Asphalt Institute

a look back

Wayne Jones, P.E.
Senior Regional Engineer
A brief history…

- First successful asphalt pavement
  - 1870-Newark NJ City Hall
- Pennsylvania Ave partially reconstructed with asphalt
  - 1876 for the centennial
A brief history…
Refining asphalt …

- Superior to mined deposits in Venezuela, Trinidad
- Asphalt surface treatments, penetration macadam, sheet asphalt, A/C mixes
- Large variety of grades
The Asphalt Institute

• Founded on May 16, 1919 at the Union League Club in NYC
• 11 original members
• Well timed;
  ◦ WWI ended
  ◦ Public clamor for better roads
  ◦ Rapid advance of the automobile
Proper use of asphalt...

- 102 grades to 9
- Efforts to pave farm to market roads
  - Local aggregates & cutbacks
  - AI $100k promotional campaign
- Engineering conferences
  - Promoting low cost roads
Mission clarification; 1929

“actual promotion of asphalt in the sense of personal participation in local paving jobs will not be a feature of Association work but will be left to competitive effort by the various producers and contractors.”

“the Association's efforts will be directed wholly along sound technical, engineering, educational, scientific and informational lines.”
1930’s; the depression…

• Pacific Coast members
  ◦ Office in San Francisco (1932)
• Civil Aeronautics Administration (CAA) established
• Expansive use of cutbacks
• Invention of self-propelled paving machines
Post WWII; Move to DC

• ME and NJ Turnpike
  ◦ Chose asphalt!
  ◦ Other states follow suit

• AI engineers promoted sound engineering principles

• January 1955
  ◦ Moved to University of Maryland, College Park Campus
The US Interstate System...

- The Federal Aid Highway Act of 1956
  - “…the biggest public works program ever undertaken…”
- Promotion of the “Velvet Ride”
  - ENR, Saturday Evening Post, Life, Good Housekeeping, and the WSJ
Full Depth Asphalt® …

- Stabilized asphalt base
  - Lowered stress on subgrade
  - Reduced total thickness
  - Very economical
  - Improved in-place compaction

- Non-traditional uses
  - Ports
  - Hydraulic structures
  - Recreational
Penetration to Viscosity Grades

• Early 1970’s
• Led by AI research engineers (V.P. Puzinauskas)
  ◦ Better control of temperature susceptibility
  ◦ More realistic measurement of behavior at 60C
1970’s – 1980’s; rehabilitation

- Focus shift
- Emulsions (BAEM)
- Training “explosion”
- Rubblizing/Crack & Seating
- Pavement Management Systems
- Major AI staff downsizing
  - (200 – 40) in mid-80’s
Move to Lexington

• 1989; UK partnership, AI’s Building
• SHRP & Superpave Asphalt Technology
Through education, engineering, technical development, environmental stewardship and marketing leadership, the Asphalt Institute promotes the safe use, benefits and quality performance of petroleum asphalts in a unified voice for our membership.
Areas of Strategic Focus

Member connectivity –
• A catalyst for member engagement through meetings, programs and communications

Asphalt promotion –
• National, regional and local marketing efforts to increase the use of asphalt

Health, safety & environmental oversight –
• Leveraged sweat-equity and strategic partnerships to achieve solutions to longer-range challenges

Technical leadership –
• Professional engineering, research and testing that shapes specifications, standards and public policy.

Educational expertise –
• Training and publication of the latest advancements in asphalt technology
Building For The Next 100 Years
Building For The Next 100 Years

ASPHALT INSTITUTE
Building for the next 100 years

The Asphalt Institute
National Binder Technician Certification Program

asphalt institute
Building For The Next 100 Years
Building For The Next 100 Years

Airport Pavement Technical Workshop
Building For The Next 100 Years
Building For The Next 100 Years
Building For The Next 100 Years
2018 AI Members...

Global, International, Regular, Associate and Canadian members

Affiliate and Commercial members
Ohio Connection

PAVING THE WAY
ASPHALT IN AMERICA
DAN McNICHOL

TRINIDAD RECORD No. 5
That No Other Bituminous Paving Material
Can Equal

Columbus, Ohio—King Avenue from High
Street to Neil Avenue—an area covering 8,683
square yards—was paved with Trinidad Lake
Asphalt in 1888—33 years ago.

Maintenance cost to date, 2.2 cents per yard per
year.

TRINIDAD RECORD No. 5
The No Other Bituminous Paving Material
Can Equal

Lake Trinidad

The Barber Asphalt Paving Co.
PHILADELPHIA
FIFTH SESSION

OCTOBER 31, 1929. 10 O’CLOCK A.M.

MAJOR FRANK M. KENNEDY, CHIEF, BUILDINGS AND GROUNDS DIVISION, OFFICE, CHIEF OF AIR CORPS, U.S. ARMY, WAR DEPARTMENT, WASHINGTON, D.C., PRESIDING

CHAIRMAN F. M. KENNEDY: We will have for the subject under discussion this morning, the question of airport paving. This should be of unusual interest to all of you gentlemen who are connected with asphalt and the paving industry, for the reason that it presents so many interesting technical problems. It is a subject that, in its future, has possibilities for an enormous amount of business that should interest every one. To start the discussion this morning, we have a paper entitled “Standard Paving for Airports,” by Mr. R. H. Simpson, chief engineer, Department of Public Service, Columbus, Ohio.

Standard Paving for Airports

By R. H. Simpson, Columbus, O.

Chief Engineer, Department of Public Service, City of Columbus

The development of air transportation in the United States during the past two years is the outstanding achievement in this country for this period. The advance in this industry is almost unbelievable. Almost overnight millions of people have become interested in aviation.
Paved Loading Platform for Airplanes at Port Columbus Airport, Columbus, Ohio. Administration Building and Passenger Station in the Distance.
Wayne Jones, P.E.
Senior Regional Engineer
Columbus, OH

wjones@asphaltinstitute.org