



## BOARD OF DIRECTORS MEETING

### Open Session Agenda

Sunday, June 22, 2025 | 1:30 – 5:30 pm MST (UTC-07:00)

Sheraton Phoenix Downtown | Phoenix Ballroom CDE (3)

<https://ashrae.webex.com/ashrae/j.php?MTID=me69d1ba19d2cc9afcf347a6d5dffdcb>

Meeting Number: 2342 070 7981 | Meeting Password: SundayBOD

**1. CALL TO ORDER – Knight**

**2. VALUE STATEMENT – Knight**

*In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.*

Code of Ethics - <https://www.ashrae.org/about/governance/code-of-ethics>

Core Values - <https://www.ashrae.org/about/ashrae-s-core-values>

Diversity Statement - <https://www.ashrae.org/about/diversity-equity-and-inclusion-dei>

**3. ROLL CALL/INTRODUCTIONS – Knight**

**4. REVIEW OF MEETING AGENDA – Knight**

**5. APPROVAL OF MINUTES**

A.\* May 28, 2025

**6. OPEN SESSION – Addresses to the Board of Directors**

**7. REPORT OF THE TREASURER - McQuade**

A. FY24-25 Financial Status and FY25-26 Budget Presentation

B. Finance Committee Report and FY25-26 Budget Approval

C.\* Dashboards & Financial Statements – Activity thru May 2025

**8. PRESIDENTIAL AD HOC COMMITTEE AND TASK GROUP REPORTS**

A.\* ASHRAE HQ Ad Hoc – Darryl Boyce

**9. COMMITTEE REPORTS**

A. Executive Committee – Knight

i. June 21, 2025

B. Planning Committee – Abellon (Trent Hunt)

C. Nominating Committee – Ginger Scoggins

D. Audit Committee - Sanders

10. **BOD SUBCOMMITTEE REPORTS**
  - A. DEI Advisory – Hanson
11. **DOE RECI GRANT PROGRESS UPDATE - Littleton**
12. **OLD BUSINES**
  - A.
13. **NEW BUSINESS**
  - A.
- 14.\* **REPORT OF THE PRESIDENT - Knight**
15. **RECOGNITION OF OUTGOING CHAIRS – Knight**
16. **RECOGNITION AND REMARKS FROM OUTGOING BOD MEMBERS – Knight**
17. **EXECUTIVE SESSION (Separate Agenda)**
18. **INFORMATION ITEMS**
  - A.\* Appointments Update – Vacancies Filled Since January 2025
19. **UPCOMING MEETINGS**

***Annual Meeting***  
Wednesday, June 25, 2025 | 2:00 – 6:00 pm MST | Phoenix Ballroom CDE (3)

***BOD Annual Meeting Dinner***  
Wednesday, June 25, 2025 | 6:30 – 8:30 pm MST | Mancuso’s – 201 E. Washington St.
20. **ADJOURNMENT**

\*Indicates Attachment



## MINUTES

## BOARD OF DIRECTORS MEETING

Wednesday, May 28, 2025

Note: These draft minutes have not been approved and are not the official record until approved by the Board of Directors.

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## PRINCIPAL APPROVED MOTIONS

Board of Directors Meeting

Wednesday, May 28, 2025

No. - Pg.	Motion
1 - 2	Minutes from the February 9, 2025, February 12, 2025, and April 2, 2025 open session BOD meetings be approved.
2 - 2	Approve the proposed membership model restructuring plan as presented by the Membership Model Ad Hoc Committee to be implemented by the 2027-2028 Society Year.
3 - 5	<p>Technology Council recommends that the Board of Directors approve the following changes to Rule of the Board, 1.201.009, ASHRAE Policy on Standards and Guidelines that Address Smoking Space:</p> <p>1.201.008 ASHRAE Policy on Standards and Guidelines that Address <del>Smoking Spaces where Smoking is Allowed.</del></p> <p><u>ASHRAE standards and guidelines that address ventilation or indoor air quality in their purpose shall not prescribe ventilation rates in smoking spaces or claim to provide acceptable indoor air quality be consistent with ASHRAE's Position Document on Environmental Tobacco Smoke, When Technology Council determines the need for substantial revision to the Position Document, it may grant a temporary waiver of this rule until the revision is completed.</u></p>
4 - 6	<p>Technology Council recommends to the Board of Directors that the Procedures for ASHRAE Standards Action (PASA), <i>Definitions</i>, be revised as shown below:</p> <p>User: A member who represents the interest of those that purchase or use materials, products, systems, or services <del>other than for household use</del> covered in the project scope.</p>
5 - 6	The Board DEI Subcommittee recommends to the ASHRAE Board of Directors that we approve the responses included in ATTACHMENT B, to be used as needed by all standing committees.
6 - 7	The Board DEI Advisory Subcommittee recommends to the ASHRAE Board of Directors that Jai Calloway of Calloway Consultants be approved as interim Professional Consultant. See ATTACHMENT C.



**MINUTES**  
**BOARD OF DIRECTORS MEETING**  
Wednesday, May 28, 2025

**MEMBERS PRESENT:**

Dennis Knight, President  
Bill McQuade, President-Elect  
Sarah Maston, Treasurer  
Devin Abellon, Vice President  
Wade Conlan, Vice President  
Ken Fulk, Vice President  
Chandra Sekhar, Vice President  
Jeff Littleton, Secretary  
Charles Bertuch, Region I DRC  
Matt Archey, Region III RMCR  
Bryan Holcomb, Region IV DRC  
Jim Arnold, Region V DRC  
Susanna Hanson, Region VI DRC  
Scott Peach, Region VII DRC  
Joe Sanders, Region VIII DRC

Jonathan Smith, Region IX DRC  
Buzz Wright, Region X DRC  
Rob Craddock, Region XI DRC  
John Constantinide, Region XII DRC  
Cheng Wee Leong, Region XIII DRC  
Mahroo Eftekhari, Region XIV DRC  
Richie Mittal, Region XV DRC  
Bassel Anbari, RAL DRC  
Carrie Brown, DAL  
Doug Cochrane, DAL  
Blake Ellis, DAL  
Patrick Marks, DAL  
Corey Metzger, DAL  
Heather Schopplein, DAL  
Wei Sun, DAL  
David Yashar, DAL

**GUESTS PRESENT:**

Ashish Rakheja  
Trent Hunt  
Andres Sepulveda  
Heather Platt-Gulledge  
Julia Timberman  
Michael Pouchak

Maggie Moninski  
Jason Alphonso  
Ching Loon Ong  
Pankaj Dharkar  
Steve Kujak  
Daniel Nall

**STAFF PRESENT:**

Candace Denton, Sr. Manager - Board Services  
Chandrias Jolly, Manager - Board Services  
Vanita Gupta, Director – Marketing  
Rhannon Masterson – Interim Director – Member Services  
Mark Owen, Director - Publications & Education  
Kirstin Pilot, Director - Development  
Stephanie Reiniche, Director - Technology  
Craig Wright, Director of Finance

Daniel Gurley, Sr. Manager - Membership  
Tony Giometti, Group Mgr. – Conference Programs  
Selina Parks, Manager – Conference Services

**CALL TO ORDER**

The meeting was called to order at 9:00 am.

**VALUE STATEMENT**

Mr. Knight read the value statement and advised that the full code of ethics, core values and diversity statements were available online.

**ROLL CALL/INTRODUCTIONS**

Roll call was conducted; members, guests, and staff were in attendance as noted above.

**REVIEW OF MEETING AGENDA**

Mr. Knight reviewed the meeting agenda. 'Wildfires and Access to Wildfire Standards' was added to *New Business*.

The group was advised that Matt Archey, Region III RMCR, was representing Region III in Ms. Abbott-Adkins' absence and would voice but no vote.

**APPROVAL OF MINUTES**

It was moved and seconded that

1. Minutes from the February 9, 2025, February 12, 2025, and April 2, 2025 open session BOD meetings be approved.

**MOTION 1 PASSED** (Unanimous Voice Vote, CNV).

**REVIEW OF ACTION ITEMS**

The one open action item was reported as complete.

**POSTPONED MOTION**

Mr. Knight reported that the motion that was recommended by the MMAH and postponed on February 9, 2025 had satisfied the mandatory cooling off period and was coming back before the BOD for further discussion and vote.

2. Approve the proposed membership model restructuring plan as presented by the Membership Model Ad Hoc Committee to be implemented by the 2027-2028 Society Year.

Mr. Fulk reported that all comments and questions submitted to the MMAH following the February 9<sup>th</sup> meeting were satisfied.

He reported that two subcommittees of the MMAH were created. The first focused on drafting proposed Bylaws amendments and worked with the Chair and Vice Chair of SRC. This group completed its work. The second subcommittee focused on developing the member value proposition and was chaired by Mr. Austin. The value proposition subcommittee was still working and the recommendations from that subcommittee would be presented to the BOD at the Phoenix BOD meeting.

The floor was opened for additional comments and questions.

It was asked if the dues amounts shown in the report were illustrative. Would Finance Committee still set dues each fall?

Mr. Fulk confirmed that was correct.

It was asked when the proposed changes would be implemented. Mr. Fulk reported that, if approved, the changes would be implemented in Society Year 2027-28.

Mr. Littleton advised that the motion on the floor would require a 2/3 majority vote of the BOD because it is a major organizational change and would have a fiscal impact.

**MOTION 2 PASSED (28:0:0, CNV)**

Mr. Knight thanked Mr. Fulk and the MMAH for their great work. He thanked RAL for bringing the issue to the attention of the BOD at the BOD meeting in Turkey. He also thanked the BOD for their input and engagement. He expressed that a thoughtful body of work would move forward for the membership's consideration next spring.

Mr. Fulk expressed appreciation for the BOD's vote and shared his excitement at seeing the recommendations move forward.

Mr. Littleton suggested that thought should go into how the approved motion is discussed and presented prior to vote by the full membership in the spring.

There was discussion of Mr. Littleton's suggestion. A summary of that discussion is below:

*Need to be thoughtful moving forward because the recommendations are not final until approved by the membership. Suggest developing an overview ahead of announcing that there will be a vote by the membership in spring 2026.*

*Don't see a problem releasing this as part of updates at the CRCs and advise that the membership still needs to vote.*

*Members should at least be advised that the recommendation will be on the ballot.*

*Suggest including as part of election informational material. For example, "the BOD has approved this recommendation for vote by the membership and would like to educate the membership on what will be voted on."*

*Not saying something makes it seem like a secret. In the absence of fact, opinion will reign.*

*The BOD needs to be transparent so standing committees can prepare.*

*Suggest providing a message or script so BOD members can be in unison about why changes were made; specifically regarding changes to Life Members.*

*Mr. Knight reported that changes would not be retroactive and would not impact members who are already Life Members.*



**FINANCE COMMITTEE****FY24-25 MAJOR VARIATIONS**

Ms. Maston reported that the major variations were a forecast of where Society is anticipated to end the Society Year. The major variations were attached to the agenda and shown on screen.

**FY25-26 BUDGET PRESENTATION**

Ms. Maston reviewed the draft budget presentation. The presentation was attached to the agenda and was shown on screen.

She reported that Finance Committee will make final edits and clean up the budget before it is presented to the BOD for final approval in Phoenix.

She reported that increased dues appear on the budget as a carryover from dues increases in prior years; this increase will be less than if a dues increase had been approved for next Society Year. The impact of dues appear as a half year impact because renewals are continual. Dues impact is calculated assuming flat membership numbers.

**FY25-26 DRAFT BUDGET**

Ms. Maston reviewed the draft budget which was attached to the agenda and shown on screen.

Mr. Littleton reported that grant income was offset by payments to sub-contractors. Hypothetically, if Society loses the grant, the impact would be less than what is shown because of those offset costs. The bottom-line impact would be \$350,000.

Ms. Maston reported that the draft budget was running at a deficit of around \$60,000.

Mr. Wright reported that the CEBD budget would increase the deficit budget by \$50,000. Some of the CEBD budget would be pulled from reserves but some would come from the operating budget as well.

Mr. Littleton reported that all other factors being equal, the budget will be in net deficit of around \$110,000.

Ms. Maston reported that when the BOD voted to not increase dues for SY2025-26, there was consensus to pull the budget deficit from reserves. She expressed her opinion that drawing from reserves to achieve a balanced budget was not a long-term solution.

It was reported that the proposed dues increase would have generated an additional \$100,000 in revenue. Dues revenue is recorded in 1/12 increments every month and increased dues are experienced across multiple years. Similarly, the result of not increasing dues is experienced across multiple years.

Mr. McQuade expressed his opinion that a deficit budget and a draw from reserves to cover operating expenses was not what reserves are designed for; reserves should be used for one-time expenses. He suggested that a balanced budget, or a very close to balanced budget, be developed each year and that it was the BOD's fiscal responsibility to do so.

Mr. Littleton offered for staff to take a hard look at the budget and provide recommendations to get to a balanced budget. Ms. Mason responded that not increasing dues was a BOD decision and stated that

the BOD should be more proactive. She stated that all BOD members needed to look at the budget to identify areas where adjustments can be made.

She reported that the draft budget did not include council level requests related to the roll out or implementation of the new strategic plan.

It was asked if the budget typically included placeholders to fund new strategic plan initiatives. Mr. Littleton reported that in recent history, placeholders have not been used if specific line items were not requested by the councils.

Clarification on the DRC travel was requested. Mr. Littleton reported that the \$60,000 line item represented the cumulative impact of all DRC travel to CRCs. He reported that the amount shown was what has been budgeted historically.

It was stated that members ask BOD members frequently what the plan is for the Society's large reserves. It was suggested that reserves could dwindle because of market fluctuations and would be better spent on current needs of the Society.

Clarification on the Future Fund was requested. Ms. Maston reported that rollovers to the Future Fund were not automatic. After another full Society Year, funds in reserves in excess of the 2/3 requirement would be considered to be rolled into the Future Fund. Moving forward, draft budgets will include a line item with a recommended amount to be deposited into the Future Fund.

Mr. Knight thanked the BOD for the thoughtful discussion. He suggested that the Finance Committee should be allowed to take the BOD's comments into consideration and work to provide a balanced budget.

### **TECHNOLOGY COUNCIL REPORT**

Mr. Conlan reported on behalf of the Council. The full report was attached to the agenda and shown on screen.

Mr. Conlan moved that

3. Technology Council recommends that the Board of Directors approve the following changes to Rule of the Board, 1.201.009, ASHRAE Policy on Standards and Guidelines that Address Smoking Space:

1.201.008 ASHRAE Policy on Standards and Guidelines that Address Smoking Spaces where Smoking is Allowed.

ASHRAE standards and guidelines that address ventilation or indoor air quality in their purpose shall not prescribe ventilation rates in smoking spaces or claim to provide acceptable indoor air quality be consistent with ASHRAE's Position Document on Environmental Tobacco Smoke. When Technology Council determines the need for substantial revision to the Position Document, it may grant a temporary waiver of this rule until the revision is completed.

Background on the motion was shown on screen and was attached to the agenda.

There was no discussion.

**MOTION 3 PASSED** (Unanimous Voice Vote, CNV).

Mr. Conlan moved that

4. Technology Council recommends to the Board of Directors that the Procedures for ASHRAE Standards Action (PASA), *Definitions*, be revised as shown below:

User: A member who represents the interest of those that purchase or use materials, products, systems, or services ~~other than for household use~~ covered in the project scope.

There was no discussion.

**MOTION 4 PASSED** (Unanimous Voice Vote, CNV).

Mr. Conlan reviewed information items from the report; they were shown on screen and attached to the agenda.

He reported that the annual EHC *Trends and Research Gaps* report was attached to the agenda and is included in ATTACHMENT A. He requested BOD members assist in providing council and committee chairs and vice chairs with a copy of the report.

**DEI ADVISORY SUBCOMMITTEE REPORT**

Ms. Hanson reported on behalf of the subcommittee. The full report was attached to the agenda and shown on screen.

Ms. Hanson moved that

5. The Board DEI Subcommittee recommends to the ASHRAE Board of Directors that we approve the responses included in ATTACHMENT B, to be used as needed by all standing committees.

Ms. Hanson reported that part of the development process for the talking points was circulating them to the BOD for review and comment. Talking points were revised to address comments received from BOD members.

She stated that the talking points were not meant to be a Society position document and were not meant to be posted verbatim online. The intent behind the talking points was to provide a unified message for BOD members to present, in various settings, when questions come up.

There was some discussion of the original intent of the talking points and the ideal mode of circulation and dissemination.

It was reported that the talking points were developed in response to questions relating to Society's stance on DEI and DEI initiatives. The intended strategy was for the talking points to be developed for use by BOD members to address common or anticipated questions from members.

It was suggested that the talking points could be shared at the grassroots level as there were chapter leaders being asked the same types of questions.

It was suggested that, in the spirit of openness and transparency, the talking points could be distributed at the BOD's discretion.

**MOTION 5 PASSED (28:0:1, CNV).**

Mr. Yashar abstained.

Ms. Hanson moved that

6. The Board DEI Advisory Subcommittee recommends to the ASHRAE Board of Directors that Jai Calloway of Calloway Consultants be approved as interim Professional Consultant. See ATTACHMENT C.

Ms. Hanson reported that the subcommittee would like to hire a consultant to operationalize DEI Chairs in a way that is ASHRAE centric. The cost to hire and retain a consultant was included in the subcommittee's budget.

It was asked if there had been communication between MP and the subcommittee to ensure consistency. Ms. Hanson reported that the subcommittee had a liaison from the MP Committee. One of the goals of hiring the consultant was to facilitate calls with regional DEI chairs. Having the consultant facilitate the calls, which did not happen consistently this Society Year, would take the burden off volunteers.

She reported that the consultant will provide guidance on what group the DEI Chairs should report to.

There was discussion of the consultant reviewing staff hiring practices as well. Mr. Littleton suggested that volunteer and staff initiatives be kept separate. He stated that he was very confident that Society's hiring practices were in compliance with US Federal guidelines.

**MOTION 6 PASSED (28:0:1, CNV).**

Mr. Yashar abstained.

Ms. Hanson reported that information items were included in the report for the BOD's review.

Mr. Knight thanked Ms. Hanson and the subcommittee for keeping this important work moving forward.

**NEW BUSINESS****WILDFIRES AND ACCESS TO WILDFIRE STANDARDS**

Mr. Craddock reported that 302 wildfires were burning in four Canadian provinces, with many starting mandatory evacuations. When California was impacted by wildfires, free versions of Standard 44 were available online for free download. He requested that the same be done in response to the Canadian wildfires.

Mr. Littleton stated that there was no reason that applicable Standards could not be made available online for free download.

Ms. Gupta reported that there was a dedicated wildfire resources page where access to the free downloads would also be posted.

There was no objection.

**2025-26 PRESIDENTIAL APPOINTMENTS****IEQ HUB STRATEGIC EVALUATION PRESIDENTIAL AD HOC**

Mr. McQuade reported that the IEQ Hub Strategic Evaluation Ad Hoc was organized to investigate a comprehensive approach while meeting proper IEQ requirements. He reported that the fiscal impact would be a one-day planning meeting at the Annual Conference.

**FUTURE OF ASHRAE CONFERENCES PRESIDENTIAL AD HOC**

Mr. McQuade reported that a staff presentation on the future of ASHRAE Conferences was previously made to the BOD. That presentation was also attached to the agenda. This ad hoc would continue the work started by staff.

**PEAC/TRAC STREAMLINING**

Mr. McQuade reported that Ms. Keen offered to streamline PEAC/TRAC processes. He reported that she will be compiling a list of members who participated in past PEACs and TRACs to assist with the effort. There was no cost associated with this effort.

**UPCOMING MEETINGS**

Mr. Knight reviewed the meeting dates and times for the BOD meetings at the Annual Conference in Phoenix.

**ADJOURNMENT**

The meeting adjourned at 11:13 am without objection.

Jeff Littleton

Jeff H. Littleton, Secretary

**ATTACHMENTS:**

- A. Trends and Research Gaps Report
- B. DEI Talking Points and Script
- C. Calloway Consultants Proposal

# Emerging Trends and Research Gaps in Environmental Health

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Spring 2025

## An Environmental Health Committee Report to ASHRAE Technology Council

This report is prepared as a part of the MBO's assigned to Environmental Health Committee. Based on the feedback from the members of the EHC a list of recent trends and research gaps in the environmental health field and their impact on HVAC&R industry was prepared.

### Microplastics as a source of particulate matter

Microplastics are an emerging environmental contaminant found in air, water, soil, and biota. Despite rising concern over their potential health and ecological impacts, the absence of standardised methods for sampling and analysis remains a major barrier to understanding their distribution, abundance, and effects. Current techniques vary widely depending on the sample matrix, particle size, and study objectives, with methods including enzymatic digestion, spectroscopic analysis, forensic fiber techniques, and thermal decomposition.

No single analytical approach is suitable for all environmental conditions, and even similar sample types may require different processing depending on characteristics such as particle density or organic content. Given this complexity, harmonization—rather than full standardization emerges as a more achievable short-term objective. Harmonization focuses on using consistent reporting units, quality control protocols, and transparent documentation of analytical procedures.

This allows data comparability across studies and supports monitoring of spatial and temporal trends in microplastic pollution. It supports future regulatory standards, particularly in sectors such as water treatment and public health. Collaborative method development and shared best practices will be essential to advance the field.

### Chlorine flushing as a source of chloroform

Chloroform, a volatile disinfection byproduct formed during the chlorination of water, is now recognised as an indoor air pollutant of concern. Recent studies have shown that routine use of chlorinated water in homes—particularly during activities like showering, washing, or cooking—can release chloroform into the indoor environment through volatilisation. This process can be intensified during chlorine flushing of water distribution systems, a standard maintenance practice aimed at ensuring water safety. Studies show

indoor chloroform concentrations may exceed outdoor levels by up to tenfold, posing potential inhalation risks.

Evidence suggests that chloroform emissions during residential water use are not only common but also underreported. In some cases, indoor exposure may surpass that from drinking water ingestion. Elevated concentrations have also been documented in facilities using chlorinated water, such as swimming pools and laundries. As concern grows over indoor air quality, chloroform emissions from municipal water treatments and household activities represent an emerging trend in environmental health research, highlighting the need for better ventilation strategies and exposure risk assessments.

## **Wildfires**

Recent research highlights the varying health impacts of particulate matter (PM) produced by wildfires, depending on the materials burned. While vegetation fires generate organic carbon particles, wildfires that consume buildings, vehicles, and other urban infrastructure release more complex and potentially more hazardous pollutants. These may include heavy metals, volatile organic compounds, and synthetic chemicals not typically present in natural biomass.

This variability in composition suggests that not all wildfire smoke poses equal health risks. In urban-interface fires, the inhalation of toxic combustion products may have more severe respiratory and systemic health effects compared to exposure to smoke from forested areas. As climate change increases both the frequency and scale of wildfires, understanding the source-specific toxicity of emitted particulate matter is becoming a critical area of public health research and regulatory concern.

## **Using Disability Adjusted Life Years for justifying and setting standards**

Over the past few decades, the field of public health has developed a unified metric of harm called the Disability Adjusted Life Year, or DALY, that includes both quality of life lost to illness or disease and life lost to premature death. DALYs are now the standard metric for evaluating public health programs, international aid, and government regulations. IEQ researchers and ASHRAE standards committees are now starting to use DALYs in their work. DALYs solve two problems for us:

First, DALYs can help justify IEQ standards. We can show that improving IAQ prevents harm, i.e. 'purchases' life and health, for a good price compared to other health regulations. This is true even in situations where improved standards are not profitable for business owners.

Second, DALYs can be used to make better standards. At minimum, we can use them to set thresholds based on the harm that a contaminant would cause. The cutting edge of standards, as demonstrated in the revised 62.2 Standard, is to define good IEQ as

minimizing the total harm caused, and create a 'harm budget' that the environment cannot exceed.

## Sensors

In 2025, the deployment of real-time air quality monitoring devices within buildings is becoming standard practice for new, and existing, buildings (during renovations). The combination of real-time monitoring, smart ventilation, and predictive modeling is a game-changer for indoor and outdoor air quality management. With open data platforms aggregating sensor data, it also enhances transparency and public awareness. These devices, when integrated with smart ventilation systems, can provide tenants with assurance of a healthy indoor environment. These advancements will directly impact building regulations, sustainability initiatives, or tenant well-being.

The integration of real-time data collection and advanced modelling techniques is revolutionizing the scope of air quality monitoring. With the proliferation of open data platforms and networks of sensors deployed across urban and rural areas, it is now possible to compile live measurements from numerous devices. These datasets feed into sophisticated models that provide a comprehensive understanding of air quality over a large area. Such developments empower governments, researchers, and the public with the ability to track pollution levels dynamically, to predict air quality trends, and to develop effective mitigation strategies. New research using the data obtained from sensors will enhance understanding and use of controls, and will enable building owners to control the indoor environmental quality in their buildings. Sensor accreditation, currently underway at the American Industrial Hygiene Association Laboratory Accreditation Program (AIHA LAP), will become important since there is currently no formal, recognized process to validate the performance of direct-reading sensor devices. This validation will potentially undermine the health and safety of the individuals they intend to protect.

Sensor networks are increasingly being integrated with artificial intelligence (AI) platforms. These systems combine real-time data with predictive modelling, occupancy patterns, and weather forecasts to optimize building operations. However, concerns remain over algorithm transparency, data privacy, and the real-world validation of AI tools. Formal testing protocols and performance standards are needed to ensure health and safety are not compromised.

As these technologies develop, collaboration between environmental health researchers, building engineers, and AI specialists will be essential to ensure that both sensor data and AI systems support healthier indoor environments.

## Heat Stress

Rising global temperatures are increasing the frequency and severity of heatwaves, with significant implications for vulnerable populations indoors. While thermal comfort and



temperature thresholds are well established in building design, there is growing interest in early biomarkers of physiological heat stress, particularly in settings such as schools, care homes, and hospitals.

Heat shock proteins (HSP70, HSP90) are consistently upregulated in response to elevated core body temperature and cellular stress. They are detectable in blood, saliva, and potentially urine, and rise before clinical symptoms appear. Their use as early warning indicators is well supported by studies in occupational and athletic settings. Other markers—such as cortisol, inflammatory cytokines (IL-6, TNF- $\alpha$ ), and oxidative stress indicators—may complement this molecular profile, offering a fuller picture of subclinical stress during heat events.

There is an opportunity to integrate physiological screening with environmental monitoring. A pilot study could track HSP70 levels in children or elderly individuals during a heatwave, alongside hydration, symptoms, and indoor environmental data. This could support the development of heat stress risk tools for caregivers, enabling targeted interventions before occupants become clinically unwell.

These developments underline the need for better integration between building performance metrics and occupant health monitoring, especially as climate change intensifies thermal exposure risks indoors.

## **Novel Airborne Diseases**

Health agencies are increasingly focused on several emerging airborne disease threats. A key concern is the recent mutation of avian influenza A (H5N1), with cases in North America showing changes that could increase transmissibility to humans. Risk remains low, but pandemic potential requires ongoing monitoring.

Human metapneumovirus (HMPV), a respiratory virus similar to RSV, is also drawing attention due to rising cases in China and the U.S. Although seasonal, spikes in infections and severity—particularly among children and older adults—suggest the need for enhanced surveillance.

In Central Africa, an unidentified illness dubbed ‘Disease X’ has raised alarm. This illness affects primarily young children, and the symptoms include fever, cough, and severe anemia. Its cause and transmission route remain unknown, but potential airborne spread is under investigation.

Finally, the World Health Organization has revised its definitions of airborne transmission to better guide responses to both familiar and novel pathogens. Together, these developments reflect growing concern about the adaptability of respiratory viruses, underscoring the importance of early detection, global coordination, and preparedness for future outbreaks.

## Fungal Pathogens and Indoor Risk

*Candida auris* is an emerging fungal pathogen of global concern. Since its first identification in 2009, *C. auris* has caused difficult-to-control outbreaks in hospitals across five continents, including in several EU countries. Spain and the UK have reported hundreds of cases, many linked to nosocomial transmission in intensive care settings. *C. auris* is often resistant to multiple antifungal drug classes and can persist on surfaces and equipment, making it highly suited to healthcare environments.

Recent research supports the hypothesis that *C. auris* emerged from environmental origins, potentially accelerated by global warming. Wild-type isolates from the Andaman Islands differ genetically and phenotypically from clinical strains—showing slower growth at mammalian temperatures and lower antifungal resistance. This supports the idea that thermal adaptation, in response to rising global temperatures, allowed *C. auris* to cross the endothermy barrier (the high body temperature of mammals and birds restricts many fungal species, making them less likely to cause infections) and become pathogenic to humans.

In the EU, outbreaks have demonstrated the organism's potential for rapid intra- and inter-facility spread. Laboratory misidentification, limited decolonization strategies, and persistent environmental contamination all contribute to outbreak difficulty. The ECDC recommends targeted infection control measures, including screening, isolation, and rigorous disinfection with fungicidal agents. Many member states have yet to fully implement surveillance systems or reference laboratory capacity.

The emergence of *C. auris* highlights a broader concern: fungal pathogens with environmental reservoirs and high thermal tolerance may become increasingly common in buildings. Indoor environments that serve vulnerable populations—especially hospitals and care homes—should monitor emerging fungal risks as climate trends, antifungal use, and healthcare practices continue to evolve.

## Second Hand Emissions from Non-Tobacco Sources

Second-hand exposure to smoke from non-tobacco sources, such as marijuana and hookah, is now an emerging health concern. While tobacco smoke is known for indoor air pollution and health risks, recent studies show that marijuana smoke may produce even higher levels of fine particulate matter (PM<sub>2.5</sub>). Some studies indicate that second-hand marijuana smoke can emit over three times more PM<sub>2.5</sub> than tobacco cigarettes, raising concerns about respiratory and cardiovascular risks for bystanders, particularly in poorly ventilated spaces.

Similarly, hookah use generates substantial second-hand smoke exposure. A single smoking session can emit significant quantities of pollutants including carbon monoxide, volatile organic compounds, and particulates. Despite the water filtration process, emissions from hookah smoke still contain harmful substances that can linger in indoor environments, affecting non-users nearby.

These findings challenge the perception that non-tobacco smoking is less harmful and point to a need for updated health policies. As social and legal norms around marijuana and hookah evolve, understanding and addressing second-hand exposure risks is becoming more important for indoor air quality management and health protection.

## **Tradeoffs between De-carbonization, Energy Efficiency, and Indoor Environmental Quality**

Balancing sustainability goals with indoor environmental quality (IEQ) is an emerging challenge in building design and environmental health. De-carbonization and energy efficiency measures are accelerating, but they do not always align with efforts to protect occupant health. This tension is increasingly recognized and reflected in phrases such as '*Sustainability Without Compromise*', '*Healthy Energy Efficiency*', and '*Energy-Efficient IAQ*'.

Despite this attention, frameworks to evaluate and manage trade-offs between energy use, carbon reduction, and indoor environment quality remain limited. Progress will be difficult without clear principles that prioritize human health within sustainability targets. Collaboration between environmental health researchers, building scientists, and policymakers is needed to develop standards that safeguard both planetary and human health.

## **Talking Points and Script**

### **Executive Summary**

ASHRAE is a merit- and science-based organization. The technology and consensus we develop are better when we include many perspectives and encourage meaningful participation.

ASHRAE maintains its core values. Diversity, equity and inclusivity are part of our values and support our mission and vision.

ASHRAE's mission is to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields.

ASHRAE is global. The non-U.S. portion of our membership is growing; currently it's over 30%.

ASHRAE's vision is a healthy, sustainable built environment for all.

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### **Enhancing our Mission as a Global Society**

As a global organization, ASHRAE's strength grows when we collaborate across borders, backgrounds and perspectives. Embracing DEI is critical to addressing challenges in the HVAC&R industry, including workforce development and overcoming staffing shortages. Together we build consensus and provide solutions for global issues.

Advancing DEI ensures we attract and retain top talent from all walks of life. This is essential for sustaining ASHRAE's position as a leading engineering society. It allows us to advance in the field of technology and helps to build a sustainable world. It reinforces our commitment to supporting a diverse and skilled membership that reflects the world we serve.

### **Embracing Diversity is a Commitment to Excellence**

Having diverse teams, committees and membership has been shown to be advantageous and outperform homogenous ones through broader perspectives, better problem-solving and increased creativity. This commitment supports ASHRAE's long-standing reputation for rigorous consensus building and technical excellence.

ASHRAE is a leader in setting standards across the Built Environment and HVAC&R industry. ASHRAE develops merit and performance within ASHRAE and the broader industry by educating, credentialing and developing technical products, so that all related industries can benefit from an equitable, level playing field and well-trained employees.

When selecting members for volunteer positions, the mantra we follow is “the office seeks the person”. This means that there is no campaigning for positions. Only qualified individuals are considered; ASHRAE has a vast pipeline to develop the necessary skills to succeed as a volunteer leader.

### **Equity Reflects ASHRAE’s Core Values**

Respect is one of ASHRAE’s core values, and our support of equity reflects that. By fostering respectful, inclusive environments, we create a culture where all members, regardless of age, gender, ethnicity, physical appearance, thought styles, religion, nationality, socioeconomic status, belief systems, sexual orientation or education can thrive and contribute to ASHRAE’s mission.

ASHRAE sponsors meaningful and thoughtful use of our volunteers’ expertise through programs such as community sustainability projects in conjunction with the annual and winter conferences. Most of the projects target underserved communities and spotlight the value that our volunteers bring while inspiring more people to improve the built environment. Our volunteers work with Engineers Without Borders to bring simple, sustainable energy and water upgrades to remote communities without the resources for maintaining complicated systems.

### **Inclusion Makes ASHRAE a Better Organization**

ASHRAE strives to promote a sense of belonging. One of ASHRAE's most successful initiatives resulted in Member Resource Groups (MRGs). Two established MRGs are Young Engineers in ASHRAE and Women in ASHRAE. Two new MRGs were started in 2024-2025: New Members and Professionals with Young Families. These groups build community, enhance professional development and discover unmet needs. This leads to a stronger sense of belonging and identity within our organization.

### **Short Messages Inspired by the Member Survey**

#### **1. Why is ASHRAE committed to Diversity, Equity, and Inclusion?**

ASHRAE's commitment aligns with our core values of integrity, respect, and collaboration. We believe that fostering a diverse and inclusive environment enhances our ability to develop innovative solutions for the built environment. By embracing diverse perspectives, we strengthen our Society and better serve our global community.

#### **2. How does DEI contribute to ASHRAE’s mission?**

As an apolitical, global organization, ASHRAE focuses on technical excellence and innovation. DEI contributes to this mission by bringing together varied experiences and viewpoints, which are essential for addressing engineering challenges worldwide. Our inclusive approach ensures that we remain a leader in developing sustainable solutions for diverse communities.

### **3. Is this a political initiative within ASHRAE?**

No, ASHRAE maintains our commitment to our core values and the recognition that inclusivity enhances our professional environment. By promoting diversity and equity, we aim to create a welcoming space for all members, which in turn fosters collaboration and innovation.

### **4. What action has ASHRAE taken within the organization?**

ASHRAE established a Board DEI Advisory Subcommittee to identify and address barriers to inclusion. This group focuses on developing programs and policies that support underrepresented groups, ensuring equitable opportunities across all levels of the Society. Additionally, ASHRAE encourages chapters to engage in initiatives appropriate for the diverse communities they serve. ASHRAE's Member Resource Groups (MRGs) such as the Young Engineers in ASHRAE (YEA), Women in ASHRAE, New Members and Professionals with Young Families, build community, enhance professional development and uncover diverse perspectives.

### **5. How does ASHRAE integrate DEI into its operations?**

ASHRAE is committed to continuously evaluating and adapting our policies and practices. ASHRAE provides resources and training to support inclusive practices and encourages feedback from members to identify areas for improvement. By embedding DEI into our organizational framework, we strive to maintain an environment where all members can thrive.





J. CALLOWAY CONSULTANTS

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BOD OPEN SESSION INU ES 2025 AY 28

# DIVERSITY, EQUITY & INCLUSION

## Strategic Implementation Proposal

May 9

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24



# Overview

## Introduction

We are pleased to submit this proposal to support the implementation and operationalization of DEI-informed, mission-driven programs that advance **IDEAS**—Innovation, Diversity, Equity, Access, and Sustainability. With extensive experience in DEI consulting and a proven track record of driving equity through people-centered policies, leadership engagement, and strategic execution, our team is well-equipped to partner with ASHRAE in embedding DEI into the core of its mission: to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

Our approach is designed to translate DEI principles into actionable strategic implementation and programs that strengthen ASHRAE's organizational culture, enhance representation across the engineering and HVAC industry, and ensure long-term, inclusive impact for the Society and the communities it serves.

We encourage you to review this proposal and offer amendments or revisions that you feel are appropriate to help us better support you.



# About Us

J. Calloway Consultants (JCC) is a boutique firm dedicated to assisting corporations, academic institutions, agencies, NGO's and non-profits redefine the way people work together by harnessing the power of difference. We offer innovative, customized solutions to meet the distinct needs of our clients across all sectors. Our specialized expertise in tailored DEI strategy development and implementation, organizational culture enhancement, and training and development is designed to address unique challenges while prioritizing the human element at the core of our services.

We believe in enhancing your organizational culture, uniquely tailored to reflect your mission-driven values. We prioritize creating bespoke, people-centered strategies that drive meaningful, lasting change. Our methodology centers on these four core pillars:

## **People-Centered Solutions:**

We're dedicated to fostering an environment that deeply appreciates and fully integrates every individual. By championing equitable practices and inclusive policies, we lay the groundwork for a culture that genuinely embraces diversity.

## **Learning and Development:**

Commitment to continuous education, skill enhancement, and leadership alignment is paramount. By investing in education and development programs, we equip individuals and teams with the necessary skills, resources, and tools to effectively serve and contribute to the broader communities you serve.

## **Strategic Alignment and Sustainability:**

Recognizing that cultural development is a continuous journey, we prioritize the ongoing assessment and enhancement of our strategies to ensure they remain responsive to your organization's evolving needs. This approach enables us to consistently align our efforts with your strategic priorities, embedding your core values into the design and delivery of programs and initiatives that drive lasting impact.

# Our Proposed Approach

*Based on insights gathered during our initial discovery call, we propose the following approach to effectively assess your organization's capacity to advance and operationalize DEI strategic programming across all areas. Upon completion of this engagement, subsequent phases—focused on strategic integration, implementation, and the development of DEI-aligned programs and policies—may be further refined to support long-term impact and sustainability.*

## **Phase 1: Discovery & Alignment**

Objective: Understand ASHRAE's current DEI Advisory Subcommittee recommendations, internal readiness, and strategic mission alignment.

### **Key Activities:**

- Conduct a DEI Baseline Assessment (policy review, demographic analysis, programmatic assessments of all regional chapters.
- Interview key stakeholders (ASHRAE staff, Society members, Board of Directors)
- Assess alignment between DEI and the organization's mission, values, and technical goals.
- Deliver a DEI Strategic Implementation Readiness Report that includes a SWOT analysis and roadmap implementation plan.

### **Deliverables:**

- DEI Strategic Implementation Readiness Report

### **Timeline:**

- 6-8 weeks

# Projected Costs

Engagement Details	Cost
Phase 1	\$5,000
Administrative Fees	\$2,500
Training and Facilitation *optional	\$3,500
<b>Total</b>	<b>\$7,500</b>

*\*Projected costs do not include consultant travel.*

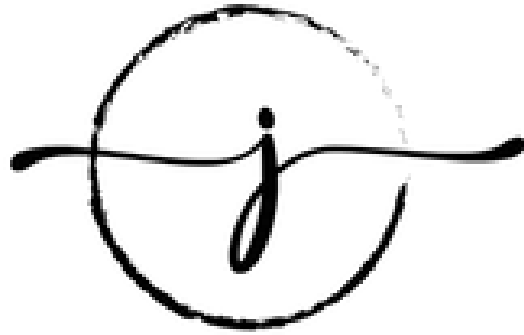
# | Consultant Bio



**Jai Calloway, JD**

Jai McBride Calloway is the Founder and Principal Consultant of J. Calloway Consultants. has over 15 years of experience as a change maker and people strategist empowering organizations toward culture transformation and equitable workplace environments through strategy development and programmatic implementation. Jai is known for her unique approach to reimagining business models by centering on people-centric strategic frameworks. She blends her experience in alternative dispute resolution methodology, diversity and inclusion, and organizational development to provide equitable solutions to highly complex organizational issues. In addition to founding J. Calloway Consultants, LLC, a boutique firm dedicated to helping organizations create equitable, inclusive, and high-performing workforce cultures, Jai proudly serves on multiple civic boards, and works as a trusted executive advisor.

Jai earned a Bachelor of Science in Sociology from the University of New Mexico, a Master of Science in Public Affairs from Texas Southern University, a Juris Doctor from South Texas College of Law, and a Master of Law in Dispute Resolution with a focus on cross-cultural conflict and advanced mediation from Pepperdine Caruso School of Law.



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Thank you for your consideration.

[www.jaicalloway.com](http://www.jaicalloway.com)  
[info@jaicalloway.com](mailto:info@jaicalloway.com)

## **General Fund Dashboard and Treasurer's Report Legend**

### **General Fund Dashboard**

#### **Top section of General Fund Dashboard**

Total General Fund Only Operating Results for the last year to date (on the left) and the current year to date (on the right). The bar graph consists of:

- Budgeted Revenue
- Revenue
- Budgeted Expense
- Expenses
- Budgeted Net Operating Results
- Actual Net Operating Results

In addition, the bar graph is stacked and color coded based on each of the Councils. The numerical representation is immediately below the bar graphs and is also color coded consistent with the bar graph.

#### **Bottom section of General Fund Dashboard**

Operating results for the last year to date and current year to date for Members, Publishing/Education, and Technology Councils. Includes the same categories as above including the Margin.

### **Treasurer's Report**

#### **Costs per Member**

Expenses – (Total **General Fund Only** Expenses Less Non-Dues Revenue)/Rolling 12-month period

Members (Total and Full Dues Paying) – Current totals for both

#### **Composition of Assets**

Cash – Cash in operating bank accounts

ST Inv. – Short-Term Investments – consists of interest-bearing assets such as U.S. Treasury Bills, Money Market Accounts, Certificates of Deposit, etc. with maturities less than 12 months.

Prop & Eq – Property and Equipment/Fixed Assets – Depreciable assets such as the HQ Building, Computers, IT network equipment, furniture/fixtures, etc. with various useful lives.

Inventory – Products on hand at our third-party distribution facility available for sale.

Prepays – Expenses paid for goods/services in advance of the actual service/completion date.

#### **YTD Consolidated Revenue and Expenses – Pie Charts**

Both General and Research fund results combined through the month ended displayed

#### **General and Research Fund – Bar Graphs**

Operations – Net Operating results year to date through the month ended displayed

Reserve Fund – Investment Reserve Fund balance as of the month end displayed



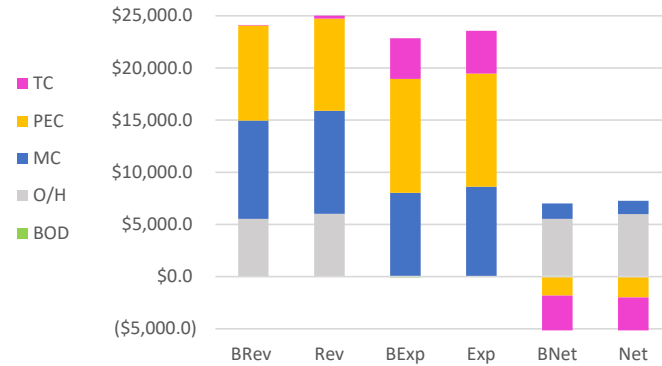
## General Fund Dashboard

For the Eleven Months Ending May 2025

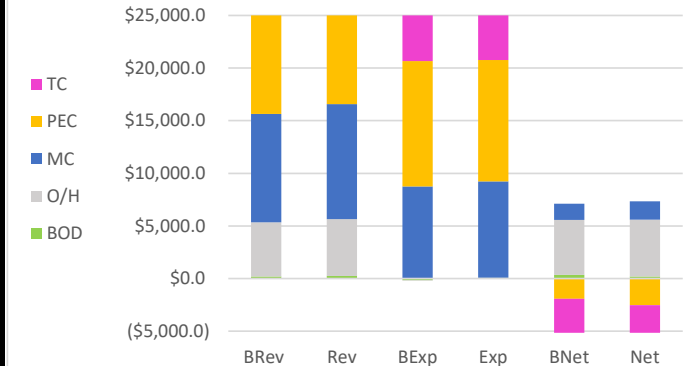
### LEGEND:

**BRev** = Budgeted Revenue;  
**Rev** = Actual Revenue;  
**BExp** = Budgeted Expenses after OH&BOD;  
**Exp** = Actual Expenses after OH&BOD;  
**BNet** = Budgeted Net (BRev less BExp);  
**Net** = Actual Net (Rev less Exp);  
**LYTD** = Last Fiscal Year to Date;  
**YTD** = Current Fiscal Year to Date;  
**Diff** = Difference between LYTD and YTD, either percentage or dollars. **Data source** = Financial statements (roll-ups for BOD, Overhead, MC, PEC, TC ). Values =

### Last Year to Date - GENERAL (Fund 2)



### Current Year to Date - GENERAL (Fund 2)



### Last Year To Date

GENERAL (Fund 2)	BOD	O/H	MC	PEC	TC	TOTAL
BRev	\$8.5	\$5,520.2	\$9,440.3	\$9,108.2	\$31.4	\$24,108.6
Rev	\$60.6	\$5,960.5	\$9,867.5	\$8,839.7	\$323.1	\$25,051.4
BExp	(\$78.2)	\$67.2	\$7,956.8	\$10,932.6	\$3,900.0	\$22,778.4
Exp	\$1.8	\$12.0	\$8,607.6	\$10,839.3	\$4,099.1	\$23,559.8
BNet	\$86.7	\$5,453.0	\$1,483.5	(\$1,824.4)	(\$3,868.6)	\$1,330.2
Net	\$58.8	\$5,948.4	\$1,260.0	(\$1,999.6)	(\$3,776.0)	\$1,491.6

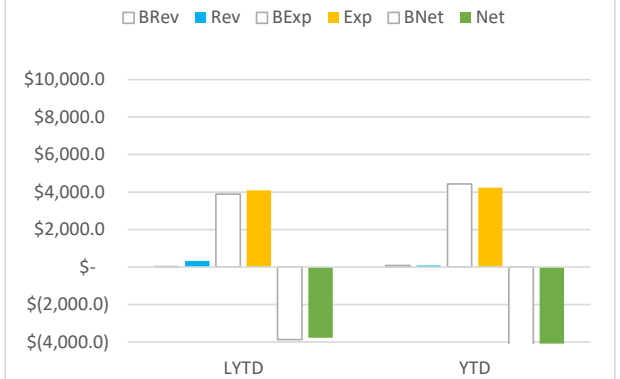
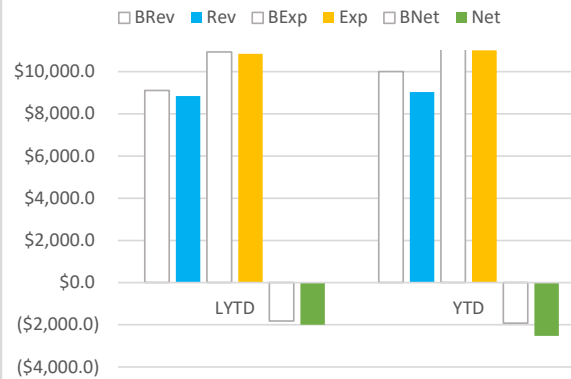
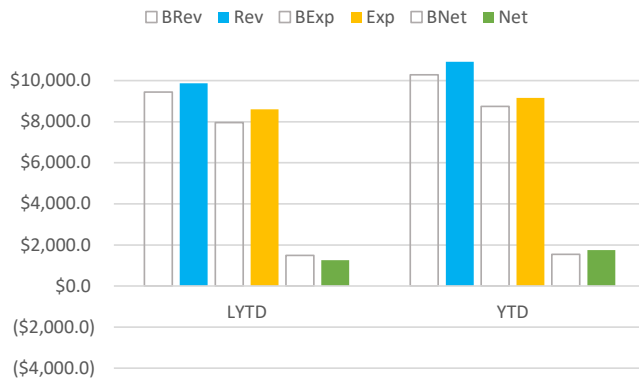
### Current Year To Date

BOD	O/H	MC	PEC	TC	TOTAL
\$207.9	\$5,147.2	\$10,277.8	\$9,998.4	\$75.1	\$25,706.6
\$244.2	\$5,407.3	\$10,912.0	\$9,032.2	\$84.4	\$25,680.1
(\$146.8)	(\$63.3)	\$8,742.9	\$11,919.7	\$4,433.4	\$24,886.0
\$60.9	(\$0.4)	\$9,158.6	\$11,557.0	\$4,227.4	\$25,003.6
\$354.7	\$5,210.6	\$1,534.9	(\$1,921.3)	(\$4,358.3)	\$820.6
\$183.3	\$5,407.7	\$1,753.4	(\$2,524.9)	(\$4,143.0)	\$676.5

## Members Council

## Publishing and Education Council

## Technology Council



Item	LYTD	YTD	Diff v LY
BRev	\$9,440.3	\$10,277.8	9%
Rev	\$9,867.5	\$10,912.0	11%
BExp	\$7,956.8	\$8,742.9	10%
Exp	\$8,607.6	\$9,158.6	6%
BNet	\$1,483.5	\$1,534.9	\$51.4
Net	\$1,260.0	\$1,753.4	\$493.4
Margin	12.8%	16.1%	3.3%

Item	LYTD	YTD	Diff v LY
BRev	\$9,108.2	\$9,998.4	10%
Rev	\$8,839.7	\$9,032.2	2%
BExp	\$10,932.6	\$11,919.7	9%
Exp	\$10,839.3	\$11,557.0	7%
BNet	(\$1,824.4)	(\$1,921.3)	(\$96.9)
Net	(\$1,999.6)	(\$2,524.9)	(\$525.3)
Margin	-22.6%	-28.0%	-5.3%

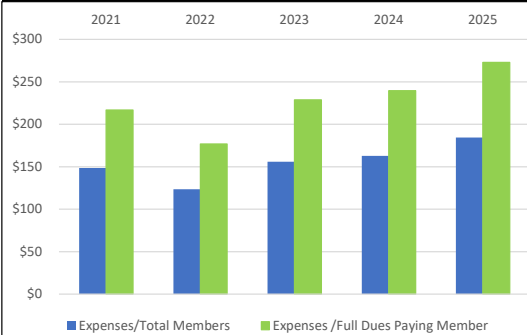
Item	LYTD	YTD	Diff v LY
BRev	\$31.4	\$75.1	140%
Rev	\$323.1	\$84.4	-74%
BExp	\$3,900.0	\$4,433.4	14%
Exp	\$4,099.1	\$4,227.4	3%
BNet	(\$3,868.6)	(\$4,358.3)	(\$489.7)
Net	(\$3,776.0)	(\$4,143.0)	(\$367.0)
Margin	-1168.7%	-4908.8%	-3740.1%



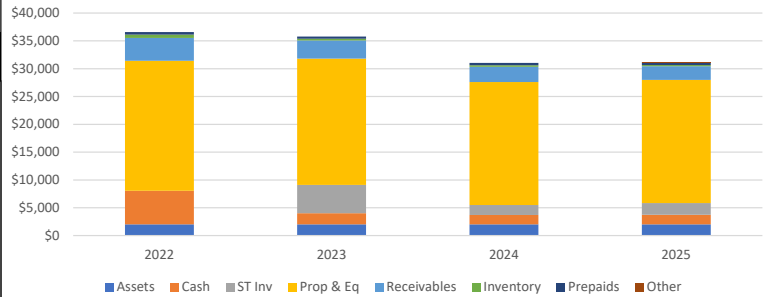
## Treasurer's Report

Eleven Months Ending May 2025  
All funds in USD ('000)

Costs Per Member {Paid and Not Paid} (Net of Non-Dues Revenue)  
For the Twelve Months Ending May 31

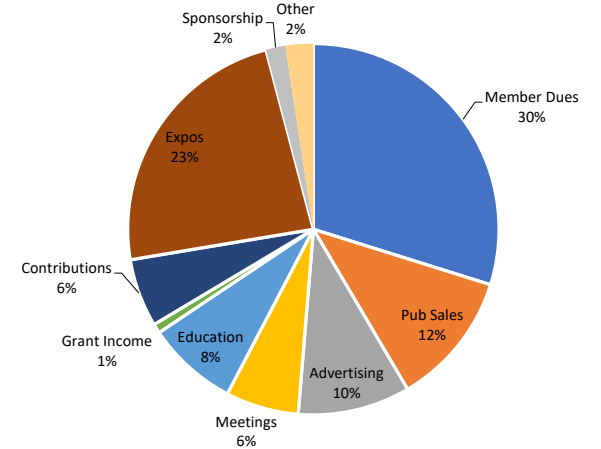


## Composition of Assets (Excludes Inv. Reserve Funds)

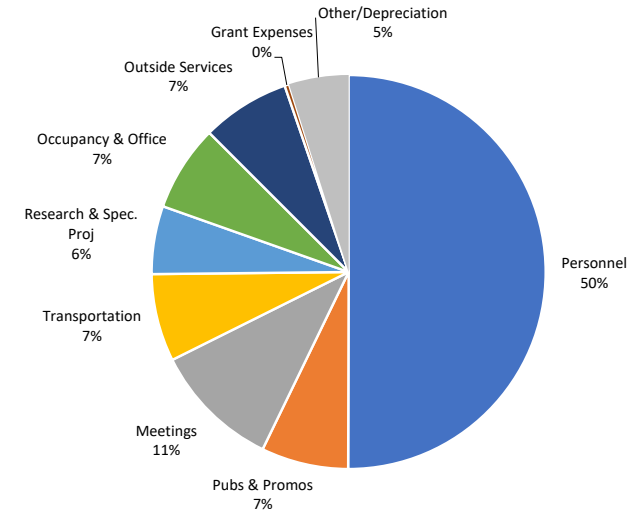


Assets	Cash	ST Inv	Prop & Eq	Receivables	Inventory	Prepaids	Other
2022	6,027	-	23,363	4,113	617	448	-
2023	1,983	5,111	22,692	3,254	320	396	-
2024	1,664	1,803	22,101	2,736	288	438	-
2025	1,725	2,097	22,148	2,456	213	524	0

## 2025 YTD Consolidated Revenue (\$28,645)



## 2025 YTD Consolidated Expenses (\$27,672)



## General Fund



## Future Fund



## Research Fund





ASHRAE  
GENERAL RESEARCH FUNDS  
Balance Sheets  
Saturday, May 31, 2025

	5/31/2025	One Year Ago 5/31/2024	Two Years Ago 5/31/2023	Three Years Ago 5/31/2022	Four Years Ago 5/31/2021
Cash	\$1,724.9	\$1,663.7	\$1,982.6	\$6,026.9	\$6,286.9
Cash Equivalents	2,097.3	1,803.3	5,111.2	0.0	0.0
Marketable Securities at Market Value	34,380.7	30,586.6	21,286.7	19,550.3	20,556.4
Accounts Receivable	1,299.0	1,055.0	1,071.4	1,333.0	1,079.4
Less: Allowance for Uncollectable Accounts	(375.2)	(351.3)	(328.6)	(349.0)	(204.0)
Contribution Pledge Receivables	1,500.0	2,002.0	2,508.0	3,043.8	4,484.0
Miscellaneous Receivables & Deposits	31.9	30.3	3.4	84.9	11.0
Inventory	213.4	288.3	320.3	617.0	632.6
Prepaid Expense	523.6	438.3	395.9	447.5	913.6
Property and Equipment-Remaining Value	22,147.8	22,101.4	22,691.8	23,362.9	23,640.7
Due To (From) Other Funds	0.1				
<b>TOTAL ASSETS</b>	<b>63,950.6</b>	<b>59,488.4</b>	<b>55,104.7</b>	<b>55,378.8</b>	<b>58,038.5</b>
Accounts Payable & Accrued Expenses	5,040.7	3,686.5	3,906.0	3,514.1	3,703.0
Refundable Advances	22.2	22.2	13.3	22.6	13.6
Loans					8,742.9
Deferred Income	6,437.7	6,393.8	5,842.6	5,567.3	5,060.7
<b>TOTAL LIABILITIES</b>	<b>11,907.7</b>	<b>9,973.3</b>	<b>9,823.9</b>	<b>10,365.5</b>	<b>18,158.1</b>
Net Assets Beginning of Year	49,343.3	45,490.9	42,547.7	41,204.9	35,580.5
Net Assets -Surplus/(Deficit) for Current Yr	2,699.6	4,024.2	2,733.1	3,808.4	4,299.9
<b>TOTAL LIABILITIES &amp; NET ASSETS</b>	<b>63,950.6</b>	<b>59,488.4</b>	<b>55,104.7</b>	<b>55,378.8</b>	<b>58,038.5</b>
<b>NET ASSETS TO DATE</b>	<b>52,042.9</b>	<b>49,515.1</b>	<b>45,280.8</b>	<b>45,013.3</b>	<b>39,880.4</b>

**ASHRAE**  
**ASHRAE CONSOLIDATED**  
For the Eleven Months Ending Saturday, May 31, 2025

A	B	C	D		E	F	G	H	I	J	K
Fiscal YTD Through Month of May					TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget		Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025		FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
				<b>REVENUES</b>							
\$7,889.3	\$7,655.4	\$8,545.4	\$8,266.1	31 Membership Dues	\$7,865.7	\$8,108.7	\$8,642.7	\$9,324.6	\$9,024.6	\$9,545.0	\$9,700.0
3,375.2	3,526.2	3,350.6	3,539.6	32 Publication Sales	3,383.5	3,757.8	3,680.4	3,764.5	4,063.6	3,938.2	3,888.2
2,192.1	2,234.1	2,112.0	2,220.0	34 Advertising Income - Print	2,313.4	2,084.3	2,315.5	2,152.1	2,343.0	2,175.5	2,175.5
951.5	957.0	689.9	1,152.0	34 Advertising Income - Non-Print	1,178.8	849.3	1,049.0	875.0	1,250.0	875.0	900.0
1,720.1	1,591.6	1,821.7	1,516.5	35.1 Meetings/Conferences Registration	1,453.9	2,005.8	2,368.0	2,504.2	2,217.9	2,656.7	2,445.1
315.9	267.1	398.6	327.0	35.2 Certification Registration	227.2	276.0	356.7	420.0	350.0	450.0	450.0
1,809.7	1,892.4	1,875.2	1,802.9	35.3 Education Registration	1,777.2	1,889.7	2,018.2	2,120.2	2,040.0	2,217.5	2,217.5
		234.5	861.0	36 Grant Income				268.3	939.2	910.8	940.1
75.0				37 Special Project Income	73.9	20.0	75.0				
1,372.0	1,013.1	1,346.6	1,222.6	38 Contribution Income	2,092.6	2,108.2	2,170.4	2,002.1	2,011.5	2,072.9	2,131.1
6,817.3	6,400.0	6,737.3	6,500.0	41.1 AHR Exposition Income	5,397.6	6,179.8	6,817.3	6,737.3	6,500.0	7,100.0	7,200.0
165.4	138.7	355.9	311.7	41.2 Contributions and Matching Gifts	165.5	136.9	165.4	361.2	322.0	354.1	337.0
232.0	225.0			41.3 Exposition Income - Other Countries	34.3	102.2	232.0			450.0	60.0
266.7		336.8	119.2	44 Reserve Transfers		155.1	266.7	397.5	410.0	1,646.0	290.0
327.4	299.6	484.5	482.4	46 Sponsorship Income	151.7	217.3	360.8	603.0	527.0	560.0	561.9
489.2	536.7	356.3	244.5	46 Miscellaneous Income	415.0	458.4	557.6	473.6	379.0	360.3	388.6
<b>27,998.8</b>	<b>26,736.9</b>	<b>28,645.3</b>	<b>28,565.5</b>	<b>TOTAL REVENUES</b>	<b>26,530.3</b>	<b>28,349.5</b>	<b>31,075.7</b>	<b>32,003.6</b>	<b>32,377.8</b>	<b>35,312.0</b>	<b>33,685.0</b>
				<b>EXPENSES:</b>							
9,511.0	9,665.9	10,639.0	10,524.2	51 Salaries	9,118.6	9,834.9	10,554.2	11,550.4	11,402.1	11,973.5	12,361.3
2,856.7	2,664.5	3,208.5	3,253.7	52 Payroll Taxes, Benefits, Personnel	2,628.4	2,906.2	3,151.6	3,468.4	3,556.4	3,770.0	3,931.9
951.2	1,090.7	955.4	1,056.2	61 Publishing	1,507.5	1,356.4	1,194.1	1,189.3	1,280.6	1,330.1	1,309.6
1,094.5	1,242.5	1,023.6	1,146.3	62 Promotion (All Depts)	1,102.1	1,041.6	1,215.0	1,206.1	1,297.2	1,254.1	1,262.0
2,075.4	1,732.3	2,237.8	1,894.3	64 Meetings/Conferences	2,265.9	2,203.1	2,837.5	3,025.6	2,665.9	3,141.6	2,927.0
547.2	639.8	654.0	612.5	64 Education Courses/Trainings	529.3	614.9	621.8	729.8	700.5	729.3	719.3
2,134.5	1,739.3	1,989.3	1,926.5	66 Travel	951.0	2,186.6	2,585.4	2,440.6	2,344.8	2,552.0	2,444.5
189.2	140.5	182.9	154.6	68 Awards, Certif, Logo Cost of Goods Sold	234.5	233.7	205.8	147.3	156.8	157.1	153.4
1,050.2	1,717.0	1,337.3	1,631.9	71 Research Projects & Grants	744.0	1,100.1	938.2	1,798.3	2,083.7	3,063.5	2,197.6
244.6		24.9		73 Special Projects	21.2	149.8	244.6	24.9			
49.3	68.8	33.9	50.5	76 Public Relations	41.5	53.2	67.2	58.6	70.8	72.9	72.9
828.3	820.5	820.1	820.7	78 Occupancy & Insurance	699.3	803.4	918.8	909.1	912.2	871.1	826.3
1,023.4	1,212.9	1,138.8	1,343.3	82 Office Expense and Organizational Dues	1,165.7	1,224.7	1,233.9	1,586.7	1,502.7	1,620.6	1,684.1
2,115.4	2,012.8	2,004.0	1,760.0	84 Outside Services	1,987.2	1,848.7	2,378.1	2,435.8	2,214.2	2,675.8	2,216.6
		102.1	504.0	84 Grant Expenses				131.0	549.9	549.8	549.8
663.3	700.2	617.4	679.1	88 Other Expenses	959.7	787.9	697.0	632.6	733.6	766.6	780.7
722.2	798.8	703.5	819.8	90 Depreciation	912.9	888.8	786.2	766.3	897.7	770.0	730.0
0.0	8.2		(0.4)	91 Allocation of Overhead & BOD			0.0	0.0	0.1	0.0	
<b>26,056.4</b>	<b>26,254.7</b>	<b>27,672.5</b>	<b>28,177.2</b>	<b>TOTAL EXPENSES</b>	<b>24,868.8</b>	<b>27,234.0</b>	<b>29,629.4</b>	<b>32,100.8</b>	<b>32,369.2</b>	<b>35,298.0</b>	<b>34,167.0</b>
1,942.4	482.2	972.8	388.3	SURPLUS (DEFICIT) before reserve income	1,661.5	1,115.5	1,446.3	(97.2)	8.6	14.0	(482.0)
	500.0		500.0	91.5 Contributions - HQ Building	47.9	2.0		500.0	500.0	500.0	500.0
				91.6 Interest Expense - HQ	26.0						
		406.4	450.0	91.8 PPP Loan Forgiveness	2,009.3						
				92 Non-Recurring Expenses				406.4	450.0		
				Reserve Investment Income:							
2,348.6	416.8	2,469.9	801.8	95 Investmt Income - Reserves (net of exp)	(2,347.0)	1,980.8	2,672.9	874.7	874.7	901.0	901.0
(266.7)	(220.0)	(336.8)		96 Transfer Reserves Portion Used Currently		(155.1)	(266.7)	(280.0)	(280.0)	(288.4)	(288.4)
2,081.9	196.8	2,133.1	801.8	Remaining Reserve Investment Income	(2,347.0)	1,825.7	2,406.2	594.7	594.7	612.6	612.6
<b>4,024.3</b>	<b>1,179.0</b>	<b>2,699.5</b>	<b>1,240.1</b>	<b>OVERALL SURPLUS (DEFICIT) after reserve i</b>	<b>1,345.7</b>	<b>2,943.2</b>	<b>3,852.5</b>	<b>591.1</b>	<b>653.3</b>	<b>1,126.6</b>	<b>630.6</b>

**ASHRAE**  
**GENERAL (Fund 2)**  
**For the Eleven Months Ending Saturday, May 31, 2025**

Fiscal YTD Through Month of May				TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget	Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025	FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
<b>REVENUES</b>										
\$7,731.4	\$7,502.6	\$8,374.5	\$8,101.0	\$7,708.1	\$7,946.8	\$8,469.8	\$9,144.3	\$8,844.3	\$9,354.6	\$9,506.0
3,375.2	3,526.2	3,350.6	3,539.6	3,383.5	3,757.8	3,680.4	3,764.5	4,063.6	3,938.2	3,888.2
2,192.1	2,234.1	2,112.0	2,220.0	2,313.4	2,084.3	2,315.5	2,152.1	2,343.0	2,175.5	2,175.5
951.5	957.0	689.9	1,152.0	1,178.8	849.3	1,049.0	875.0	1,250.0	875.0	900.0
1,720.1	1,591.6	1,821.7	1,516.5	1,453.9	2,005.8	2,368.0	2,504.2	2,217.9	2,656.7	2,445.1
315.9	267.1	398.6	327.0	227.2	276.0	356.7	420.0	350.0	450.0	450.0
1,809.7	1,892.4	1,875.2	1,802.9	1,777.2	1,889.7	2,018.2	2,120.2	2,040.0	2,217.5	2,217.5
		234.5	861.0				268.3	939.2	910.8	940.1
75.0				73.9	20.0	75.0				
82.4	37.6	52.2	28.8	83.9	92.7	83.1	34.4	43.8	41.0	36.0
6,817.3	6,400.0	6,737.3	6,500.0	5,397.6	6,179.8	6,817.3	6,737.3	6,500.0	7,100.0	7,200.0
(1,334.6)	(1,361.3)	(1,144.1)	(1,188.3)	(1,334.5)	(1,363.1)	(1,334.6)	(1,138.8)	(1,178.0)	(1,145.9)	(1,163.0)
232.0	225.0			34.3	102.2	232.0			450.0	60.0
266.7		336.8	119.2		155.1	266.7	397.5	130.0	456.0	
327.4	299.6	484.5	482.4	151.7	217.3	360.8	603.0	527.0	560.0	561.9
489.3	536.7	356.3	244.5	415.0	458.4	557.7	473.6	379.0	360.3	388.6
<b>25,051.4</b>	<b>24,108.6</b>	<b>25,680.0</b>	<b>25,706.6</b>	<b>22,864.0</b>	<b>24,672.1</b>	<b>27,315.6</b>	<b>28,355.6</b>	<b>28,449.8</b>	<b>30,399.7</b>	<b>29,605.9</b>
<b>EXPENSES:</b>										
9,069.8	9,096.5	10,159.2	9,939.5	8,549.0	9,261.7	10,067.9	10,917.0	10,768.8	11,371.2	11,741.0
2,729.0	2,500.5	3,065.2	3,083.5	2,500.1	2,747.7	3,013.8	3,280.1	3,371.9	3,582.8	3,737.0
935.6	1,084.2	949.1	1,049.6	1,503.2	1,345.5	1,178.5	1,182.5	1,273.8	1,323.1	1,302.6
1,091.3	1,232.3	1,021.0	1,141.7	1,097.8	1,040.7	1,211.8	1,195.6	1,286.7	1,243.3	1,251.2
2,032.2	1,715.6	2,216.8	1,875.5	2,260.6	2,186.1	2,788.8	3,004.7	2,644.9	3,120.0	2,905.5
547.2	639.8	654.0	612.5	529.3	614.9	621.8	729.8	700.5	729.3	719.3
2,021.5	1,613.0	1,892.8	1,849.4	915.5	2,089.2	2,452.4	2,343.3	2,247.4	2,451.8	2,344.3
112.5	101.7	117.2	138.6	177.1	152.0	108.2	131.1	140.6	140.4	136.8
2.2	8.7	154.3	173.9	160.5	332.9	2.2	174.7	174.7	175.0	180.0
244.6		24.9		21.2	149.8	244.6	24.9			
49.2	68.5	33.9	50.2	41.5	53.1	67.0	58.3	70.5	72.6	72.6
828.3	820.5	820.1	820.7	699.3	803.4	918.8	909.1	912.2	871.1	826.3
1,009.7	1,149.8	1,125.6	1,276.3	1,145.7	1,212.7	1,220.0	1,516.6	1,432.6	1,548.4	1,611.9
2,115.4	2,012.8	2,004.0	1,760.0	1,987.2	1,848.7	2,378.1	2,435.8	2,214.2	2,675.8	2,216.6
		102.1	504.0				131.0	549.9	549.8	549.8
615.7	647.8	571.3	621.3	909.0	738.6	633.7	552.8	653.8	684.4	698.5
722.2	798.8	703.5	819.8	912.9	888.8	786.2	766.3	897.7	770.0	730.0
(566.5)	(712.0)	(611.8)	(830.6)	(740.9)	(733.8)	(623.7)	(900.9)	(899.3)	(923.4)	(935.3)
<b>23,559.9</b>	<b>22,778.5</b>	<b>25,003.2</b>	<b>24,885.9</b>	<b>22,669.0</b>	<b>24,732.0</b>	<b>27,070.1</b>	<b>28,452.7</b>	<b>28,440.9</b>	<b>30,385.6</b>	<b>30,088.1</b>
1,491.5	1,330.1	676.8	820.7	195.0	(59.9)	245.5	(97.1)	8.9	14.1	(482.2)
	500.0		500.0	47.9	2.0		500.0	500.0	500.0	500.0
				26.0						
		406.4	450.0	2,009.3			406.4	450.0		
1,675.2	313.5	1,882.7	515.5							
(266.7)		(336.8)		(1,571.2)	1,395.2	1,922.3	562.3	562.3	579.2	579.2
					(155.1)	(266.7)				
1,408.5	313.5	1,545.9	515.5	(1,571.2)	1,240.1	1,655.6	562.3	562.3	579.2	579.2
<b>2,900.0</b>	<b>2,143.6</b>	<b>1,816.3</b>	<b>1,386.2</b>	<b>655.0</b>	<b>1,182.2</b>	<b>1,901.1</b>	<b>558.8</b>	<b>621.2</b>	<b>1,093.3</b>	<b>597.0</b>

**ASHRAE**  
**BOARD OF DIRECTORS 2-5nn**  
**For the Eleven Months Ending Saturday, May 31, 2025**

A	B	C	D	E	F	G	H	I	J	K
Fiscal YTD Through Month of May				TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget	Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025	FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
				REVENUES						
\$50.5	\$8.5	\$21.8	\$8.8	38 Contribution Income	\$41.8	\$11.7	\$40.5	\$9.5	\$9.5	\$9.8
10.0		80.0	80.0	41.2 Contributions and Matching Gifts			10.0	80.0	80.0	82.4
		141.8	119.2	44 Reserve Transfers			140.0	130.0	456.0	
0.1		0.6		46 Miscellaneous Income	0.8	0.2	0.1			
60.6	8.5	244.2	208.0	TOTAL REVENUES	42.6	11.9	50.6	229.5	219.5	548.2
				EXPENSES:						92.2
1,035.1	1,078.3	1,296.3	1,188.1	51 Salaries	1,045.7	1,133.1	1,161.4	1,287.8	1,287.8	1,371.3
300.1	311.0	379.0	346.7	52 Payroll Taxes, Benefits, Personnel	332.1	307.9	323.3	382.9	375.8	426.3
2.4	3.7	0.4	3.8	61 Publishing	2.5	1.9	2.4	4.0	4.0	4.1
5.6	54.7	5.9		62 Promotion (All Depts)	13.5	1.6	5.6	45.6	45.6	47.0
133.7	52.4	124.5	66.8	64 Meetings/Conferences	155.4	87.7	154.3	131.8	71.8	141.6
894.2	614.0	821.5	787.2	66 Travel	438.2	979.7	1,028.1	1,011.7	928.6	1,040.0
14.6	4.3	13.4	13.3	68 Awards, Certif, Logo Cost of Goods Sold	12.3	18.7	15.1	13.6	13.6	14.0
	8.7		8.9	71 Research Projects & Grants				9.7	9.7	10.0
8.6	43.2	9.4	33.1	82 Office Expense and Organizational Dues	15.0	10.6	9.3	33.9	44.2	27.3
228.1	296.1	161.8	174.2	84 Outside Services	101.5	113.5	247.2	199.0	218.8	593.4
6.8	14.9	5.8	18.7	88 Other Expenses	12.9	6.3	6.8	6.9	19.9	6.2
				90 Depreciation	40.0	25.0				20.5
(2,627.4)	(2,559.5)	(2,757.0)	(2,787.5)	91 Allocation of Overhead & BOD	(2,116.5)	(2,685.9)	(2,953.6)	(3,170.0)	(3,019.8)	(3,225.0)
1.8	(78.2)	61.0	(146.7)	TOTAL EXPENSES	52.6			(43.1)	0.0	456.2
58.8	86.7	183.2	354.7	SURPLUS (DEFICIT) before reserve income	(10.0)	11.9	50.6	272.6	219.5	92.0

**ASHRAE**  
**OVERHEAD 2-9nn**  
For the Eleven Months Ending Saturday, May 31, 2025

A	B	C	D		E	F	G	H	I	J	K
Fiscal YTD Through Month of May					TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget		Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025		FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
		\$18.3		<b>REVENUES</b>				\$18.3			
6,817.3	6,400.0	6,737.3	6,500.0	36 Grant Income	5,397.6	6,179.8	6,817.3	6,737.3	6,500.0	7,100.0	7,200.0
(1,500.0)	(1,500.0)	(1,500.0)	(1,500.0)	41.1 AHR Exposition Income	(1,500.0)	(1,500.0)	(1,500.0)	(1,500.0)	(1,500.0)	(1,500.0)	(1,500.0)
232.0	225.0			41.2 Contributions and Matching Gifts	34.3	102.2	232.0			450.0	60.0
15.9				41.3 Exposition Income - Other Countries		155.1	15.9				
395.3	395.2	151.8	147.2	44 Reserve Transfers	196.1	203.3	366.5	195.2	160.3	165.1	165.1
<b>5,960.5</b>	<b>5,520.2</b>	<b>5,407.4</b>	<b>5,147.2</b>	46 Miscellaneous Income	<b>4,128.0</b>	<b>5,140.4</b>	<b>5,931.7</b>	<b>5,450.8</b>	<b>5,160.3</b>	<b>6,215.1</b>	<b>5,925.1</b>
				<b>TOTAL REVENUES</b>							
				<b>EXPENSES:</b>							
2,097.1	2,276.5	2,465.1	2,679.9	51 Salaries	2,147.9	2,183.6	2,317.6	2,903.2	2,903.2	3,016.6	3,184.2
704.0	514.2	766.8	951.8	52 Payroll Taxes, Benefits, Personnel	600.0	729.4	814.9	890.0	1,061.9	965.2	1,027.9
3.4	7.2	5.1	3.6	61 Publishing	8.4	10.4	3.6	4.0	4.0	4.1	4.1
40.8	68.7	26.0	67.0	62 Promotion (All Depts)	32.9	55.0	47.8	78.1	88.1	90.7	90.7
5.7	13.3	13.2	13.7	64 Meetings/Conferences	4.6	9.9	6.0	13.9	13.9	14.3	14.3
207.7	118.2	118.2	97.2	66 Travel	59.4	84.6	225.2	138.0	127.0	144.4	145.9
21.8	21.1	18.8	31.4	68 Awards, Certif, Logo Cost of Goods Sold	23.5	28.1	22.5	31.4	31.4	32.3	32.3
49.2	68.5	33.9	50.2	76 Public Relations	41.5	53.1	67.0	58.3	70.5	72.6	72.6
775.4	764.2	770.2	767.4	78 Occupancy & Insurance	668.4	751.1	859.6	849.1	848.6	815.3	765.3
195.9	264.4	227.8	363.2	82 Office Expense and Organizational Dues	270.1	264.4	208.3	400.1	400.1	398.7	398.7
661.3	754.5	696.3	747.1	84 Outside Services	816.4	641.3	747.9	826.3	831.4	865.1	856.3
32.5	88.3	47.4	68.8	88 Other Expenses	127.8	13.5	39.1	80.0	80.0	82.4	82.4
714.8	726.4	703.5	745.2	90 Depreciation	836.7	828.0	778.8	766.3	816.3	770.0	730.0
(5,497.6)	(5,618.4)	(5,892.7)	(6,650.0)	91 Allocation of Overhead & BOD	(5,599.2)	(5,653.7)	(6,070.8)	(7,071.3)	(7,204.2)	(7,271.9)	(7,476.6)
<b>12.0</b>	<b>67.1</b>	<b>(0.4)</b>	<b>(63.5)</b>	<b>TOTAL EXPENSES</b>	<b>38.4</b>	<b>(1.3)</b>	<b>67.5</b>	<b>(32.6)</b>	<b>72.2</b>	<b>(0.2)</b>	<b>(71.9)</b>
5,948.5	5,453.1	5,407.8	5,210.7	SURPLUS (DEFICIT) before reserve income	4,089.6	5,141.7	5,864.2	5,483.4	5,088.1	6,215.3	5,997.0

**ASHRAE**  
**MEMBERS COUNCIL (2-2nn & 2-8nn)**  
**For the Eleven Months Ending Saturday, May 31, 2025**

A	B	C	D		E	F	G	H	I	J	K
Fiscal YTD Through Month of May					TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget		Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025		FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
				<b>REVENUES</b>							
\$7,731.4	\$7,502.6	\$8,374.5	\$8,101.0	31 Membership Dues	\$7,708.1	\$7,946.8	\$8,469.8	\$9,144.3	\$8,844.3	\$9,354.6	\$9,506.0
1,720.1	1,591.6	1,821.7	1,516.5	35.1 Meetings/Conferences Registration	1,453.9	2,005.8	2,368.0	2,504.2	2,217.9	2,656.7	2,445.1
		(0.5)		35.3 Education Registration	0.3						
13.3	19.6	8.3	10.0	38 Contribution Income	14.4	51.7	19.8	13.0	22.4	19.0	14.0
35.0	18.3	168.0	137.0	41.2 Contributions and Matching Gifts	49.0	4.5	35.0	168.0	147.3	158.8	141.7
311.2	269.1	479.5	467.5	46 Sponsorship Income	150.1	196.3	344.6	586.0	510.0	560.0	544.4
56.5	39.0	60.5	45.8	46 Miscellaneous Income	55.2	66.3	68.2	51.0	51.0	48.7	52.6
<b>9,867.5</b>	<b>9,440.2</b>	<b>10,912.0</b>	<b>10,277.8</b>	<b>TOTAL REVENUES</b>	<b>9,431.0</b>	<b>10,271.4</b>	<b>11,305.4</b>	<b>12,466.5</b>	<b>11,792.9</b>	<b>12,797.8</b>	<b>12,703.8</b>
				<b>EXPENSES:</b>							
1,847.6	1,730.2	1,992.8	1,836.1	51 Salaries	1,667.2	1,883.7	2,053.5	2,046.1	1,989.1	2,118.0	2,181.6
534.0	498.2	594.4	534.0	52 Payroll Taxes, Benefits, Personnel	479.8	540.0	577.8	608.4	578.5	658.4	685.4
16.3	30.1	16.6	27.6	61 Publishing	19.0	22.1	17.9	29.3	29.3	25.7	30.2
324.3	302.3	330.1	312.1	62 Promotion (All Depts)	266.4	314.4	387.4	343.6	341.6	351.5	359.1
1,872.1	1,621.9	2,062.2	1,786.6	64 Meetings/Conferences	2,082.6	2,068.3	2,598.8	2,827.9	2,528.2	2,932.0	2,785.2
705.2	622.3	695.9	696.7	66 Travel	339.8	814.2	900.1	875.4	868.2	934.9	910.4
75.9	73.4	85.0	90.8	68 Awards, Certif, Logo Cost of Goods Sold	140.6	105.0	70.4	83.0	92.5	90.8	87.2
2.2		154.3	165.0	71 Research Projects & Grants	160.5	332.9	2.2	165.0	165.0	165.0	170.0
267.8	305.4	203.9	207.8	82 Office Expense and Organizational Dues	290.3	273.0	315.5	305.2	245.8	271.2	314.5
164.1	157.1	124.8	120.5	84 Outside Services	285.6	159.5	177.0	201.5	177.3	229.4	226.4
431.6	372.4	377.4	372.7	88 Other Expenses	431.1	391.7	484.8	398.1	388.0	405.0	404.6
2,366.5	2,243.3	2,521.2	2,593.0	91 Allocation of Overhead & BOD	2,168.7	2,411.3	2,630.2	2,813.9	2,809.1	2,884.1	2,921.2
<b>8,607.6</b>	<b>7,956.6</b>	<b>9,158.6</b>	<b>8,742.9</b>	<b>TOTAL EXPENSES</b>	<b>8,331.6</b>	<b>9,316.1</b>	<b>10,215.6</b>	<b>10,697.4</b>	<b>10,212.6</b>	<b>11,066.0</b>	<b>11,075.8</b>
1,259.9	1,483.6	1,753.4	1,534.9	SURPLUS (DEFICIT) before reserve income	1,099.4	955.3	1,089.8	1,769.1	1,580.3	1,731.8	1,628.0

**ASHRAE**  
**PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)**  
**For the Eleven Months Ending Saturday, May 31, 2025**

A	B	C	D		E	F	G	H	I	J	K
Fiscal YTD Through Month of May					TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget		Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025		FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
REVENUES											
\$3,375.2	\$3,526.2	\$3,350.6	\$3,539.6	32 Publication Sales	\$3,383.5	\$3,757.8	\$3,680.4	\$3,764.5	\$4,063.6	\$3,938.2	\$3,888.2
2,192.1	2,234.1	2,112.0	2,220.0	34 Advertising Income - Print	2,313.4	2,084.3	2,315.5	2,152.1	2,343.0	2,175.5	2,175.5
951.5	957.0	689.9	1,152.0	34 Advertising Income - Non-Print	1,178.8	849.3	1,049.0	875.0	1,250.0	875.0	900.0
315.9	267.1	398.6	327.0	35.2 Certification Registration	227.2	276.0	356.7	420.0	350.0	450.0	450.0
1,809.7	1,892.4	1,875.7	1,802.9	35.3 Education Registration	1,776.8	1,889.7	2,018.2	2,120.2	2,040.0	2,217.5	2,217.5
		216.2	834.9	36 Grant Income				250.0	910.8	910.8	910.8
18.6	9.5	22.1	10.0	38 Contribution Income	27.8	29.2	22.9	11.9	11.9	12.2	12.2
120.4	120.4	95.4	82.2	41.2 Contributions and Matching Gifts	116.5	132.4	120.4	100.7	82.2	100.0	100.0
36.0		128.1		44 Reserve Transfers			36.0	190.6			
20.3	101.6	143.4	29.8	46 Miscellaneous Income	162.9	145.7	105.8	203.7	144.0	146.5	146.5
8,839.7	9,108.3	9,032.0	9,998.4	TOTAL REVENUES	9,186.9	9,164.4	9,704.9	10,088.7	11,195.5	10,825.7	10,800.7
EXPENSES:											
2,739.2	2,623.4	2,931.7	2,742.1	51 Salaries	2,387.5	2,699.2	3,038.3	3,041.9	2,970.6	3,142.4	3,188.2
801.4	776.9	885.9	816.9	52 Payroll Taxes, Benefits, Personnel	690.3	771.2	882.8	911.6	885.5	997.3	1,022.3
913.4	1,043.1	926.8	1,014.5	61 Publishing	1,473.3	1,310.8	1,154.4	1,145.3	1,236.6	1,289.2	1,264.2
719.0	797.3	659.0	753.0	62 Promotion (All Depts)	785.0	669.6	769.4	717.8	800.9	743.3	743.6
10.2	21.1	7.3	1.5	64 Meetings/Conferences	17.4	10.1	19.3	23.7	23.7	24.5	24.5
547.2	639.8	654.0	612.5	64 Education Courses/Trainings	529.3	614.9	621.8	729.8	700.5	729.3	719.3
95.9	103.2	119.5	92.1	66 Travel	43.2	95.5	131.3	114.5	120.1	121.7	121.7
	1.1		1.2	68 Awards, Certif, Logo Cost of Goods Sold	0.3			1.2	1.2	1.3	1.3
52.8	56.3	49.9	53.3	78 Occupancy & Insurance	30.9	52.2	59.2	60.1	63.6	55.8	61.0
535.3	534.4	576.3	547.5	82 Office Expense and Organizational Dues	471.7	562.5	582.4	652.7	617.8	722.7	724.7
763.8	760.8	826.4	701.1	84 Outside Services	744.4	818.6	876.4	1,018.3	965.4	966.0	968.7
		102.1	504.0	84 Grant Expenses				131.0	549.9	549.8	549.8
143.2	172.1	136.7	160.9	88 Other Expenses	337.3	318.1	101.4	67.7	165.7	190.8	190.8
				90 Depreciation	0.6	0.3					
3,518.0	3,403.1	3,681.0	3,919.1	91 Allocation of Overhead & BOD	3,115.7	3,450.7	3,900.2	4,252.8	4,245.7	4,359.0	4,415.1
10,839.4	10,932.6	11,556.6	11,919.7	TOTAL EXPENSES	10,626.9	11,373.7	12,136.9	12,868.4	13,347.2	13,893.1	13,995.2
(1,999.7)	(1,824.3)	(2,524.6)	(1,921.3)	SURPLUS (DEFICIT) before reserve income	(1,440.0)	(2,209.3)	(2,432.0)	(2,779.7)	(2,151.7)	(3,067.4)	(3,194.5)

**ASHRAE  
TECHNOLOGY COUNCIL**

A	B	C	D	E	F	G	H	I	J	K
Fiscal YTD Through Month of May				TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget	Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025	FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
				REVENUES						
			\$26.0						\$28.4	\$29.3
75.0				36 Grant Income						
				37 Special Project Income	73.9	20.0	75.0			
		12.5	12.5	41.2 Contributions and Matching Gifts				12.5	12.5	12.9
214.8		66.9		44 Reserve Transfers			214.8	66.9		
16.2	30.4	5.0	14.9	46 Sponsorship Income	1.6	21.0	16.2	17.0		17.5
17.1	0.9		21.7	46 Miscellaneous Income		43.0	17.1	23.7	23.7	24.4
323.1	31.3	84.4	75.1	TOTAL REVENUES	75.5	84.0	323.1	120.1	81.6	12.9
				EXPENSES:						
1,350.8	1,388.1	1,473.4	1,493.4	51 Salaries	1,300.7	1,362.1	1,497.1	1,638.1	1,618.1	1,722.9
389.4	400.1	439.1	434.0	52 Payroll Taxes, Benefits, Personnel	398.0	399.3	415.0	487.1	470.3	535.6
0.2		0.2		61 Publishing	0.0	0.1	0.2			557.6
1.7	9.4		9.6	62 Promotion (All Depts)			1.7	10.5	10.5	10.8
10.4	6.7	9.6	6.9	64 Meetings/Conferences	0.6	10.1	10.4	7.3	7.3	7.5
118.5	155.3	137.7	176.2	66 Travel	34.8	115.2	167.8	203.6	203.6	210.6
0.2	1.8		2.0	68 Awards, Certif, Logo Cost of Goods Sold	0.4	0.2	0.2	2.0	2.0	2.0
244.6		24.9		73 Special Projects	21.2	149.8	244.6	24.9		
2.0	2.3	108.2	124.6	82 Office Expense and Organizational Dues	98.5	102.2	104.4	124.8	124.8	128.5
298.3	44.3	194.7	17.0	84 Outside Services	39.4	115.9	329.5	190.8	21.3	22.0
1.6	0.1	4.0	0.1	88 Other Expenses		9.0	1.6	0.2	0.2	0.2
7.4	72.4		74.6	90 Depreciation	35.5	35.5	7.4		81.4	
1,674.0	1,819.4	1,835.7	2,094.9	91 Allocation of Overhead & BOD	1,690.4	1,743.7	1,870.3	2,273.8	2,269.9	2,330.5
4,099.1	3,899.9	4,227.5	4,433.3	TOTAL EXPENSES	3,619.5	4,043.1	4,650.2	4,963.1	4,809.4	4,970.4
(3,776.0)	(3,868.6)	(4,143.1)	(4,358.2)	SURPLUS (DEFICIT) before reserve income	(3,544.0)	(3,959.1)	(4,327.1)	(4,843.0)	(4,727.8)	(4,957.5)



**ASHRAE**  
**RESEARCH (funds 3 & 4)**  
**For the Eleven Months Ending Saturday, May 31, 2025**

A	B	C	D		E	F	G	H	I	J	K
Fiscal YTD Through Month of May					TWELVE MONTHS ENDING JUNE 30					DRAFT	DRAFT
Actual	Budget	Actual	Budget		Actual	Actual	Actual	Forecast	Budget	Budget	Budget
FY 2024	FY 2024	FY 2025	FY 2025		FY 2022	FY 2023	FY 2024	FY 2025	FY 2025	FY 2026	FY 2027
\$157.8	\$152.8	\$170.9	\$165.1	31 Membership Dues	\$157.6	\$161.9	\$172.9	\$180.3	\$180.3	\$190.4	\$194.0
1,233.9	975.5	1,242.9	1,193.8	38 Contribution Income	1,945.9	1,960.0	2,029.2	1,967.7	1,967.7	2,031.9	2,095.1
1,500.0	1,500.0	1,500.0	1,500.0	41.2 Contributions and Matching Gifts	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0
				44 Reserve Transfers					280.0	1,190.0	290.0
(0.1)				46 Miscellaneous Income			(0.1)				
2,891.6	2,628.3	2,913.8	2,858.9	<b>TOTAL REVENUES</b>	3,603.5	3,621.9	3,702.0	3,648.0	3,928.0	4,912.3	4,079.1
				<b>EXPENSES:</b>							
441.2	569.3	479.7	584.7	51 Salaries	569.5	573.2	486.3	633.4	633.4	602.3	620.3
127.7	164.0	143.3	170.2	52 Payroll Taxes, Benefits, Personnel	128.3	158.5	137.8	188.3	184.4	187.2	194.9
15.6	6.5	6.3	6.6	61 Publishing	4.4	10.9	15.6	6.8	6.8	7.0	7.0
3.2	10.2	2.6	4.6	62 Promotion (All Depts)	4.2	0.9	3.2	10.5	10.5	10.8	10.8
43.2	16.8	21.0	18.8	64 Meetings/Conferences	5.2	17.0	48.6	21.0	21.0	21.6	21.6
113.0	126.2	94.6	77.1	66 Travel	35.5	97.4	131.1	97.3	97.3	100.3	100.3
56.7	38.8	47.7	16.0	68 Awards, Certif, Logo Cost of Goods Sold	42.5	46.7	56.8	16.2	16.2	16.6	16.6
1,048.0	1,708.3	1,183.1	1,458.0	71 Research Projects & Grants	583.5	767.2	936.0	1,623.5	1,908.9	2,888.5	2,017.6
0.2	0.3		0.3	76 Public Relations		0.1	0.2	0.3	0.3	0.3	0.3
13.8	63.1	9.5	67.0	82 Office Expense and Organizational Dues	19.3	12.0	13.9	70.1	70.1	72.2	72.2
47.6	52.4	46.1	57.9	88 Other Expenses	49.4	49.3	63.3	79.8	79.8	82.2	82.2
566.6	720.2	611.8	830.2	91 Allocation of Overhead & BOD	740.9	733.8	623.7	900.9	899.4	923.4	935.3
2,476.8	3,476.1	2,645.7	3,291.4	<b>TOTAL EXPENSES</b>	2,182.7	2,467.0	2,516.5	3,648.1	3,928.1	4,912.4	4,079.1
414.8	(847.8)	268.1	(432.5)	SURPLUS (DEFICIT) before reserve income	1,420.8	1,154.9	1,185.5	(0.1)	(0.1)	(0.1)	0.0
				Reserve Investment Income:							
673.4	103.3	587.2	286.4	95 Investmt Income - Reserves (net of exp)	(775.8)	585.6	750.6	312.4	312.4	321.8	321.8
	(220.0)			96 Transfer Reserves Portion Used Currently				(280.0)	(280.0)	(288.4)	(288.4)
673.4	(116.7)	587.2	286.4	Remaining Reserve Investment Income	(775.8)	585.6	750.6	32.4	32.4	33.4	33.4
1,088.2	(964.5)	855.3	(146.1)	<b>OVERALL SURPLUS (DEFICIT) after reserve income</b>	645.0	1,740.5	1,936.1	32.3	32.3	33.3	33.4

**REPORT TO THE BOARD OF DIRECTORS**  
**From the ASHRAE Headquarters Building Committee**  
**As of June 15, 2025**

**Recommendations for Board Approval:**

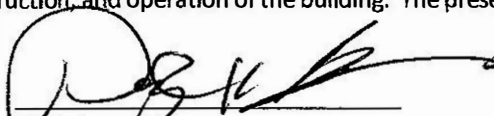
1. MOTION: None

**Information Items:**

The Committee continued this year to oversee the correction of some operational issues and to develop a strategy to enhance the building operations to provide a quality indoor environment while effectively using energy. The Committee is also experimenting with several technologies to improve the effective operation of the facility. So far this year we have worked on the following initiatives:

1. Net-Zero Operations:
  - a. The amount of solar power installed at the Headquarters was limited to 250 kW AC due to net metering regulations from Georgia Power. The current performance over the last 12 months is at Net-Zero. As we continue to learn more about the operation of the building, we will continue to adjust the operations to effectively achieve a quality indoor environment without wasting energy. One area is the lighting system, which is not currently connected to the BAS system.
2. We are currently working with the technical support group at Climate Master to correct some DOAS operational issues that are negatively impacting the operation of the building.
3. New Proposal from Copper Tree, LBNL, DOE to demonstrate Automated System Optimization, we are still waiting for the DOAS operational issues to be sorted out.
4. Building operation evaluations:
  - a. **Cisco intelligent building initiative**, currently evaluating the Building Intelligence using the Building Intelligence Quotient (BiQ), this is on hold until we get the lighting system issues resolved.
  - a. **Building EQ**: The ASHRAE HQ will receive a new Building EQ rating upon completion of a more recent year of energy consumption data collection and an energy audit in March of 2025. The current Building EQ score is -1, This is in comparison to the last Building EQ rating from March 2024 of -2 and indicates that we are generating more electricity than the building is using on an annual basis.
  - b. **BOMA 360**, We have approval for the use of the BOMA 360 program to evaluate the operation of the building and we will be evaluating the system to see if it is worth implementing.
  - c. **Green Globes-EB**, we have approval to use this system to evaluate the operation of the facility, and we have started the documentation process.
  - d. **LEED Existing Building Operation and Maintenance (EBOM)**, we have recently received approval to evaluate the operation of the facility, data entry will start when we have the new version of LEED.
5. We continue to present on the design, construction, and operation of the building. The presentations are quite popular and are well received.

June 15, 2025,

  
 Chair Darryl K. Boyce



# RECI ECO-TEC GRANT UPDATE

# Budget Period 1 Tasks

## Task 1.0: Overall Project Management and Planning

- Continued and on track (Responsible: ASHRAE)

## Task 2.0: National Collaborative and Technical Assistance Engagement

- Participation in the Collaborative Technical Advisory Groups (Responsible: ASHRAE)
- Coordination re: Development of trainings and tools (Responsible: ASHRAE)

## ~~Task 3.0 Community Benefits Coordination and Planning~~

- Task must be removed: diversity activities are not allowable

## Task 4.0 Develop Taskforce for Examining Workforce Expansion

- Groups are coordinated by state – looking at states' pre-existing workforce development plans (Responsible: NASEO)
- Draft of Intro to Codes Careers Course being reviewed (Responsible: ICC)



# Budget Period 1 Tasks

## Task 5.0: Course Development

- 90.1: Subject matter experts procured per federal regulations (Responsible: ASHRAE)
- IECC: Draft in progress (Responsible: ICC)

## Task 6.0 Develop Train the Trainer Course

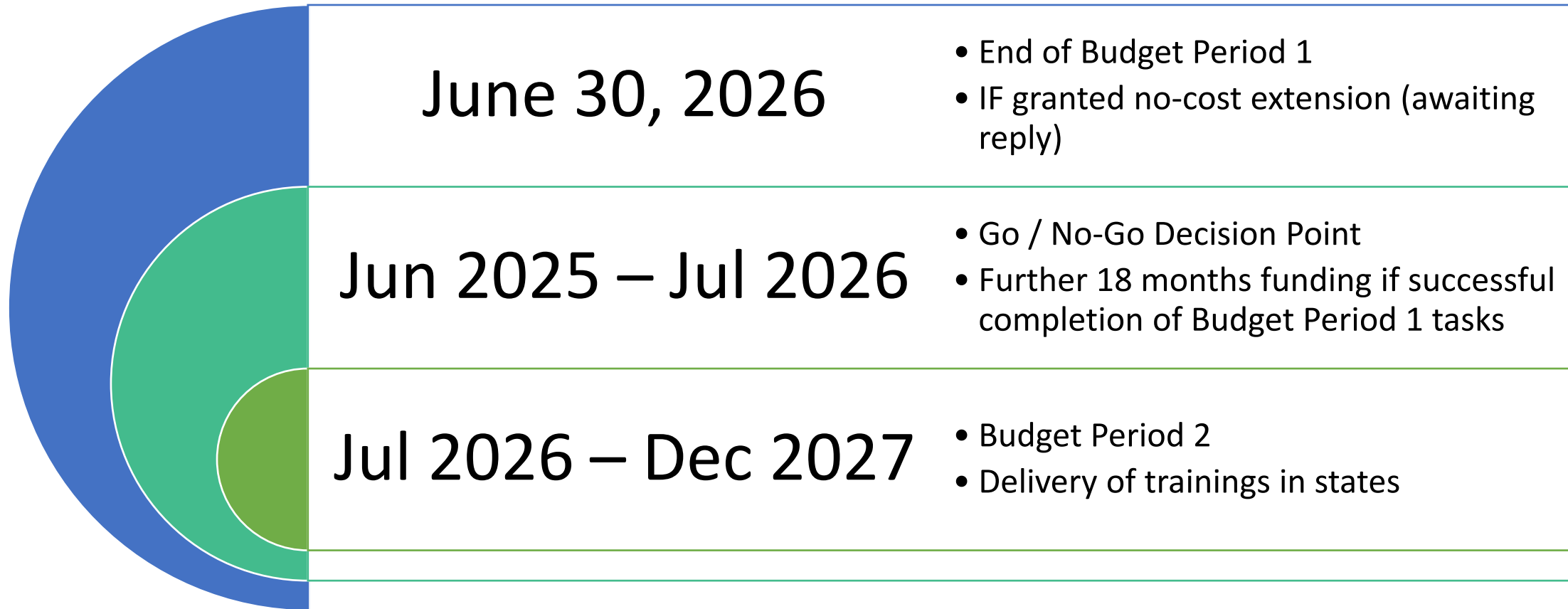
- Scheduled: beginning 2026

## Task 7.0 Outreach and Engagement Strategy

- Marketing and engagement strategy drafted (Responsible: ASHRAE and NASEO)



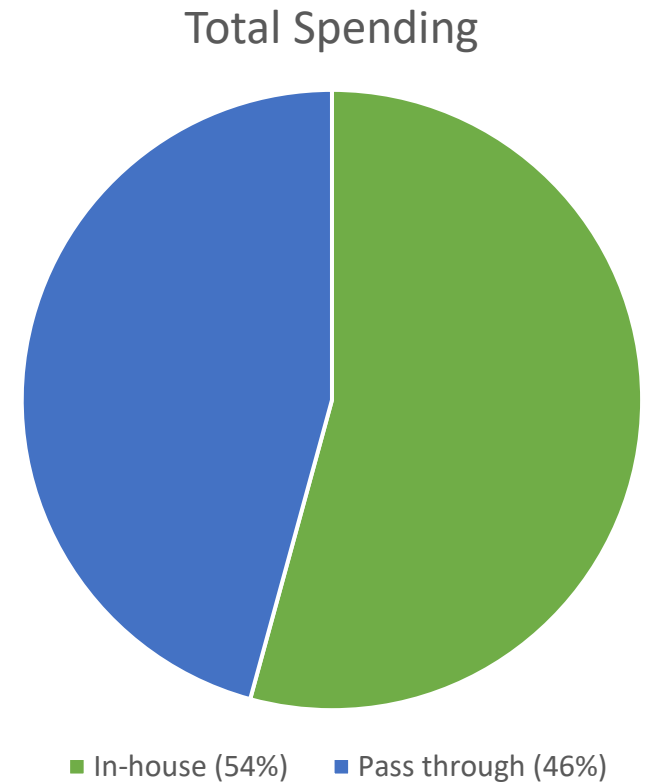
# Timeline



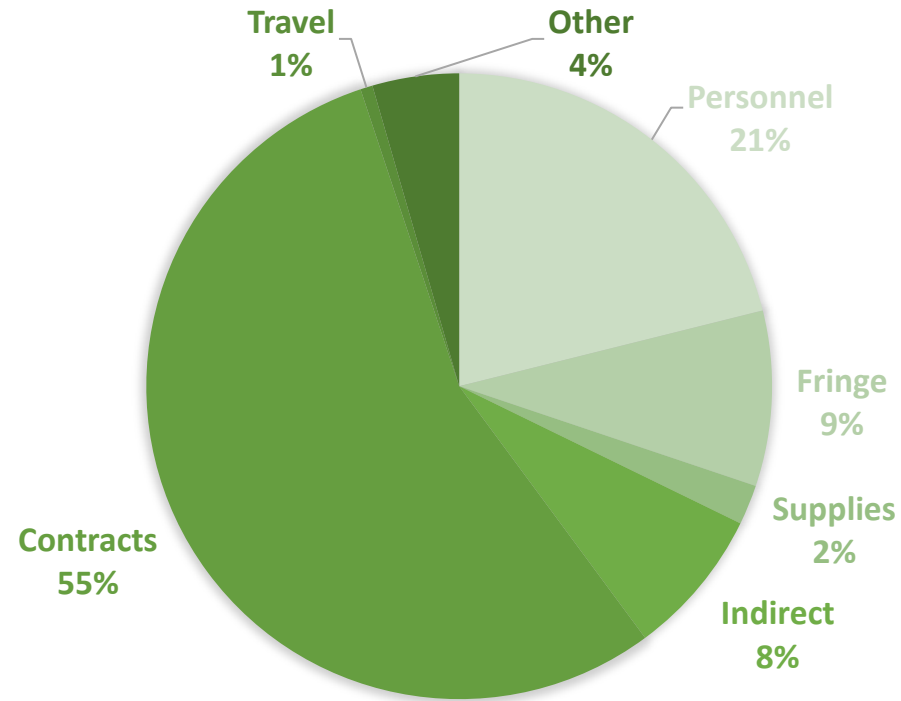
# RECI ECO-TEC Update

## Year to Date Spending

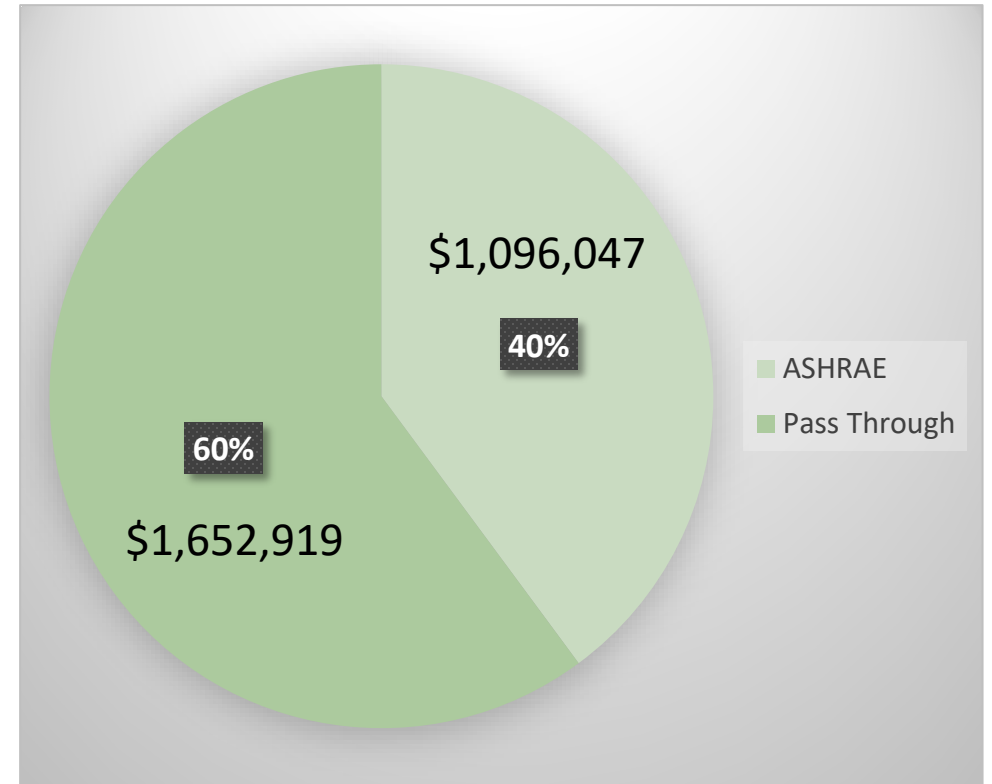
- Total Award Budget \$2,850,000
- Currently Received \$216,200
- In Process of Invoice approximately \$71,180
- Projected spend Budget Period 1: \$1,366,748
- Total spent approximately \$287,380 (21% of Budget Period 1)
- Amount “In-house” for ASHRAE approximately \$155,900 (salaries and overhead)



# ASHRAE RECI ECO-TEC TOTAL Budget (\$2.85M)



ECO-TEC Cost Categories Break Down  
TOTAL BUDGET



Internal vs. External Income  
TOTAL BUDGET





# **Report to the ASHRAE Board of Directors, Future Boards, and Future Presidents**

**By: M. Dennis Knight, P.E., BEMP, FASHRAE, ASHRAE President 2024–2025**

**This report is being submitted as an informational item attached to Sunday June 22, 2025  
Board meeting in Phoenix, Arizona**

The purpose of this document is to ensure the continuity of ASHRAE's long-term vision while providing actionable insights and inspiration for future leadership. As our organization evolves to meet the challenges of a rapidly changing world, this report is intended to serve as both a reflection of past successes and a roadmap for sustained progress.

# Executive Summary

This report provides a comprehensive overview of the 2024–2025 ASHRAE presidential year, highlighting key achievements, strategic initiatives, and recommendations for future Boards and future leaders. The year was defined by a strong commitment to workforce development, global engagement, and advancing the Society’s mission of sustainability, inclusion, and technical excellence.

## Key Accomplishments:

- Launched the “Career Conversations” video series, amplifying member voices and inspiring future professionals.
- Established new chapters and student branches in Ghana, Egypt, the UK, and Europe, and inaugurated the BETA technician training center at Loughborough University.
- Fostered partnerships with industry and labor organizations, notably with SMART, and advocated for ASHRAE’s standards and workforce needs with policymakers worldwide.
- Advanced diversity, equity, and inclusion through new Member Resource Groups and the first Women in ASHRAE Leadership Symposium.
- Invested in digital transformation, including a unified learning platform and AI-powered resources to enhance member access to education and standards.

## Strategic Insights and Recommendations:

- Chapter programs and the chapter experience, both technically and socially, continue to be where our growth will come from. Well trained chapter and regional leadership are essential.
- Personal connections and storytelling remain vital for member engagement and workforce recruitment.
- Preparation, flexibility, and resilience are essential for effective leadership in a dynamic global environment.
- Empowering local leaders, fostering inclusion, and sharing best practices strengthen the Society’s collective impact.
- Continued advocacy, innovation, and investment in professional development are critical to addressing future challenges and opportunities.

## Conclusion:

The 2024–2025 presidential year reaffirmed ASHRAE’s global relevance and its pivotal role in building a sustainable future. This report encourages future boards and presidents to build on this foundation, champion workforce development, embrace innovation, and uphold ASHRAE’s core values as the Society continues to grow and lead worldwide.

# Introduction

As my term as ASHRAE President draws to a close, I reflect with gratitude and pride on a year marked by extraordinary engagement, growth, and progress. My journey-shared with my wife Shirl, our members, and partners worldwide-has reaffirmed the power of human connection, the urgency of workforce development, and the limitless potential of our Society. This report distills my experiences, lessons learned, and recommendations for current and future ASHRAE leaders.

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## Reflections on my Presidential Year

### The Power of Relationships and Storytelling

Just as a strong marriage is built on commitment and conversation, so too is ASHRAE's future. From our 50th wedding anniversary to countless chapter visits, I have seen firsthand that every meaningful relationship-personal or professional-thrives on investment, dialogue, and shared purpose.

A year ago in Indianapolis, I challenged our members to tell their stories-to articulate the "why" behind our work and to inspire others to join us. Across 13 U.S. states and 11 countries, I witnessed or was told of the profound impact of these stories, whether in a hotel lobby in Tempe, a student roundtable in Gainesville, or a panel discussion in Milan. Every conversation, every story, has the power to ignite a passion and build our future workforce.

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## Key Achievements and Initiatives

### 1. Workforce Development: A Global Imperative

- **Career Conversations Video Series:** Over 60 ASHRAE members shared their journeys, creating a library of authentic, inspiring stories accessible to all. These videos have become powerful recruitment and retention tools.
- **Student Engagement:** I engaged with over 1,500 students from our branches worldwide. Their energy and curiosity are a reminder that our investment in the next generation is critical.
- **New Chapters and Programs:**
  - Chartered new chapters in the Nordic Countries, Ghana and Egypt.
  - Launched the first-ever chapter-sponsored HVAC&R Technician Apprenticeship Program in Ghana.
  - Inaugurated the BETA (Built Environment Training Academy) technician training center at Loughborough University, UK.

- Established at least nine new student branches in Europe, Africa, and North America.
- **Recognition and Empowerment:**
  - Celebrated the inaugural Women in ASHRAE Leadership Symposium and the Young Engineering Student in ASHRAE EmpowHERment Award.
  - Supported mentorship and networking through new Member Resource Groups (MRGs), including the Young Professionals with Children MRG.
- **Industry Partnerships:** Collaborated with the International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) to align training and foster collaboration between the trades and design engineers.

## 2. Global Outreach and Advocacy

- **International Engagement:** Participated in eight Chapter Regional Conferences, connecting with over 1,100 leaders in industry, academia, and government across four continents.
- **First-Ever Presidential Visits:** To the French section and student branch in Paris, inaugurated a new student branch at ETHZ in Zurich, inaugurated two new student branches in Italy and met with our Italian Section in Milan (will be awarded Chapter status here in Phoenix), and traveled to Brussels with leaders from our Hellenic Chapter for meetings with both EU Parliament members and departments of the European Commission.
- **Technical Exchange:** Toured innovative facilities such as the Glasgow 5 MW district heating plant (powered by two large scale heat pumps) and participated in global conferences like CLIMA and the ASHRAE-UNEP annual meeting.
- **Policy and Standards Leadership:** Advocated for ASHRAE's standards and workforce needs with U.S. Senators' staff, EU Parliament members, and government officials worldwide.

## 3. Education, Technology, and Innovation

- **Unified Learning Platform:** Launched a major initiative to integrate ASHRAE eLearning, instructor-led, and self-directed training into a single, user-friendly web platform.
- **AI-Driven Resources:** Piloted an AI-powered language model to help members access and utilize ASHRAE standards and handbooks more effectively.
- **Strategic Planning:** Workforce development is now a central pillar of ASHRAE's new strategic plan, with a roadmap distributed to councils, committees, and planning groups.

## 4. Diversity, Equity, and Inclusion

- **Affinity Groups:** Member Resource Groups have created new spaces for collaboration, mentorship, and engagement, helping to build a more inclusive and connected ASHRAE community.

- **Empowerment:** Recognized and supported the advancement of women and underrepresented groups through awards, leadership symposia, and targeted outreach.
- 

## **Lessons Learned and Recommendations for Future Leaders**

### **1. Personal Connections Matter**

- In-person visits, dinners, and chapter meetings are irreplaceable for building trust and inspiring engagement.
- Virtual platforms remain vital for accessibility-embrace both.

### **2. Preparation and Flexibility**

- International travel demands meticulous planning: visas, local customs, and logistics.
- Unexpected changes are inevitable-resilience and adaptability are your best assets.

### **3. Empower and Elevate Others**

- Share the spotlight with local leaders, students, and volunteers.
- Listen actively and encourage diverse voices; our strength lies in our collective expertise.

### **4. Well-Being and Balance**

- The demands of the presidency are significant. Prioritize your health, family, and well-being.
- Delegate, rest, and reflect-your energy sets the tone for the organization.

### **5. Document and Share**

- Keep detailed records of meetings, contacts, and outcomes for Society archives and future references.
- Share your experiences widely-every story can inspire action.

### **6. Advocacy and Partnerships**

- Engage with government, industry, and academia to advance ASHRAE's mission.
  - Foster alliances with allied societies to amplify our impact.
-

## Notable Stories and Impact

- **Elevator Lobby in Tempe:** A chance encounter led to the founding of a new student branch at San Diego State University, demonstrating the ripple effect of sharing our passion.
  - **Nordic Countries (Denmark and Sweden), Ghana, Egypt, France and Switzerland:** Chartering new chapters and student branches and launching technician programs has laid the foundation for workforce growth in critical regions.
  - **Women in Leadership:** The inaugural symposium and new awards are transforming the landscape for women in engineering and building sciences.
  - **AI and Learning:** Our investment in digital platforms and AI tools will keep ASHRAE at the forefront of professional development and technical excellence.
- 

## Looking Forward: A Call to Action

The challenges ahead-workforce shortages, technological disruption, and the imperative for sustainability, resilient, healthy, safe and affordable built environments that produce zero carbon emissions-are also opportunities for ASHRAE to lead. I urge future boards and presidents to:

- **Continue Telling Our Story:** Every member is an ambassador. Encourage storytelling at every level.
  - **Champion Workforce Development:** Invest in education, training, and mentorship to build a resilient pipeline of professionals. Leverage the Distinguished Lecturer program and increase its touch points to include not only chapters but local universities and local employers where possible.
  - **Embrace Innovation and continue to Research future solutions:** Leverage emerging technologies like AI to enhance our industry's capabilities.
  - **Foster Inclusion:** Prioritize diversity, equity, and inclusion in all Society activities.
  - **Lead with Vision and Presence:** Be present, inspire, and provide a clear vision for the future.
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## Gratitude

I am deeply grateful to my wife, Shirl, my family, our members, staff, and the many mentors and friends who have supported me. Special thanks to the founding members of Region IV and the Charleston, SC Chapter, the past presidents, my advisory committees (TRAC and PEAC), and our dedicated staff-your support made this journey possible.

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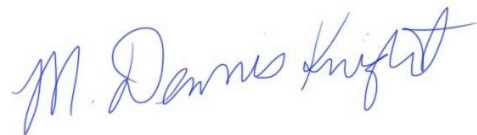
## Closing Thoughts

As I pass the torch, I encourage you to take pride in our accomplishments, show up, do the necessary work, and stay true to ASHRAE's core values. May you have the courage to change what you can, the wisdom to know what you cannot, and the vision to lead our Society toward a future where all buildings are safe, healthy, resilient, sustainable, and carbon neutral.

Let's continue to improve the built environment, our industry, and ASHRAE-one conversation at a time.

Thank you for your support, your passion, and your commitment to making a difference.

With gratitude and optimism,

A handwritten signature in blue ink that reads "M. Dennis Knight". The signature is fluid and cursive, with the first name "M." and last name "Knight" clearly visible.

**Dennis Knight**  
ASHRAE President 2024–2025

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### Attachments:

- Appendix: Summary Table of Travel & Events (2024–2025)

*This report is a living document and legacy for future ASHRAE leaders. Please share your feedback and continue the conversation as we build on this foundation together.*

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# **Appendix: Daily Activities – July 1, 2024, to June 30, 2025**

**M. Dennis Knight, ASHRAE President 2024–2025**

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## **July 2024 – No Travel**

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## **August 2024**

### **August 8–11, 2024**

- Region IV CRC  
Location: Lake Lanier, GA  
Activities: Chapter Regional Conference, meetings with regional leaders

### **August 15–17, 2024**

- Region I CRC  
Location: Albany, NY  
Activities: Chapter Regional Conference, leadership meetings; Industry Roundtable

### **August 22–25, 2024**

- Region II CRC  
Location: Toronto, Canada  
Activities: Chapter Regional Conference

### **August 26–31, 2024**

- No Travel
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## **September 2024**

### **September 1–7, 2024**

- No Travel



### **September 8–13, 2024**

- Mercfrio Conference  
Location: Porte Alegre, Brazil  
Activities: Conference, workforce development advocacy

### **September 15–17, 2024**

- Region XV Delhi Chapter  
Location: New Delhi, India  
Activities: Chapter meetings

### **September 17–18, 2024**

- Region XV Chandigarh Chapter  
Location: Chandigarh, India  
Activities: Chapter meetings and student branches

### **September 18–19, 2024**

- Region XV Jaipur Chapter  
Location: India  
Activities: Chapter meetings and student branches

### **September 19–22, 2024**

- Region XV CRC, Udaipur  
Location: New Delhi, India  
Activities: Chapter Regional Conference, Industry Roundtable

### **September 25–28, 2024**

- WIA Leadership Symposium  
Location: Chicago  
Activities: Conference, women in ASHRAE leadership

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## **October 2024**

### **October 1–7, 2024**

- Region-at-Large (RAL) CRC  
Location: Karachi, Pakistan  
Activities: Chapter Regional Conference

## **October 8–12, 2024**

- CIBSE/ASHRAE  
Location: London, UK  
Activities: Joint meetings and CIBSE/ASHRAE Graduate of the year awards.

## **October 13–18, 2024**

- Daikin Visit  
Location: Tokyo, Japan  
Activities: Industry meetings

## **October 19–24, 2024**

- 2024 Decarb Conference NYSERDA  
Location: New York  
Activities: Conference, Global Workforce Development Summit the day before the conference

## **October 30–November 3, 2024**

- NEBB Conference  
Location: Phoenix, AZ  
Activities: Conference and participated in discussions and rountables
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# **November 2024**

## **November 5, 2024**

- Region VII, Knoxville, TN Chapter  
Activities: East Tenn. Chapter meeting – toured newly renovated lower west bowl of Neyland Stadium.

## **November 6, 2024**

- Region VII, Lexington, KY Chapter  
Activities: Bluegrass Chapter lunch meeting
- Region VII, Louisville, TN Chapter  
Activities: Chapter dinner meeting and anniversary celebration

## **November 7, 2024**

- Region VII, Nashville, TN Chapter  
Activities: Chapter meeting, meeting with Tennessee Governor Bill Lee, discussed

workforce development initiatives of the Governor and how the ASHRAE Chapter and HVAC&R industry are participating.

#### **November 8, 2024**

- Travel Home

#### **November 14–18, 2024**

- Region XIV Nordic Chapter  
Location: Copenhagen, Denmark  
Activities: Chapter meetings Chartered Nordic Chapter leaders in Copenhagen

#### **November 18–19, 2024**

- Nordic Chapter, KTH  
Location: Stockholm, Sweden  
Activities: Chapter meetings, met with student branch at KTH University where first refrigerator was designed.

#### **November 19–21, 2024**

- Region XIV Cyprus Chapter  
Activities: Chapter meetings – first presidential visit to this chapter

#### **November 21–24, 2024**

- Hellenic Chapter Buildings & Energy Conference  
Location: Athens, Greece  
Activities: Conference, presented on health and wellness in the built environment and engaged with members of the medical community from Greece and the UK

#### **November 25–28, 2024**

- Vacation Greece, No Travel

#### **November 29–December 1, 2024**

- Home No Travel - Thanksgiving

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## **December 2024**

#### **December 2–3, 2024**

- Region VIII, NEAK Chapter  
Location: Little Rock, AR  
Activities: Chapter meetings

#### **December 3–4, 2024**

- Region VIII N.W. Arkansas Chapter  
Location: Springdale, AR  
Activities: Chapter meetings

#### **December 4–6, 2024**

- Region VIII Central OK Chapter  
Location: Tulsa, OK  
Activities: Chapter meetings

#### **December 6–8, 2024**

- Region VIII Central OK Chapter  
Location: Oklahoma City, OK  
Activities: Chapter meetings

#### **December 9–19, 2024**

- Region X So. Cal, Orange Empire, Tri-County Joint Chapter Meeting  
Activities: Joint chapter meetings

#### **December 16, 2024–January 13, 2025**

- Home No Travel - Christmas & New Year

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## **January 2025**

#### **January 14, 2025**

- Region IV - Charleston Chapter  
Location: Charleston, SC  
Host: Barret Williams  
Activities: Dinner, led panel on Workforce Development

#### **January 23–24, 2025**

- Region VII - Northern Alabama Chapter  
Location: Huntsville, AL (Virtual)

Host: Tony Horton  
Activities: DL on Integrated Building Design and BIM

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## **February 2025**

### **February 2–3, 2025**

- Region XII – Jacksonville, FL Chapter  
Activities: Lunch, Presidential Theme presentation

### **February 3–4, 2025**

- Region XII – Tallahassee, FL  
Activities: Drive to Tallahassee, dinner with former member of Charleston Chapter, discussed supporting the section in Tallahassee

### **February 4, 2025**

- Region XII – Gainesville, FL (UF)  
Activities: Academic Roundtable with UF faculty/students, Dinner & Joint Meeting

### **February 5, 2025**

- Central Florida Chapter Meeting  
Location: Orlando, FL  
Activities: Lunch, Presidential Theme presentation

### **February 5–13, 2025**

- Winter Meeting  
Location: Orlando, FL  
Activities: ASHRAE Winter Conference, meetings all week

### **February 13, 2025**

- Depart Orlando for Charleston

### **February 19–22, 2025**

- Region XV ACREX - Bengaluru, India  
Activities: Curtain Raiser Dinner, Opening Ceremony, Booth Visits, Commissioning Kickoff, DL Presentation on Conducting a Commissioning Kick-off Meeting

### **February 22–24, 2025**

- Region XI, Manitoba, Canada Chapter  
Activities: Chapter meetings

### **February 24–25, 2025**

- Region XI Regina, Canada Chapter  
Activities: Chapter meetings

### **February 25–26, 2025**

- Region XI B.C. Chapter, Vancouver  
Activities: Chapter meetings

### **February 26–27, 2025**

- Region XI Puget Sound Chapter, Seattle  
Activities: Chapter meetings

### **February 27–March 2, 2025**

- Region XI Alaska Chapter  
Location: Anchorage, AK  
Activities: Chapter meetings, student engagement

## **March 2025**

### **March 3, 2025**

- Region IX Colorado Springs BOG Meeting  
Location: Colorado Springs, CO  
Activities: Lunch, BOG meeting, Olympic Training Center tour, dinner

### **March 4, 2025**

- Region IX Rocky Mountain Chapter BOG Breakfast Meeting  
Location: Denver, CO  
Activities: BOG meeting, drive to Fort Collins, Section Lunch Meeting (BIM)

### **March 5, 2025**

- Region IX Sioux Falls Chapter Meetings  
Location: Sioux Falls, SD  
Activities: Tech Workshop, Lunch Meeting, BOG meeting, drive to Omaha, NE, dinner

**March 6, 2025**

- Region IX Omaha, NE Employer Meetings  
Activities: Coffee with HDR, meetings with Leo A Daly, Farris Engineering, Mechanical Sales
  - Lunch at Round the Bend Steakhouse, Ashland, NE
  - BOG meeting

**March 7, 2025**

- Region IX Utah Chapter Meeting, Salt Lake City  
Location: Murray, UT  
Activities: Lunch, BOG meeting

**March 9, 2025**

- Region X Tucson Chapter
- Activities: Social Dinner

**March 10, 2025**

- Tucson Chapter Lunch
- Drive to Phoenix, dinner with Central Arizona Chapter

**March 11, 2025**

- Drive to Las Vegas, dinner with Southern Nevada Chapter

**March 12, 2025**

- Drive to Reno, dinner with Northern Nevada Chapter

**March 13, 2025**

- Lunch with Sacramento Valley Chapter (Snowed Out)
- Joint Dinner with Golden Gate and San Jose Chapters

**March 14, 2025**

- Depart San Francisco for Charleston

**March 19–22, 2025**

- Spring ExCom  
Location: Asheville, NC  
Activities: Welcome dinner, half-day meetings, team building activities

## **March 22, 2025**

- Drive home to Charleston

## **March 22–26, 2025**

- DC Leaders  
Location: Washington, DC  
Activities: Meetings with DC leaders, DOE, State Senators
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# **April 2025**

## **April 2, 2025**

- Spring Board Meeting (Virtual)

## **April 7–11, 2025**

- Region IV  
Locations: Charleston, SC, Columbia, SC, Atlanta, GA, Greenville, SC, Charlotte, NC, Greensboro, NC, and Raleigh, NC Chapters  
Activities: Lunches, dinners, chapter meetings, ASHRAE HQ meeting

## **April 12–14, 2025**

- RAL Ghana Chapter  
Activities: Student Chapter ATU Inauguration, Ghana Chapter

## **April 14–15, 2025**

- RAL Cairo Chapter
- Activities: Chapter and student dinner meeting

## **April 15–16, 2025**

- RAL Alexandria Chapter  
Activities: Chapter meetings, dinner, Chartered new chapter, met with local policy makers

## **April 16–18, 2025**

- RAL Falcon Chapter, Dubai  
Activities: Chapter BOG meeting, dinner



### **April 20–22, 2025**

- Qatar Oryx Chapter Visit & Hot Climates Conference  
Location: Doha, Qatar  
Activities: Chapter visit, conference, met with local policy makers, toured largest central cooling plant in the world (130,000 tons refrigeration)

### **April 23–26, 2025**

- Region XIV Technology Awards  
Location: Loughborough University, UK  
Activities: CIBSE Meeting (London), Technology Awards, Black Tie Dinner, Installed chapter officers and student branch leaders

### **April 26–May 4, 2025**

- Region XIV Chapter Visits  
Locations: Peak District, Glasgow, Edinburgh, Dublin  
Activities: Factory tours, university visits, student engagement, employer meetings, central heating plant (5MW) heat pump
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## **May 2025**

### **May 4–10, 2025**

- Region XIV Dublin
- Chapter visit  
Activities: Activities with Dublin members and students at UCD. Installed student branch leaders. Held half day seminar on workforce development and mentorship at UCD

### **May 10–17, 2025**

- UNEP Meeting  
Location: Paris, France  
Activities: Meetings at UNEP, dinner, strategic planning
- Student Branch Advisor and Section Chair lunch meeting and tour of one of the oldest trade/guild schools in UK (where Marie Curry worked). University does a lot of research into heat pumps and different refrigerants and lubricants.

### **May 17–24, 2025**

- Region XIV Brussels  
Activities: Meetings with EU Parliament member from Greece and meeting with the European Commission DG Energy department (similar to the DOE in the US).

### **May 24–31, 2025**

- Region XIV Zurich
- Activities: Meeting with section chair, lunch meeting with local industry leaders and employers, toured a fully automated sensor manufacturing facility and research center, inaugurated new student branch at ETHZ (school where Einstein taught) and toured their new and extensive building decarbonization research facility

### **May 28, 2025**

- Board of Directors Meeting (Virtual)
- 

## **June 2025**

### **May 31–June 8, 2025**

- CLIMA Conference  
Location: Milan, Italy  
Activities: Workshops, panel discussions, conference sessions

### **June 18–26, 2025**

- Summer Meeting  
Location: Phoenix, AZ  
Activities: ASHRAE Annual/Summer Meeting, board meetings, farewell speech

### **June 26–30, 2025**

- Return to Charleston, wrap-up, transition to next president
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## **End of Report**

- BOD ExO = Board of Directors Ex Officio
- CO = Coordinating Officer
- VP = Vice President
- DAL = Director-at-Large
- DRC = Director-and Regional Chair
- RAL = Region-at-Large
- RMCR = Region Members Council Representative,
- NVM = Non-voting Member
- \* = New Member
- Dir. =Director
- MAL= Member-at-Large
- Cons. = Consultant



## 2024-25 Standing Appointments & Election Reference (For Information Only)

*This document is a complete listing of standing body appointments and election outcomes within ASHRAE for the Society Year noted with the exception of PEAC, JEPC, COF, and LMC.*

**Updated June 2025**

### Board of Directors (Members are elected)

Malcolm (Dennis) Knight, President	Charles Bertuch, DRC (I)*	Buzz Wright, DRC (X)	Blake Ellis, DAL
William (Bill) McQuade, President-Elect	Genevieve Lussier, DRC (II)*	Rob Craddock, DRC (XI)*	Luke Leung, DAL
Sarah Maston, Treasurer*	Sherry Abbott Adkins, DRC (III)*	John Constantinide, DRC (XII)	Pat Marks, DAL*
Wade Conlan, VP	Bryan Holcomb, DRC (IV)	Cheng Wee Leong, DRC (XIII)	Corey Metzger, DAL
Chandra Sekhar, VP	James (Jim) Arnold, DRC (V)	Mahroo Eftekhari, DRC (XIV)	Heather Schopplein, DAL
Devin Abellon, VP*	Susanna Hanson, DRC (VI)	Richie Mittal, DRC (XV)*	Wei Sun, DAL
Ken Fulk, VP*	Scott Peach, DRC (VII)	Mohammed (Bassel) Anbari DRC (RAL)*	David Yashar, DAL*
Jeff Littleton, Secretary	Joseph (Joe) Sanders, DRC (VIII)	Carrie Brown, DAL*	
	Jonathan Smith, DRC (IX)	Douglas (Doug) Cochrane, DAL	

### Executive Committee

*During intervals between Board of Directors meetings, the Executive Committee shall exercise administrative powers of the Board of Directors. Matters of policy determined by the Executive Committee between meetings of the Board of Directors shall be submitted for approval to the Board of Directors at its next meeting.*

**Members are determined by noted elected position on the Board of Directors.**

Malcolm (Dennis) Knight, President  
William (Bill) McQuade, President-Elect  
Sarah Maston, Treasurer\*  
Wade Conlan, VP  
Chandra Sekhar, VP  
Devin Abellon, VP\*  
Ken Fulk, VP\*  
Jeff Littleton, Secretary

### Diversity, Equity and Inclusion Subcommittee

*Though not identified as a standing body, this subcommittee is an ongoing appointment made by the President-Elect and reports to the Board of Directors*

Susanna Hanson, Chair	Madison Schultz, Consultant*
Heather Schopplein, Vice Chair	Lionel Davis, Consultant
Devin Abellon	Fiona Martin McCarthy, Consultant*
Mohammed Anbari*	Kishor Khankari, Consultant*
Jennifer Leach*	Alekhya Kaianathbhatta, Consultant*
Dunstan Macauley	Tanisha Meyers-Lisle, Staff Liaison
Max Rohr*	
Jonathan Smith	

### Center of Excellence in Building Decarbonization

*This standing body reports to ExCom.*

Kent Peterson, P.E., Chair	Kayleigh Houde, MEP 2040 Liaison
Blake Ellis, P.E., Vice Chair	Bill McQuade, P.E., Members
Ghina Annan	Council Liaison
Carrie Brown	Jeremy Smith, P.E., Technology
Luke Leung	Council Liaison
Bing Liu	Costas Balaras, P.E., Ph. D.,
Clay Nesler	Technology Council Liaison
Rajan Rajendran	Jaime Yeh, AHRI Liaison
Stet Sanborn	Stephanie Reiniche, Staff Liaison
Ginger Scoggins	

**Continued on next page**

## Councils Reporting to the Board of Directors

### **Members Council**

*In addition to the below, this council includes chairs of committees reporting to the council as voting members, a Planning Committee liaison, and a Developing Economies consultant.*

William (Bill) McQuade, Chair  
Sarah Maston, Vice Chair\*  
James (Jim) Arnold, Dir. (25)  
Mahroo Eftekhari, Dir. (25)  
Bryan Holcomb, Dir. (25)  
Scott Peach, Dir. (25)  
Buzz Wright, Dir. (25)  
Cheng Wee Leong, Dir. (25)  
Wei Sun, Dir. (25)  
Deanna Adkison (I) (27)\*  
Ibrahim Semhat (II) (27)\*  
Matthew Archey (III) (27)\*  
Heather Platt Gullledge (IV) (25)  
Julia Timberman (V) (25)  
Maggie Moninski (VI) (25)  
Carrie Kelty (VII) (26)  
Keith Reihl (VIII) (26)  
Daniel Russell (IX) (26)  
Colin Laisure-Pool (X) (26)  
Jeff Hurd (XI) (27)\*  
Tulia Rios (XII) (25)  
Ching Loon Ong (XIII) (25)  
Eduardo Maldonado (XIV) (26)  
Aakash Patel (XV) (25)\*  
Adeeba Mehboob (RAL) (27)\*  
Mohammed Anbari (RAL) (24)  
Lizzy Seymour, Staff Liaison

### **Publishing and Education Council**

*In addition to the above, this council includes chairs of Committees reporting to the council as voting members (excluding the Historical Committee Chair) and Vice-Chairs as non-voting members, a Planning Committee liaison, and a Developing Economies consultant.*

Chandra Sekhar, Chair  
Kenneth (Ken) Fulk, Vice Chair\*  
Doug Cochrane, Dir. (25)  
John Constantinide, Dir. (25)  
Blake Ellis, Dir. (25)  
Jonathan Smith, Dir. (25)  
Kimberly Cowman, Past Certification (27)\*  
Megan Tosh, Past Handbook (26)  
Jeremy Smith, Past Training and Education (27)\*  
Adeeba Mehboob, Past Publications (26)  
Mark Owen, Staff Liaison

### **Technology Council**

*In addition to the above, this council includes chairs of Committees reporting to the council as voting members and Vice-Chairs as non-voting members, a Planning Committee liaison, and a Developing Economies consultant.*

Wade Conlan, Chair  
Devin Abellon, Vice Chair,\*  
Susanna Hanson, Dir. (25)  
Corey Metzger, Dir. (25)\*  
Richie Mittal, Dir. (25) MAL (26)  
Mark Fly, MAL (27)\*  
Jospeh Sanders, Dir. (25)\*  
Heather Schopplein, Dir. (25)\*  
Constantinos Balaras, Past DRC (25)  
Drury (Dru) Crawley, Past Standards (27)\*  
Carl Huber, Past TAC (25)  
Michael Pouchak, Past RAC (26)  
Larry Smith, MAL (25)  
Stephanie Reiniche, Staff Liaison

*Continued on next page*

## Committees Reporting to the Board of Directors

### Nominating Committee

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Chair, Farooq Mehboob  
Vice Chair, Ginger Scoggins\*

#### Region Members

I Richard Vehlow\*  
II Isabelle Lavoie  
III James Grant  
IV Jimmy Leonida  
V Stephen Ehrman  
VI Mark Miller  
VII Karen Thrasher  
VIII Christopher Ahne  
IX Jessica Renner  
X Marites Calad  
XI Greg Fluter  
XII Timothy Theriault\*  
XIII Ching Man Tracy Pang  
XIV Bratislav Blagojevic  
XV Krishnan Viswanath  
RAL Mohammad Sajid

#### Board Elected Members

Dunstan Macauley - III  
Sheila Hayter - IX  
Costantinos (Costas) Balaras - XIV  
Robin Bryant - XII  
Adeeba Mehboob – RAL  
Chris Gray - VII  
Mick Schwedler - VI  
Tom Lawrence - IV

#### Region Alternates

I Christopher (Chris) Phelan\*  
II Nicolas Lemire  
III Roger Jones  
IV Charlie Curlin  
V Bradley White  
VI Daniel Chudecke\*  
VII Grant Page  
VIII William (Bill) Simpson\*  
IX Kevin Amende\*  
X Cynthia Moreno\*  
XI Louise McKenzie\*  
XII Timothy Theriault  
XIII Dominador Castro\*  
XIV Marko Ignjatovic  
XV Sandesh Bhure\*  
RAL Mohamed Alagraa\*

#### Board Elected Alternates

Ashok Virmani – RAL\*  
Bjarne Olesen - XIV  
Steven Sill – I\*  
Bill Klock - VIII  
Jen Leach - III  
Karine Leblanc - X  
Lee Millies - V  
Pat Graef – XII\*

Candace Denton, Staff Liaison

*Continued on next page*

## Committees Reporting to the Board of Directors Continued

### **Audit Committee**

Joseph Sanders, Chair  
Cheng Wee Leong  
Genevieve Lussier\*  
Craig Wright, Staff Liaison

### **Finance Committee**

Sarah Maston, Chair\*  
George (Billy) Austin  
Wade Conlan\*  
Chris Gray  
Ahmed Alaa Eldin Mohamed  
Ashish Rakheja  
Matt Rowe  
Chandra Sekhar\*  
Craig Wright, Staff Liaison

### **Development Committee (Reports to Finance)**

Darryl Boyce, Chair*	Haley Goslinga, RP ExCom
Jason Alphonso, Vice Chair*	Randy Jones, Foundation ExCom
Michael Cooper*	Mike Hart, Foundation ExCom
Stephanie (Steph) Kunkel*	Rajesh Jain, MAL
Dunstan Macauley*	Wade Conlan, CO*
Hassan Sultan*	Kirstin Pilot, Staff Liaison
Aakash Patel*	
Lester Pereira, RP ExCom	

### **Planning Committee**

Trenton (Trent) Hunt, Chair	Mohammed (Bassel) Anbari, Cons.*
Andres Sepulveda, Vice Chair	Carrie Brown, Cons.*
George (Billy) Austin	Sheila Hayter, Cons
Rupesh Iyengar	Mick Schwedler, Cons
Kellie Huff*	Chandra Sekhar, Cons.
Dunstan Macauley*	David Yashar, Cons.*
Farhan Mehboob	Devin Abellon, CO
Michael Patton	Lizzy Seymour, Staff Dir., Membership*
Madison Schultz	Jeff Littleton, EVP
Chad Smith	Chandrias Jolly, Staff Liaison
Samir Traboulsi*	
Buzz Wright*	
Sherry Abbott-Adkins, Cons.*	

### **Society Rules Committee**

Elbert (Bert) Phillips, Chair  
Spencer Morasch, Vice Chair  
Ioan Dobosi  
Bill Klock\*  
Isabelle Lavoie\*  
Heather Schopplein  
Chandra Sekhar, CO  
Chandrias Jolly, Staff Liaison

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## Committees Reporting to Members Council

### Chapter Technology Transfer Committee

Daniel Redmond, Chair  
 Heric Holmes, 1<sup>st</sup> Vice Chair  
 Elizabeth Zakelj, 2<sup>nd</sup> Vice Chair  
 Murat Bayramoglu (I)\*  
 Abhi Khurana (II)  
 Stephanie Mages (III)\*  
 Don Gariepy (IV)\*  
 Matthew Klok (V)  
 Eric Johansen (VI)  
 Kevin Muldoon (VII)  
 Steven McConnell (VIII)\*  
 David Griffin (IX)\*  
 Nikola Kravik (X)\*  
 Matt Parkes (XI)  
 Esteban Baccini Jauregui (XII)\*  
 Sivakumar Gadam (XIII)  
 Conor Murray (XIV)  
 Krishna Mitra (XV)\*  
 Osama Khayata (RAL)  
 Kenneth Shifflett, Chapt. Prog. Coord. \*  
~~Elizabeth Zakelj, Tech Hour coord.~~  
 Wei Sun, BOD ExO  
 William (Bill) McQuade, CO\*  
 Rhiannon Masterson, Staff Liaison

### Communications Committee

Daniel Bourque, Chair  
 Thursten Simonsen, Vice Chair  
 Franco D'Atri\*  
 Nissun Feiner  
 Jeanette Hay  
 Kinga Hydras  
 Sandeep Mendiratta  
 Bradley White  
 James (Jim) Arnold, BOD ExO  
 William (Bill) McQuade, CO\*  
 Joslyn Ratcliff, Staff Liaison

### Conferences & Expositions Committee

Maggie Moninski, Chair  
 Kristen Cetin, Vice Chair  
 Ahmed Abdel Salam  
 Ehab Abdelkader Mostafa  
 Atilla Biyikoglu  
 Aaron Boranian  
 Craig Bradshaw  
 Kevin Brown  
 Robin Bryant  
 Cynthia Callaway  
 Joe Chow  
 Jon Cohen  
 Brian Fronk  
 Anuj Gupta\*  
 Haotian Liu  
 Money Khanna  
 Suzanne LeViseur  
 James Liston  
 Stephanie Mages  
 Andrew Reilman\*  
 Erik Sanchez  
 Som Shrestha  
 Li Song\*  
 Joshua Vasudevan\*  
 Vinod Venugopal  
 Ng Yong Kong  
 Davide Ziviani  
 Cheng Wee Leong, BOD ExO  
 William (Bill) McQuade, CO\*  
 Tony Giometti, Staff Liaison

### Government Affairs Committee

Sheila Hayter, Chair  
 Meghan McNulty, Vice Chair  
 Jason Alphonso, Pub Ed. Rep.  
 Mohammed (Bassel) Anbari, Members Council Rep.  
 Christopher (Chris) Phelan, Tech Council Rep.  
 Timothy (Tim) Wentz, MAL  
 Andrew Persily, MAL  
 Artorius Reyes, MAL  
 Philip Johnston, MAL\*  
 William Fisher (I)  
 Adrienne Mitani (II)\*  
 Patrick Villaume (III)\*  
 Weston Hockaday (IV)  
 Adam Doubblestein (V)  
 Victor Nino (VI)\*

Douglas Cage (VII)  
 Eleazar Rivera (VIII)  
 Peter Koneck-Wilwerding (IX)  
 Tracey Jumper (X)  
 Geoffrey Jenks (XI)  
 Luis Alvarado (XII)\*  
 Abdul Razaak Syed Mubarak (XIII)\*  
 Ioan Dobosi (XIV)  
 Varun Jain (XV)\*  
 Ahmed Bolbol (RAL)  
 Sonya Pouncy, Commun. Coord.  
 Bryan Holcomb, BOD ExO  
 Sarah Maston, CO\*  
 Alice Yates, Staff Liaison

### Honors and Awards Committee

Thomas (Tom) Phoenix, Chair  
 Adam Davis, Vice Chair  
 Mohammad Al Tassi  
 Ronald (Ron) Gagnon\*  
 Maged Hashem  
 Andy Reilman\*  
 Janice Peterson\*  
 Karine Leblanc  
 Scott Martin  
 Juliana Trigo  
 Krishnan Viswanath\*  
 Wei Sun  
 William (Bill) McQuade, CO\*  
 Rhiannon Masterson, Staff Liaison

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## Committees Reporting to Members Council Continued

### **Membership Promotion Committee**

Jason Urso, Chair  
 Louise McKenzie, 1<sup>st</sup> Vice Chair  
 Robert Druga, 2<sup>nd</sup> Vice Chair  
 Chonghui Liu (I)  
 Reaz Usmanali (II)  
 Ryan Westlund (III)  
 Darrell Sandlin (IV) \*  
 Akshay Bhargava (V)  
 Jason Leffingwell (VI)\*  
 Lionel Davis (VII)\*  
 Ron McCarty (VIII)  
 Mark Penchoff (IX)  
 Lawrence Hodgins (X)\*  
 Gregory Jernstrom (XI)  
 Guillermo Massucco (XII)  
 Dennis Tung (XIII)\*  
 Adelio Gaspar (XIV)  
 Muhammad Ershed Jaman Khan (XV)\*  
 Adil Inam (RAL)  
 Daniel Chudecke, Cons.\*  
 Bryan Holcomb, BOD ExO  
 William (Bill) McQuade, CO\*  
 Daniel Gurley, Staff Liaison

### **Research Promotion Committee**

Lester Pereira, Chair  
 Haley Goslinga, 1<sup>st</sup> Vice Chair  
 Andrew Manos, 2<sup>nd</sup> Vice Chair  
 Kevin Baldwin, 3<sup>rd</sup> Vice Chair  
 Kimberly Thompson, 4<sup>th</sup> Vice Chair  
 Eric Fontaine (I)  
 David Sinclair (II)  
 Morgan Stevens (III)\*  
 Brian Justice (IV)  
 Matthew Belko (V)\*  
 Mayra Rebeca Reyes Elizondo (VI)  
 Jennings Davis (VII)  
 Greg Tinkler (VIII)\*  
 Wesley Stanfill (IX)\*  
 Robert Kunkel (X)\*  
 Nathan Zeigler (XI)\*  
 Javier Korenko (XII)  
 Suei Chea (XIII)  
 Aleksandar Andjelkovic (XIV)  
 Sayani Haribabu (XV)\*  
 Muhammad Omer Khan (RAL)  
 Mahroo Eftekhari, BOD ExO\*  
 William (Bill) McQuade, CO\*  
 Julia Mumford, Staff Liaison

### **Student Activities Committee**

Shaun Nienhueser, Chair  
 Robert Snow III, Vice Chair  
 Ashley Keller (I)  
 Elizabeth Primeau (II)  
 Andrew Hobson (III)  
 Natalie MacDonald (IV)  
 Arunabha Sau (V)\*  
 Kevin Summers (VI)  
 Mariel Meegan (VII)\*  
 Jacqueline Hay (VIII)  
 Corey Chinn (IX)  
 Omar Rojas (X)  
 Justin Albo (XI)  
 Juliana Trigo (XII)  
 Fu-Jen Wang (XIII)  
 Triantafyllos Triantafyllopoulos (XIV)  
 Yashkumar Shukla (XV)\*  
 Michel Hayek (RAL)\*  
 Dennis O'Neal, Accred. Rep./ ABET Board  
 Mansour Zenouzi, Accred. Rep./ ABET EAC  
 Robert Bittle, Accred. Rep./ ABET ETAC  
 Buzz Wright, BOD ExO\*  
 William (Bill) McQuade, CO\*  
 Katie Thomson, Staff Liaison

### **Young Engineers in ASHRAE Committee**

<p>Bruno Martinez, Chair                  Elise Kiland, Senior Vice Char                  Elizabeth Jedrlinic, Junior Vice Chair                  Vineet Nair (I)*                  Benjamin Oliver (II)                  Tyler Berry (III)                  Ben Bingham (IV)                  Paul Fernandez (V)                  Drew Samuels (VI)                  Blake Forsythe (VII)                  Christopher Kriepps (VIII)*                  Marie VanderVliet (IX)                  Elise Backstrom (X)                  Roisie (Roisin) Welch (XI)*                  Keiron Nanan (XII)                  Chak Mou Lam (XIII)                  Joshua Vasudevan (XIV)</p>	<p>Money Khanna (XV)*                  Eman Mohamed (RAL)*                  Robert Druga, Liaison, MP*                  Jake Lenahan, Liaison, CIBSE                  Robert Snow III, Liaison, SA*                  Zachary Alderman, MAL*                  Basma Sadek, MAL*                  Marisa Higgins, Cons.*                  Cailin MacPherson, Cons.*                  Scott Peach, BOD ExO                  William (Bill) McQuade, CO*                  Jeanette McCray, Staff Liaison</p>
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## Committees Reporting to the Publishing and Education Council

### Certification Committee

Suz Ann Arroyo, Chair  
Badri Patel, 1<sup>st</sup> Vice Chair  
Gregory Jones, 2<sup>nd</sup> Vice Chair  
Marius Balan  
Kristen Cole\*  
Cory Jassen\*  
Apichit Lumlertpongpana  
Carlos Mitroga  
Vikram Murthy  
Keith Reihl  
Marianna Vallejo  
Jonathan Smith, BOD ExO\*  
Chandra Sekhar, CO\*  
Tim Kline, Staff Liaison

### Historical Committee

Norman Grusnick, Chair  
Akinbowale (Ade) Soluade, Vice Chair  
Vinay Ananthachar\*  
Fabio Clavijo\*  
Khalid Gulzar  
Andrew Pearson  
Henry Stehmeyer  
Jonathan Smith, BOD ExO\*  
Chandra Sekhar, CO\*  
Julie Harr, Staff Liaison

### Publications Committee

Megan Tosh, Chair  
Kurt Monteiro, Vice Chair  
Rodrigo Arias  
Robin Bryant  
Walter Grondzik\*  
Stephen Duda\*  
Wyatt Hahn\*  
Jennifer Isenbeck  
Alekhya Kaianathbhatta\*  
Stephen Kavanaugh  
Francis Mills  
Vinod Venugopal\*  
Drew Champlin, Jour. Editor  
Blake Ellis, BOD ExO  
Chandra Sekhar, CO\*  
Cindy Michaels, Staff Liaison

### Training and Education Committee

Kimberly Pierson, Chair  
Tim Ashby, 1<sup>st</sup> Vice Chair  
Ashley Weekly, 2<sup>nd</sup> Vice Chair  
Roberto Aguilo\*  
Gerardo Alfonso\*  
Joseph Firrantello  
Vanessa Freidberg  
KokZhen Law  
Christopher (Chris) Phelan\*  
James Piscopo  
Christine Reinders-Caron  
Zeeshan Siddiqui  
Douglas Cochrane, BOD ExO  
Chandra Sekhar, CO\*  
Karen Murray, Staff Liaison

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### Handbook Committee ([Members Elected to Committee](#))

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Joseph (Joe) Furman, Chair  
Stephanie Mages, Vice Chair

#### **Subcommittee for 2025 Fundamentals**

Stephanie Mages, Chair  
Sonya Pouncy  
Caroline Calloway  
Frederich Granzow  
Marija Todorovic  
Robert McFarlane

#### **Subcommittee for 2026 Handbook Refrigeration**

Adrienne Thomle, Chair  
Drake Erbe  
Kevin Muldoon  
Cameron Labunski  
Vance Payne  
Zheng O'Neill

#### **Subcommittee for 2027 HVAC Applications**

Krishnan Gowri, Chair  
Jeff Gatlin  
Rex Scare  
Mark Miller  
Paula Hernandez  
Philip Naughton

#### **Subcommittee for 2028 HVAC Systems and Equipment**

Nicolas Lemire, Chair  
Elizabeth Goll  
Gursaran Mathur  
Satish Iyengar  
Javier Korenko  
Katja Auer

*Continued on next page*

## Committees Reporting to the Technology Council

### Environmental Health Committee

Marwa Zaatari, Chair  
Max Sherman, Vice Chair  
William Bahnfleth\*  
Seema Bhangar\*  
Richard Bruns\*  
Dimitris Charalambopoulos  
Benjamin Jones  
Howard Kipen  
Linda Lee  
John McKeon\*  
Kenneth Mead  
Conor Murray  
Lisa Ng  
Kathleen Owen  
Donald Weekes  
Corey Metzger, BOD ExO\*  
Wade Conlan, CO\*  
~~Steve Hammerling, Staff Liaison~~  
Heather Pierce, Staff Liaison\* 5/13/25

### Global Technical Interaction Committee

Ashish Rakheja, Chair  
Steven Bushby, Vice Chair  
Adrienne Thomle\*  
Satheesh Kulankara\*  
Justin Prosser\*  
Michael Corbat\*  
Drake Erbe  
Coleman Brumley\*  
Hassan Ali Younes, MAL  
Fabio Clavijo, MAL  
Cheng Wee Leong, MAL  
Jyotirmay Mathur, MAL  
George Pantelidis, MAL  
Richie Mittal, BOD ExO  
Wade Conlan, CO\*  
Ryan Shanley, Staff Liaison

### Residential Buildings Committee

Rachel Romero, Chair  
Carol Marriott, Vice Chair  
Chrissi Antonopoulos\*  
Darcy Carbone  
Wesley Davis  
Shivraj Dhaka\*  
Philip Fairey  
Jingjuan Feng  
Jaap Hogeling  
Li Lan  
Kimberly Llewellyn\*  
Michael Pouchak  
Yashkumar Shukla  
Xudong Wang  
Brian Dougherty\*  
Pawel Wargocki  
Joseph (Joe) Sanders, BOD ExO\*  
Wade Conlan, CO\*  
Derrick Nesfield, Staff Liaison

### Refrigeration Technology Committee for Comfort - Process - Cold Chain

Douglas Scott, Chair  
Donald (Don) Brandt, Vice Chair\*  
Andrew Beall  
Bruce Nelson  
Charles Hon\*  
Dustin Lilya  
Cesar Luis Lim\*  
Bruce Lindsay\*  
Apichit Lumlertpongpana  
Davide Ziviani\*  
Roddam Simha  
Harshal Surange  
Gratiela Maria Tarlea\*  
Xudong Wang  
Heather Schopplein, BOD ExO\*  
Wade Conlan, CO\*  
~~Steve Hammerling, Staff Liaison~~  
Heather Pierce, Staff Liaison\* 5/13/25

### Research Administration Committee (Members Elected to Committee)

Natascha Milesi Ferretti, Chair  
Jin Wen, Vice Chair  
Srinivas Katipamula  
Chris Gray  
Zheng O'Neill  
Dennis Landsberg  
Douglas Scott  
Matthew Mullen  
James Bogart  
Carl Huber  
Roland Charneux  
WenBin Ng  
Allen Kirkwood\*  
Conor Murray\*  
Xudong Wang, Cons.  
Anastasia Mylona, Cons\*  
Susanna Hanson, BOD ExO  
Wade Conlan, CO  
Steve Hammerling, Staff Liaison

### **Standards Committee (Members Elected to Committee)**

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Douglas Fick, Chair	Jaap Hogeling	Kenneth Monroe	Paolo Tronville
Adrienne Thomle, Vice Chair *	Jennifer Isenbeck	Daniel Nall	Douglas Tucker
Hoy Bohanon*	Satish Iyengar*	Philip Naughton	William Walter
Kelley Cramm	Phillip Johnson	Kathleen Owen	David Yuill*
Abdel Darwich	Paul Lindahl	Gwelen Paliaga	Susanna Hanson, BOD ExO*
Drake Erbe	Julie Majurin	Karl Peterman	Wade Conlan, CO*
Patricia Graef	Lawrence Markel	Justin Prosser	Ryan Shanley, Staff Liaison
William Healy*	Margaret Mathison	Christopher Seeton	

### **Technical Activities Committee (Members Elected to Committee)**

Kevin Mercer, Chair  
Satheesh Kulankara, Vice Chair  
Joy Altwies  
Jason Atkisson  
Vikrant Aute  
Esteban Baccini Jauregui\*  
Tina Brueckner  
Kyle Gluesenkamp\*  
Ongun Kazanci  
Money Khanna  
Gursaran Mathur  
Kevin Muldoon\*  
Diana Fisler\*  
Kashif Nawaz  
Lan Chi Nguyen Weekes  
Douglas Reindl  
Steve Hammerling, Staff Liaison

