Cradle-to-Grave/Rock-to-Rock!

A full life cycle assessment (LCA) must consider a material's environmental impact from cradle-to-grave. Concrete is comprised of large and small aggregate and Portland cement, which itself is ground natural aggregate. Once it has reached the end of its service life, concrete can be crushed, to be used as a natural aggregate replacement for virgin aggregate material as either subbase material, or even in new concrete mixes.

Cradle-to-Grave equals Rock-to-Rock. Sustainability in its simplest form!

Questions about concrete paving?

Visit
paveahead.com

Or call us at
833-485-1192

PAVE AHEAD
DURABLE. SUSTAINABLE. CONCRETE.

Economically Green

With its extensive service life, concrete pavement eliminates the constant maintenance, the additional CO_2 emissions, and other toxins associated with resurfacing and reconstruction operations, making it both financially and environmentally friendly.

Resilience

Concrete pavement retains its structural integrity and performance, even when inundated by floods. In many cases, concrete roads can be returned to pre-flood service levels immediately after the water recedes.

Carbon Sequestration

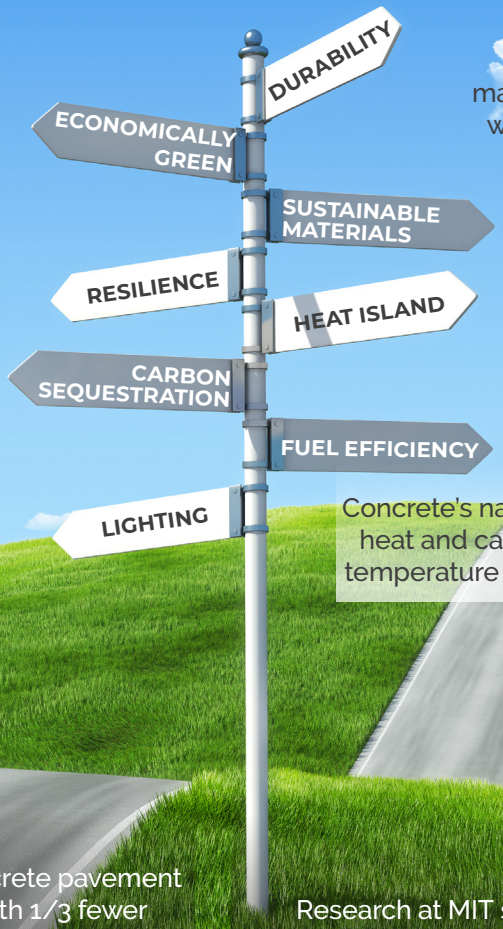
Through a process called carbonation, concrete pavements sequester carbon dioxide from the atmosphere over their service life, reducing nearby pollution levels. A study by MIT found that concrete's carbon uptake can offset 5% of the CO_2 emissions generated from cement used in U.S. pavements.

Lighting

The increased reflectivity of a concrete pavement allows for more efficient lighting with 1/3 fewer light fixtures. The light-colored surface pairs perfectly with LED and other high-efficiency lights.

Durability

No other paving material matches concrete's ability to withstand heavy day-to-day traffic and extreme weather while providing a service life of 40 years or more.



Sustainable Materials

Concrete mixtures maximize strength through optimized aggregate proportions and incorporate materials like Portland limestone cement, supplementary cementitious materials, and recycled materials which reduce concrete's carbon footprint by up to 25%.

Heat Island

Concrete's natural lighter color absorbs less heat and can assist in lowering ambient air temperature by as much as 7 to 10 degrees.

Fuel Efficiency

Research at MIT shows that concrete pavement can reduce fuel consumption by 4% to 8%, significantly lowering CO_2 emissions and user costs.