalt Density

- ML Algorithm - Translates Roller Vibration Data into Percentage Density
- In-Cab Display for Operators
- Cloud Storage with As-Built Maps
- GPS Tagged Records for Pass-by-Pass Analysis

Machine Learning

Density 92.8%

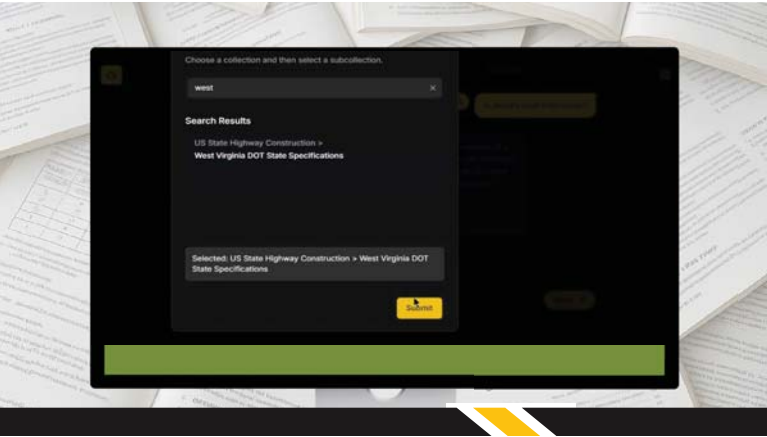
Density 94.3%

Density 94.7%



Natural Language API

SpecChat AI



AI Knowledge Model


Granite Asphalt Gooru

Conversations

Calculating Trucks Needed for P.

Traffic Control Setup Injuries

New Chat



You

How many trucks might I need to pave 2200 tons in a 6 hour window when the plant is 42 minutes away by truck?

Granite Asphalt Gooru

To calculate the number of trucks needed, I'll use the formula: Number of trucks = (Tons to pave / Tons per truck) * (Round trip time / Paving window) Given information:

- 2200 tons to pave
- 6 hour paving window
- 42 minute one-way trip time
- Assuming 24 tons per truck load (based on common truck capacity mentioned in sources)

Stop generation

Your message...





HAMM

Operator Assist (HITL)





HAMM

Smart Compact Basic/Pro



HMV stiffness value

Smart Compact Basic



Real-time density

Smart Compact Pro



