



September 1, 2022: In this edition of RMCREF Spotlight, we focus on the impact that [MIT Concrete Sustainability Hub](#) (CSHub) resources and research are having in highlighting opportunities presented by the use of the Carbin app and in efforts to battle extreme heat in cities.

Recently, two publications in the city of Charleston, SC, including the [Statehouse Report](#) and the [Charleston City Paper](#), reported on the state of that city's roads as characterized through the use of the Carbin app. The Carbin app, developed by researchers at the MIT CSHub, is a crowdsourced application used to assess the quality of over one million miles of roads and streets around the world over the last couple of years. As Charleston residents constantly complained of the state of the roads, their complaints were affirmed through data collected in the area through the use of the Carbin app. Public officials note they are working to improve the network of roadways especially with recent increases in federal and local funding and residents hope the data provided by the Carbin app will help ensure that areas of greatest need will be addressed. The Charleston City Paper piece also includes instructions for using the Carbin app to help increase the data collected. The app is available through both the Apple store and Google Play.

It's no secret that the urban heat island effect contributes to the rise of a city's average temperature but what is less widely known is how extreme heat is not only the deadliest natural hazard in the United States but that it also has the greatest impact on vulnerable groups. As explained in a recent opinion piece in [The Hill newspaper](#), higher reflective pavements can help combat extreme heat and ultimately result in lower local air temperatures. The implementation of higher pavement albedo could have a major impact toward reducing global warming, as noted in the piece, "If the United States increased its average albedo of all pavements by 0.20, the country could attain global warming impact savings equivalent to taking about 3.75 million cars off the road for one year due to the lowered atmospheric temperature." Albedo is only one of several other areas of research by the CSHub that are helping to address climate challenges worldwide.

If you plan to attend NRMCA's ConcreteWorks 2022, be sure to stop by the Foundation's booth to check out four new research reports and resources released earlier this year. Please also participate as a sponsor or a walker in the Foundation's [Walk for Wellness](#) taking place in conjunction with NRMCA's 16th Annual National Mixer Driver Championship on Saturday, October 1st. If you are not attending ConcreteWorks or unable to participate, please support the Foundation by making a tax-deductible donation online

from our [Contribute page](#). Your support helps to fund the important work noted above, as well as all of the resources available from our [website](#). We hope to see you there!

For more information about the work of the [RMC Research & Education Foundation](#), please contact Foundation Executive Director [Julie Garbini](#).