



MINUTES

Handbook Committee

June 26, 2016

Marriott St. Louis Grand

St. Louis, Missouri

MEMBERS PRESENT:

Chris Ahne, chair
Forrest Yount, 2016S chair
Nicolas Lemire, 2016S
Paul Lindahl, 2016S
Patrick Marks, 2016S
Michael Patton, 2016S
David Yuill, 2017F chair
Bass Abushakra, 2017F
Larry Akers, 2017F
Van Baxter, 2017F
Sheila Hayter, 2017F
Ramesh Paranjpey, 2017F
Don Fenton, 2018R chair
Kelley Cramm, 2018R
Jay Enck, 2018R
Scott Fisher, 2018R
Bill Murphy, 2018R
Suzanne LeViseur, 2019A chair
Bryan Becker, 2019A
Narayanan Chandrasekar, 2019A
Bryan Holcomb, 2019A
Harris Sheinman, 2019A
Lynn Werman, 2019A
Mick Schwedler, Board of Directors Ex-Officio
Chuck Gullledge, Publishing and Education Council chair; Coordinating Officer

STAFF PRESENT:

Heather Kennedy, Managing Editor, Handbook
Mark Owen, staff liaison, Editor/Group Mgr., Handbook and Special Publications

VISITORS:

Caroline Calloway, incoming 2020S
Walid Chakroun, Publishing and Education Council vice chair
Ken Cooper, Technical Activities Committee (TAC)
Prakash Dhamshala, incoming 2020S
Pam Duffy, Leadership U
James Lo, TC 4.10
Florentino Roson, incoming 2020S
Steven Sill, incoming 2020S

ADDITIONAL DISTRIBUTION:

Publishing and Education Council
Chapter Technology Transfer Committee

MAJOR PASSED MOTIONS

No.	Motion
2	To modify the committee’s Manual of Procedures (MOP) as amended in Motion 2A.
3	To modify the Authors and Revisers Guide (ARG) as shown in the excerpts in Attachment B.
4	To modify the committee’s Reference Manual by adding new paragraph 2.1.2.

ACTION ITEMS

No.	Responsibility	Action Item
1	Functional Subcommittee	Review the content on handling errors as now contained in the Authors and Revisers Guide (ARG) and Manual of Procedures (MOP).
2	Owen	Add the ASHRAE Authoring Portal (AAP) PowerPoint presentation to Handbook Central as soon as possible at this conference.

1. Call to Order

Mr. Ahne called the meeting to order at 10:32 a.m. and noted that a quorum was present.

2. Introductions

Mr. Ahne welcomed all attendees. Members and visitors introduced themselves.

3. Approval of Minutes

It was moved and seconded

(1) to approve the minutes of the committee’s January 2016 meeting in Orlando.

MOTION (1) PASSED, voice vote.

4. Agenda Updates

There were no additions to the agenda.

Mr. Lo (TC 4.10) inquired about the procedure for submitting the previously approved new chapter on indoor air modeling for 2019 *HVAC Applications*. Mr. Owen said the chapter manuscript and checklist items should be submitted to the TC’s Handbook liaison (Mr. Sheinman) no later than July 31, 2018.

5. Chair’s Comments

5.1 Publishing and Education Council (PEC) update

Mr. Ahne reported that training on using Basecamp, the approved hosting tool for document sharing (as opposed to unapproved venues such as Dropbox or Google Docs) is forthcoming. He also mentioned motions/comments received and under consideration are (1) offering member benefit options other than Handbook, (2) making Handbook Online device responsive, and (3) adding more content on operation and maintenance in all ASHRAE publications.

6. Board of Directors Ex-Officio (BOD ExO) Member Report

Mr. Schwedler gave a brief PowerPoint presentation (Attachment A) of Society announcements and news. He also recognized the chair, Mr. Ahne, for his work during the year.

7. Coordinating Officer (CO) Report

Mr. Gulledge, PEC chair and CO, said that the new ASHRAE Authoring Portal was “impressive” and will be an important tool for easier development of Handbook content and keeping it protected in the process.

He added that liaisons and TCs should be on the lookout for new research on flammable refrigerants; this information will need to be incorporated into the Handbook.

8. Handbook Editor’s Report

Mr. Owen provided an update of information on distribution and sales for the current (2013, 2014, 2015, and 2016) Handbook volumes and ASHRAE Handbook Online. There are now between 11,000 and 12,000 active subscribers to the online edition. He also provided the revision and online access history for all chapters.

Regarding member benefit selections, he reported that, since March 2014, 81% of renewing members have chosen to receive the print/CD edition. Another 14.5% chose the CD accompanied by an online subscription, and about 4.5% have chosen to receive all formats—print, CD, and online—for an additional fee. Google Analytics data show that about 94% of online subscribers access the Handbook from a desktop computer, while about 6% use a smart phone or tablet.

9. Volume Subcommittee Reports

9.1 2016 HVAC Systems and Equipment

Mr. Yount praised the good job done by the TCs, with the final results for the 2016 volume showing a high percentage of chapters with revisions. He added that good tracking and communication with staff and liaisons contributed to successful publication of the book on time.

9.2 2017 Fundamentals

Mr. Yuill reported TCs are now in the final stages of revisions and approvals, with 16 chapters received, 10 coming late, 3 for which status is unclear, and the rest with no changes for 2017. A new chapter on moisture management is ready, although 2 other approved new chapters (on climate change and on optimization) will not be ready in time for the print edition. However, when the 2 new chapters are completed, they can be added to the online edition as supplemental content for the volume.

Mr. Yuill said that some TCs had expressed interest in receiving reviews from members of the College of Fellows.

Mr. Yuill asked if staff published errata for noncurrent Handbook volumes. Mr. Owen said this has not been done; only current volumes’ errata are now posted on the website and included in each year’s new edition. Users are encouraged to obtain and reference the current volumes. Mr. Ahne assigned the Functional Subcommittee to review the content on handling errors as now contained in the Authors and Revisers Guide (ARG) and Manual of Procedures (MOP) (**ACTION ITEM #1**).

9.3 2018 Refrigeration

Mr. Fenton reported that TC are now getting down to work on revisions, with most TCs on track. The challenge for some TCs is that the expertise for certain chapters is not found in ASHRAE, so they must reach out to experts in other organizations. Mr. Fenton said he has helped facilitate reviews by such experts, with 10 to 12 reviews received to date.

9.4 2019 HVAC Applications

Ms. LeViseur reported that the volume/TCs meeting was “somewhat sparsely attended,” but also that those who did attend had many questions.

10. Subcommittee Reports

10.1 Training

10.1.1 Handbook training

Ms. LeViseur reported that training was conducted earlier in the morning with more than 60 attendees. Much of the focus and excitement was on the new ASHRAE Authoring Portal (AAP) (authoring.ashrae.org), which was very positively received. Questions/comments covered whether subfolders can be created, uploading material into the Content Folders, and the potential for using AAP for other publications. Mr. Owen said that the AAP PowerPoint presentation would be added to Handbook Central as soon as possible at this conference (**ACTION ITEM #2**).

Mr. Cooper said that launching the AAP is “a step in the right direction,” adding that he has been promoting it and the training session.

10.2 Functional

10.2.1 Rules of the Board (ROBs)

Mr. Fenton reported no changes.

10.2.2 Manual of Procedures (MOP)

Mr. Fenton presented the following motion:

- (2) to modify the committee’s Manual of Procedures (MOP) by adding the following new paragraph 2.2.5:

2.2.5 At the following ASHRAE Winter meeting, the incoming volume subcommittee uses the “Chapter Revision History” maintained by Handbook Staff to determine the status of each chapter regarding its timeliness and currency. Categories are assigned by the collective action of the Volume Subcommittee to each chapter according to:

- #1: (White designation): Chapter well maintained and no concerns**
- #2: (Yellow designation): 3 HB cycles with no changes except corrections; update and revision to chapter likely needed**
- #3: Orange designation): 4 HB cycles with no changes except corrections; serious consideration of update and revision to chapter needed**
- #4: (Red designation): 5 (or greater) HB cycles with no changes except corrections; urgent consideration of update and revision of chapter needed.**

where the Volume Subcommittee uses its collective judgement taking into account the stability of each chapter’s content. The Volume Subcommittee members (liaisons) inform each TC the status of their chapter(s) as determined. Adjustments to status may be suggested by the respective TC’s in conjunction with the liaison for possible change.

Mr. Owen suggested that the revision history document and the color coding not be specified, instead mentioning the intended aims only. Ms. Cramm offered the following motion:

- (2A) to amend Motion (2) as tracked in the following:

2.2.5 At the following ASHRAE ~~W~~winter ~~conference~~meeting, the incoming volume subcommittee uses the ~~“C~~chapter ~~R~~revision ~~H~~history” maintained by Handbook Staff to determine the status of each chapter regarding its timeliness and currency. ~~Categories are assigned by the collective action of the Volume Subcommittee to each chapter according to:~~

- ~~#1: (White designation): Chapter well maintained and no concerns~~
- ~~#2: (Yellow designation): 3 HB cycles with no changes except corrections; update and revision to chapter likely needed~~

~~#3: (Orange designation): 4 HB cycles with no changes except corrections; serious consideration of update and revision to chapter needed~~

~~#4: (Red designation): 5 (or greater) HB cycles with no changes except corrections; urgent consideration of update and revision of chapter needed.~~

~~where t~~**The Volume Subcommittee uses its collective judgement taking into account the stability of each chapter's content. The Volume Subcommittee members (liaisons) inform each TC the status of their chapter(s) as determined. Adjustments to status may be suggested by the respective TC's in conjunction with the liaison for possible change.**

MOTION (2A) (to amend) PASSED, 19-0-0, chair voting.

MOTION (2) (as amended) PASSED, 19-0-0, chair voting.

10.2.3 Authors and Revisers Guide (ARG)

Mr. Fenton presented the following motion:

(3) to modify the Authors and Revisers Guide (ARG) as shown in the excerpts in Attachment B.

MOTION (3) PASSED, 19-0-0, chair voting.

10.2.4 Reference Manual

Mr. Fenton presented the following motion:

(4) to modify the committee's Reference Manual by adding the following new paragraph 2.1.2:

2.1.2 At the following ASHRAE winter conference, the incoming volume subcommittee uses the chapter revision history maintained by Handbook Staff to determine the status of each chapter regarding its timeliness and currency. The Volume Subcommittee uses its collective judgement taking into account the stability of each chapter's content. The Volume Subcommittee members (liaisons) inform each TC the status of their chapter(s) as determined. Adjustments to status may be suggested by the respective TCs in conjunction with the liaison for possible change.

MOTION (4) PASSED, 19-0-0, chair voting.

10.3 Electronic Media

Mr. Yuill reported that the subcommittee will defer items discussed until the next meeting.

10.4 Strategic Planning

Mr. Yount said he will cover strategic planning items in item 11.2 on the agenda.

10.5 International

Mr. Ahne said that he understands the subcommittee has not yet selected a chair.

11. Information Items

11.1 Year 2015-16 MBOs

Mr. Ahne reviewed the status of MBOs for 2015-16 (updates noted in Attachment C).

11.2 Year 2016-17 MBOs

Mr. Yount presented his MBOs for 2016-17 (Attachment D).

12. Action Items

Mr. Owen reviewed action items from the January 2016 meeting:

No.	Responsibility	Action Item	Status
1	Owen	Provide liaisons with data ranking the number of sales/downloads/access for each chapter.	COMPLETE.
2	Owen	Investigate feasibility of asking ASHRAE Handbook Online users "Did you find what you needed?" and/or "Was this information helpful?" to help identify areas needing improvement.	COMPLETE. Recommendation not to add pop-up survey question.
3	All liaisons	Ensure that contact is made with assigned TCs.	COMPLETE.
4	Training Subcommittee	Prepare for training the TCs in June on the new collaborative authoring tool.	COMPLETE. Training presented at morning session.
5	Owen	Make available on Handbook Central the customized spreadsheet of overall schedules for the 2017 to 2020 volumes.	COMPLETE.
	Functional Subcommittee	Update the Reference Manual on the practice of using the revision history provided by staff to monitor chapter revision status.	COMPLETE.
	Ahne	Inform TC 6.5 of the committee's decision and recommendation regarding Motion 2.	COMPLETE.

13. Old Business

(None.)

14. New Business

(None.)

15. Adjournment

The meeting was adjourned at 1:13 p.m.

Respectfully submitted,



Mark S. Owen
 Staff liaison
 Editor/Group Manager, Handbook and Special Publications

ASHRAE Update

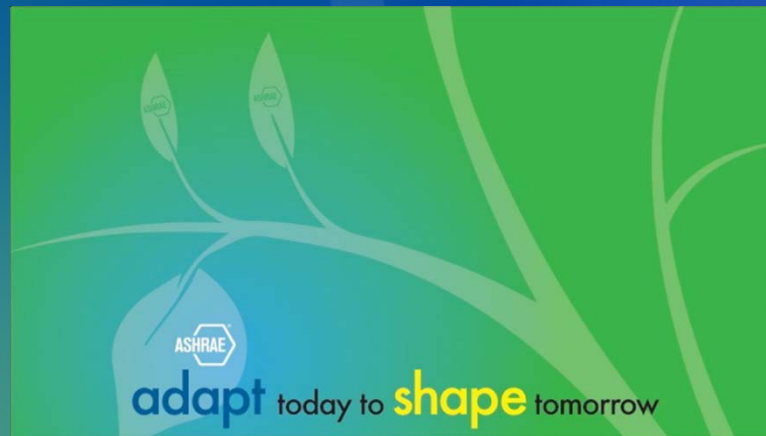
ExO Report to Committees



2016-17 Society Theme

- **Directives**

- Adapt ASHRAE resources to help expand member knowledge and develop the visionaries of tomorrow
- Adapt ASHRAE investments to energize chapters and engage members
- Adapt ASHRAE technology to produce an immediate, direct benefit to members and society.



Strategic Plan

- Planning Committee nearing completion of discussions on Initiative 4, “Role in the Global Community” based on results of work by consultant, MCI.
- MCI final report contains 31 recommendations. Specific recommendations under consideration in following general categories:
 - Membership and Operations
 - Marketing
 - Professional Development
 - Publications
 - Website
- Committee further plans to provide recommendations with costs/revenue projections for years 1, 2 and 3.



Board of Directors Fall Meeting

- First Board meeting held outside North America
- Held Oct. 3 and 4 in Bangkok following combined Chapter Regional Conference (CRC) for Region XIII and the Region-at-Large (RAL)
- Will expand the Board's perspective and present it with unique opportunity to work with members from dozens of chapters and countries.
- Follows goals in Strategic Plan



Flammable Refrigerant Research

- Part of global effort to phase down use of high global warming potential refrigerants
- \$5.2 million initiative by ASHRAE, AHRI and U.S. Department of Energy
- Results to be used in Standards 15 and 34



Certification

- BEAP, BEMP and CPMP accredited by American National Standards Institute), joining HBDP approved last year
- Personnel who work at U.S. federal buildings can now include ASHRAE certification in professional development plan
 - BEAP, CPMP and OPMP certifications and ASHRAE Learning Institute's Fundamentals of Building Operation, Maintenance and Management course considered Federal Buildings Personnel Training Act (FBPTA)-Aligned

Planned 2016 Publications

- Design Guide for Cleanrooms
- Design Guide for Duct Systems
- Design Guide for Air Terminal Units
- Design Guide for Dedicated Outdoor Air Systems
- Design Guide for Sustainable Refrigeration Facilities and Systems
- Member's Survival Guide: Design/Build section

Planned 2016 Standards

- Standard 90.1 (energy efficiency)
- Standard 90.4 (data centers)
- Standard 126 (HVAC Air Ducts and Fittings – with SMACNA)
- Standard 135 (BACnet)
- Standard 154 (Ventilation for Commercial Cooking Operations)
- Standard 55-2013 User's Manual
- Standard 201-2016 User's Manual
- Guideline 10 (Interactions Affecting the Achievement of Acceptable Indoor Environments)
- Standard 52.2 (General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size)
- Standard 160 (Criteria for Moisture-Control Design Analysis in Buildings)

Join ASHRAE on Social Media



Make Plans to Attend!

- Aug. 10-12: **ASHRAE/IBPSA-USA SimBuild 2016: Building Performance Modeling Conference**, Salt Lake City, Utah
- Sept. 12-14: **IAQ 2016 Defining Indoor Air Quality: Policy, Standards and Best Practices**, Alexandria, Virginia, co-organized by Air Infiltration and Ventilation Centre (AIVC)
- Sept. 22-23: **2nd International Conference Efficient Building Design: Materials and HVAC Equipment Technologies**, Beirut, Lebanon
- Sept. 20–22: **AHR Expo Mexico**, Monterrey, Mexico
- **Jan. 28-Feb. 1: ASHRAE 2017 Winter Conference, Las Vegas**
 - **Jan. 30-Feb. 1: AHR Expo, Las Vegas**
- Jan. 11-13: **Sustainable Management of Refrigeration Technologies in Mobile Marine and Fisheries Sectors**, Bangkok
- Feb. 26-27: **Second International Conference on Energy and Indoor Environment for Hot Climates**, Doha, Qatar



Authors and Revisers Guide

ASHRAE Handbook July 2015

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Year 1: The TC/TG/TRG Chair appoints a Handbook subcommittee and its chair. A meeting time is established and the subcommittee then meets at every ASHRAE Annual and Winter Conference. The subcommittee and others review the just-published chapter

and make recommendations for its revision. A lead author/reviser for the chapter is selected. [The Handbook Liaisons will identify to each TC those chapters that have been determined to be of concern regarding their revision status.](#)

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10.0 ELECTRONIC ENHANCEMENTS FOR ASHRAE HANDBOOK ONLINE

Although the latest print volume of the Handbook is the official version, the four-volume ASHRAE Handbook Online is designed to provide the most complete and useful electronic HVAC&R reference available. It includes (1) all Handbook chapters, with the latest updates and corrections, in searchable electronic format, and (2) interactive and supplemental tools and

features developed or obtained by ASHRAE Technical Committees. See the [Handbook Central](#) page of the ASHRAE web site (www.ashrae.org) for the current guidelines on preparing features for ASHRAE Handbook Online. Tools and features should be submitted by TCs to their Handbook Committee Liaison, who will forward them to Handbook staff to edit and prepare as necessary for online publication.

[11.0 REFERENCES AND RESOURCES](#)

[11.1 References](#)

[Handbook Liaison Training PowerPoint presentation](#)

[TC Handbook Subcommittee Chair Training PowerPoint presentation](#)

[Rules of the Board \(ROBs\) \[Handbook website\]](#)

[Manual of Procedures \(MOP\) \[Handbook website\]](#)

[11.2 Resources](#)

[ASHRAE College of Fellows](#)

[ASHRAE Chapter Technology Transfer Committee](#)

[Distinguished Lecturers](#)

[Appropriate Industry Groups](#)

[ASHRAE Handbook Staff](#)

[Other ASHRAE Committees relevant to chapter's subject area](#)

Handbook Committee

MBOs for Society Year 2015-2016

Chair: Chris Ahne

Date: 28 June 2016

Objective	SP Init.	Compl. Date	Fiscal Impact	Responsible Party	Status	Comment
1. Review TC workload distribution with TAC. Verify TCs have sufficient membership to update assigned chapters in timely manner.	2A, 2B, 3	1/16	None	Chair	In progress; ongoing; staff provided revision history	Verify current TC chapter assignments are viable. <i>Measure:</i> TCs regularly updating content; reported by liaisons, staff.
2. Form subcommittee or other formal tracking system to identify chapters delinquent for updates.	2A, 2B, 3	1/16	None	Functional Subcom; Chair; staff	COMPLETE; revision history provided by staff; Ref Manual updated	Action to support identifying chapters and TCs needing help. <i>Measure:</i> subcom or system established by chair.
3. Create and distribute list of resources for TCs needing help to review, update chapters.	2A, 3	6/15	None	ExCom; Functional Subcom	COMPLETE; handout with list of resources given to TCs	Action to support TCs needing help. <i>Measure:</i> resources provided to TCs.
4. Provide training for TCs on collaboration tools.	2A, 3	1/16	None	Training Subcom	COMPLETE	Action to improve TC volunteer time by use of better tools. <i>Measure:</i> training is provided.
5. Provide training video available online for TCs who cannot attend Handbook training	2A, 3	6/16	Unknown	Training Subcom	In progress; webinar to be posted instead of video	Action to improve TC volunteer time. <i>Measure:</i> video uploaded to Handbook Central.
6. Create web form for chapter review.	2A, 3	6/16	None	Elec. Media Subcom; staff	COMPLETE	Action to improve ability of members to provide feedback on chapters and improve quality of Handbook chapters. <i>Measure:</i> web form updated online.

7. Modify ARG Appendix A as single-page Handbook item for TAC section meetings information packet.	2A, 3	1/16	None	Functional Subcom	COMPLETE; revision schedule on handout	Action to improve awareness of chapter update milestones <i>Measure:</i> handout is available at TAC section meetings.
8. Modify ARG Appendix A to more user-friendly version.	2A, 3	6/16	None	Functional Subcom	In progress	Action to improve communication with TC Handbook chairs. <i>Measure:</i> Appendix A is updated.
9. Evaluate possibility of providing dynamic equations for Handbook Online	3	6/16	None	Elec. Media Subcom; staff	COMPLETE; vendor quote received; alternative approach chosen	Action to improve member benefit of Handbook Online. <i>Measure:</i> report from staff.
10. Provide download option for current Handbook for members without access to CD-ROM.	2A, 3	6/16	None	Elec. Media Subcom; staff	COMPLETE	Action to improve member benefit of permanent access to Handbook <i>Measure:</i> download available.
11. Solicit reviewers for infrequently updated Refrigeration Handbook chapters.	3	6/16	None	ExCom; Strategic Planning; Chair; 2018R subcom	COMPLETE	Action to increase quality of content in Refrigeration volume. <i>Measure:</i> chapter review forms collected by liaisons.
12. Report out-of-sequence updates in Society publications.	3	6/16	None	Staff	In progress	Action to increase awareness of Handbook Online member benefit. <i>Measure:</i> Society publications have Handbook-related updates.
13. Evaluate using social media to inform members of Handbook content updates and news.	3	6/16	None	Elec. Media Subcom; staff	In progress; ongoing	Action to increase awareness of Handbook Online member benefit. <i>Measure:</i> Society publications have Handbook-related updates.
Additional Recommendations for Strategic Planning: None.						

SP Init. = Strategic Plan 2014 Initiative addressed by objective

CA: mso 28 June 2016

ASHRAE HANDBOOK

2016/2017 MBOs

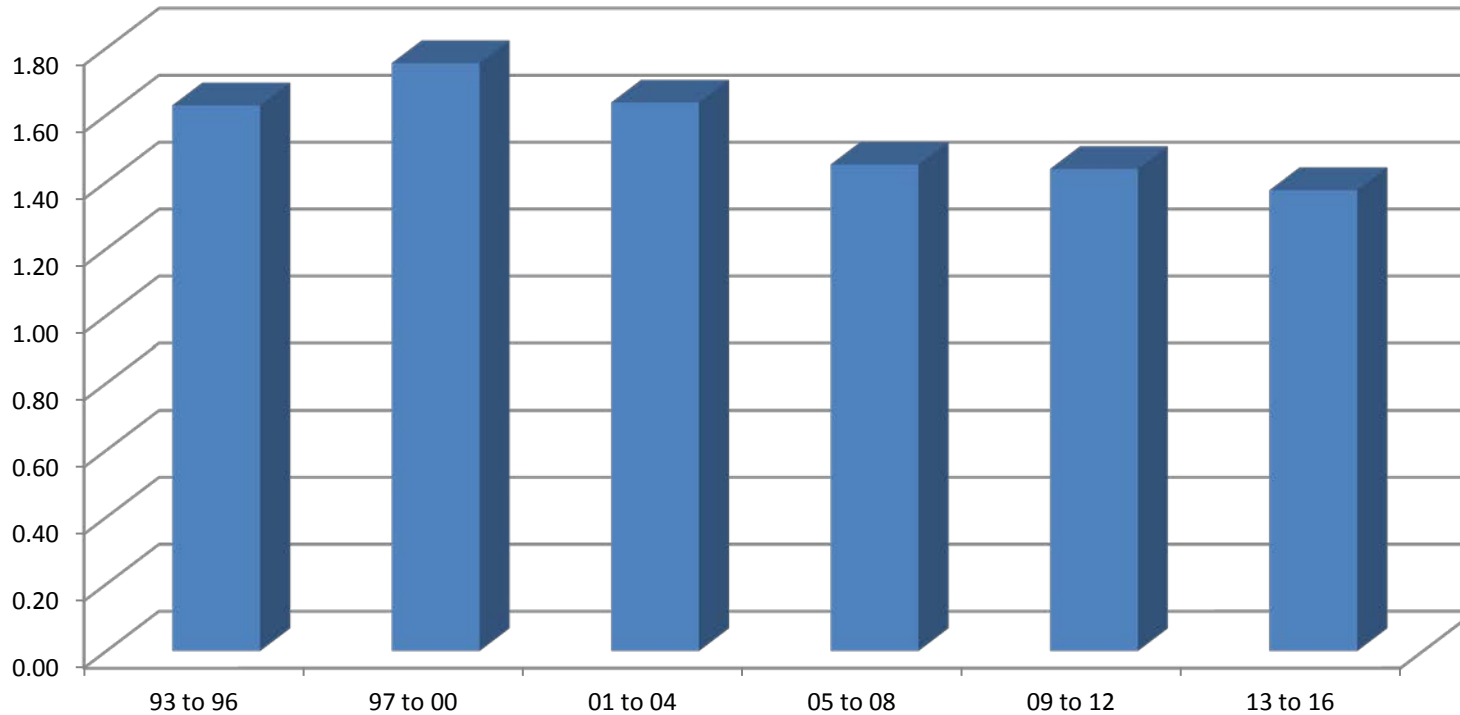
ASHRAE HANDBOOK

Strategic Objectives

1. Keep the Handbook relevant and discoverable
2. Keep the revision process alive

REVISION HISTORY

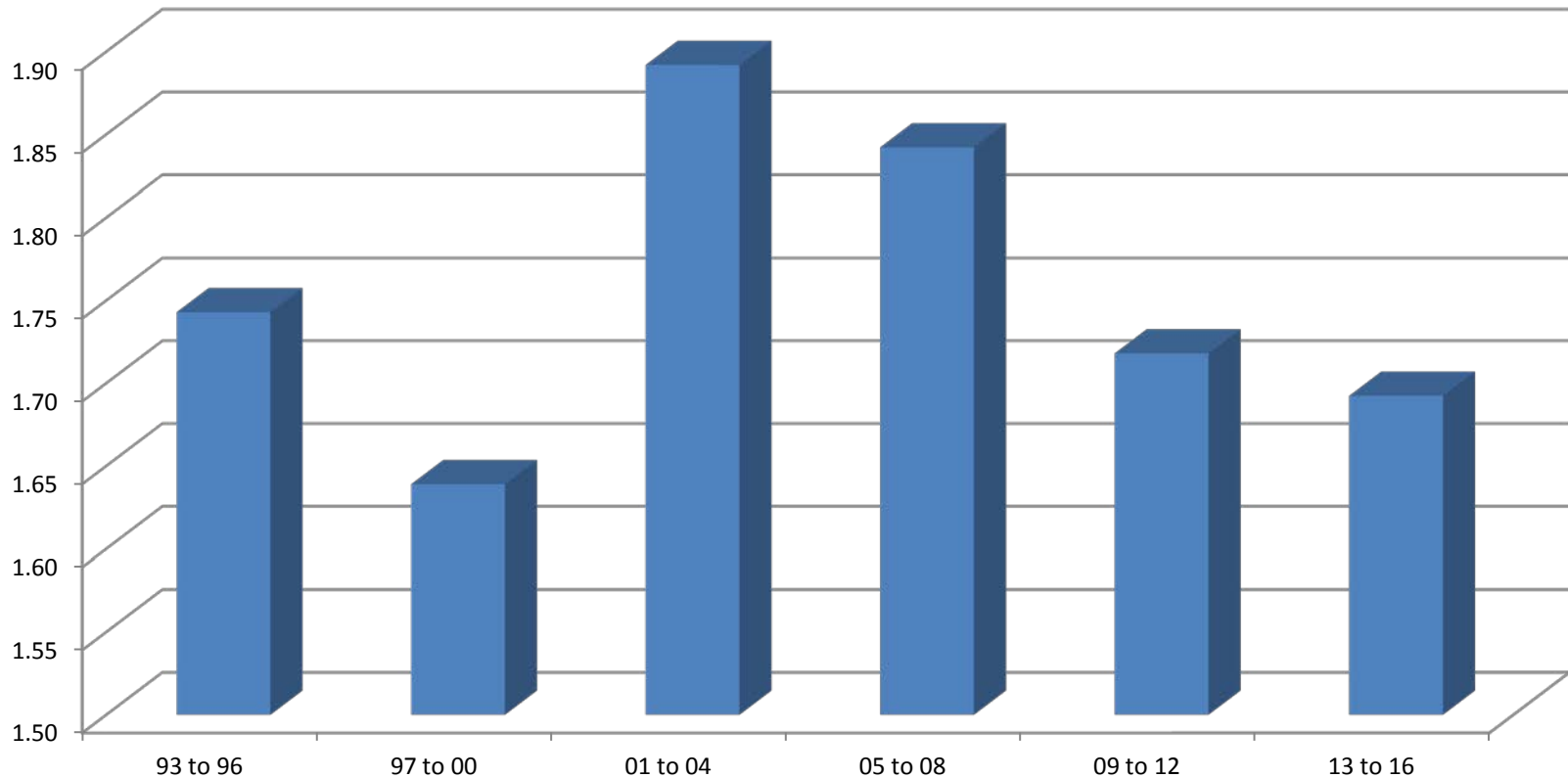
Handbook Volumes



22% Decrease in past 16 years
Not sustainable

REVISION HISTORY

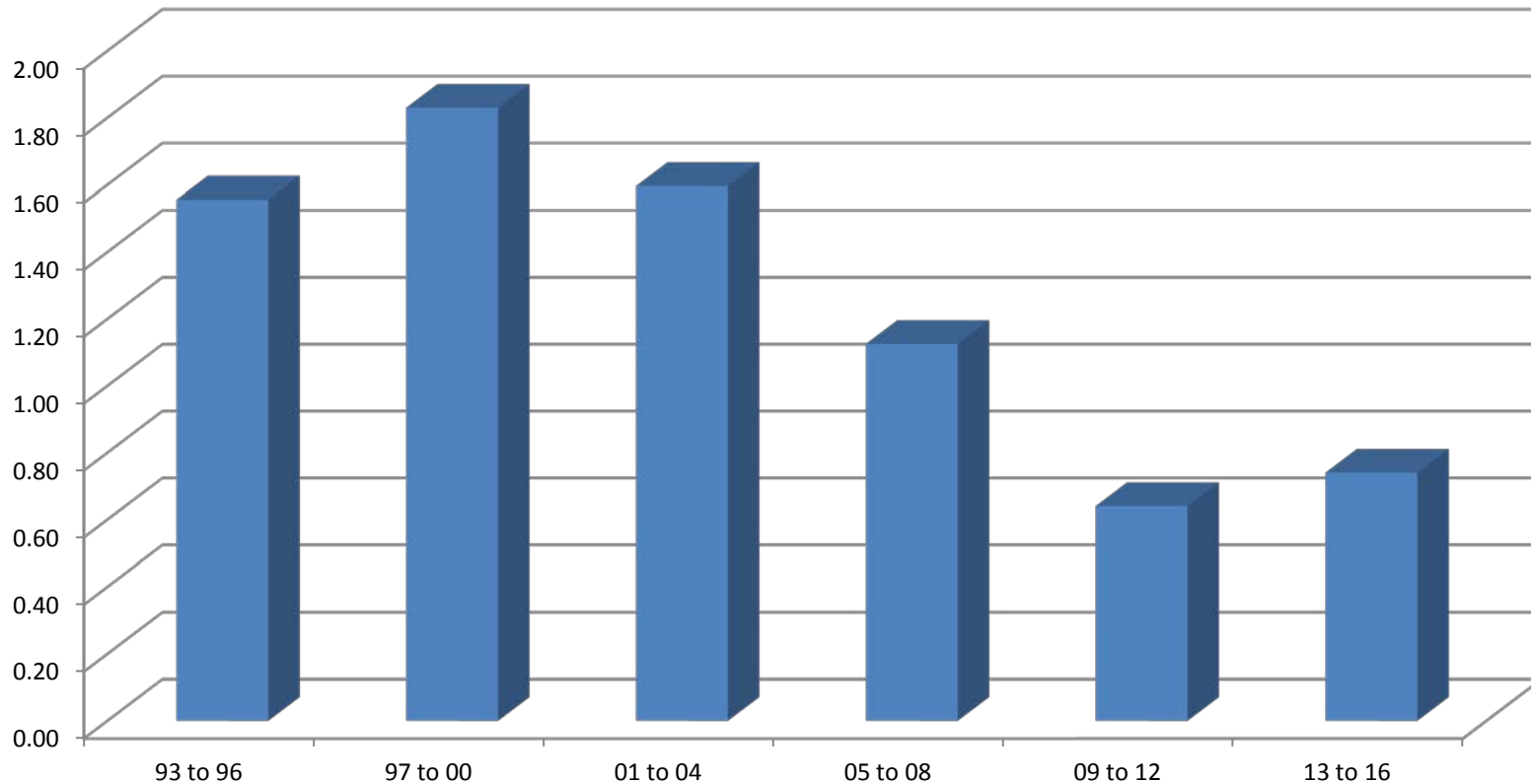
Fundamentals



3% increase in past 16 years
However, trending down

REVISION HISTORY

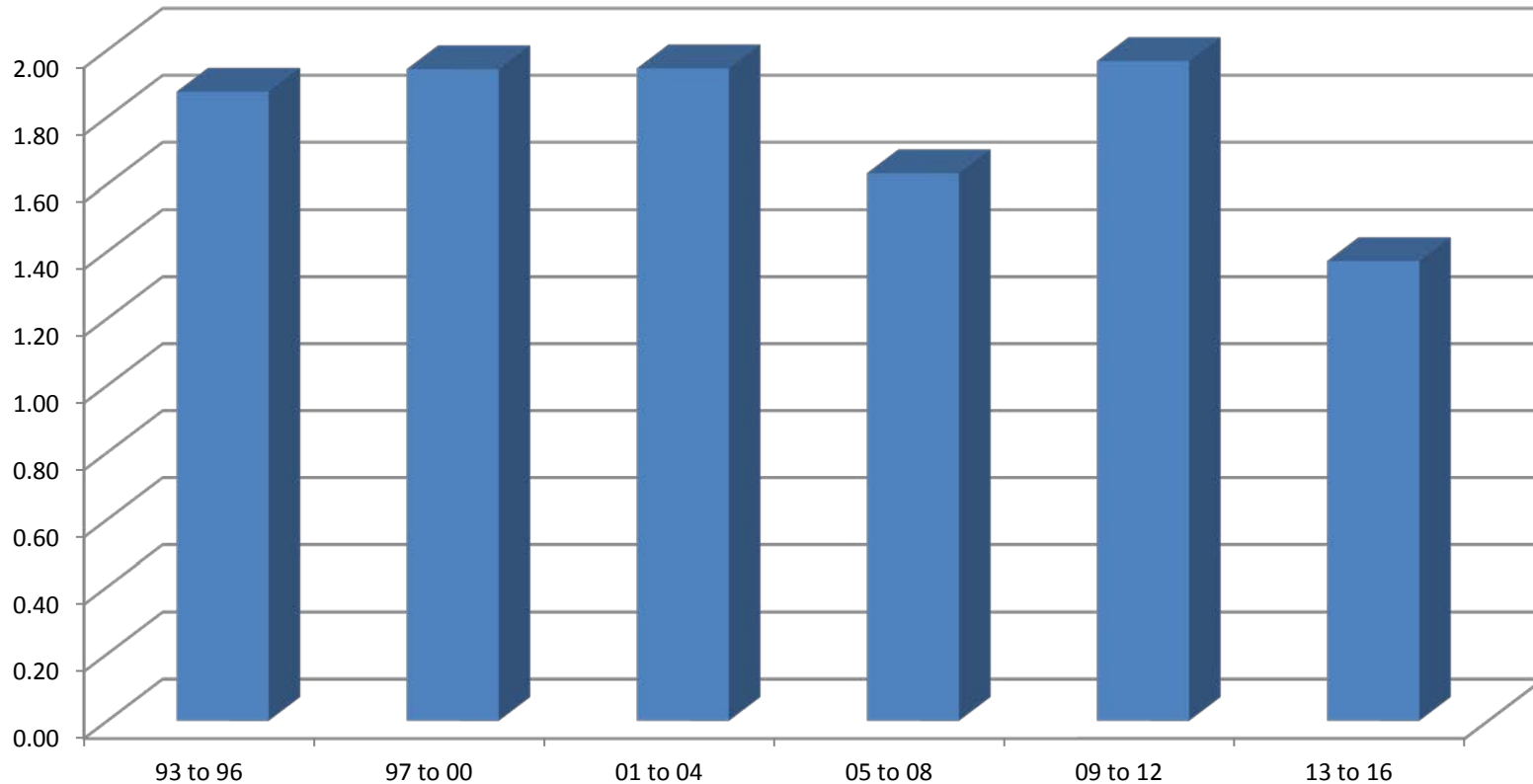
Refrigeration



Historically least revised
60% decrease in past 16 years

REVISION HISTORY

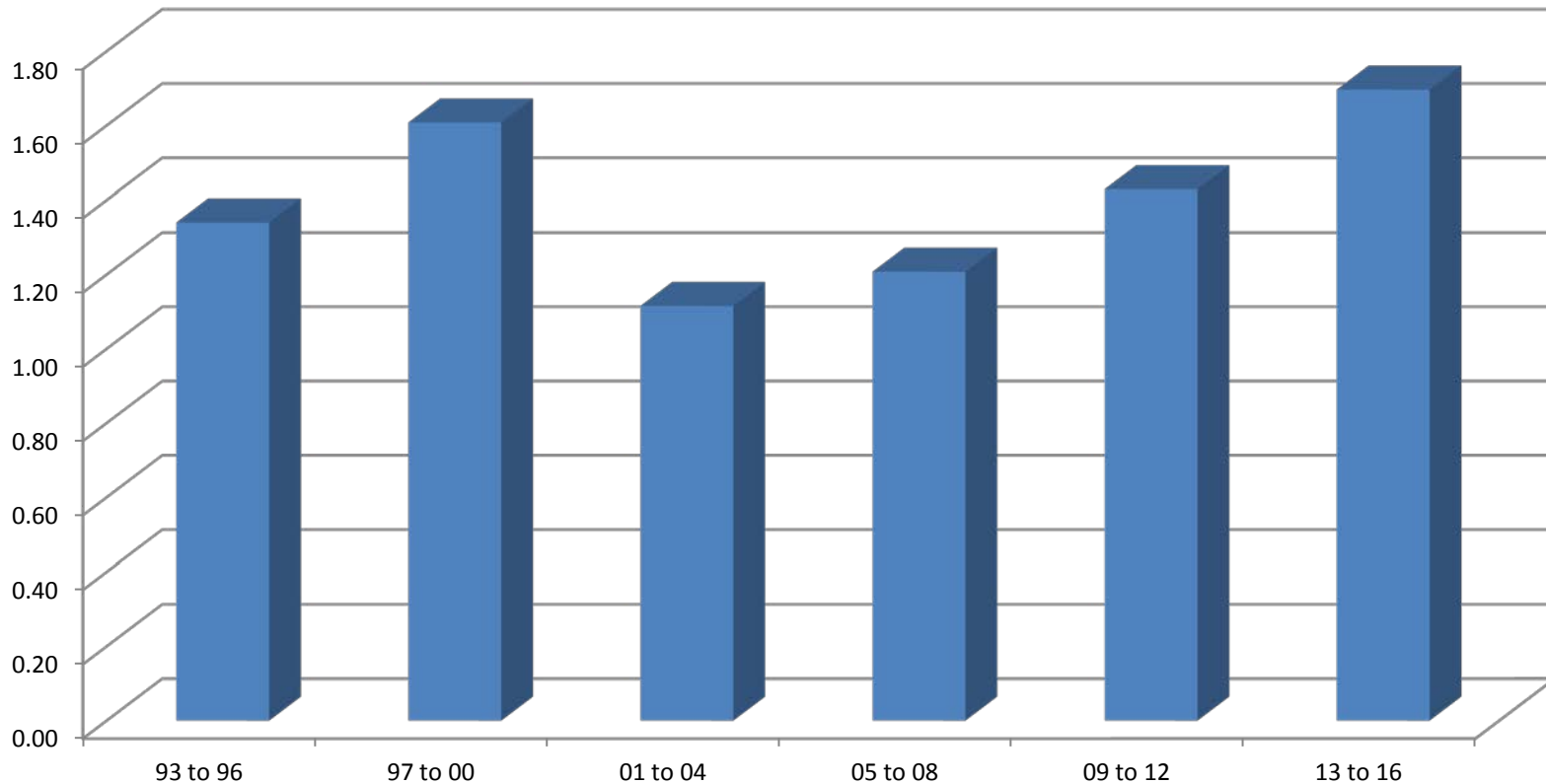
Applications



Historically most revised
29% decrease in past 16 years

REVISION HISTORY

HVAC Systems & Equipment



6% Increase

Trending up

Most revised volume for the first time

ASHRAE HANDBOOK

Challenge

How do we get TCs to prioritize Handbook revisions?

ASHRAE HANDBOOK

Objectives

1. Goal: 10% revision improvement for each volume
2. Volume subcommittees identify opportunities and risks
3. Liaisons establish relationships with assigned TCs and encourage a 10% revision
4. Explore opportunities to recognize TCs and individuals contribution to Handbook
5. Pilot annual revision cycle with TC(s) to update Handbook Online (Agile Methodology-Small sprints vs 4 year cycle)
6. Solicit feedback on new collaboration tools