

HOSPITALITY FACILITIES MANAGEMENT AND DESIGN

Third Edition

David M. Stipanuk



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EDUCATIONAL INSTITUTE
American Hotel & Lodging Association

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Preface

HOSPITALITY FACILITIES regularly call for managerial attention. Modifications are needed due to (among other things) various levels of facility obsolescence, the Americans with Disabilities Act, and the growth of governmental and corporate requirements for additional safety and security. Remodeling to meet these needs and stay competitive in today's increasingly competitive markets requires managers who understand the basic elements of facility management, design, and renovation. And, of course, new facilities will continue to spring up as entrepreneurs seek to develop new concepts and chains seek to expand.

Hospitality facilities are complex and unique in many ways. Creating and managing them requires special knowledge, skills, and dedication. In *Hospitality Facilities Management and Design*, Third Edition, we provide an introduction to the key issues involved in the management and design of hospitality facilities, illustrated with examples drawn from the industry itself. Owners and operators of hospitality facilities should benefit from the coverage of key areas of interest and concern to them. After reading this book, managers and management students should be much better prepared to deal with facilities-related questions and problems as they arise (and they will arise!).

This third edition of *Hospitality Facilities Management and Design* represents an updating of the data contained in various chapters, inclusion of some emerging industry practices in others, and an integration in selected chapters of materials previously contained in the appendices of previous editions. Many additional "sidebar" illustrations have been provided as well. Also new to this edition is the inclusion of case studies at the end of a number of chapters. Based on changes in the industry and input from several industry professionals, we have elected to eliminate the chapter on telecommunications found in earlier editions in favor of a fairly brief overview of telecommunications in the electrical systems chapter. For readers interested in additional information, we have provided references to resources providing extensive discussions of telecommunications.

The text is divided into three parts and an appendix. Part I presents a look at the nature of hospitality facilities and an overview of the issues involved in managing maintenance needs. The discussion of emerging issues in waste management and environmental legislation highlights the changing responsibilities involved in facilities management.

Part II continues with chapters devoted to each of the primary facility systems—safety and security, water and wastewater, electrical, HVAC, lighting, laundry, food service, and the building and grounds. In this era when cost control and extending equipment and building life through better maintenance are more important than ever, these chapters provide much-needed information.

Part III presents the basics of lodging and food service design and renovation, preparing the reader for the challenges involved in creating new facilities or renovating existing ones. The design chapters introduce key terms, criteria, and

methods employed in the design of lodging and food service facilities. Readers with a design orientation should find these discussions especially stimulating. Those more interested in operations will see how the design process unfolds and should be able to more effectively influence this process to help create a product that "works."

The text concludes with an appendix not directly referenced in the chapters. Although this text is designed for current and future hospitality managers rather than engineers, this appendix presents a discussion of engineering principles for those readers who want a better basic understanding of the more technical elements of the engineering and maintenance world.

Acknowledgments

As mentioned above, a number of chapters in this new edition have case studies. Several of these cases are the result of the input of Richard Manzolina, Hilton Hotels, and Ed Pietzak, Marriott International. The contributions of these property engineering professionals have provided a highly valued addition to the text and, it is hoped, materials that will prove useful to instructors and informative to students.

Other industry professionals have also contributed by providing updates and edits. These include Chad Callahan of Marriott International, April Berkol of Starwood Hotels, Jerry LaChapell of Harrah's, and Dennis Pete of Servidyne Corporation. The author's involvement with the Engineering and Environment Committee of the AH&LA has also provided ideas for text enhancement and expansions.

Richard Penner and Jan deRoos, School of Hotel Administration at Cornell, and Carolyn Lambert, School of Hospitality Management at Pennsylvania State University, have revised their chapters for this edition, providing valued additional materials and perspectives. Here at Cornell, the support and resources of the School of Hotel Administration have greatly aided the updating of the text as well.

One test of a text involves its adoption by educators throughout the world. We are grateful to the educators who continue to purchase and use *Hospitality Facilities Management and Design* in hospitality programs around the globe. We hope all readers find the text useful in learning about the significant role that hospitality facilities play in providing guest and employee services.

David M. Stipanuk
Ithaca, New York

About the Author

David M. Stipanuk, a registered Professional Engineer, has been a member of the Property Asset Management faculty of the School of Hotel Administration at Cornell University since 1983. His teaching responsibilities include courses in sustainable development, facilities management, hospitality risk management, and hotel development and construction. He is also an active participant in the school's Executive Education Program, offering coursework in Property Operations and Maintenance in the program each year.

Professor Stipanuk's service to the university community includes membership on transportation services committees and on the faculty senate. He has also served for many years as the de facto department chair for Property Asset Management and for three years as the faculty coordinator of Cornell's General Manager and Advanced Management programs.

Professor Stipanuk is the author or co-author of three textbooks published by the Educational Institute of the American Hotel & Lodging Association: *Managing Hospitality Engineering Systems* (with Michael H. Redlin), *Hospitality Facilities Management and Design*, Third Edition, and *Security and Loss Prevention Management*, Second Edition (with Raymond C. Ellis, Jr.). Professor Stipanuk provides training to lodging corporations on engineering certification programs offered by the Educational Institute. He has also published articles on environmental issues for the lodging industry and on workplace-safety benchmarking for travel and tourism. Most recently, he helped to prepare AH&LA's *Energy Management and Conservation Guide*.

He is a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Executive Engineers and Environmental Officers Committee of AH&LA. He has also been involved with the Environmental Concerns Task Force of the White House Conference on Travel and Tourism, the Pan American Health Organization, and the Caribbean Hotel Association in developing environmental audit criteria for hotels.

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Part I

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 The Costs of Operation
 The Costs of Renovation and Modernization
The Impact of Facility Design on Facility Management
 Components and Layout
 Materials, Quality, and Types of Construction
 Equipment
 Systems
Management's Responsibilities
 Management Contracts and Franchise Agreements
Responsibilities of the Facilities Department
Facilities Managers in Lodging Operations
Conclusion

Competencies

1. Identify a number of important roles played by hospitality facilities. (pp. 4–6)
2. Explain why construction costs vary by facility type and why proper construction practices provide long-term benefits. (pp. 6–7)
3. Identify the two primary categories of facility operating costs, the components of each category, and various factors that affect those costs. (pp. 7–12)
4. Explain the purpose and limitations of the reserve for replacement. (pp. 13, 22)
5. Describe how facility components, layout, materials, quality, types of construction, and systems affect facility management. (pp. 14–19)
6. Identify several equipment concerns that affect maintenance needs. (pp. 15–19)
7. State management's responsibilities with regard to facility management. (pp. 19–21)
8. Outline typical maintenance requirements found in management contracts and franchise agreements. (pp. 21–24)
9. Summarize the basic responsibilities of the facilities department and the facilities manager. (pp. 24–28)