



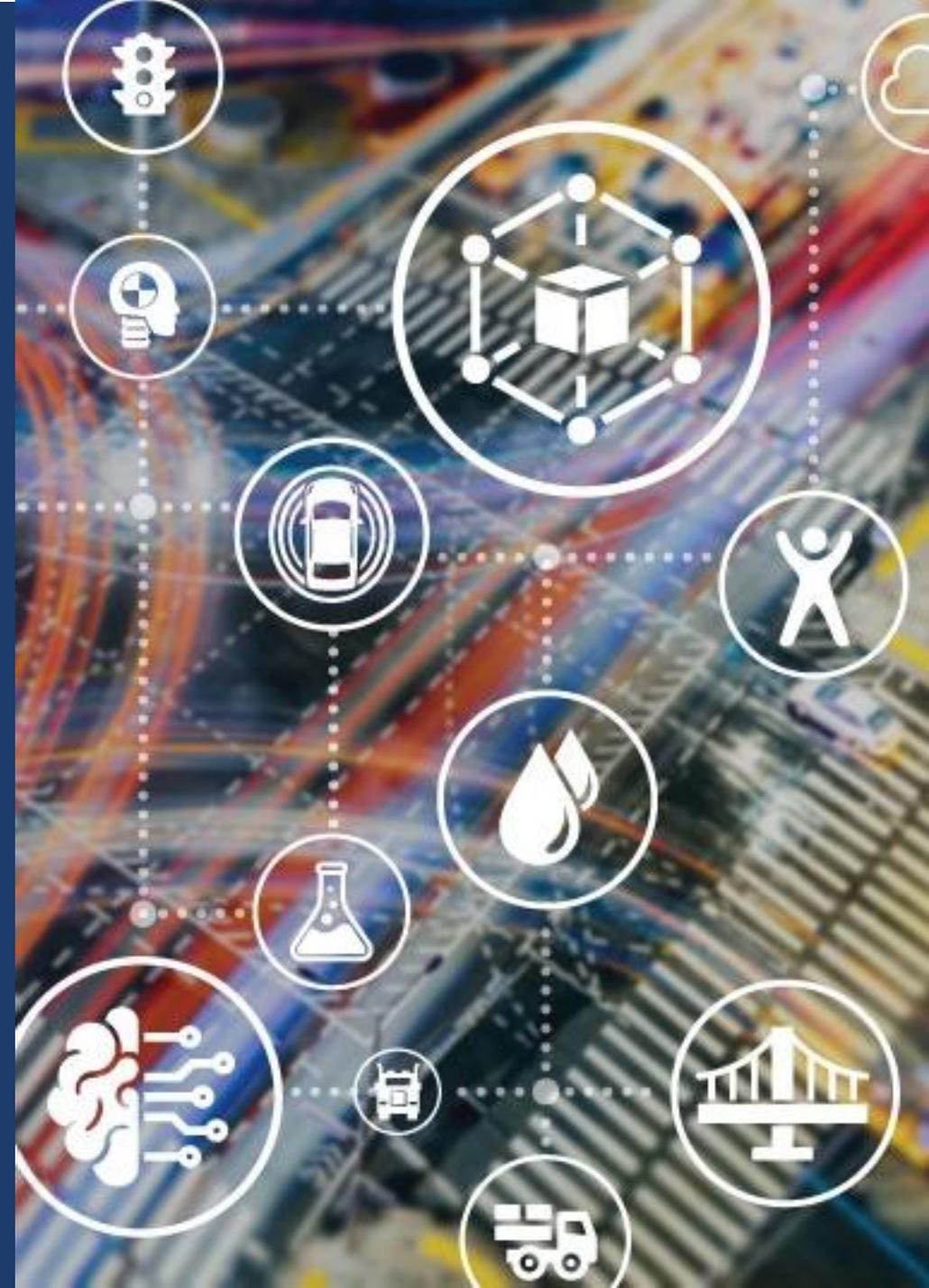
U.S. Department of Transportation
Federal Highway Administration

FHWA Progress on Nationally Significant Research Topics

Special Report 331, Bipartisan Infrastructure Law
(Infrastructure Investment and Jobs Act) Research Provisions

Dr. Jonathan Walker

May 23, 2022



Transformational Technologies

- ▶ Data Integration Pilot Program (Sec. 13004).
- ▶ Emerging Technology Research Pilot Program (Sec. 13005).
- ▶ Advanced Transportation Technologies and Innovative Mobility Deployment (Sec. 13006).
- ▶ Center of Excellence on New Mobility and Automated Vehicles (Sec. 13006).⁽¹⁾



Energy and Sustainability

- ▶ Roadway Electrification.
- ▶ Recycled Materials.
- ▶ Green Procurement.



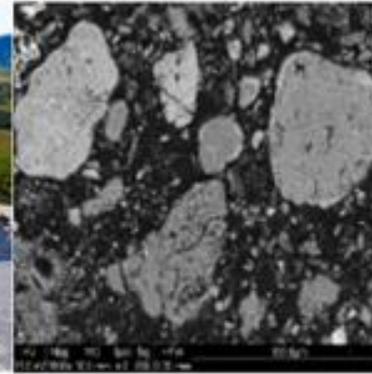
3 Calcined clays



3 Ground
bottom ashes



3 Raw natural
pozzolan



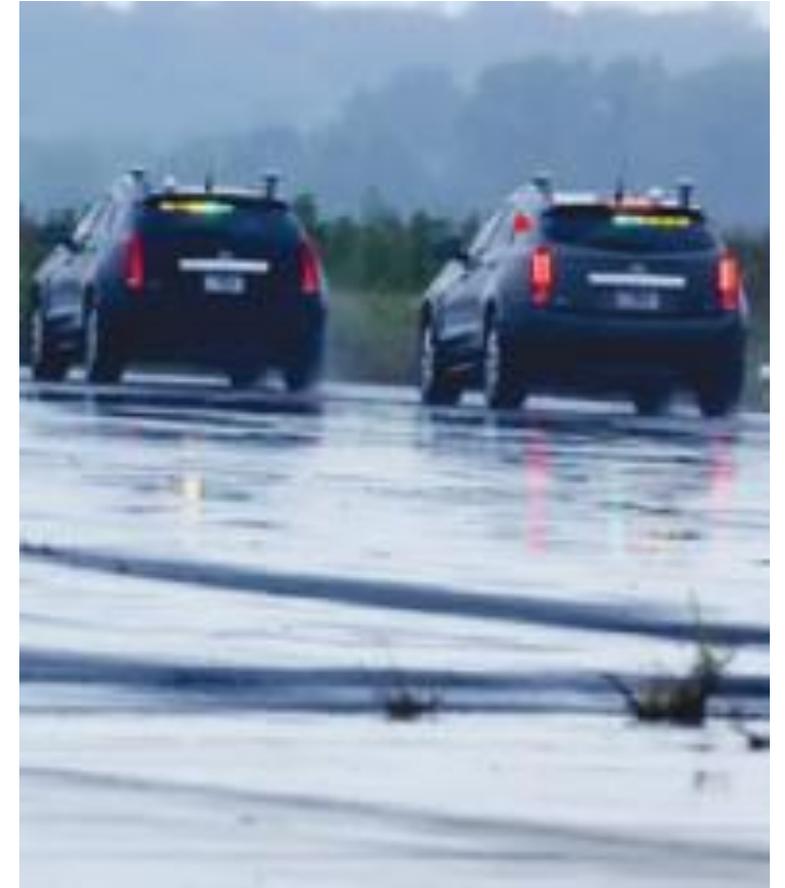
2 FBC fly ash

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Serving a Growing, Shifting Population

- ▶ Transportation Systems Management and Operations.
- ▶ Cooperative Driving Automation.
- ▶ Micromobility.



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Resilience

- ▶ Infrastructure Materials.
- ▶ Designing for a Changing Climate.
- ▶ Vulnerability Assessment Tools.
- ▶ Transportation Resilience and Adaptation Centers of Excellence (Sec. 13009).⁽¹⁾



Safety

- ▶ Safe Systems Approach.
- ▶ Complete Streets.
- ▶ Vulnerable Road Users.
- ▶ Work Zones.
- ▶ High-Friction Surface Treatment Application Study (Sec. 13006).⁽¹⁾



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Equity

- ▶ Public Engagement Tools.
- ▶ Modeling and Analysis Tools.
- ▶ Complete Streets.
- ▶ Transportation Access Pilot Program (Sec. 13010).⁽¹⁾



Source: FHWA.



Asset Management, System Performance

- ▶ Building Information Modeling for Infrastructure.
- ▶ Lifecycle Assessment.
- ▶ Accelerated Implementation and Deployment of Pavement Technologies.
- ▶ Accelerated Implementation and Deployment of Advanced Digital Construction Management Systems (Sec. 13006).⁽¹⁾



Funding and Finance

- ▶ Innovative Finance.
- ▶ Accelerated Project Delivery.
- ▶ External Cost of Highway Analysis Tool.
- ▶ Strategic Innovation for Revenue Collection (Sec. 13001).
- ▶ National Vehicle Miles Traveled Pilot (Sec. 13002).⁽¹⁾



Good Movement

- ▶ Cooperative Driving Automation.
- ▶ Urban Delivery.



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Research and Innovation

- ▶ Exploratory Advanced Research Program.
- ▶ Accelerated Market Readiness Program.
- ▶ Accelerating Innovation Delivery Program.
- ▶ Everyday Counts.
- ▶ Open Challenge and Research Proposal Pilot Program (Sec. 130006).⁽¹⁾



Questions?



Contacts

Dr. Jonathan Walker

jonathan.b.walker@dot.gov

(202) 493-3439



U.S. Department of Transportation
Federal Highway Administration

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