**Shining a Light on Pavement**

Concrete is naturally brighter and more reflective than other pavement surfaces. This requires less energy to illuminate comparable areas, which is good for the environment.

A rule of thumb is that for every 10% increase in light reflectance, 10% more light will reflect up to the objects on the surface. Surface reflectance readings on concrete are four to five times higher than asphalt, which means drivers can see the road, other vehicles and pedestrians clearer and sooner.

**It’s Easy to See**

Concrete’s superior reflectance improves night time visibility, saves money on street lighting, and is better for the environment!
The Cost of Lighting Streets and Highways

To overcome the lack of light reflectance, an asphalt pavement requires either: (1) more street lights per mile than a concrete pavement, or (2) higher watt light bulbs at the same light pole spacing as a used on a concrete pavement. In either case, more energy is consumed to illuminate the asphalt roadway. Where more light poles are installed then the initial costs are higher too.

Case 1 – More Light Poles:
Highway requires 250w light every 210 ft for concrete and every 170 ft for dark surface (asphalt).

- Asphalt requires 24% more poles
- Initial costs, maintenance costs, and energy costs are 24% higher

Case 2 – Higher Watt Light Bulbs:
Local road requires 150w light for concrete and 200w light for the dark surface, both at 210 ft spacing.

- Initial and maintenance costs similar
- Asphalt requires 33% higher energy costs each year.

References