

Field Safety Assessment Report by OZMOS, LLC

Date of Assessment: April 4, 2026
Location: Pittsburgh, Hopewell Area
Assessor: Shingo Ozaki
Founder & Engineering Consultant

1. Executive Summary (NIW-Oriented)

This field assessment was conducted to document real-world tire safety issues among commercial fleet vehicles operating in the Hopewell area, PA. The findings demonstrate the presence of significant safety risks that directly align with the United States' national interest in reducing transportation-related accidents, improving fleet operational efficiency, and lowering economic losses associated with tire failures.

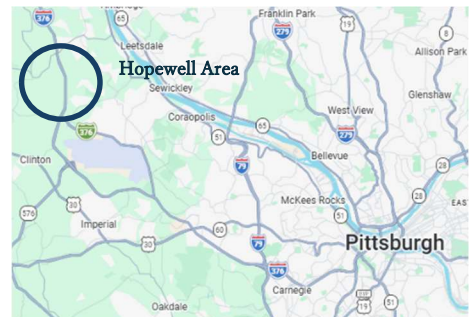
The assessment provides objective, photo-based evidence supporting the necessity of my continued work in the United States as a tire safety expert with over 20 years of experience in Japan and the U.S., etc.

This assessment was conducted independently without prior engagement from the fleets observed.

2. Purpose of Visit

The purpose of this assessment is to:

- Identify tire-related safety hazards in active U.S. commercial fleets
- Evaluate maintenance practices and risk factors
- Provide data-driven insights to support safety improvement initiatives
- Demonstrate ongoing professional activities that contribute to U.S. transportation safety



This assessment is part of OZMOS LLC's ongoing efforts to reduce tire-related incidents and enhance fleet safety nationwide.

3. Overview of Fleet Observations

- Number of fleet facilities observed: 3 Fleets
- Estimated number of vehicles present: 15 Vehicles
- Types of vehicles: 2DD Tractor Head, 2T Trailer
- Notes on accessibility:
 - ✓ Offices closed due to Good Friday/Easter
 - ✓ No maintenance personnel available
 - ✓ Visual inspection conducted on parked vehicles

Despite limited access to personnel, the assessment successfully identified multiple safety-critical tire issues.

4. Detailed Findings with Photographic Evidence

4.1 Low Tire Inflation

<Description>

A vehicle was observed with visibly underinflated tires, indicating potential safety and fuel-efficiency risks.



<Safety Impact>

- ✓ Increased heat buildup
- ✓ Higher likelihood of blowouts
- ✓ Reduced handling stability

<National Interest Relevance>

Underinflation is a leading cause of tire-related crashes in the U.S., contributing to preventable fatalities and economic losses.

4.2 Tread Depth Mismatch / Tire Mismatching

<Description>

Significant tread depth differences were observed between dual tires, indicating improper pairing.



<Safety Impact>

- ✓ Uneven load distribution
- ✓ Increased casing stress
- ✓ Higher failure probability

<National Interest Relevance>

Improper tire pairing increases maintenance costs and accident risk, affecting supply chain reliability.

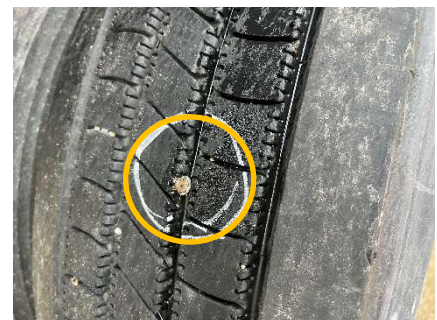
4.3 Embedded Nail (Puncture)

<Description>

A nail was found embedded in the tread area of a tire, with no repair performed.

<Safety Impact>

- ✓ Slow air loss
- ✓ Sudden deflation risk
- ✓ Potential roadside breakdown



<National Interest Relevance>

Roadside breakdowns cause delays, increase operational costs, and pose safety hazards to other users.

4.4 Stone Trapping & Tread Chuck

<Description>

Multiple stones were lodged in the tread grooves.

<Safety Impact>

- ✓ Accelerated tread wear
- ✓ Potential casing damage
- ✓ Increased risk of puncture

<National Interest Relevance>

Preventable tire damage contributes to unnecessary tire disposal and environmental waste.



5. Professional Assessment

Based on my 20+ years of experience in tire safety, quality, and failure analysis, the observed conditions indicate systemic maintenance gaps within regional fleets. These issues that can directly contribute to:

- Increased accident risk
- Higher maintenance costs
- Reduced operational efficiency
- Premature tire failure

The findings reinforce the need for expert-led safety programs, training, and preventive maintenance strategies—areas where my expertise provides immediate and measurable value to U.S. fleets.

6. Contribution to U.S. National Interest

This assessment supports the NIW criteria by demonstrating that:

1. My work addresses a matter of substantial merit

(transportation safety, economic efficiency, environmental impact)

2. The issue is of national importance

Tire-related incidents affect interstate commerce, logistics, and public safety.

3. I am well positioned to advance this work

Through OZMOS LLC, I am actively conducting field assessments, identifying risks, and preparing to deliver safety solutions to U.S. fleets.

This report provides objective evidence of ongoing activities that directly support U.S. national interests.

7. Planned Follow-Up Actions

1. Conduct follow-up visits when fleet managers are available
2. Offer on-site tire safety seminars and training
3. Provide fleet-specific tire maintenance improvement plans
4. Continue periodic field assessments to document ongoing safety needs

8. Conclusion

This field assessment demonstrates the presence of significant tire safety risks in the Hopewell area.

OZMOS LLC will continue to support local fleets by providing expert guidance, training, and safety solutions that contribute to reducing tire-related incidents and improving transportation safety in the United States.

Appendix

Additional photos, notes and observations



During the assessment, several automatic inflation systems and Bandag retread tires were confirmed. I believe that these fleets have good maintenance mind and cost consciousness. Even in such fleets, several potential risks still exist.

This assessment was conducted based on visual observation only.

No fleet operator was formally engaged.

This report is for informational purposes.