

Association of Asphalt Paving Technologists

Annual Report 2022 - 2023

*Since 1924
AAPT is a Leader
in the Advancement of
Asphalt Paving Technology.*

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AAPT



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AsphaltTech

Amy Epps Martin, Ph.D., P.E.

Professor
Zachry Department of Civil and Environmental Engineering, Texas A&M University

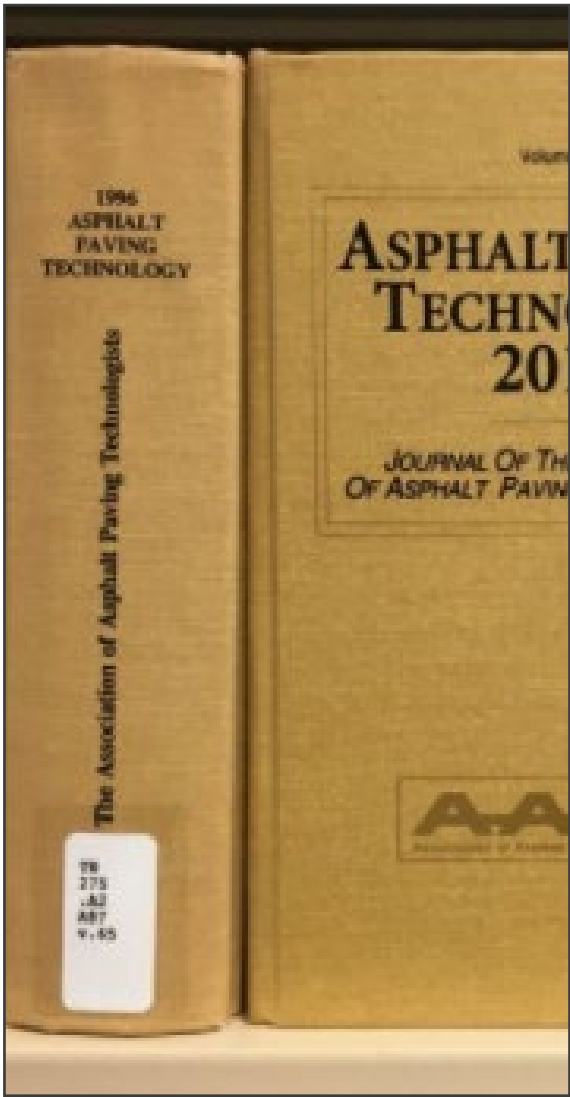
Senior Research Engineer
Texas A&M Transportation Institute



Message from the President

The Association of Asphalt Paving Technologists (AAPT) is a global community of researchers and practitioners that is almost 100 years old and still growing and evolving! This first annual report aims to showcase our accomplishments in 2022 and 2023 toward our mission to serve as a central forum for communication, networking, and exchange of ideas to advance the body of knowledge and state of the practice in asphalt paving technology. Highlights include a successful annual meeting, digital publication, webinars, and recognition of past dedication and the next generation through awards and scholarships, respectively.

Further development of the strategic plan was also a focus with many ideas generated to meet four over-arching goals: sustain and grow our vibrant organization, promote and provide information on asphalt paving technology, engage members in organization activities, and grow and retain membership through industry-wide participation. We look ahead to implementation of the 5-year strategic plan in 2023 and the yearlong centennial celebration in 2024! Thank you to our sponsors for your support, our volunteers for your participation, and our members for your engagement.



The objective of this inaugural annual report for the Association of Asphalt Paving Technologists is to provide a comprehensive overview of the organization's activities, achievements, and financial performance to its stakeholders.

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Mission and Vision

Mission and vision statements are essential components of an organization’s strategic planning process. On one hand, the mission statement describes the organization’s primary purpose and outlines how it aims to achieve its goals. On the other hand, the vision statement is a forward-looking statement that outlines the organization’s aspirations and ultimate destination.



Our Vision

The Association of Asphalt Paving Technologists is a leading world-wide community dedicated to excellence and advancement of asphalt paving technology.



Our Mission

The Association of Asphalt Paving Technologists is a global community of researchers and practitioners that serves as a central forum for communication, networking, and exchange of ideas to advance the body of knowledge and state of the practice in asphalt paving technology.

AAPT Staff



Eileen Soler
Office Manager



Michael Anderson
Executive Director

Board of Directors



Amy Epps Martin
President
Professor, Texas A&M University



Jean-Pascal Planche
Vice-President
Chief Executive Officer, Western Research Institute



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Director at Large
Assistant Professor, Auburn University



William J. Pine
Director at Large
Quality Control Director of Asphalt Technology, Heritage Research Group



Matthew Corrigan
Director at Large
Research Civil Engineer, Federal Highway Administration



Thomas Bennert
Director at Large
Research Professor, Rutgers University



Stacey Diefenderfer
Director at Large
Assistant Principal Research Scientist, Virginia Transportation Research Council



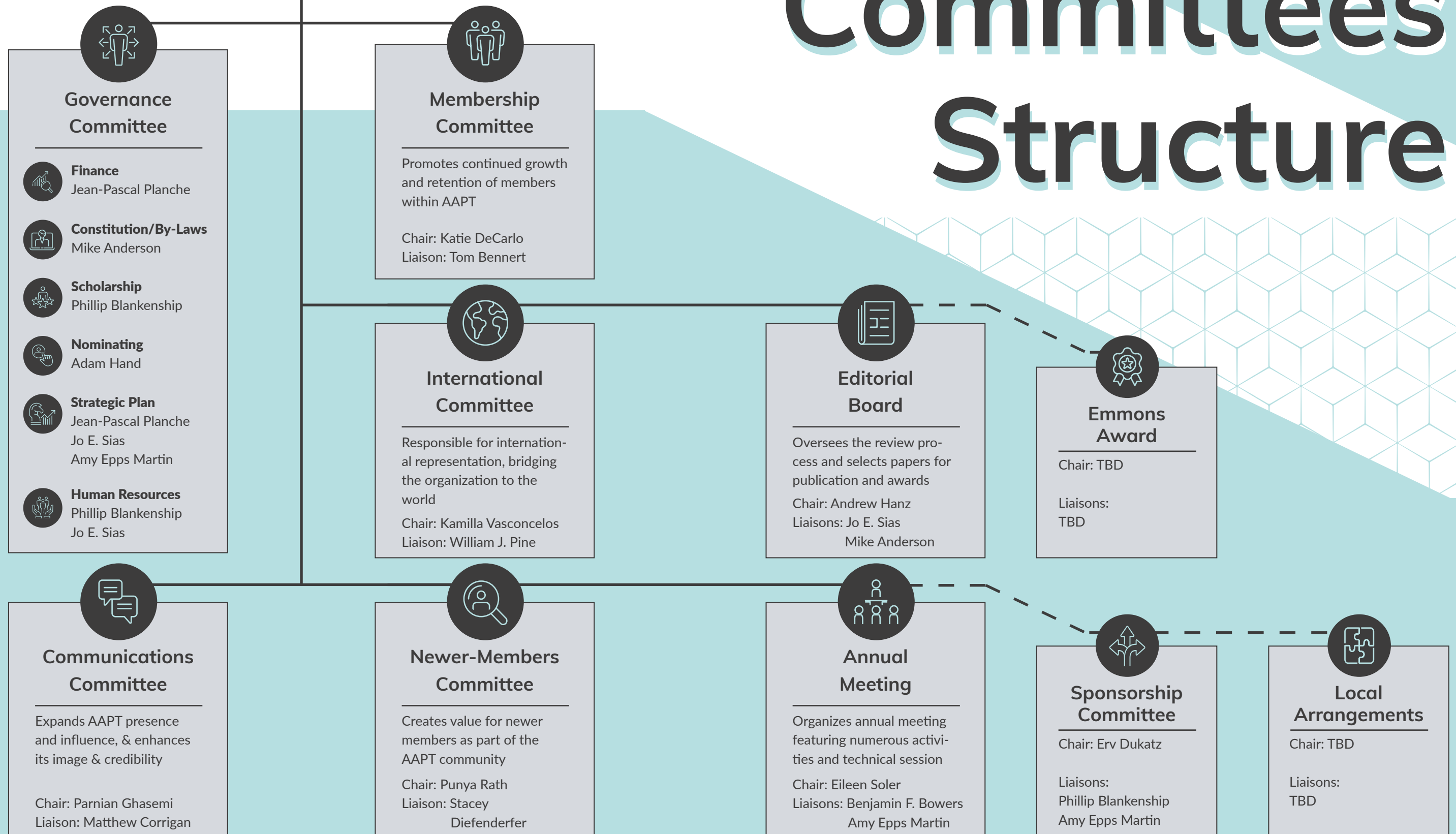
Jo E. Sias
Past President
Professor, University of New Hampshire



Phillip Blankenship
Past Past President
President, Blankenship Asphalt Tech and Training

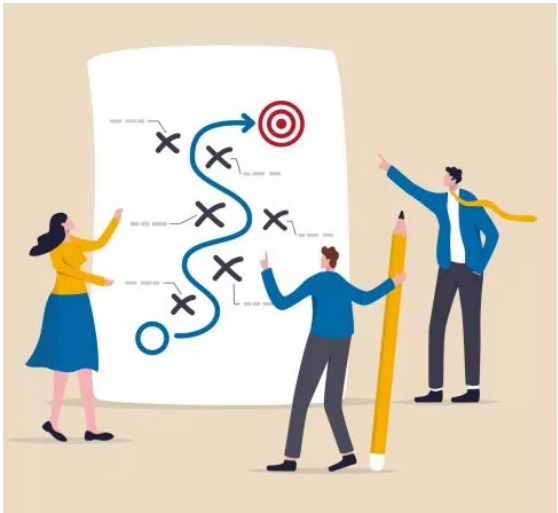


Committees Structure

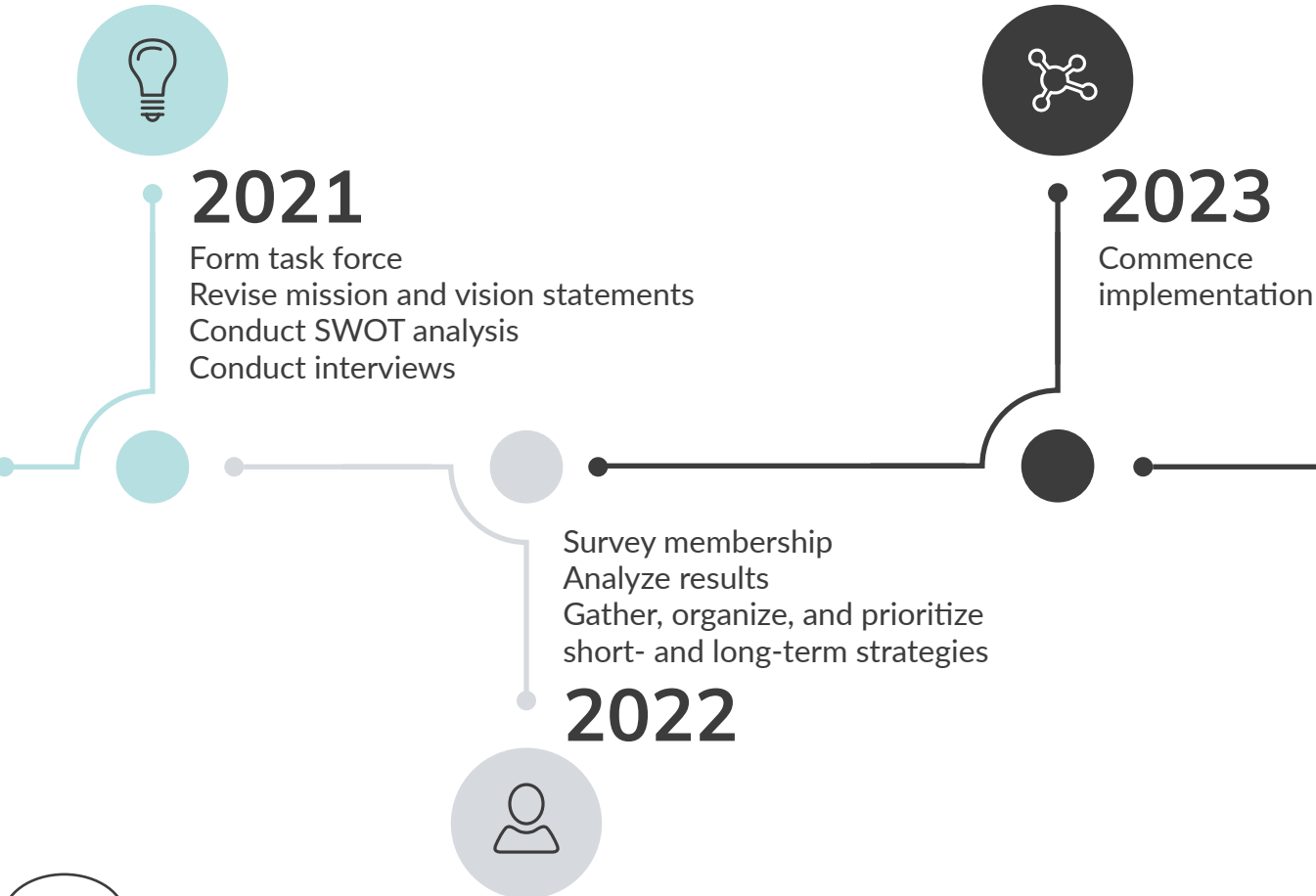


Strategic Plan

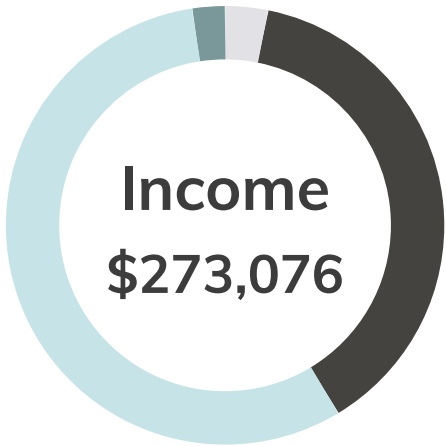
Strategic planning serves as a crucial tool to prioritize the needs of an association’s members and the profession or industry it represents. Its primary goal is to quantify and measure organizational and programmatic achievements.



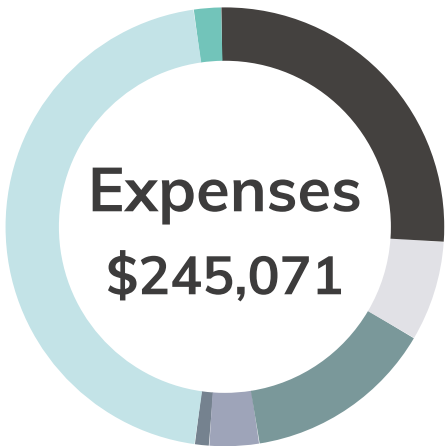
AAPT deemed it necessary to update its short and long term goals and objectives, and in order to do so effectively, the Association undertook a comprehensive survey of its membership to gather information. The valuable inputs obtained from the survey were then utilized by the AAPT committees to develop a prioritized timeline for the goals and objectives. Subsequently, a town hall meeting was convened, wherein the President of the Association shared the results of the survey, the prioritized timeline and sought feedback from the membership on the proposed plans. Following this feedback, AAPT intends to implement the plans before the annual meeting, ensuring that it continues to serve the needs and interests of its members with diligence and foresight.



Financials as of August 2022



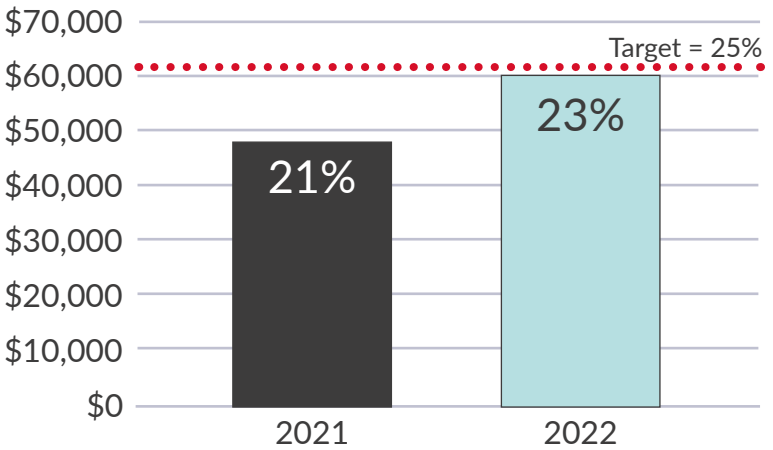
- Annual Meeting, 56%
- Dues, 38%
- Publication Sales, 3%
- ISAP, 3%



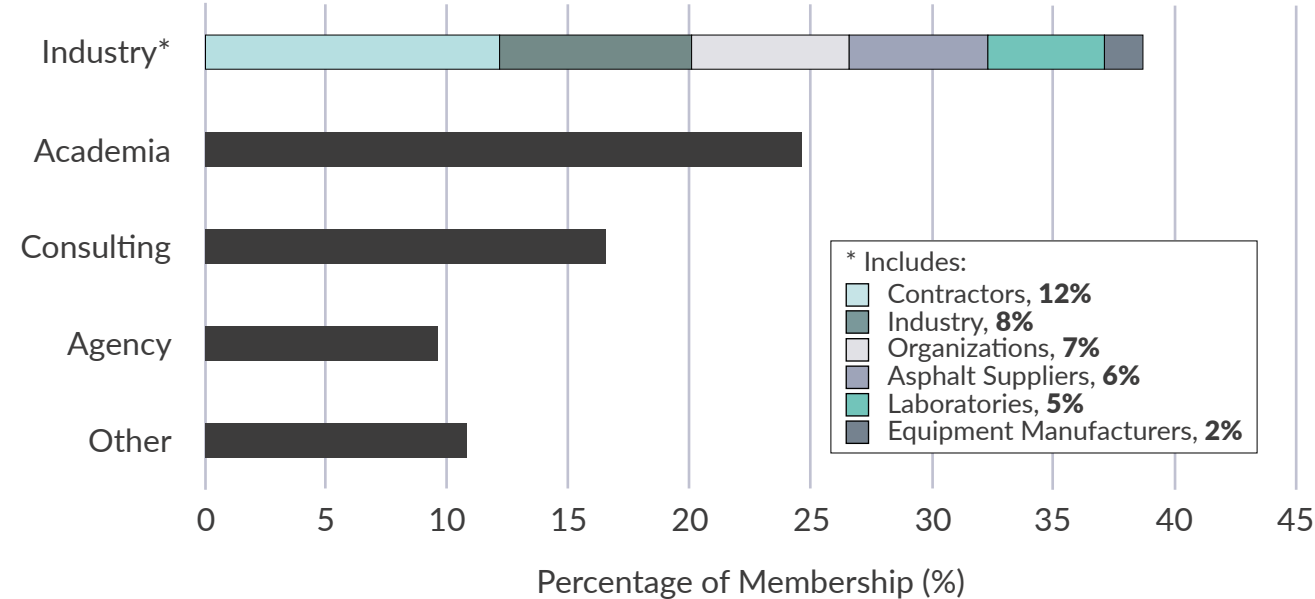
- Annual Meeting, 46%
- Salary, Office Manager, 26%
- Office Expenses, 14%
- Salary, Executive Director, 7%
- Publications, 4%
- Website, 2%
- Storage, 1%



AAPT aims to establish a reserve fund that exceeds 25% of its annual operating expenses within a year to secure its sustainability and enhance financial transparency for its members. By the end of 2022, the reserve fund reached 23% of its annual operating expenses.



Membership as of December 2022



Conference attendees gathered during the annual banquet.


98th Annual Meeting

San Antonio, Texas
September 12 - 15, 2022

The 98th Annual Meeting was held in San Antonio, Texas, from September 12-15, 2022, with a total attendance of 292. The number of attendees at the meeting was back to pre-pandemic levels. In addition, there were 19 accompanying guests present. The meeting featured a student poster session, with a record number of 19 posters presented out of 36 submissions. This meeting was the second year in a row with a hybrid format, which allowed attendees to choose whether to participate in-person or virtually. Overall, the 2022 Annual Meeting was a successful event, with a high level of engagement and participation from members and attendees.



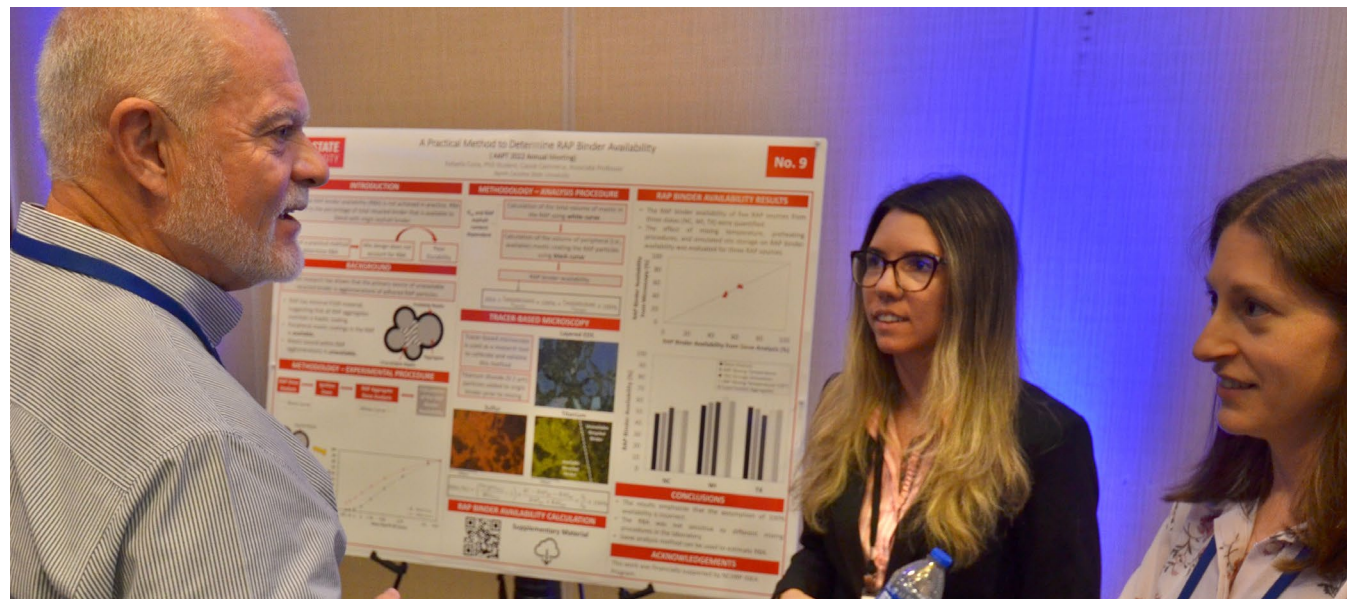
From left to right: Dr. Katie DeCarlo and Dr. Sadie Casillas

292 Total Attendance	207 In-Person	85 Virtual	169 Members	 98th Annual Meeting Photos
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Student Poster Session

As part of engaging the young members and future professionals in the asphalt industry, the AAPT holds a student poster session during each annual meeting. This valuable opportunity for the students to present their ongoing/completed research projects provides them with constructive feedback and comments from professional members based on brief technical discussions during this event.

In 2022, this event engaged a record number of students. The 19 posters presented in the last annual meeting were evaluated by several judges, and the best poster award was presented at the banquet to Sushanth Revelli from Rowan University. Among the 19 posters, there are 9 students who had the chance to present their work at the beginning of the session with a 3-minute elevator pitch on the podium.



From left to right: Mr. Gary Fitts, Ms. Rafaella Fonseca da Costa, and Dr. Cassie Castorena.

Ice Breaker Reception

The icebreaker reception, held on the 1st day of the conference, aimed to create a relaxed and welcoming atmosphere where participants can introduce themselves, engage in casual conversations, and establish connections with fellow attendees.



From left to right: Dr. Shihui Shen, Mr. Jason Moore, Dr. David A. Andersen, Dr. David Mensching, and Ms. Marsha Thompson.

Global Forum



From left to right: Dr. Kim Jenkins, Dr. Alan Carter, Dr. Jean Pascal Planche, Dr. William Buttlar, Dr. Kamilla Vasconcelos, Mr. Brett Williams and Dr. Eshan Dave.

The ISAP Global Forum held during the 98th AAPT Annual Meeting was a significant gathering of industry experts, researchers, and professionals from around the world dedicated to advancing the field of asphalt paving technology. The forum was focused on sustainable materials that lower the global warming potential of asphalt pavements. Dr. Kamilla Vasconcelos presided over the meeting and the speakers included Dr. Alan Carter, Dr. Kim Jenkins, Dr. William Buttlar, Mr. Brett Williams, and Dr. J. P. Planche. The platform provided innovative research presentations, and insightful discussions on the latest developments in sustainable asphalt materials and construction techniques. The presentations were streamed live and were made available to everyone at no cost.

Pavement Inspection Tour

The AAPT organizes an annual pavement inspection tour. On the third day, attendees meet in the lobby and choose between a 5K run or a walk. Afterward, both groups gather for a yearly photo.



Participants in the 2022 pavement inspection tour in San Antonio, Texas.

Awards and Scholarships

Honorary Membership is awarded to individuals selected by the AAPT membership for having outstanding eminence and a long tenure of experience in the practice of asphalt paving technology. The Board of Directors may also select an individual each year to receive the Award of Recognition. This award is given to an individual who has made significant contributions to the field of asphalt paving technology as well as the Association for many years.



Rebecca McDaniel

**Honorary Membership
(2022)**
Awarded Posthumously



Louay Mohammad

**Honorary Membership
(2021)**
Louisiana State University



John D'Angelo

**Honorary Membership
(2020)**
D'Angelo Consulting, LLC



Dale Decker

**Honorary Membership
(2020)**
Dale S. Decker, LLC



Gale Page

**Honorary Membership
(2020)**
King of Asphalt Consulting



Charlena Gray

**Award of
Recognition**
Asphalt Institute

Each year, AAPT awards scholarships to students in support of the goal of increasing the number of scientists and engineers interested in pursuing careers within the asphalt industry. The Board of Directors reviews all applicants, and winners are selected based upon classroom achievement, relevance and strength of non-classroom achievement, relevance and strength of applicant statement, and strength of recommendation letters.

Scholarship opportunities include the Gene and Betty Skok Annual Meeting Awards and technical merit awards. Within the technical merit category, a student may be awarded the Ward K. Parr Scholarship or the Rebecca S. McDaniel Memorial Scholarship. As always, competition amongst applicants for technical merit scholarships was very strong for 2022!



Douglas Mocelin

**Ward K. Parr Late Ph.D.
Level Scholarship**

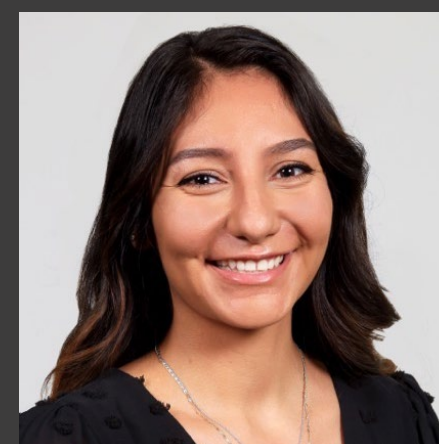
North Carolina State University



Nicole Elias

**Ward K. Parr Early Ph.D.
Level Scholarship**

University of Nevada Reno



Julissa Larios

**Ward K. Parr Masters
Level Scholarship**

University of Nevada Reno



Aaron Leavitt

**Rebecca S. McDaniel
Memorial Scholarship**

Texas A&M University

Activities

Webinars

Polymer-Modified Asphalt: State of the Practice and Applications

01

March
2022

500
Registrants

124
Members

Speakers



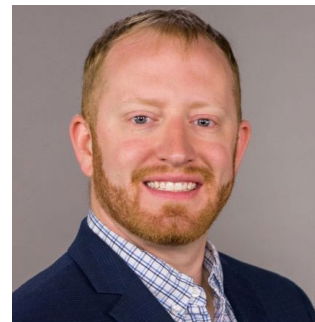
Robert McGennis,
P.E.

Asphalt Technical Manag-
er, HollyFrontier Compa-
nies



Cassie Castorena,
Ph.D.

Associate Professor,
North Carolina State
University



Derek Nener-Plante,
P.E.

Pavement and Materials
Engineer, Federal Highway
Administration



Hamed Majidfard,
Ph.D.

Postdoctoral Fellow, Uni-
versity of Missouri

June
2022

02

Strategies to Improve Pavement Resilience

503
Registrants

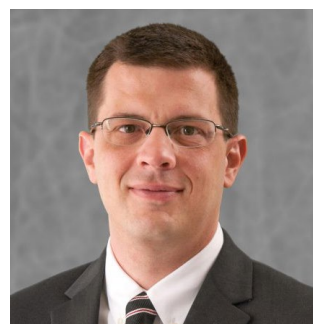
102
Members

Speakers



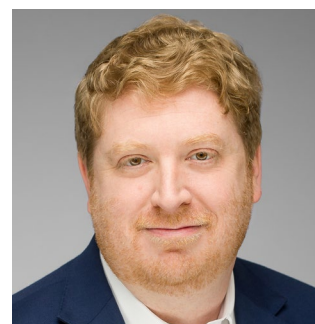
Amir Gotalipour, Ph.D.,
P.E.

Highway Research En-
gineer, Federal Highway
Administration



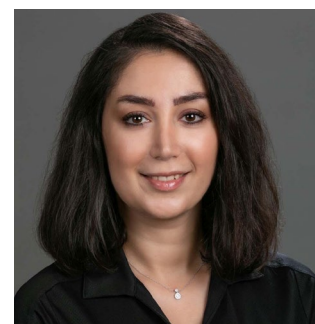
Shane Underwood,
Ph.D.

Associate Professor,
North Carolina State
University



Richard Willis, Ph.D.

Vice President, National
Asphalt Pavement Asso-
ciation



Parnian Ghasemi, Ph.D.

Pavement Engineer,
Kiewit Engineering Group
Inc.

Recent Advances in the Use of Rubber-Modified Asphalt

03

November
2022

247
Registrants

63
Members

Speakers



Doug Carlson

Rubberized Asphalt
Technologist, Liberty Tire
Recycling



Punyaslok Rath, Ph.D.

Assistant Research
Professor, University of
Missouri, Columbia



Harikrishnan Nair, Ph.D.,
P.E.

Associate Principle Re-
search Scientist, Virginia
Transportation Research
Council



Faustina Keuliyen
Rodriguez

Asphalt Engineer, Herit-
age Research Group

March
2023

04

Best Practices During Asphalt Production and Paving

302
Registrants

91
Members

Speakers



Louay Mohammad,
Ph.D., P.E.

Professor, Louisiana Trans-
portation Research Center
and Louisiana State Uni-
versity



Jean-Paul Fort

Director of Pavement En-
gineering and Innovation,
National Asphalt Pave-
ment Association



Leslie Ann Myers, Ph.D.,
P.E.

Senior Pavement Engi-
neer, Federal Highway
Administration



Aaron Leavitt

Associate Research Engi-
neer, Texas A&M Univer-
sity and Texas Transporta-
tion Institute

Activities

Ask-Me-Anything

Conferences 101: Networking and Presenting

01

January
2022

Speakers



Jenna Bowers,
P.E.

Technology Development
Engineer,
Ingevity



Bouzid Choubane,
Ph.D., P.E.

Director of the National
Center of Pavement Pres-
ervation (NCPPI),
Michigan State University



Darren Hazlett,
P.E.

Research Associate,
The University of Texas at
Austin - Center for Trans-
portation Research

April
2022

02

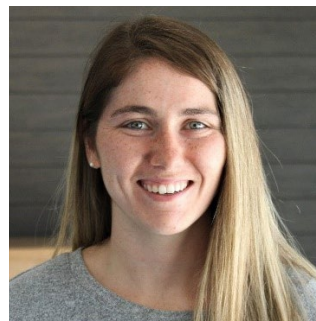
From Orientation to Graduation: How to be
Successful with Graduate Thesis and Publications

Speakers



Elie Hajj,
Ph.D.

Professor,
University of Nevada,
Reno



Katie DeCarlo,
Ph.D.

Senior Pavement Research
Engineer,
Heritage Research Group



Cassie Castorena,
Ph.D.

Associate Professor, North
Carolina State University

How to Have a Successful Conference

03

November
2022

Speakers



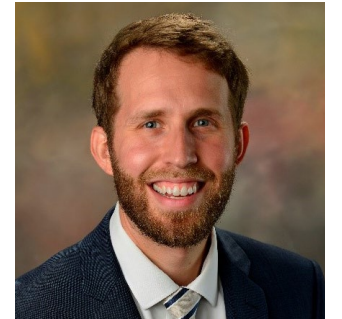
Tanya Nash,
P.E.

Director of Engineering,
Asphalt Testing Solutions
and Engineering



Amy Epps Martin,
Ph.D., P.E.

Professor,
Texas A&M University



Ben Bowers,
Ph.D., P.E.

Assistant Professor,
Auburn University

Student Chapters

The AAPT New Member Committee (NMC) launched in 2022 the Student Chapter initiative with 5 students who volunteered to serve as inaugural leads for 5 local chapters.

The student chapter leaders were distributed around the United States with the aim of creating a strong connection among students to facilitate their engagement and deepen their understanding of AAPT activities and benefits.



Glimpse of the student chapter launching event at Louisiana State University.

Publication

2021 AAPT TRR Sage Papers Published in 2022

Impact of Improved Density on Pavement Design Response for Low-Volume Roads / Non-Primary Roads
Jason Bausano, Phil Blankenship, and Geoff Rowe
<https://doi.org/10.1177/03611981221083310>

Development and Verification of Sample Reduction Method for Rubberized Asphalt Mixtures
Veera Nanugonda, Rahshaun Spears, Paul Curren, Thomas Carter, Ian Broddrick, and Baron Colbert
<https://doi.org/10.1177/03611981221083303>

Recycled Polyethylene (RPE) Modified Asphalt Binders and Mixtures: Performance Characteristics and Environmental Impact
Ibrahim A. Abdalfattah, Walaa S. Mogawer, and Kevin D. Stuart
<https://doi.org/10.1177/03611981211065733>

Data Mining Statewide Department of Transportation Volumetrically Designed Asphalt Mixture Records
Ben Cox, Jonathan Easterling, W, Griffin Sullivan, Alex Middleton, and Isaac Howard
<https://doi.org/10.1177/03611981211061356>

Environmentally Tuning Asphalt Pavements Using Micro-Encapsulated Phase Change Materials
Miguel A. Montoya, Daniela Betancourt, Reyhaneh Rahbar-Rastegar, Jeffrey Youngblood, Carlos Martinez, and John E. Haddock
<https://doi.org/10.1177/03611981211068366>

Short- and Mid-Term Loose Mix Conditioning Protocols for Asphalt Overlay BMD and QC/QA
Fujie Zhou, Walla Mogawer, and Richard Steger
<https://doi.org/10.1177/03611981221083920>

Development of a Performance-Based Approach to Asphalt Emulsion Selection for Cold In-Place Recycling Applications
Sadie Casillas and Andrew Braham
<https://doi.org/10.1177/03611981221082569>

Performance Evaluation of Pelletized Solid Polymer Modified Asphalt Mixtures
Danial Mirzaiyanrajeh, Christopher J. Decarlo, Mohamed Elshaer, Runhua Zhang, Eshan Dave, and Jo Sias
<https://doi.org/10.1177/03611981221083307>

Statistical Analysis Framework to Evaluate Asphalt Concrete Overlay Reflective Cracking Performance
Katie E. Haslett, Eshan Dave, Jo Sias, and Ernst Linder
<https://doi.org/10.1177/03611981221078570>

Examples of Successful Practices with State Implementation of Balanced Design of Asphalt Mixtures
Ellie Hajj, Timothy Aschenbrener, and Derek Nener-Plante
<https://doi.org/10.1177/03611981221084696>

Investigation of IDEAL-CT Device Equivalence: Are All Devices Equal?
Nathan Moore, Richard Steger, Adam Taylor, and Benjamin Bowers
<https://doi.org/10.1177/03611981221091551>

Proposed Changes to Asphalt Binder Specifications to Address Binder Quality-Related Thermally Induced Surface Damage
Michael D. Elwardany, JP Planche, and Gayle King
<https://doi.org/10.1177/03611981211065428>

Toward Better Longitudinal Joints for Asphalt Pavement
Dan Swiertz, Yuan Zhang, Ping Low, and Hussain Bahia
N/A

Chemical and Rheological Characterization of Asphalt Binders: A Comparison of Asphalt Binder Aging to Asphalt Mixture Aging
Peyman Barghabany, Jun Zhang, Louay Mohammad, Samuel Cooper III, and Samuel Cooper Jr.
<https://doi.org/10.1177/03611981211067977>

Balanced Mix Design Benchmarking of Field-Produced Asphalt Mixtures in Maine
Ram Kumar Veeraragavan, Derek Nener-Plante, Leslie Myers McCarthy, Casey Nash, and Nam H. Tran
<https://doi.org/10.1177/03611981211061552>

Balanced Mix Design Benchmarking of Field-Produced Asphalt Mixtures in Maine
Ram Kumar Veeraragavan, Derek Nener-Plante, Leslie Myers McCarthy, Casey Nash, and Nam H. Tran
<https://doi.org/10.1177/03611981211061552>

Relating N_{design} to Field Compaction: A Case Study in Minnesota
Tianhao Yan, Mugurel Turos, Chelsea Bennett, John Garrity, and Mihai Marasteanu
<https://doi.org/10.1177/03611981211065429>

Evaluating Impact of Corrected Optimum Asphalt Content and Benchmarking Cracking Resistance of Georgia Mixtures for Balanced Mix Design Implementation
David Vivanco Sala, Nam Tran, and Fan Yin
<https://doi.org/10.1177/03611981221082547>

Multi-Level Laboratory Performance Evaluation of Conventional and High Polymer Modified Asphalt Mixtures
Jhony Habbouche, Ilker Boz, Brian Diefenderfer, and Sungho Kim
<https://doi.org/10.1177/03611981211056642>

Validation of Performance-Based Specifications for Surface Asphalt Mixtures in Virginia
Jhony Habbouche, Ilker Boz, and Stacey Diefenderfer
<https://doi.org/10.1177/03611981211056639>

Precision Estimates and Statements for Performance Indices from the Indirect Tensile Cracking Test at Intermediate Temperature
Ilker Boz, Jhony Habbouche, Stacey Diefenderfer, and Yusuf K. Bilgic
<https://doi.org/10.1177/03611981211061129>

Publication

2022 AAPT TRR Sage Papers Published in 2023

Short-Term Performance Characterization and Fatigue Damage Prediction of Asphalt Mixtures Containing Polymer-Modified Binders and Recycled Plastics

Fan Yin, Randy West, Buzz Powell, and C.J. DuBois
<https://doi.org/10.1177/03611981221143119>

Comparison of Bond Strength Evaluation Methods between Pavement Layers

Katie Eileen Haslett, Zachary Robinson, and Jason Wielinski
<https://doi.org/10.1177/03611981221141434>

Effect of Binder Chemistry and related Properties on Low Temperature Performance Parameters of Asphalt Binders

Yogesh Kumbargeri
<https://doi.org/10.1177/03611981231155173>

Development of a Laboratory Operations-Friendly Long-Term Loose Mix Aging Protocol for New Asphalt Pavements

Fujie Zhou, Walaa Mogawer, Michael Elwardany, David Mensching, and Enad Mahmoud
<https://doi.org/10.1177/03611981221137595>

A Laboratory Performance and Compositional Evaluation of Bio-Based Recycling Agents

Raquel Moraes
<https://doi.org/10.1177/03611981231157390>

Laboratory Performance Evaluation of Asphalt-Treated Cold Recycled Mixtures Using Existing Practical Tests

Jhony Habbouche, Ilker Boz, Brian K. Diefenderfer, David Jones, and Adam J. T. Hand
<https://doi.org/10.1177/03611981221137591>

Effects of Asphalt Binder Additives and Industrial Fillers on the Mechanical and Functional Properties of Open Graded Friction Course

Hossam Abohamer, Mostafa A. Elseifi, Corey Mayeux, Samuel B. Cooper, III, and Samuel Cooper Jr.
<https://doi.org/10.1177/03611981231152253>

The Oxygen Diffusion Coefficients of Asphalt Mixtures and Their Impacts on Mixture Aging

Xingyu Chen, Yuhong Wang, Yong Wen, Huailei Cheng, and Gengren Hao
<https://doi.org/10.1177/03611981221143117>

Self-Healing Capability and Mechanical Properties of Asphalt Mixtures Prepared with Light Activated Polyurethane Prepolymer Modified Asphalt Binder

Sharareh Shirzad, Ipshit Ibne Idris, Marwawa Hassan, and Louay N. Mohammad
<https://doi.org/10.1177/03611981221138522>

Exploration of Curing Characteristics of Epoxy-Modified Asphalt

Raj Dongre, Adrian Andriescu, Michael Elwardany, David J. Mensching, and Jack Youtcheff
<https://doi.org/10.1177/03611981221150445>

Understanding Bitumen Ageing through Interrelationships and Ageing Ratios

Elaine Simone Goosen, and Kim Jenkins
<https://doi.org/10.1177/03611981221147519>

Moisture Susceptibility of Asphalt Mixtures: Conditioning and Testing Protocols

Moses Akentuna, Jun Liu, Louay N. Mohammadhttps, Sanchit Sachdeva, Samuel B. Cooper, III, and Samuel B. Cooper
<https://doi.org/10.1177/03611981221147214>

Upcoming Events

2023 Annual Meeting and Technical Sessions



Annual Meeting
September 25-28, 2023
San Diego, California
at the Westin Gaslamp Quarter



Register today at
asphalttechnology.org



In Person and Virtual Options



Networking Opportunities:
Social Events
Annual Banquet
Ice Breaker Reception



Technical Information:
Data Science Applications in Asphalt Technology
Additives for Sustainable Asphalt Pavements
Lessons Learned from Long-term Case Studies



Meetings:
New Members
Current Members
President's Report

www.facebook.com/asphalttech

www.linkedin.com/groups/3731100/

<https://twitter.com/asphalttech>


AAPT Centennial Celebration

The AAPT family will celebrate the 100-year anniversary of the organization from January 2024 through September 2024, culminating in a special Annual Meeting to be held on September 9-12, 2024 in Chicago, Illinois, where the story began. Stay tuned for more information as it becomes available!


— Become a Member —

THE VALUE OF AAPT MEMBERSHIP


The Association of Asphalt Paving Technologists is committed to providing members with resources and opportunities for communicating with fellow professionals and staying up-to-date on the latest developments in the asphalt paving industry.




INFORMATION
Expand your knowledge with access to the latest industry research, cutting-edge technologies and concepts.



COMMUNITY
Become involved in an international community that represents all disciplines of the industry.




JOURNAL
Receive the AAPT Journal of technical papers, discussion and conference proceedings.



NETWORK
Connect with colleagues and build relationships through annual meetings and events.

Contact an AAPT member or visit asphalttechnology.org to learn more.





GET IN TOUCH



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