Building Department Administration 5th Edition

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Preface

The fifth edition of Building Department Administration (BDA) has been updated based on the four previous editions. The fourth edition was published in 2012, five years after publication of the third edition. Our experience from previous editions has provided a foundation to enhance our understanding through changes in technology, innovative materials, green and sustainability issues, economic globalization, communication and other related areas. The rapidly changing landscape of the work of code administrators requires a continued investment in the development of tools and guidance to meet the demands of a changing world. After publication of the fourth edition, the decision was made to continue updating this work periodically to keep pace with the challenges of a changing environment and the growth in our profession. The fifth edition is our effort to keep the material as fresh and relevant to the field of building safety administration as possible.

This new fifth edition has been revised to reflect contemporary advances in building technology and a new paradigm facing communities where the workforce is losing seasoned personnel, evolving and engaging a new generation of leaders. We have also reformatted this edition to improve the reader’s experience and usability of the publication, offering a “road map” for novice building officials and more tenured professionals.

In a 2014 survey, nearly 85 percent of respondents were over the age of 45. More importantly, over 80 percent of respondents expected to retire within the next 15 years, and more than 30 percent plan to do so within five years. Such a massive exodus of public safety professionals would have a serious impact on jurisdictions—particularly those with smaller departments—because more than half of the respondents work in departments of nine or fewer employees. In response to this information, the fifth edition is directed to a new wave of code administrators, addressing a new expanding cadre of leaders and providing guidance and direction on code administration that can serve a new generation of code administrators.

The first edition, known as the original 1973 edition, was authored by the late Robert E. O’Bannon, who had planned and slowly prepared for several years the preparation of text for an administrative book. Sixteen years later, O’Bannon updated the 1973 edition. The 1989 updated edition was completed by O’Bannon as well, under the leadership and management of Roy Fewell, who has now retired from his last position as the building official for the City of La Habra, California. It was dedicated to the memory of the late John B. Vogelsang, who proved that one could rise to the highest levels of achievement in his or her chosen field despite what some might consider an inauspicious beginning. An uninspired student, Mr. Vogelsang dropped out of high school at age 17, but after his dis-
charge from a military tour of duty, he completed his high school studies, graduated from college with a bachelor of science degree in civil engineering and went on to earn his master's degree in civil engineering. He sought and gained registration as a civil engineer and, sometime later, his structural engineering license—all noteworthy achievements. Mr. Vogelsang’s entire life was devoted to the field of codes. He worked as an inspector, plan examiner, assistant building official and building official.

Previous editions of *Building Department Administration* were updated through the participation and contribution of many talented and experienced individuals from across a wide spectrum of building safety administration. It included information on a large variety of areas, such as the incorporation of new technologies and automation, management, leadership and supervision, building sustainability and green building, disaster mitigation and building security, existing buildings and many other subjects of critical importance.

The authors contributing to this updated fifth edition continue the tradition of offering excellent guidance and bring their years of talent and experience into the knowledge base of this edition, continuing the legacy of assisting code officials in their work and introducing new ideas and administration techniques.

**Dedication**

This book is dedicated to all those code officials who have worked or continue to work passionately, honestly and tirelessly to protect the public’s safety and well-being. Their contribution to improving the quality of life in our communities is highly valued.

Also acknowledged are the authors, contributors and peer reviewers of various editions of this classic book who have given their time selflessly with the goal of advancing building safety and effective code administration.
Foreword

Code administrators face numerous challenges providing for public safety. In earlier editions of Building Department Administration, many of these challenges have been reviewed and information offered to assist in the administration of codes. As noted in the foreword of the fourth edition, “In a day’s time, we encounter and resolve issues relating to the hard sciences of engineering and physics as code developers and administrators; the human sciences of psychology and sociology as personnel managers; jurist prudence as administrative adjudicators; and accounting, finance, fleet-management and labor relations as corporate business administrators.” Since the publication of the fourth edition of BDA, the built environment and society face new challenges and additional perils that require new responses and the implementation of new safety measures and strategies to provide protections from these perils. We continue to find ways to address new and increased challenges impacting the built environment through examining the current status of codes and standards and applying new technology and science. This edition of BDA continues to include lessons learned and provides updated guidance for seasoned and a new wave of code administrators to address the new challenges we face in the built environment.

A building department serves as one of the central hubs of a community, providing for the safety of a community through the application of standards assuring the built environment is safe and protecting citizens from all manner of hazards. These hazards impact our schools, health care facilities, places of worship and assembly, businesses and mercantile establishments. These perils include protections from increased occurrences of natural and human-caused events. The list of protection measures continues to evolve and grow, requiring a building department to increase its understanding and awareness of the latest in safety standards, new materials and techniques and means of protection. The building department is also a key in assisting in the economic development and viability of a community. A building department is entrusted to carry out the necessary functions, standing on guard and providing for these protections.

This edition of BDA has been revised to address a number of the contemporary issues facing building departments. With the aging of department personnel, departments are in need of additional personnel. The incoming class of code professionals is bringing new advances and understanding to codes as well as new operating principles for the building department. Departments should embrace this new paradigm and use these skills to enhance the public awareness and acceptance of the role building administrators serve in their community.
In efforts to provide additional training to new and aspiring code officials, increased training programs are being offered to assist in the understanding of code administration and the techniques and strategies applied to achieve greater levels of safety and sustainability in our built environment. This includes the establishment of formal educational programs through our institutions of higher education and professional organizations, providing a variety of training options for every individual to earn continuing education units, learning units and/or professional development hours (CEUs, LUs and/or PDHs) that can be used toward professional certification.

ICC is a leader in this effort with ongoing professional development through the Code Council Learning Center and the Emory R. Rodgers Leadership in Building Safety Fellowship. An annual fellowship is available to a building safety professional who has embarked upon a demonstrated executive-level career path and wants to further develop leadership skills through an eligible executive development program.

Since the 1973 publication of *Building Department Administration* by Robert E. O’Bannon and subsequent editions, building code administrators have been provided a guiding road map to develop and enhance their skills. This new edition of BDA is intended to offer an additional tool for code administrators in the quest to be better informed.

As with past editions, this update has been completed by some of the best minds in the construction industry. The authors in this edition, as well as those who have previously assisted in this legacy of information, have many years of experience in developing and administering codes and strategies for public safety and assisting in new opportunities to improve the built environment. This edition of BDA has been reformatted to assist in the understanding of code administration responsibilities and techniques.

Code administrators have a unique opportunity and responsibility to help shape our world, enhancing safety, improving productivity and preserving our built environment for years to come. This edition of *Building Department Administration* is a valuable tool that can be added to and used in our knowledge base.

Our profession continues to grow in understanding and stature.

Henry L. Green, International Code Council Board
President 2005—2006; President, National Institute of Building Sciences 2008—2019
Authors of the Fifth Edition

The authors of the fifth edition made revisions and crafted new chapters based on the 2012 fourth edition to update and add new materials to assist members of the building department administration in their work to provide for a safe and secure built environment. This 5th edition has greatly benefitted from participation of Henry L. Green as the Chief Content Editor.

We are thankful to the authors for each’s dedication to this work.

**Henry L. Green, Hon. AIA, Lansing, Michigan—Chapter 6 (New)**

Henry L. Green has over 30 years’ experience in the building sector, serving as president of the National Institute of Building Sciences for more than 10 years and as Executive Director of the Bureau of Construction Codes in the Michigan Department of Labor for more than 19 years.

Henry has extensive experience on professional boards including as a founding member of the International Code Council Board of Directors, completing a term as president in 2006; the National Institute of Building Sciences Board of Directors, serving as chair in 2002 and 2003; and the Building Officials and Code Administrators (BOCA) Board of Directors, holding the position of president in 1997.

Henry was named “1990 Man of the Year” by the Automatic Fire Alarm Association (AFFA) and received the “Distinguished Service to Government” award from the Building Industry Association of Southeastern Michigan in 1998. He received the Walker S. Lee Award, BOCA International in 1999. In 2005, Henry was recognized by the US House of Representatives for his work as “…a tireless advocate for building safety and enforcement of codes” and was named an Honorary Architect by the American Institute of Architects in 2008. He received the Bobby J. Fowler Award from the International Code Council in 2013 and the Mortimer M. Marshal Lifetime Achievement Award from the National Institute of Building Sciences in 2019.

**Jim Olk, Building Official, City of Garland, TX—Chapters 1, 2, 12, 16**

Jim Olk is Building Official for the City of Garland, Texas. He has worked for municipal governments in building inspection for over 35 years and serves on several local, regional and national boards and councils. Jim heads up the disaster response team for the Building Officials Association of Texas and was the lead responder for damage assessment for over a dozen disasters including the fertilizer plant explosion in West, tornados, floods and Hurricane Harvey along the Texas Gulf Coast. He also has served as mayor of the City of Lucas since 2015.
Robert Church, JD, COL, UTARNG, Director, Utah Prosecution Council—Chapter 3

Robert Church is the director of the Utah Prosecution Council. He is responsible for training Utah prosecutors. Previously, he was the chief prosecuting attorney for the City of Orem, Utah, prosecuting criminal as well as nuisance and building code violations. He is now the Orem City administrative law judge. Robert served on active duty in the US Navy as a judge advocate general. He currently serves in the Utah Army National Guard as the state military judge. He has taught “Legal Aspects of Code Administration” for ICC for nearly 20 years. He is licensed to practice law in Utah, California and Washington.

James (Tim) T. Ryan, CBO, Executive Director, International Association of Building Officials—Chapters 4, 5, 8, 9

James (Tim) T. Ryan, CBO, is the executive director of the International Association of Building Officials. He served the City of Overland Park, Kansas, for almost 40 years in the Building Safety Division as a field inspector, plans examiner, field supervisor and code administrator. He received his bachelor of science degree in Construction Management and Technology from Pittsburg State University and is certified in 15 separate categories of building code administration and management. Tim served on the BOCA Board of Directors, including as president of the Board, and on the ICC Board of Directors. He is serving as a presidential appointee to the Board of Directors of the National Institute of Building Sciences. He is the only building official ever appointed to a position by a sitting president of the United States. He is an experienced training instructor and public speaker. He serves on the ICC Codes and Standards Council and Code Correlation Committee and as a moderator for ICC’s code development hearings.

Benjamin Breadmore, Town Manager & Building Official, Town of Holden, ME—Chapter 7

Benjamin Breadmore has 10 years of experience in the administration of building codes through reviewing, permitting and inspecting. He was a founding member of the Emerging Leaders Membership Council for ICC and served as chair for 2019. Currently he serves as the president of the Maine Building Officials and Inspectors Association. Benjamin graduated from the University of Maine with a bachelor in Public Management; currently he serves as Town Manager and Building Official for the Town of Holden, Maine. He holds certifications in all 14 required code disciplines through the State of Maine, as well as being a health officer and a Certified Municipal/County Manager.

Steve Burger, CBO, LEED AP—Chapter 10

Steve Burger has been in the code industry since 1972. He started as a secretary/permit tech and residential plans examiner and then later worked as a building inspector, zoning inspector, code enforcement officer, senior plans examiner, assistant building official,
chief building official, ICC technical staff and code consultant. Steve is a Certified Building Official and LEED AP and has 10 other ICC certifications. He also has served on multiple state, local and ICC committees in California and Arizona.

Steve has taught permit technician classes since 1998, authored the original ICC “Permit Technician Study Companion” and received the ICC Educator of the Year award in 2016.

**Steve Van Note**, retired, formerly Managing Director of Product Development, International Code Council—Chapter 11

Steve Van Note, now retired, was the Managing Director of Product Development for the International Code Council (ICC), where he was responsible for developing technical resource materials in support of the International Codes. His role also included the management, review and technical editing of publications developed by ICC staff members and other expert authors. He has authored a number of ICC support publications including *Residential Code Essentials* and *Inspector Skills*. In addition, Steve developed and presented International Residential Code seminars nationally. He has over 40 years of experience in the construction and building code arena. Prior to joining ICC in 2006, Steve was building official for Linn County, Iowa. Prior to his 15 years at Linn County, he was a carpenter and construction project manager for residential, commercial and industrial buildings. A Certified Building Official and Plans Examiner, Steve also holds certifications in several inspection categories.

**Dan Foster**, General Manager, ICC Community Development Solutions—Chapter 13

Dan Foster is the general manager of the ICC Community Development Solutions and has been a member of the company’s senior management for 17 years. In this capacity, he is responsible for ICC Community Development’s business growth and new product development. Dan has actively worked with government officials around the country to help progressive organizations create efficient and effective access to municipal information as well as helping to streamline business operations through process automation and software technologies and services.

Dan is a graduate of Ferris State University, Big Rapids, MI. His undergraduate degree is in Marketing and Advertising. Dan has done graduate education work at Central Michigan University and University of Virginia in the areas of marketing and business management.

**Gabe Maser, JD**, Vice President of Government Relations, International Code Council—Chapter 14

Gabe Maser currently serves as the Vice President of Government Relations at the International Code Council, where he manages and directs the Code Council’s national policy and legislative priorities agenda. Prior to joining ICC, Gabe led federal government affairs...
and East Coast state government affairs for Renovate America, a fintech startup that became the nation’s largest provider of Property Assessed Clean Energy (PACE) financing. He has also worked on environmental litigation and regulation as an associate at Baker Botts L.L.P., as the Director of Federal-State Relations for the Commonwealth of Massachusetts and as a legislative assistant for a member of Congress. Gabe has a bachelor degree in biology from McGill University and a juris doctor from Georgetown University Law Center.

Karl Aittaniemi, PE, Director of Standards at the International Code Council—Chapter 15

Karl Aittaniemi is the Director of Standards at the International Code Council. He supervises the Standards staff in their roles supporting the development and support of ICC’s Codes and Standards out of ICC’s Central Regional Office in Country Club Hills, IL. Karl has an extensive professional background in fire protection product evaluation and has managed fire protection investigation projects in accordance with nationally and internationally recognized model codes and standards. During his 30-year career, he has worked in the nuclear power industry and has experience as a forensic engineer. He is a licensed professional engineer in several states.

Mike Jackson, FAIA, Springfield, IL—Chapter 17

Mike Jackson is a preservation architect in Springfield, IL. He was the Deputy State Historic Preservation Officer (SHPO) in Illinois from 2009 to 2013 as part of a 31-year career in public service. He is a co-chair of the Codes and Standards Technical Committee of the Association for Preservation Technology (APT). He also directs the APT Building Technology Heritage Library, an online archive of pre-1964 architectural trade catalogs, technical manuals and building codes. He was a leader in the creation of a historic preservation chapter of the Illinois Accessibility Code in the 1980s, which became a model for the ADA treatment of historic buildings in 1990.

Marilyn E. Kaplan, AIA, FAPT, Preservation Architecture, Albany, NY—Chapter 17

Marilyn E. Kaplan is a New York State–registered architect and principal of Preservation Architecture, a firm specializing in the rehabilitation of existing and historic structures. She serves as co-chair of the Association for Preservation Technology’s Codes and Standards Committee, is co-author of the NFPA publication Fire Safe Building Rehabilitation and has served on the NFPA Technical Committee on Cultural Resources. She has participated in the development of national and state existing building codes and has written and spoken widely on code applications to existing and historic buildings.
Dave Walls, Vice President of Business Support Initiatives, International Code Council—Chapter 18

Dave Walls is the Vice President of Business Support Initiatives for the International Code Council (ICC). His responsibilities include initiatives relating to the development of support products and materials related to sustainability as well as domestic and international business development activities.

Prior to joining ICC, Dave served as the executive director of the California Building Standards Commission, which oversees the adoption and publication of the California Building Standards Codes. He successfully directed the development of CALGreen in 2010.

Dave has served on the California Seismic Safety Commission and on the California Hospital Building Safety Board. He is a California Licensed General Contractor and has served as a code official and also as an adjunct professor at UC Davis.

Judy Zakreski, Vice President of Global Services, International Code Council—Chapter 19

Judy Zakreski joined ICC in 2018 to develop and implement the organization’s global strategy. With a background in international business, she spent 25 years helping US manufacturers to successfully enter the China market. She holds a Commerce Department appointment to serve on the Virginia-DC District Export Council and actively engages with US international standards developers, including through participation in several ANSI committees. Judy is committed to keeping ICC at the forefront of international building safety dialogues, including through her work as secretariat of the Interjurisdictional Regional Collaboration Committee. She holds a BA in International Studies and Chinese from American University and an MA in International Commerce and Policy from George Mason University.

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Hamid Naderi is the Senior Vice President of Product Development with the International Code Council (ICC), where he is responsible for researching and developing technical resources, managing the development and publishing of multiple technical projects by expert authors and coordinating the partnerships with outside technical organizations and publishers.

We also would like to thank the ICC staff for their support in developing this publication and the ICC Family of Solutions for their contributions, including the ICC Evaluation Service (ICC-ES), S.K. Ghosh Associates, the International Accreditation Service (IAS), General Code, NTA Inc, Alliance for National & Community Resilience (ANCR) and Progressive Engineering Inc (PEI).
Authors in Previous Editions

The following authors have made significant contributions to the life and legacy of Building Department Administration (BDA). These authors have expanded the breadth of BDA since its initial publication, contributing substantial work and materials to keep the information relevant to the changing times of each publication.


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About the International Code Council®

The International Code Council is the leading global source of model codes and standards and building safety solutions that include product evaluation, accreditation, technology, codification, training and certification. The Code Council's codes, standards and solutions are used to ensure safe, affordable and sustainable communities and buildings worldwide. The International Code Council family of solutions includes the ICC Evaluation Service, the International Accreditation Service, General Code, S. K. Ghosh Associates, NTA Inc., ICC Community Development Solutions and the Alliance for National & Community Resilience. The Code Council is the largest international association of building safety professionals and is the trusted source of model codes and standards, establishing the baseline for building safety globally and creating a level playing field for designers, builders and manufacturers.

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Family of Solutions:
About the International Building Quality Centre (IBQC)

The IBQC serves as a collaborative medium through which systems, practices, regulations, building codes and laws that provide best practice solutions and answers are identified, endorsed and encouraged. The IBQC Board is comprised of members that are internationally preeminent in the field of best practice building safety and international good practice building regulatory thought leadership. Through research and comparative analysis, IBQC benchmarks and identifies jurisdictions that have pioneered and implemented best practice and emerging construction technology, probity regimes and enlightened construction systems and practices. Hosted by the University of Canberra (UC) in Canberra, Australia, IBQC aspires to become a sounding board providing an opinion on the viability of regulatory initiatives in terms of their benchmarking with best-practice research on point. In doing so, IBQC will have regard to that which is best for the present and that which is best for the future.

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