

# Count on Concrete... *for Sustainability*

**Built for Sustainability** – With a reputation for longevity and durability, concrete pavements have been meeting the needs of sustainable development for decades. Concrete pavements are also an excellent choice when considering the lifetime environmental impact. From mining locally-produced raw materials through construction and long-term performance, concrete stands out as the most cost-effective, sustainable paving material.



## **Durability and Low Maintenance**

- Quite simply, concrete lasts longer. In turn, rehabilitation and reconstruction of concrete pavements are required less often.
- Economic and CO2 savings are achieved because of less fuel-intensive construction operations.
- Fewer raw materials are used in both the short- and long-term life of the pavement.
- Fewer work zones result in less traffic congestion.

## **Locally Produced**

- Concrete is typically produced regionally from abundant natural resources.
- Fuel consumption and emissions are minimized for transportation and handling.
- Concrete is a made-to-order material, resulting in less construction waste.

## **Abundant Raw Materials**

- Concrete pavements are made with cement (which comes is produced from natural materials); aggregates (stone, sand, and gravel); and water.
- These materials are readily available and most often, locally sourced.

## **Renewable and Recyclable**

- Concrete pavements typically last for decades, then are recycled and reused at the end of their service lives.
- This reduces the demand for non-renewable raw materials.

## **Quiet**

- Optimized surface textures can be used on concrete pavements, resulting in long-lasting pavements with acoustic stability.

# Sustainability Comes to Life in Kansas

When public works officials set out to reconstruct this busy, divided thoroughfare in 2002, they set a goal of minimizing impacts to the existing adjacent development.

The cities of Leawood and Overland Park, Kans., paved this section of Nall Avenue with 1,100 tons of slag cement, which is long lasting and lightens the surface color considerably, improving visibility.

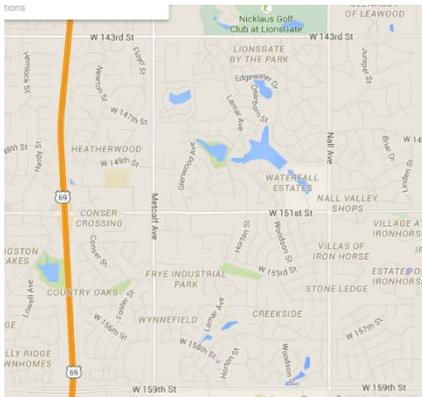
After more than a decade of use, the roadway has seen a steady increase in traffic, and yet, has required no repairs and only minimal maintenance.



*Reconstruction of Nall Avenue between 143rd and 159th in Leawood and Overland Park, Kansas, involved building a new roadway using 9-in. thick concrete across 4 lanes.*

**“Nall Avenue is a prime example of what is possible when agencies and industry work together to set and achieve sustainable construction goals.”**

– John Smith, Public Works Director, Overland Park, Kansas



*The 4-lane thoroughfare spans a length of 1.7 miles in Leawood and Overland Park, Kans.*

## Fast Facts

- This concrete roadway was designed to easily serve the ever increasing traffic in Leawood and Overland Park for 30 years or more.
- Approximately 8,000 vehicles currently transverse this section each day.
- 25,000 vehicles will cross this section daily by the year 2030!

Presented by the  
**Missouri/Kansas Chapter-ACPA**

10707 Barkley Street Overland Park, KS 66211  
Phone: (913) 381-2251  
Email: [info@moksacpa.com](mailto:info@moksacpa.com)

**Executive Director:**  
Todd LaTorella, P.E.

**Field Engineer – Missouri:**  
Ken Liescheidt, P.E.



**American Concrete Pavement Association**

Rosemont, Ill. | Washington, D.C. | Charlotte, N.C.

[www.acpa.org](http://www.acpa.org)