The Asphalt Basics
Asphalt (known in other parts of the world as “bitumen”) is a natural substance that has some amazing physical properties.

- It’s sticky (adhesive) and elastic, able to stretch, bend and flex without breaking (cohesive).
- It is not soluble in water so it does an excellent job of waterproofing.
- At air temperatures, asphalt cement is a solid or semi solid cement (highly viscous).
- When heated, it becomes thinner, acts as a lubricant and is easier to use.
- It exists naturally in a few places in the world such as a lake on the island of Trinidad.

- And the LaBrea “tar pits” in downtown Los Angeles where it has seeped from the ground for more than 10,000 years.

- Most of the asphalt used today for paving is a byproduct of refining petroleum crude oil.
A Little Asphalt History

- One of the world's oldest engineering materials.
- Sumerian shipbuilding industry used asphalt to caulk and waterproofing ship hulls in 6000 B.C.
- Egyptians used asphalt as a waterproofing material in 2600 B.C. *(Moses’ basket)*
- Also used as a preservative in mummies wrappings.
What you know as “Asphalt”

- Known by many names: “Asphalt concrete”, “bituminous concrete”, “blacktop” or just plain “asphalt”.
- A composite material commonly used in the construction of road, airport and parking lot pavements.
- Consists of graded mineral aggregate coated and bound together with asphalt cement/binder.
- Placed/laid (not “poured”) in layers as thin as ½” and compacted to a smooth, dense, waterproof layer.
President Ulysses S. Grant had Pennsylvania Avenue paved with Trinidad asphalt in 1876.

31 years later it was resurfaced with asphalt derived from petroleum distillation process.
Asphalt is an Engineered Product
Asphalt is 100% Recyclable
Asphalt is the World’s Most Recycled Product

- Asphalt road surface is the most widely recycled material in the US. in both gross tonnage and by percentage. *

- 80% of the asphalt removed each year from road surfaces during widening and resurfacing projects is reused as part of new roads, roadbeds, shoulders and embankments.

* According to the Federal Highway Administration (FHWA) and United States Environmental Protection Agency (EPA)