

Pavement Preservation Academy, Advancing the Practice – Training

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Background of Pavement Preservation Academy - PPA

Funded by MTI using SB-1 funds

Help local agencies

Improve Pavement Cost Benefits

- Pavement repair and resurfacing preparation
- Chip seals
- Slurry surfacing
- Cape seals
- Thin asphalt overlays

Development of Technical Presentations

- Began in 2019
- Completed in 2022
- Presentations developed for each of five manuals
 - One-hour presentations
 - Three-hour presentations



Contents of Pavement Preservation Academy

- Treatments covered
 - Asphalt repair & resurfacing preparation
 - Chip seals
 - Slurry surfacing
 - Cape seals
 - Thin asphalt overlays



Asphalt Repair & Resurfacing Preparation

- Contents of manual
 - Asphalt repair options such as crack sealing, crack filling and patching, etc
 - Broad look into preparations for resurfacing projects and surface treatments
 - Guides for determining when to utilize different strategies



Typical Crack Sealing Operation

Chip Seals

- Light to medium traffic
- Placed over existing HMA
- Spray pavement with binder & apply covering aggregate immediately
- Manual includes variations of chip seals
 - Scrub Seals
 - Geosynthetic Reinforced Chip Seals (GRCS)



Typical Chip Seal Operation

Slurry Surfacing

- Economical means to maintain pavement
- Used on public roads, highways, airport runways, parking lots and surfacing projects
- Microsurfacing is a more complex form of slurry seals involving Quick Setting (QS) asphalt emulsion and chemical break
- Can be used repeatedly or in conjunction with other preventative treatments



Typical Slurry Seal Construction

Cape Seals

- Used on both low and high traffic levels
- Low initial costs compared to HMA overlays
- Single chip seal that is covered by slurry surfacing
- Applications for public roads, highways, local streets, and other surfacing projects worldwide



Completed Cape Seal
- Slurry Seal over Chip Seal

Thin Asphalt Overlays

- Light to medium traffic volumes
- Placed over existing HMA by placing a new ½”–1 ½” HMA layer
- Thin HMA is rolled ASAP to ensure compaction of mix
- Manual includes best practices for construction and design of thin asphalt overlays

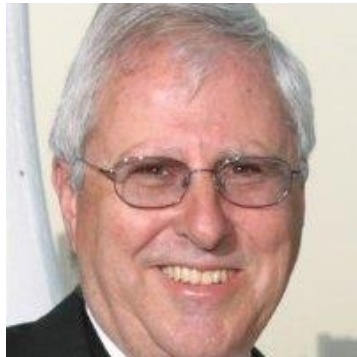


Thin Hot Mix Asphalt Overlay

Links to Five PP Manuals

- ▶ Asphalt Pavement Repair and Resurfacing Preparation
https://scholarworks.sjsu.edu/mti_publications/414/
- ▶ Chip Seals:
<https://transweb.sjsu.edu/research/1845A-Chip-Seal-Manual>
- ▶ Slurry Surfacing:
<https://transweb.sjsu.edu/research/1845B-Slurry-Surfacing-Manual>
- ▶ Cape Seals:
<https://transweb.sjsu.edu/research/1845C-Cape-Seal-Manual>
- ▶ Thin Asphalt Overlays:
<https://transweb.sjsu.edu/research/1906-Manual-Thin-Asphalt-Overlay>

Awesome Instructors



PP Academy Certificate Program

- Topics covered for each module
 - Overview
 - Project selection
 - Materials and design
 - Specification
 - Construction
 - Safety
 - Quality assurance
 - Troubleshooting
 - Other resources
- Complete all 5 modules and pass an exam to earn a certificate

Evaluation Process

At the end of the five modules

- feedback
- exam
- 3 opportunities
- passing score: 80%
- certificate from the CP2 Center



2021 Pavement Preservation Academy



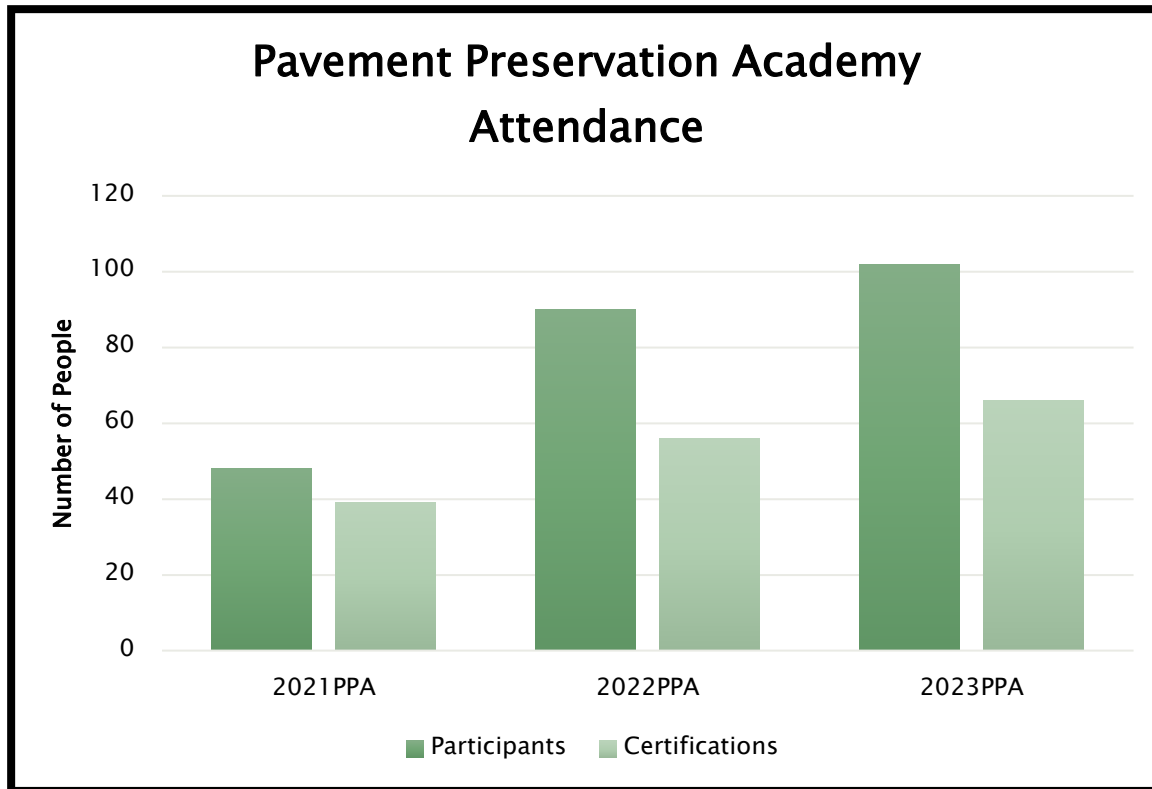
- The first PPA held between March 15–26, 2021
- 19 CA Counties
- 23 State and Local Agencies
- 48 Attendees

2023 Pavement Preservation Academy

- Third PPA held between April 4–7, 2023
- 24 CA Counties
- 50 State and Local Agencies
- 102 Attendees



PPA Certificate



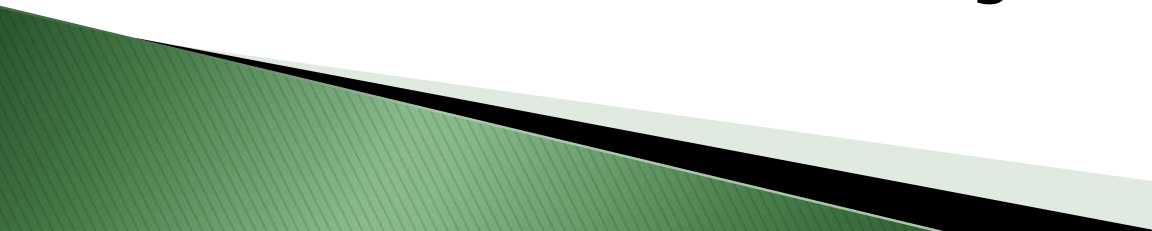
SUMMARY

CP2 Center created PPA in 2021

CP2 Center have provided PPAs for three years

Focus is on common pavement preservation practices

The goal is to improve the qualified workforce for California through training



THANK YOU

Discussion and Questions

Keep Good Roads Good

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<http://www.csuchico.edu/cp2c>