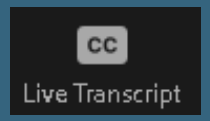
2023 Annual US Scrap Tire Workgroup Meeting

November 6, 2023

Brian Gaboriau,
Colorado Department of Public Health and Environment



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UNITED STATES SCRAP TIRE WORKGROUP

COLORADO
Hazardous Materials & Waste Management Division
Department of Public Health & Environment

Agenda

11:00 am – 11:10 am

Opening remarks / US Scrap Tire Workgroup overview

- **Brian Gaboriau**, Colorado DPHE, US Scrap Tire Workgroup Chairperson

11:10 am – 11:20 am

Goals Committee overview

- **Channon Cohen-Denson**, Ohio EPA, Goals Committee Chairperson

Agenda cont.

11:20 am – 12:10 pm

Committee updates

- **Nicholas Amante**, Calrecycle
- **Joaquin Wright**, GHD
- **Terry Gray**, TAG Resource Recovery
- **Lori Freeman**, Indiana Dept. of Environmental Management
- **Kirsten Clements**, Michigan Dept. of Environment, Great Lakes, and Energy

Agenda cont.

12:10 pm – 12:40 pm

"Transforming Scrap Tires into Eco-efficient Paths and Trails"

- **Matt Lamb,** Porous Pave Inc.

12:40 pm – 1:00 pm

Q&A session - **Brian Gaboriau**

Logistics

- Participation options - meetings:
  1) 

  2) "Raise hand"

- Phone participation:
  - Press *9 to raise hand; Press *6 to mute/unmute
- Presentations and meeting recording will be available at http://stref.org/stwg
- Mute microphone and turn off video when not speaking
- Optional: add affiliation to Zoom name

Who We Are and What We Do

- A collaboration of states, industry, trade associations, academia and other interested parties who work cooperatively to address critical scrap tire issues facing the country.

- A forum to achieve progress in eliminating barriers to scrap tire markets, encourage expansion of those markets and encourage the prevention and abatement of stockpiles.

- A forum to provide technical exchange and to share best practices.

Facts / Resources

- 120 workgroup members
- 48 of 50 states represented (Connecticut & New Mexico)
- Workgroup website
  - http://stref.org/stwg
  - Website password: USSTW2023
  - Private website
  - Posting of surveys, minutes, presentations, etc.
- Archives, mailing list, document control
- Emailing the group questions/answers. Use current list on website or contact me to distribute.
- We are a networking group!

Committees

- Goals - Channon Cohen-Denson (OH)
- Civil Engineering - Joaquin Wright (CA)
- Ground Rubber - Nicholas Amante (CA)
- Rubber Modified Asphalt - Kirsten Clemens (MI)
- Tire Derived Fuel & Export – Terry Gray (TX)
- Enforcement - Lori Freeman (IN)

9th Tire Recycling Conference – Where Innovation Meets Sustainability!

- Marriot Renaissance Atlanta Waverly Hotel & Convention Center (Atlanta, GA)
- May 15th – 17th, 2024
- Hosted by the U.S. Tire Manufacturers Association
- STREF scholarships available
- Contact John Sheerin at jsheerin@ustires.org for more information

Thank you!

Thank you for your continued support of the workgroup!

Brian Gaboriau

Colorado Department of Public Health and Environment

4300 Cherry Creek Drive South

Denver, CO 80246

303-692-2097

brian.gaboriau@state.co.us

USSTW Goals Committee Update 2023

UNITED STATES
SCRAP TIRE WORKGROUP

Meet the Goals Committee

- Channon Cohen-Denson, Ohio EPA
- Terry Gray, TAG Resource Recovery
- James Jennings, Illinois EPA
- Denise Kennedy, DK Enterprises
- Matt Lamb, Porous Pave Inc.
- Monte Niemi, First State Tire Recycling
- Rhonda Oyer, Michigan EGLE
- Mel Pins, IOWA DNR
- Adam Schlachter, Delaware - DNREC
- John Sheerin, USTMA
- Mary Sikora, Scrap Tire News

Topics to Cover

Review of USSTW Goals Committee Goals for 2023

- Engagement with US EPA
- Identify Opportunities for State Programs to Benefit from US Legislative Initiatives

Future Opportunities to Colloborate

Review of USSTW Goals Committee Goals for 2023

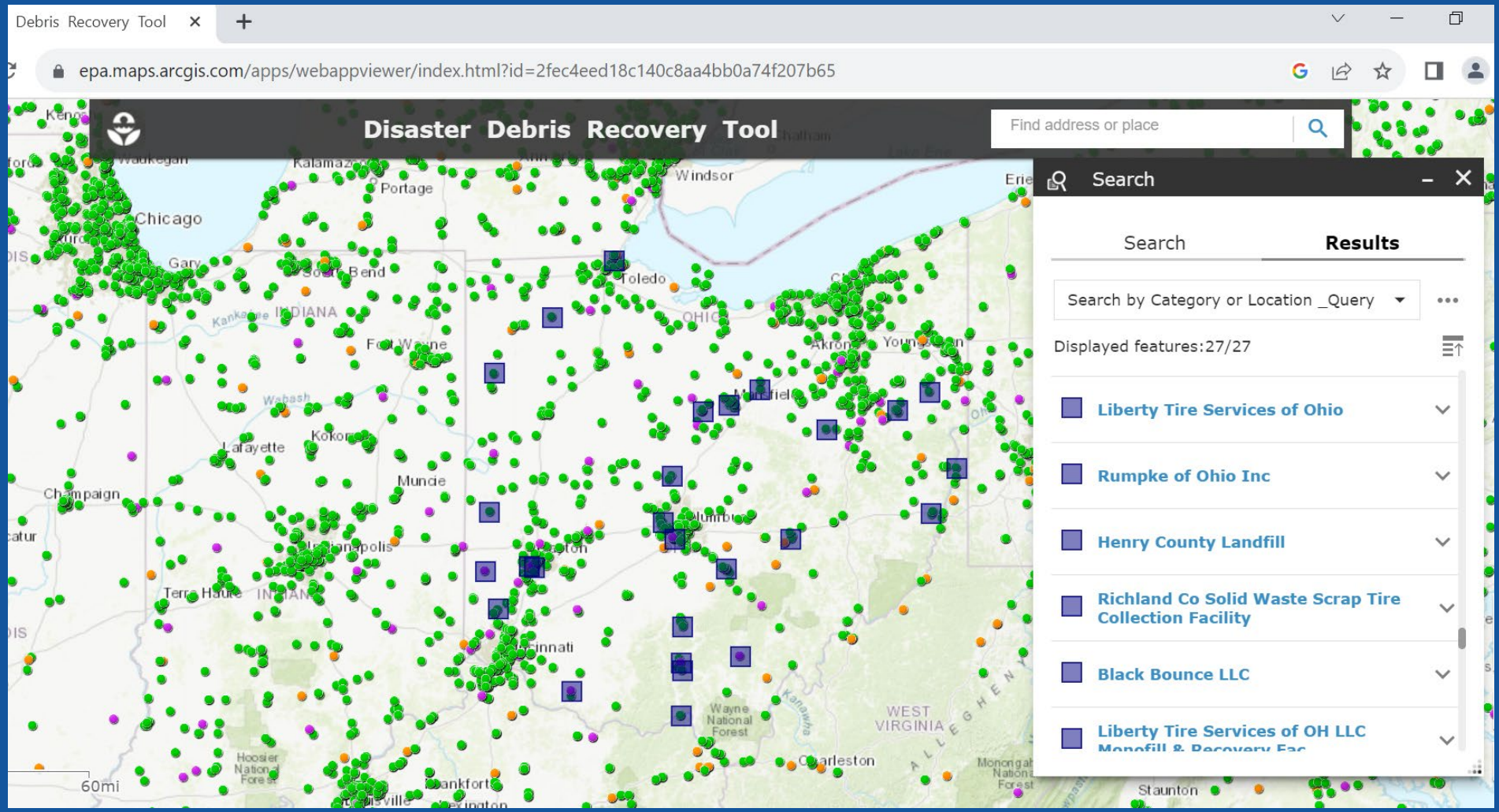
Engagement with US EPA

- Find a liaison between USSTW and USEPA
- Request that a member of USEPA join USSTW
- Provide information for USEPA Initiatives by surveying USSTW
- Examine available federal scrap tire data collection and the prospect of a national portal for comprehensive, consistent scrap tire data collection

Recycling Infrastructure and Market Opportunities Map

https://www.epa.gov/circulareconomy/recycling-infrastructure-and-market-opportunities-map#about

Disaster Debris Recovery Tool



Opportunities for State Programs to Benefit from US Legislative Initiatives

- Solid Waste Infrastructure for Recycling Grant Program
  - 24 communities selected of the SWIFR grants for Communities
  - 56 states and communities are recipients of the SWIFR grants for States and Territories

- Recycling Education and Outreach Grant Program

Solid Waste Infrastructure for Recycling Grant Program Awardees

4 address scrap tire management

- American Samoa Power Authority
- Indiana Department of Environmental Management
- State Environmental Improvement & Energy Resources Authority (Missouri)
- Wyoming Department of Environmental Quality

Future Opportunities to Colloborate

Future Opportunities to Colloborate

- Learn from and contribute data to states that have been awarded SWIFR grants

- Provide feedback on US EPA Resources

Future Opportunities to Colloborate

2024 Goals

- Will brainstorm late November
- Potential goals include
  - Contribute to development of EPDs (Environment Product Declarations)
  - Green procurement

Thank You.

Please feel free to reach out to me anytime !

USSTW Goals Committee Chairperson

Channon Cohen
614.728.5353
channon.cohen@epa.ohio.gov

Ohio Environmental Protection Agency

US Scrap Tire Workgroup 2023 Annual Meeting

Hosted by the Colorado Department of Public Health & Environment

November 6, 2023

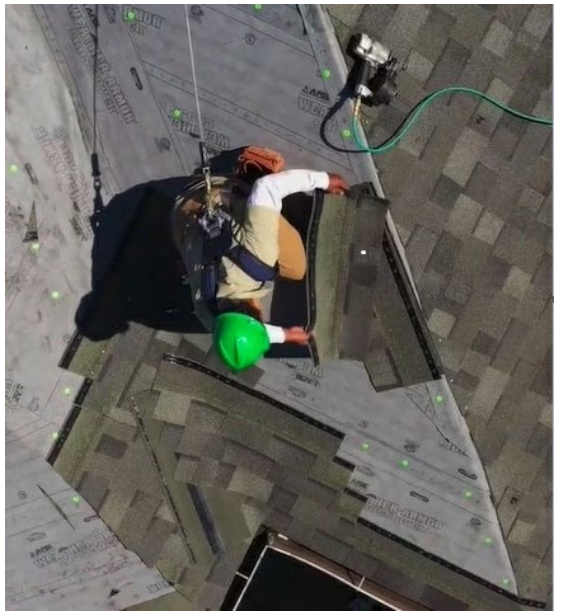
Ground Rubber Committee

COLORADO
Department of Public Health & Environment

Uses for Ground/Crumb Rubber and Current Markets

- Molded and other tire-derived products
- Rubberized pavement
- Synthetic turf infill
- Playgrounds (loose fill, poured-in-place and tiles)

Tire-Derived Product Examples



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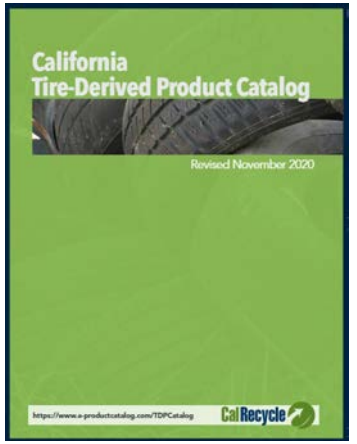
California Tire Derived Product (TDP) Catalog

- Online, interactive catalog
  - Designed to bring awareness about broad range of products made from recycled tires
  - https://www.e-productcatalog.com/TDPCatalog/



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Upcoming Initiatives

- Create a resource/catalog list of all grants, incentives, and offerings
- One, centralized resource document

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Ground Rubber Committee Members

Nicholas Amante, State of California

Amy Brackin, Liberty Tire Recycling

Lisa Evans, State of Kentucky

John Sheerin, USTMA

Terry Gray, TAG Resource Recovery

Everette Hatcher, State of Arkansas

Denise Kennedy, DK Enterprises

Dexter Mathews, Liberty Tire Recycling

Bill Robbins, Rubberform Recycled Products

Alle Crampton, State of Tennessee

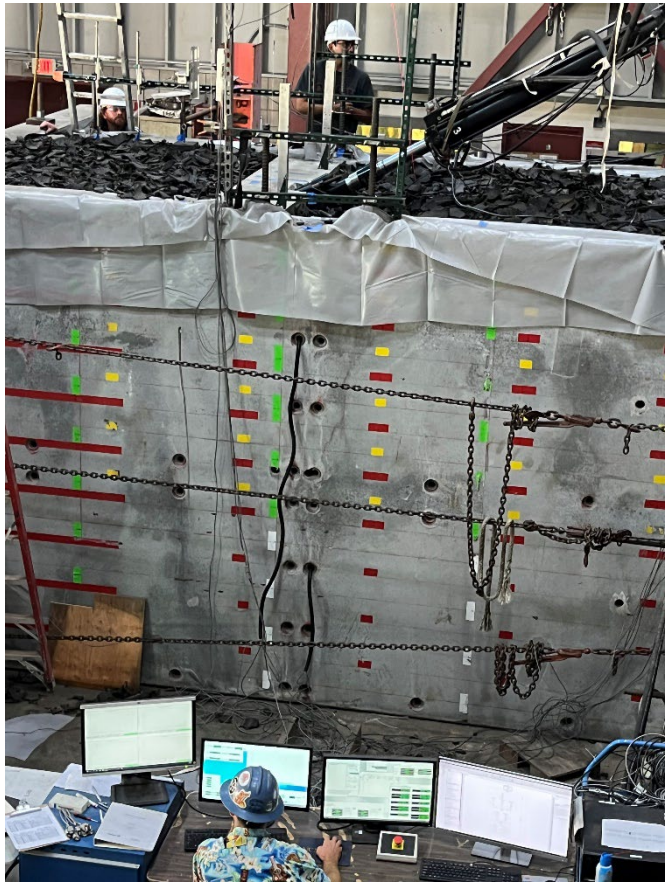
Mary Sikora, Recycling Research Institute/ Scrap Tire News

COLORADO
Department of Public Health & Environment

US Scrap Tire Work Group, Civil Engineering Committee Update

PRESENTED BY: Joaquin Wright, GHD Inc.

11/06/23



TIRE DERIVED AGGREGATE

US STWG Civil Engineering Committee 2022-2023 Objectives

- Maintain forum for open-source sharing of Civil Engineering application information using End of Life Tires(ELTs)
  - Share research and projects among state decision makers involved with ELTs, Tire Derived Aggregate(TDA) and Civil Engineering

- Help to develop public access information for the United States ELT Civil engineering market.
  - Develop public awareness documents about civil uses for ELTs
    - Tire Derived Aggregate (TDA) projects
    - Share public access information centers, and populate them with national examples of ELTs in Civil projects

TIRE DERIVED AGGREGATE

US STWG Civil Engineering Committee list of currently utilized civil applications

Boat or Ship bumpers
Highway Crash Barriers
Bales for windbreaks
Mechanically Stabilized TDA walls (MSTDA)
TDA fill behind Cast in place and Soldier Pile walls
Lightweight fill and/or insulating layer for road, subgrade
Slope and Bank stabilization, Whole tires and TDA (strength and drainage)
Fill material for water storage, retention, and infiltration
Wastewater treatment media, private and public systems
Vibration mitigation layer (light rail lines)
Chemical sorption for Storm Water constituents of concern mitigation
Compressible layer behind foundations and general Abutments
TDA above and below pipes to reduce strain and/or deflection
TDA in Landfill Applications, Alternative daily cover, LCRS systems, etc.

More civil applications that have historically been applied in the US can be found at, Scrap Tire Research and Education Foundation at Stref.org/tire-uses

TIRE DERIVED AGGREGATE

I DO TDA
International Distributor Of Tire Derived Aggregate

Design for IMPROVED SAFETY FACTOR, COST SAVINGS with TIRE-DERIVED AGGREGATE

- Low unit weight **applies smaller vertical stress** than conventional backfill
- **Lower** settlement and **increased** stability
- **Reduces** lateral earth pressure to 50% of conventional backfill
- **Increases the safety factor** of bridge abutments and retaining walls by reducing the lateral load and hydraulic load for civil engineering designs.

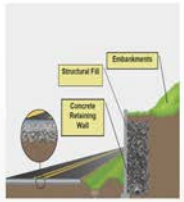




...TDA has been successfully used in embankments, bridge abutments, subgrade insulation for roads.

ASCE LIBRARY

"TDA can reduce lateral load and pressures twice more than conventional aggregate, in backfilling walls, bridge abutments." (Tweedie et al. 1998)



HIGH VALUE SUSTAINABLE SOLUTIONS
Scan the QR code now to find out more.

TDA MANUFACTURING
PRISTINE BY DESIGN

Our Office

Langdon, Room 203
530-898-5114

Regular Hours
8 a.m.–5 p.m.
Monday–Friday

Mailing Address
California Pavement Preservation Center
400 W. First St.
Chico, CA 95929-0603

Tire Engineering Research Center

California's Department of Resources Recycling and Recovery (CalRecycle) established the Tire Derived Aggregate Technology Center (TTC) at the California State University, Chico on March 1, 2012. Since then, the TTC has provided many services to CalRecycle and its partners.

The purpose of TTC is to assist CalRecycle in increasing the use of TDA in civil engineering applications. Through the Center, the California State University, Chico Research Foundation shall provide support to both private and public engineers to gain acceptance of TDA as a viable civil engineering construction material and thereby create more opportunities for TDA projects.

The material testing services aspect of the TTC will support CalRecycle and local agencies by investigating and testing the engineering properties of TDA and rubberized asphalt concrete (RAC) that are necessary to ensure the performance of these materials in civil engineering applications.

Mission Statement

The Center has two major missions: one is to provide technical support to the State, local agencies, and professionals on how to use TDA in their projects; the other one is to develop educational materials for university education on using TDA in civil engineering applications.

TDA Projects Database

You can click on TDA Database to access some major TDA projects, which have been built in California.

TDA Training Videos

You can click on video link to view an introduction to TDA.

You can click on video link to view TDA - A Sustainable Road Repair Solution.

You can click on video link to view TDA Environmental Testing and Earthquake Safety.

You can click on video link to view TDA as a low-cost vibration mitigation material.

TDA Online Training Program

CalRecycle and TTC have developed a TDA Online Training Program.

TDA Resources

You can click on Grant page link to view the latest CalRecycle's TDA grant program.

You can click on CalRecycle TDA information page link to view information about CalRecycle's TDA program.

You can click on TDA Brochure to view the latest CalRecycle's TDA Brochure.

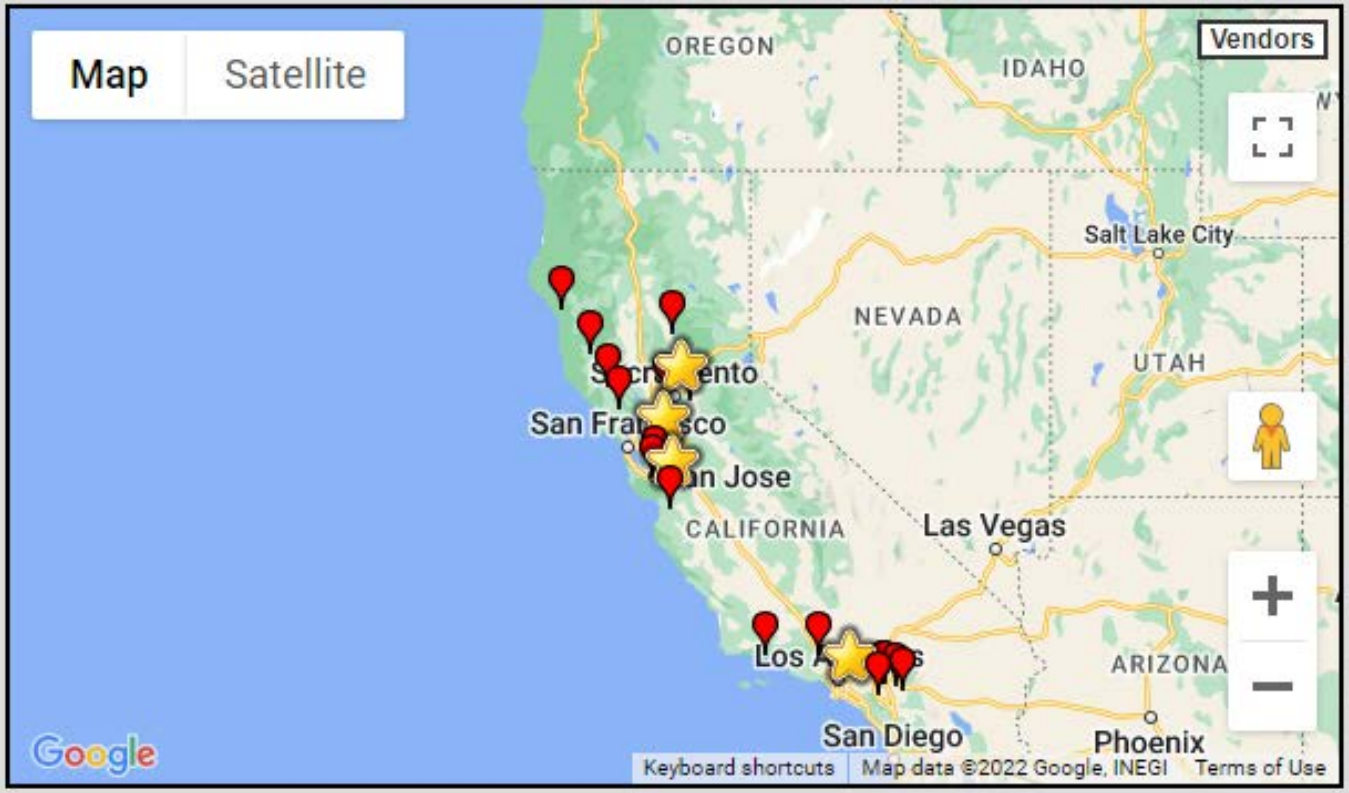
You can click on this report link (PDF) to view a Mechanically Stabilized TDA summary and design guide.

Tire Derived Aggregate Project Database

CalRecycle

Search TDA Projects

TDA Projects



Tire Derived Aggregate

Project Database

CalRecycle

Search TDA Projects

TDA Projects

View TDA Project

Type of TDA	Landslide Repair	**Project Title** ⓘ	Marina Drive Landslide Repair
Is it an Experimental Feature?	No	**District**	1
Project Status	Completed		
City	Calpella	**Country**	
Start Construction Date	08-20-2007	**End Construction Date**	11-02-2007
Project Input Date	06-12 00:00:00-2012		
Project Locations	site-1 39.234734,-123.1843559 39.23524091671426,-123.18399111957399		
Number of tires	133,000		
Total Cost of Project	740,000		

Click to Show on Map

US STWG Civil Engineering Committee

- Forum for sharing of Civil Engineering applications using End of Life Tires(ELTs)

- Help to develop public access information for the United States ELT Civil engineering community.

  - **Meeting Schedule 2023 – 2024; December 4th, 2023: April 1st, August 5th, December 2nd , 2024**
    - (First Monday of the respective months) 8:30 am -9:30am PST

TIRE DERIVED AGGREGATE

Introduction of TDA – California Pavement Preservation Center – CSU, Chico (csuchico.edu)

?

Please contact me with any questions you may have.

Joaquin Wright, Sustainable Resource Engineer, TDA specialist
Joaquin.wright@ghd.com, 707 303 4850

TIRE DERIVED AGGREGATE

U S SCRAP TIRE WORKGROUP ANNUAL MEETING

NOVEMBER 6, 2023

TIRE DERIVED FUEL (TDF) COMMITTEE

BACKGROUND

- INACTIVE FOR OVER 2 YEARS
- INITIAL EMAIL TO 21 HISTORICAL MEMBERS RECEIVED 3 RESPONSES
- ATTEMPTING TO RECONSTITUTE COMMITTEE
- CURRENTLY HAVE 8 MEMBERS, INCLUDING LONG TERM INDUSTRY PARTICIPANTS
- ACTIVELY SEEKING ADDITIONAL MEMBERS, ESPECIALLY STATE REPRESENTATIVES

COMMITTEE PORTFOLIO

INTER-RELATED THERMAL PROCESSES

TRADITIONAL TDF IN MULTIPLE APPLICATIONS

EXPORTS, PRIMARILY TDF AND PYROLYSIS FEEDSTOCK

PYROLYSIS THERMAL PROCESSES IN THE US

OBJECTIVES

UNDERSTAND CURRENT MARKETS, MAJOR INFLUENCING FACTORS, AND FUTURE PROJECTIONS

DEVELOP SOUND TECHNICAL AND ECONOMIC INFORMATION TO ALLOW FACTUAL EVALUATION AND OPTIMUM WASTE TIRE RESOURCE UTILIZATION IN APPROPRIATE APPLICATIONS

PROVIDE TOOLS TO HELP ALL INDUSTRY PARTICIPANTS UNDERSTAND, INFLUENCE AND PLAN FOR CHANGES DURING THIS EVOLUTIONARY PERIOD

BE AN INTERACTIVE COMMUNICATIONS CHANNEL FOR ALL OF THIS INFORMATION TO HELP ALL MEMBERS BE MORE EFFECTIVE

FUTURE PLANS

UP TO 10 ADDITIONAL PEOPLE WILL JOIN OUR COMMITTEE

WE WILL ALL PARTICIPATE IN DEVELOPMENT AND IMPLEMENTATION OF OUR PLANS

OUR COMBINED EFFORTS AND KNOWLEDGE WILL HAVE A GREATER COMBINED IMPACT THAN WE CAN BY OURSELVES

THERMAL PROCESSES HAVE BEEN, ARE AND WILL BE MAJOR MARKET FACTORS FOR THE FORESEEABLE FUTURE

INVITATION

THE COMMITTEE WILL BE REBORN IN JANUARY, 2024

PLEASE JOIN US

CONTACT:

TERRY GRAY, COMMITTEE CHAIR

tagray@flash.net

CELL (832) 314-5382

U.S. Scrap Tire Workgroup Meeting

Enforcement Committee Report

Nov. 6, 2023

Lori Freeman
Compliance Branch Chief
IDEM, Office of Land Quality

Enforcement Committee

Members:

- Shana Baker – CO DPHE
- Dexter Matthews – Liberty Tire Recycling
- Alex Clark – MI DEQ
- Dan Werner – WI DNR
- John Sheerin – USTMA
- Scott Zajac – MI DEQ
- Lori Freeman – IDEM

Committee Goal

To assist states with their enforcement/compliance issues by developing general BMPs/educational campaigns that can be modified and used by individual states.

Committee Project

New project for 2023-2024: Open dumping and Storage Units

Goal: Strategies for handling/preventing open dumping at storage units and similar facilities.

Contact Information

Lori Freeman
Compliance Branch Chief
Office of Land Quality
Indiana Department of Environmental Management

(317) 232-8857
lfreeman@idem.IN.gov

Rubber Modified Asphalt Workgroup

What's an EPD & why is it important?
EPD: ENVIRONMENTAL PRODUCT DECLARATION

- Source: EPD 101 American Center for Life Cycle Assessment
  - https://www.youtube.com/watch?v=Mk3OLVCtXvA

EPD

EPD Content

- Organization making the declaration
- Product description and identification
- Information about the program and program operator
- Identification of the PCR
- Date of publication and period of validity
- Required data from the LCA and additional information
- Information about contents and performance of the product
- Which life cycle stages are left out, if any
- A statement that environmental declarations from different programs may not be comparable
- Where explanatory material may be obtained
- Information about verification of PCR and EPD

EPD

What is the Value of an EPD?

- Provides verified information to customers
- Answers customer questions
  - What is the material content of the product?
  - Does its manufacture create hazardous waste?
  - What is the product's effect on climate change?
  - Can it be recycled?
  - Is it usually recycled?

EPD

Who does the Work?

- Product Owner / Service Provider
- Consultants with LCA/PCR/EPD expertise
- Program Operator
- PCR Committee
- Reviewer/Verifier

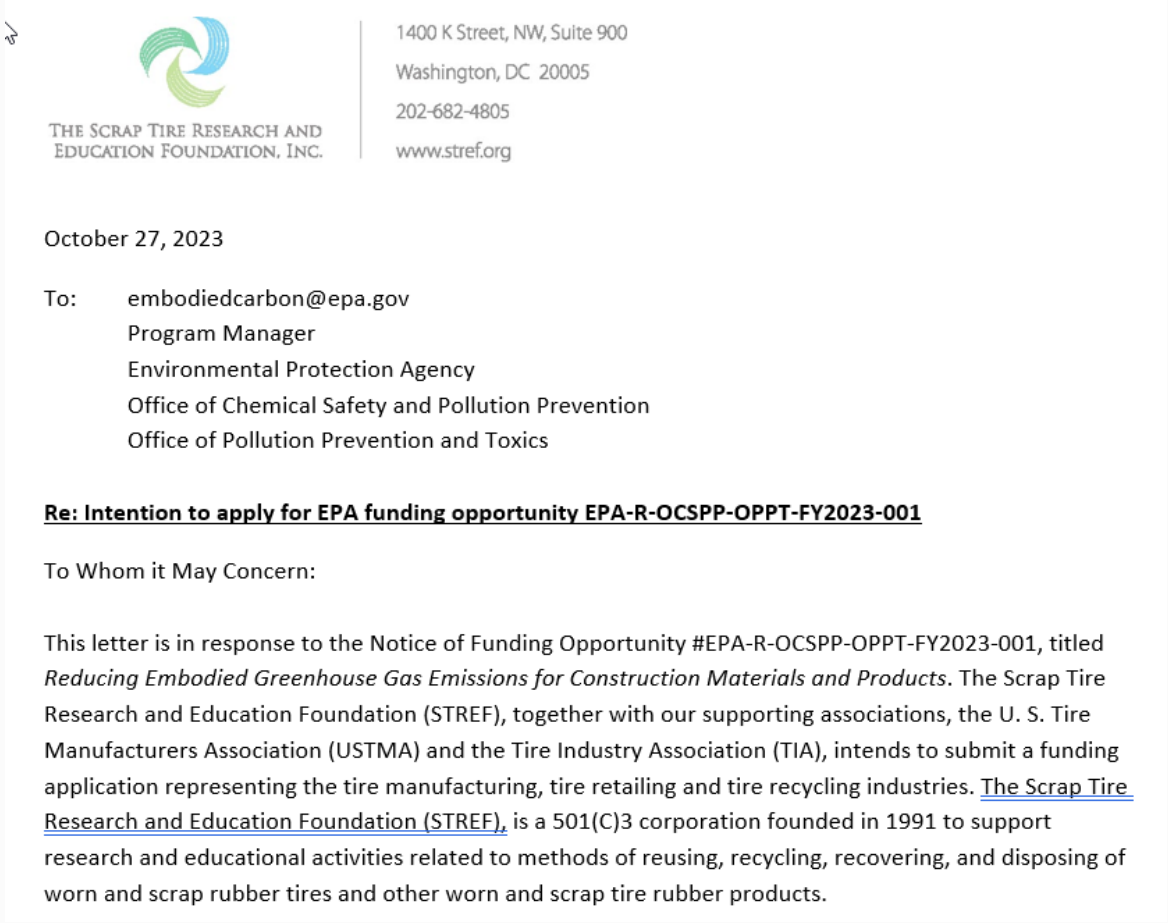
Pull up for precise seeking

How are the LCA, EPD, and PCR related?
6:18

The Committee

- John Sheerin, USTMA
- Red Clark, Asphalt Plus
- Doug Carlson, Liberty Tire/Smart Mix
- Ryan Alleman, Lehigh Technologies
- Neal Frey, Entech
- Monte Neimi, First State Tire
- Denise Kennedy, DK Enterprises
- Joseph Shacat, National Asphalt Pavement Association
- Barry Takallou, CRM Rubber Manufacturers
- Amlan Mukherjee. WAP Sustainability Consulting
- Zhanping You, Michigan Technological University
- Bill Hall & Chris Theriot, RRS
- States:
  - Joaquin Wright, California
  - Brian Gaboriau, Colorado
  - Channon Cohen-Denison, Ohio
  - Kirsten Clemens, Michigan

EPD – Hot off the Press!



THE SCRAP TIRE RESEARCH AND EDUCATION FOUNDATION, INC.

1400 K Street, NW, Suite 900
Washington, DC 20005
202-682-4805
www.stref.org

October 27, 2023

To: embodiedcarbon@epa.gov
Program Manager
Environmental Protection Agency
Office of Chemical Safety and Pollution Prevention
Office of Pollution Prevention and Toxics

Re: Intention to apply for EPA funding opportunity EPA-R-OCSPP-OPPT-FY2023-001

To Whom it May Concern:

This letter is in response to the Notice of Funding Opportunity #EPA-R-OCSPP-OPPT-FY2023-001, titled *Reducing Embodied Greenhouse Gas Emissions for Construction Materials and Products*. The Scrap Tire Research and Education Foundation (STREF), together with our supporting associations, the U. S. Tire Manufacturers Association (USTMA) and the Tire Industry Association (TIA), intends to submit a funding application representing the tire manufacturing, tire retailing and tire recycling industries. The Scrap Tire Research and Education Foundation (STREF), is a 501(C)3 corporation founded in 1991 to support research and educational activities related to methods of reusing, recycling, recovering, and disposing of worn and scrap rubber tires and other worn and scrap tire rubber products.

EPD – What's Next

- Important dates:
  - 10/27/2023 – letters of intent for EPA funding were due
  - 01/06/2024 – full EPD proposal due

Where are we *still* STUCK?

- Differing state DOT specifications
- Lack of Federal Highway Administration specifications or regional FHWA acceptance
- No central data repository for research, reports, specifications, etc.
- **There is a real NEED for a website!**
  - **Projects that could potentially use scrap tires are not using tires due to lack of knowledge.**

Porous Pave
PERMEABLE • DURABLE • FLEXIBLE

Transforming Scrap Tires into Permeable Paths and Trails

US Scrap Tire Workgroup – November 6th, 2023

Matt Lamb

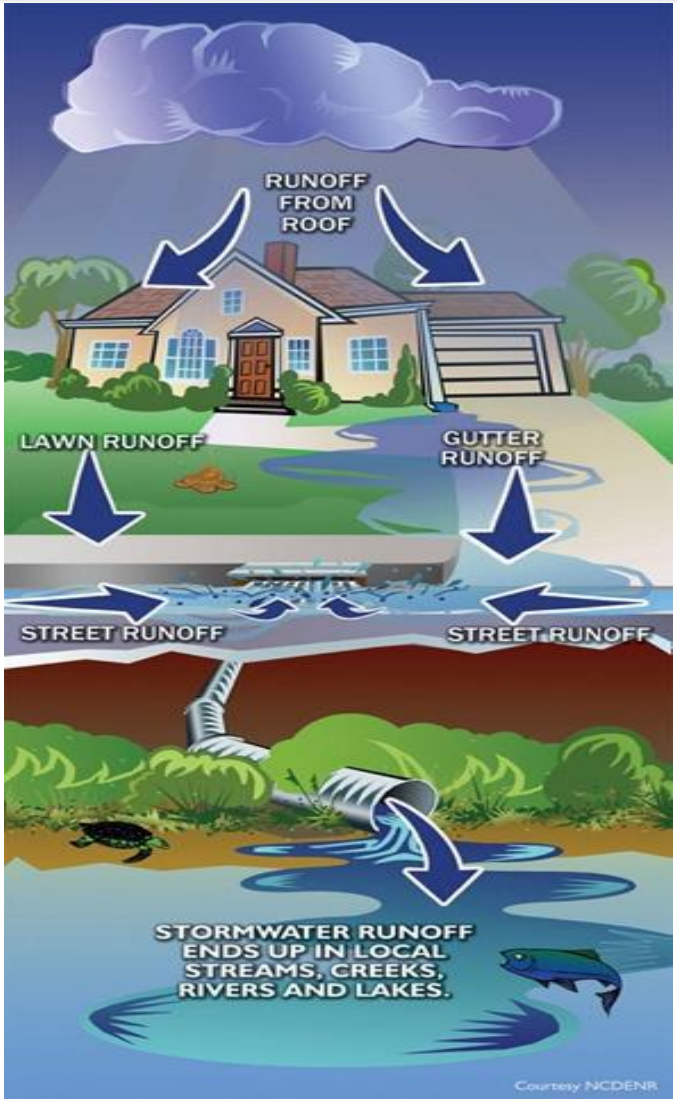
- Porous Pave Inc.
  - Founded in 2007
  - Parent company experts in water management and filtering
  - National leader in this space
    - Industry innovator
- Matt's Background
  - Sales and Marketing
  - Love for landscaping
  - Passion for eco-efficiency

Transforming Scrap Tires

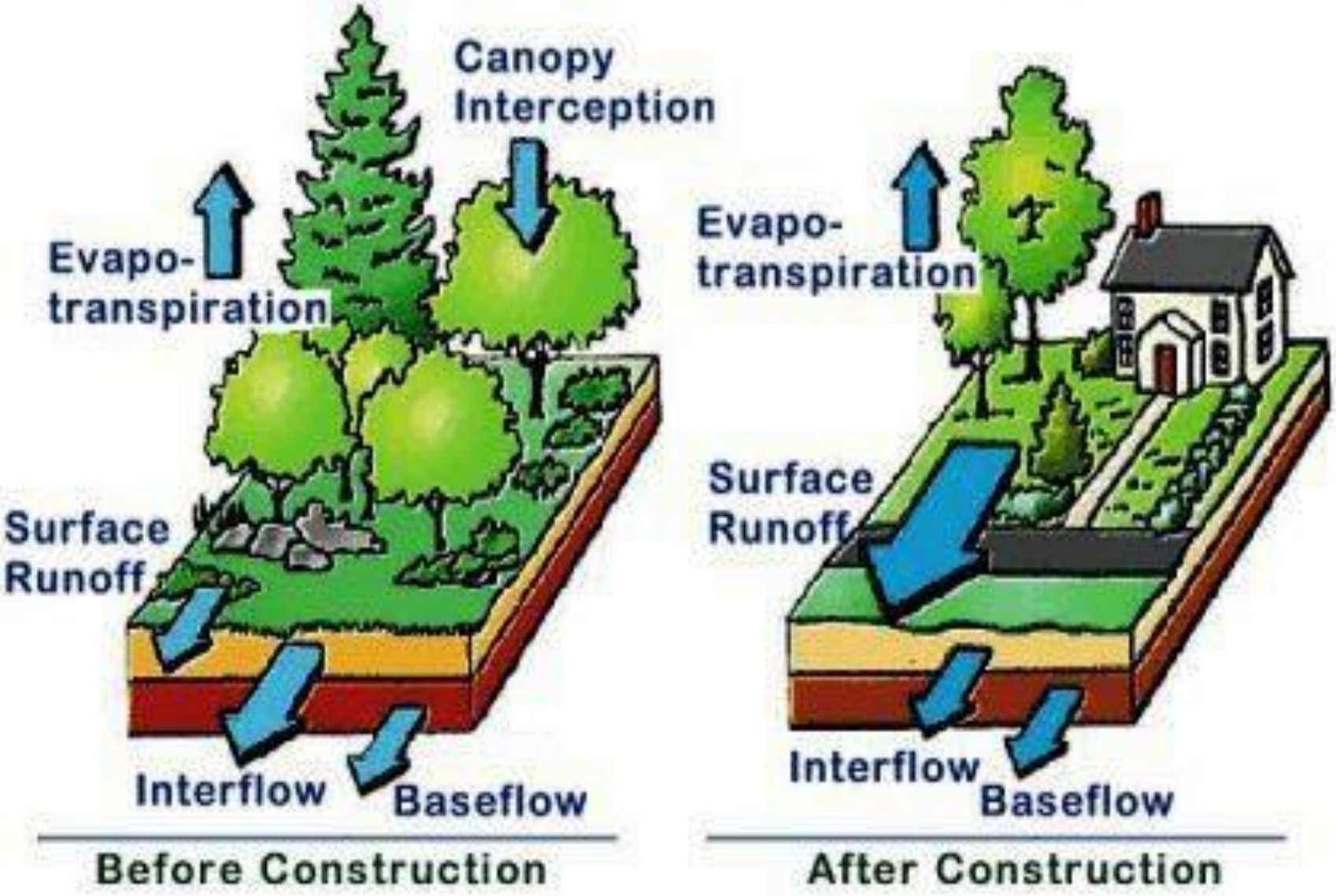
Eco-efficient Permeable Paths and Trails

Problem with Impervious Surfaces

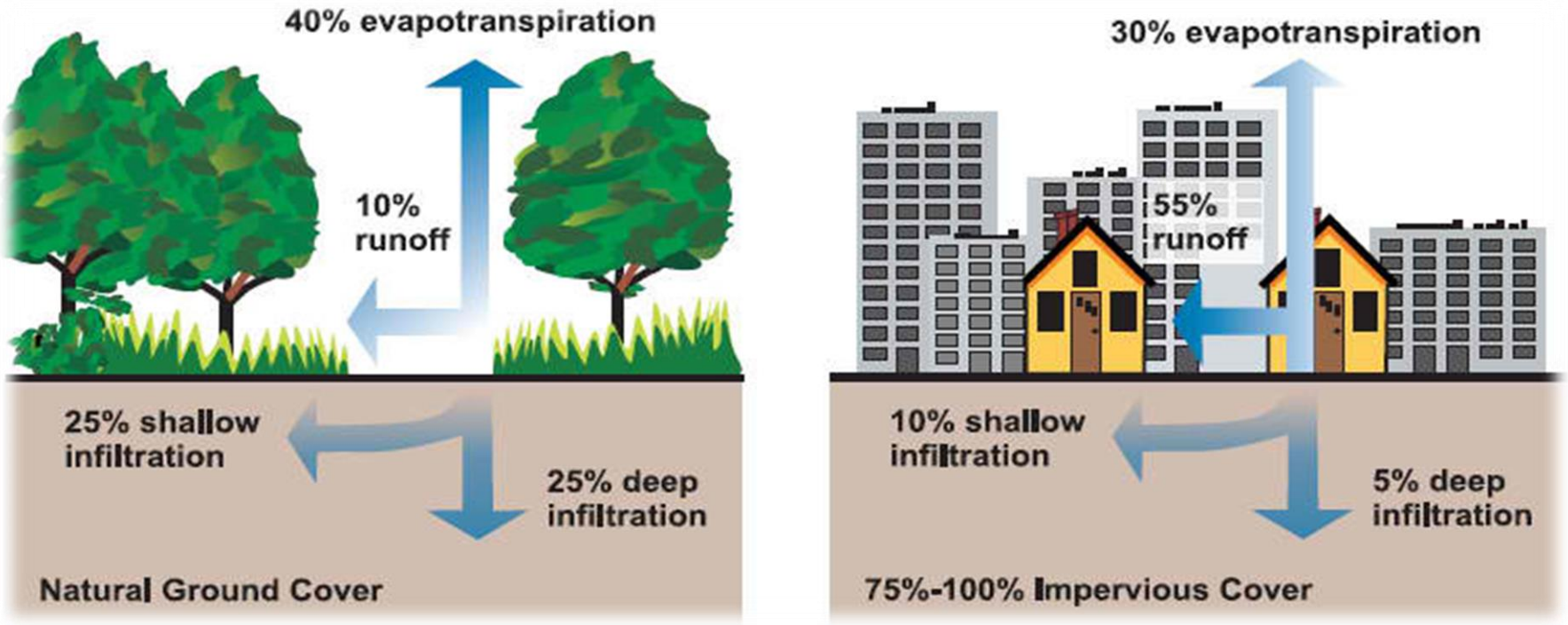
- Pollutants from vehicles, animal waste and some paving materials build up on the surface of dense pavements.
- Rainwater then washes these pollutants into surrounding water supplies.
- Due to the large areas they cover, impervious pavements have become the most significant generators of urban runoff and pollution.



Local Hydrologic Cycle



Heat Island Effect



Highly developed urban areas (right), which are characterized by 75%-100% impervious surfaces, have less surface moisture available for evapotranspiration than natural ground cover, which has less than 10% impervious cover (left). This characteristic contributes to higher surface and air temperatures in urban areas

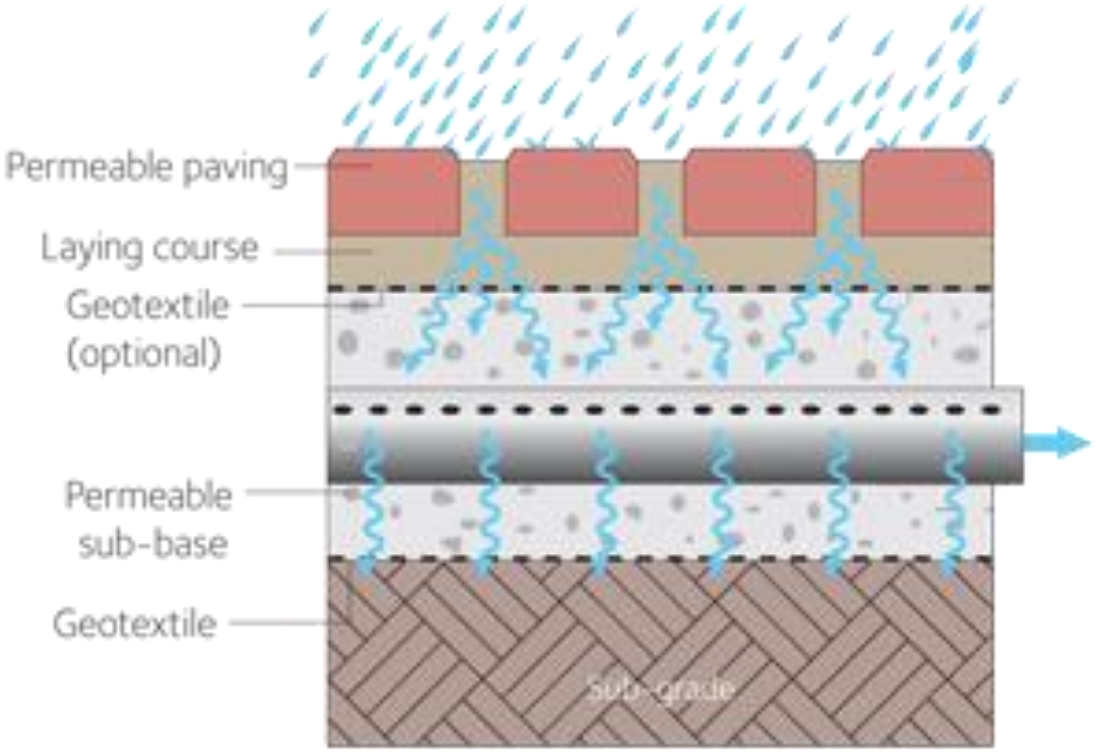
Porosity and Permeability

- Porosity (Porous)
  - Ratio of the volume of void or air surface space
- Permeability
  - The rate of flow of a liquid though a porous surface

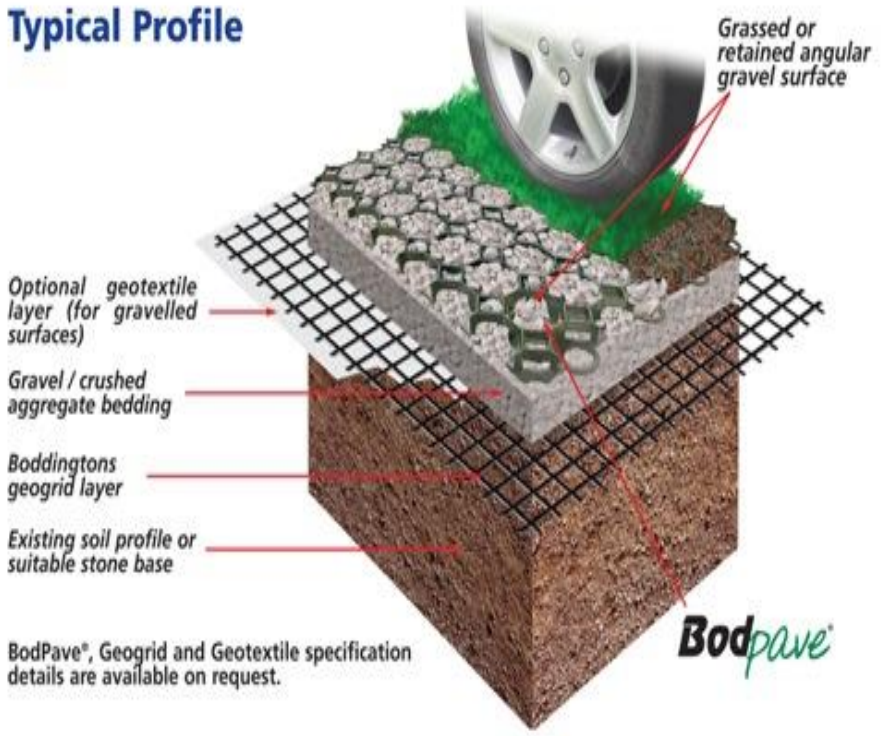
Why a Porous Solution

- Municipalities have imposed restrictions on impervious coverage.
- Porous pavements can help developers meet these restrictions.
- Superior solution.
- Eco-efficient
  - Makes business sense and good for the environment.

Permeable Pavers



Porous Pavers



What is Porous Pavement

- Eco-friendly surfacing material made from scrap tires
- Incredibly porous - allows large volumes of water to drain thru it quickly (5,800 gallons per SF per hour)

Minimizes amount of water directed to storm drains , basins, and other drainage areas.

Porous Pavement

- Reduce pollution and improve urban hydrology by allowing water to seep into the ground regularly
  - Degrade naturally vs. contaminating water supplies
- Replenish ground water and streams
- Decrease the risk of flash floods

Porous Pavement vs. Permeable Block

- Low impact installation
- Doesn’t require heavy equipment
- Better traction and Infiltration rates
- Recycled material
- Less base preparation
- Installs must faster
- Reduced labor costs

- Heavy blocks to lay in place
- Can require loading and transportation equipment
- Lower porosity rates increasing maintenance
- Deeper base prep.
- Not all comply to ADA

Porous Pavement Mixes

- Durable mixture used for applications needing maximum durability
- Most common version
  - Trails & paths, tree surrounds and cart paths

Porous Pavement Attributes

- Permeability
  - 5,800 gallons per square foot per hour
- Durability
  - All the best attributes of tires
- Low impact for walkers, bikers and wheelers
- Aesthetically pleasing – beautiful colors

Porous Pavement Key Features

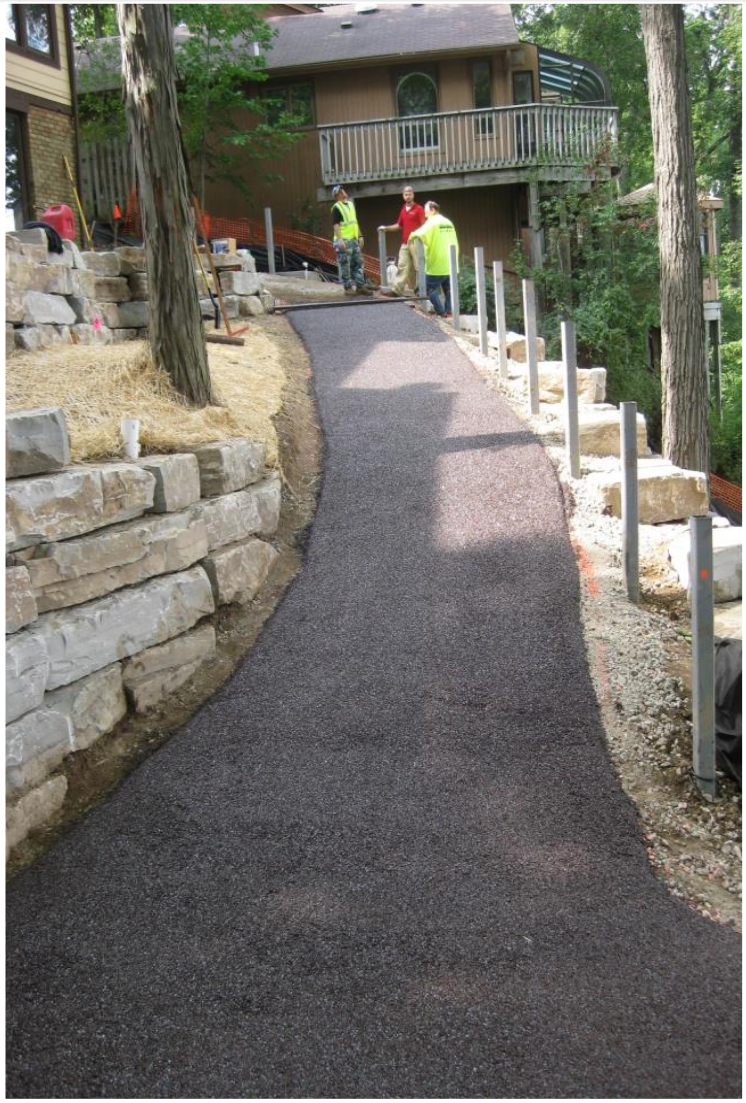
Environmentally Friendly

- Made from recycled tires
- Keeps tires out of the landfill
  - 1,000 Sq Ft - 2” thick = 4,000 lbs.
- Steel fragments and fiber removed
- ¼” - 3/8” size rubber “chips”
- No damage to existing landscape
- Trees and vegetation thrives

Porous Pavement Key Features

Easily Installed

- Poured in place at site
  - Mixed on-site
  - No concrete trucks
- Staff easily trained for installs
- Can be applied between 45 - 110 degrees F
- Cures in 24 hours



Porous Pavement Key Features

Flexible

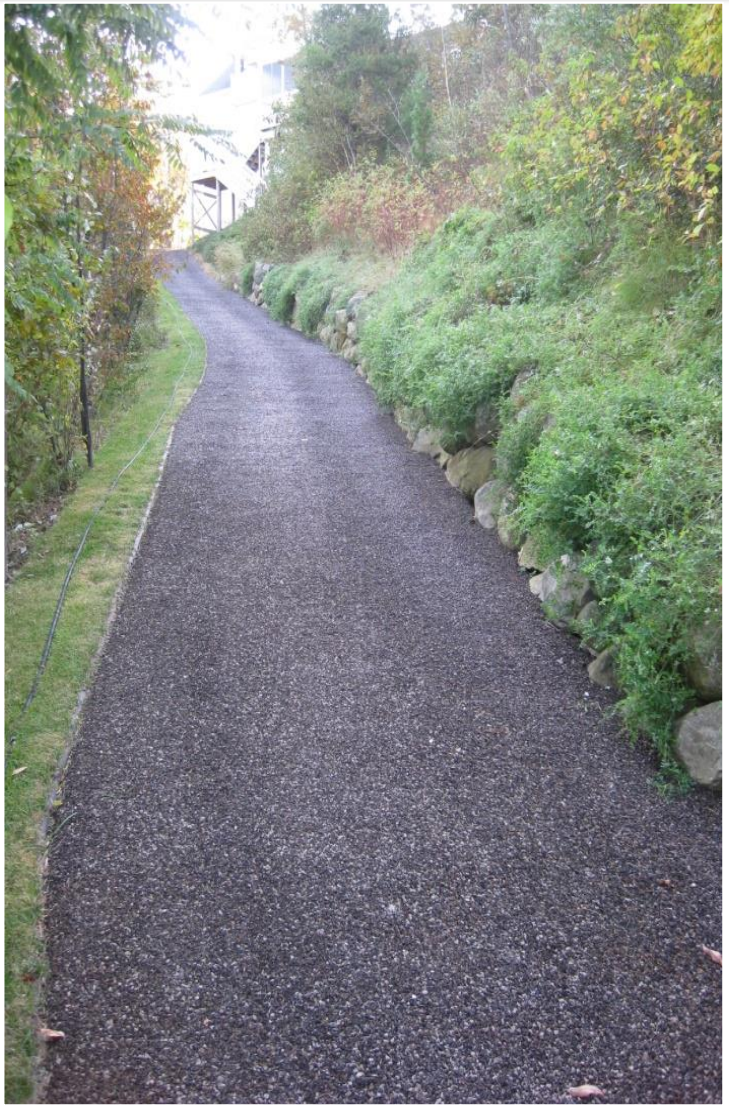
- Flexible nature resists cracking or heaving due to ground movement or frost

- 50% rubber allows product to move if sub-base moves

Porous Pavement Key Features

Slip Resistant

- High rubber content ensures good traction even when wet
- Textured surface is NOT slippery compared to concrete or other non-porous surfaces
- ADA compliant



Tree Pits & Surrounds

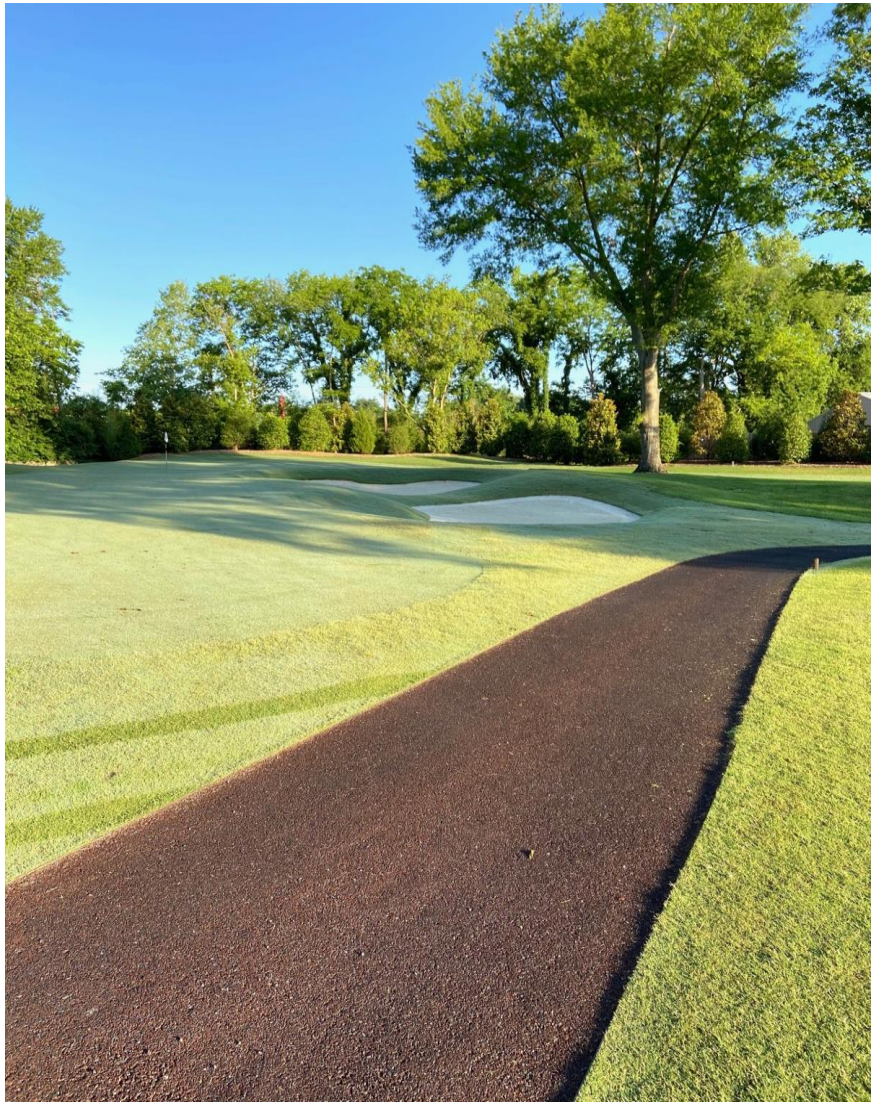
Tree Pits & Surrounds

Paths and Trails

Paths and Trails

Paths and Trails

Golf Cart Paths



Golf Cart Paths

Cart Paths

Bunker Liners

Bunker Liners

Pool Surrounds

Tools Needed

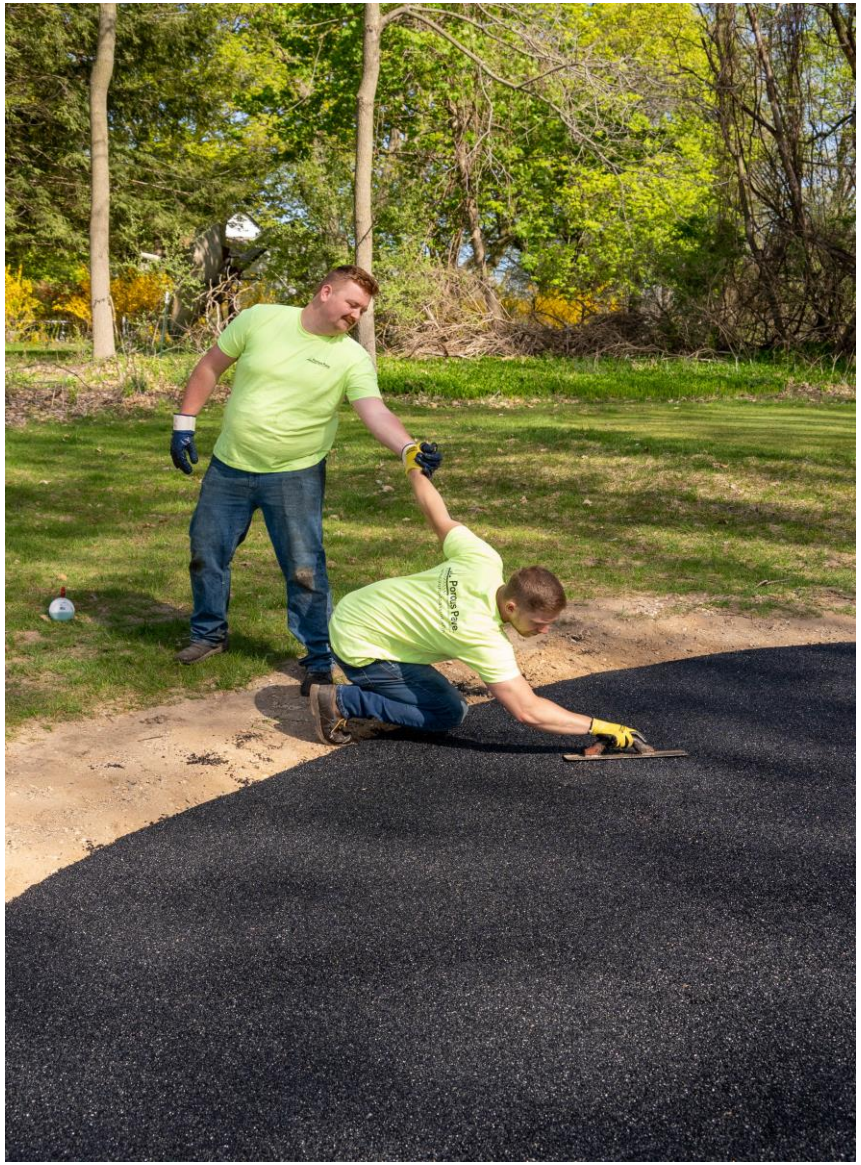
Application Steps

- Porous Pave is mixed using a traditional mortar mixer
- Cement mixers will not work. Binder tends to sit at bottom of mixer
- Mixed material is transported to install site via wheelbarrow, skid steer bucket or mobile mixer

Application Steps

- Once on site, Porous Pave is screened to desired thickness……
  - Similar to concrete
- Form boards are slid along as you pour or paver is utilized
- No preforming needed

Hand Installations



Hand Installations

Hand Installations

Paver Installations

Paver Installations

Tennessee Grants

- TDEC – TN Dept of Environment and Conservation
- Tire Environmental Act Program
  - Funded by new vehicle sales
  - $5 – vehicles with 1-3 tires
  - $10 – vehicles with 4-10 tires
  - $15 – vehicles with 11 or more tires
- 50% matching fund

Porous Pave

PERMEABLE • DURABLE • FLEXIBLE

Thank You For Your Time