

**MAKE a GIFT**

[Research](#)
[Technical Assistance](#)
[Publications](#)
[Events](#)
[About](#)

## Advancing Use of Recycled Material in Asphalt

Recycled materials such as reclaimed asphalt pavement and recycled asphalt shingles are commonly used with new pavement to cut costs. However, the recycled materials tend to become brittle faster, cracking and aging more quickly than when all new materials are used.

ISTC researchers led by B.K. Sharma are collaborating with the U of I Center for Transportation to determine how much recycled material can be used in asphalt materials while maintaining high performance and longevity. The research team for Phase I received the Illinois Center for Transportation/IDOT's 2018 High Impact Research Award for their work in determining how long the asphalt with recycled materials would last.

In Phase II, they will determine how much recycled material can be safely used without affecting the performance of the asphalt. By simulating conditions in the field, they can provide recommendations on how much recycled materials and what modifiers to use to decrease costs and increased sustainability. Phase II is funded by IDOT.

**Energy**

**Pollutants**

**Waste Utilization**

**Advancing Use of Recycled Material in Asphalt**

**Biochar**

**Bio-oils and Biolubricants**

**Mud to Parks**

**Renewable Energy Equipment Recover-Reuse Program**

**SuMo Fly Ash**

**Waste Plastics**

**Read about older waste utilization projects**

**Water Use and Reuse**

**Hazardous Waste Research Fund**



Illinois Sustainable Technology Center

PRAIRIE RESEARCH INSTITUTE

One Hazelwood Drive, MC-676  
 Champaign, IL 61820  
 p: 217-333-8940  
[Email us](#)

**Home of Illinois' State Scientific Surveys**

Illinois Natural History Survey

Illinois State Archaeological Survey

Illinois State Geological Survey

Illinois State Water Survey

Illinois Sustainable Technology Center



Email the **Web Administrator** with questions or comments. For permissions information, **contact the Illinois Sustainable Technology Center**.  
©2022 University of Illinois Board of Trustees. All rights reserved.

[Privacy statement](#) | [Intranet](#) | [Admin](#)