ARAM in your Tool Box

Chris Hooke, County of Ventura
Streets & Tech. Conf., April 10, 2019
Outline of Presentation

- Asphalt Rubber Agg. Membrane (ARAM)
- Cape Seal
- ARAM + Overlay
- Case Studies
- Summary
Possible Treatments

- Mill and Fill
- Cold In-Place Recycling
- ARAM + Slurry (Cape Seal)
- ARAM + Overlay
Asphalt Rubber Aggregate Membrane (ARAM)

- OR  Rubberized Chip Seal
  - Asphalt binder with powdered tire rubber
  - Aggregate, pre-coated and heated
Asphalt Rubber VS Conventional Asphalt
1 Year Old

13 Years old
AR Chip Seal 10 Years Later Still Performing

Original Condition
Asphalt Rubber Cape Seal

- ARAM on the bottom
- Slurry or Microsurfacing on the top
Cape Seal – Second Layer (Type II Slurry Seal)
Cape Seal – Second Layer (Type II Slurry Seal)
Orcutt Rd. (Cape Seal)
Orcutt Rd. (Cape Seal)
Orcutt Rd. (Cape Seal)

2 Years Later
Orcutt Rd. (Cape Seal)

4 Years Later
AR Cape Seal - Roseville, CA

Original condition

6 years old
AR Cape Seal - Gregory Street, Fairfield, CA

Original condition

10 years old
Chip Seal held back 6” – 12” from gutter line
ARAM + Overlay

- ARAM on the bottom
- Overlay (Conventional or ARHM) on top
Place AC Overlay over ARAM
Tapo Canyon Rd. (Chip Seal + 1.5" AC)
Tapo Canyon Rd. (Chip Seal + 1.5” AC)

1 Year Later
Tapo Canyon Rd. (Chip Seal + 1.5” AC)

2 Years Later
Tapo Canyon Rd. (Chip Seal + 1.5” AC)

3 Years Later
Tapo Canyon Rd. (Chip Seal + 1.5” AC)

4 Years Later
Tapo Canyon Rd. (Chip Seal + 1.5” AC)
Tapo Canyon Rd. (Chip Seal + 1.5” AC)

- 1 Year Later
Tapo Canyon Rd. (Chip Seal + 1.5” AC)
Tapo Canyon Rd. (Chip Seal + 1.5” AC)
Tapo Canyon Rd. (Chip Seal + 1.5” AC)

4 Years Later
Summary

- A layer of ARAM (Rubberized Chip Seal) is effective at Stopping Reflective Cracks.

- On moderately cracked roads a Cape Seal is an effective treatment

- On heavily cracked roads a layer of ARAM + an AC overlay is effective