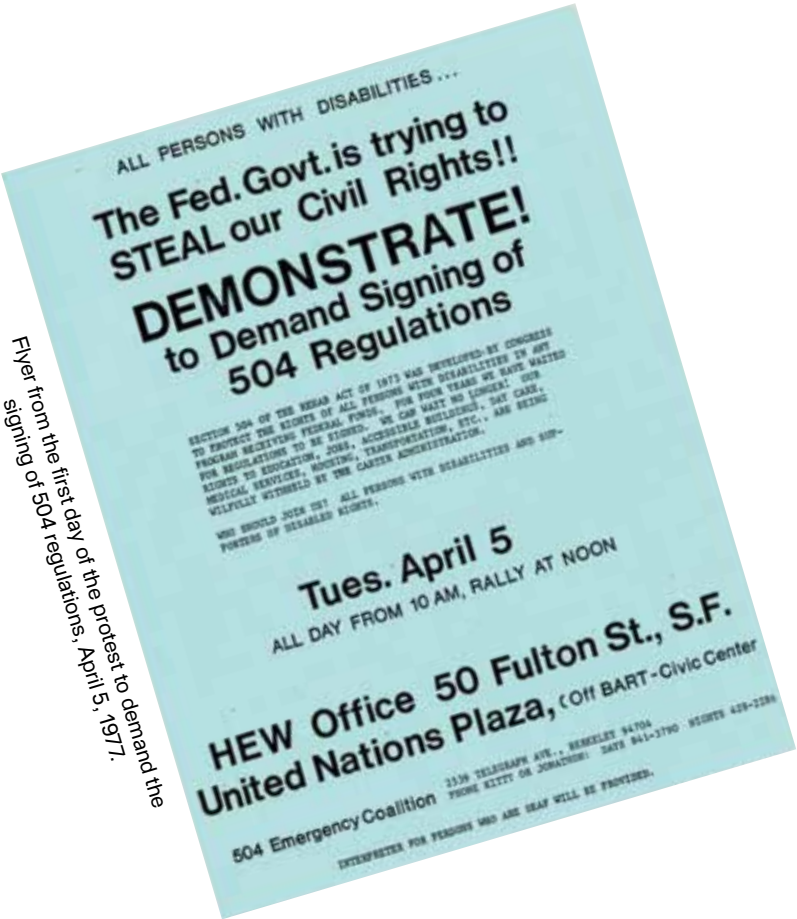


Building Code

as



Flyer from the first day of the protest to demand the signing of 504 regulations, April 5, 1977.



Anthony Tusler, We Shall Overcome, 1977. Photograph depicting Steve Dias with a hand lettered sign "We Shall Overcome," on the back of his wheelchair, San Francisco, during the 504 Sit In.

Battle-ground

In 2016, North Carolina’s governor passed a controversial bathroom bill banning transgender people from using bathrooms that aligned with their gender identity, if it differed from their biological sex assigned at birth. In the years that followed, the bill incited a national debate across the political sphere, social media, and national and local press, and ultimately made its way to the courts. During that time, a group of architects and advocates for LGBTQ+ rights began to ask a question that foregrounded *design* as a way to cut through the noise: Why are sex-separated bathrooms required at all?¹ Could private, gender-neutral bathrooms provide a solution? This question led directly to the building code.²

At the time, the International Plumbing Code required that commercial restrooms be separated by sex, with an associated number of toilets and sinks divided by “male” and “female.” In 2018, the American Institute of Architects (AIA) and the National Center for Transgender Equality, in collaboration with other allies including University of Utah professor emeritus of law Terry Kogan and architect Joel Sanders of the Stalled! project, proposed multiple amendments to the plumbing code.³ The amendments would allow for gender-inclusive restrooms—both single-user style as well as those with multiple compartments featuring full-height privacy separations—as an optional alternative to restrooms separated by sex. Such a model was already being used informally (and illegally) by many restaurants and bars in major cities in the US. It had also already been widely implemented in Europe. Architects, however, were caught between their clients, who wanted to provide inclusive restrooms, and the restrictions of the building code.

Advocates of those two code modifications—P14-18 and P15-18—argued that in addition to being more inclusive for people of all gender identities, the changes would support many others who wanted private, gender-neutral restrooms. Legal gender-neutral restrooms would allow, for example, an elderly or disabled person to be assisted by a caregiver of another gender in a family restroom; they would also provide private space for individuals with religious needs like body

washing. But this approach had potential benefits for developers too. Code modifications related to plumbing could reduce construction costs by removing redundant circulation space and sink fixtures, savings that would be appealing across political allegiances.

The code amendments were debated and voted on at the International Code Council (ICC) which, as part of its revisions to model codes every three years, allows anyone to suggest changes. Proposed changes are put through a multistep committee review and public hearing process.⁴ In the case of P14–18 and P15–18, testimony was given both in support of and against the amendments; both amendments were advanced, though in some cases with thin margins: in one instance, 57 percent of those who voted were in support and 43 percent were against.⁵ Opponents argued that inclusive restrooms were a civil rights issue that should not be determined by the building code. In contrast, an eclectic crowd argued the opposite, working collaboratively to use technical language to address concerns around privacy and fixture counts. They included advocates from local governments, professional organizations, higher education, and even the Bradley Corporation, a manufacturer of bathroom compartments.⁶ Ultimately, proponents of the bill were successful. The changes were incorporated in the 2021 edition of the International Plumbing Code, a model code adopted by most cities in the US; and in the years since, the Bradley Corporation has expanded their line of full-height privacy partitions to meet demand for use in inclusive, gender-neutral restrooms.

For many architects, the building code—the legal text that governs the construction and renovation of buildings—is seen as a dry, boring part of the design process. Students find the building code dense and unintelligible. Practitioners treat it as a technical bulwark requiring compliance but rarely sparking inspiration. The discipline tends to conceive of building codes as a purely “technical” matter. It is considered a mundane document that, at best, provides guardrails around health, safety, and welfare, and that at worst limits the freewheeling expression of artistic designers.

As seen through the lens of amendments P14-18 and P15-18, however, building code is better understood as a battleground for a better society, one that indexes and shapes the built environment and the ways we live together in buildings and in cities. Since its origins in the late 19th century, the building code has been a site of co-authorship, reflecting the implementation of new measures to protect public safety and accommodate changing social norms. Sixty years before the passing of the P14-18 and P15-18 amendments, for example, the 1958 edition of the Southern Standard Building Code explicitly required racially segregated bathrooms. As described in plumbing section 2002.1: “Where negroes and whites are accommodated there shall be separate toilet facilities provided for the former, marked plainly, ‘For Negroes Only.’”⁷ It wasn’t until the 1973 edition—nine years after the Civil Rights Act of 1964—that the provision was removed. Bringing together these histories of revision and amendment, the building code can be read as an archive of activism, of rights fought for and agreed upon, and of near infinite opportunities for improvement in a societal-scale effort toward constructing a universally safe—and therefore more equitable—built environment.

1.

Local laws governing building and construction materials go as far back as the 17th century, when buildings in Boston were required to be built of brick or stone to avoid fire. Later, housing advocates fought for tenement laws—public health regulations meant to promote healthier and more sanitary living conditions for the poor.⁸ These disparate building laws evolved into the first building codes in major cities, most of which were initially focused on avoiding urban conflagration (large fires that could spread from one building to the next). After the Great Chicago Fire in 1871, for example, the city’s Department of Buildings developed an expanded building code, published four years later, to appease the National Board of Fire Underwriters, which had threatened to stop insuring the city’s businesses.⁹

While large cities had the funds and expertise to write early building codes,



Chicago in Flames, Currier & Ives lithograph, 1871.



Aftermath of The Great Chicago Fire, 1871.



Triangle Shirtwaist Factory fire, Asch Building, New York City, March 25, 1911.



Two women strikers on the picket line during the “Uprising of the 20,000,” garment workers strike, New York City, February 1910.

smaller municipalities lacked these resources. At the same time, codes in different cities conflicted, and efforts to develop or revise them were often redundant. As a result, in the decades after Chicago and New York developed their own building codes, three regional code councils emerged that, between 1915 and 1952, worked to consolidate such work. One served the Midwest and Northeast regions, another the South, and the final one covered the West Coast.¹⁰ These regional councils, which were private entities, took on the responsibility for developing “model codes” that could be adopted by local legislators in small and large cities alike, but their emergence also marked the beginning of a shift in authorship of building code away from public officials and regulators. In 1990, these councils merged to create a single nonprofit organization, the International Code

Council (ICC), which reconciled its three existing model codes into the first International Building Code (IBC).

With the release of the IBC, architects could familiarize themselves with a single approach in the US rather than learn multiple local codes. Today, the IBC and the other “I Codes” (including the International Plumbing Code) serve as model codes across the US as well as for a handful of other countries, and are adopted and enforced by local authorities.¹¹ In some major cities like Los Angeles, New York, Chicago, and San Francisco, the IBC has been adopted with changes on the basis of local requirements. Chicago, the first major city to produce its own building code, was also the last to adopt a substantially amended version of the IBC. The “new code”—as described by local Chicago practitioners and

builders—eventually was adopted in 2019.

The model of co-authorship that drives the ongoing development of the building code carries a deep political significance that can be easy to miss. On one hand, there is the year-to-year yeoman’s work of revising the building code in the United States by architecture and engineering professionals, industry lobbyists, builders and contractors, material manufacturers, testing agencies, public officials, and trade groups. Amendment by amendment, this chorus of voices implements updates in technological, design, and research-driven standards, and it provides functional clarifications on language and methods of calculation. On the other hand, the intent of such updates and clarifications varies. Sometimes they are intended to keep

in step with changes in social norms. At other key moments, however, the code *itself* has served as the front line of activism for progressive movements, such as the advocacy for gender-inclusive bathrooms that resulted in amendments P14-18 and P15-18. Taken all together, what at first glance can seem like a mechanical rhythm of code revision ultimately constitutes a profoundly democratic process, one that is both flawed and ambitious and that, like all efforts to create meaningful representation, should aspire to continuous improvement.

A great example of the building code becoming the front line of activism can be seen in the early 20th century, with women garment workers who fought for safer working conditions. The creation of early building codes initially was motivated by building insurance agencies seeking protection of *property* from fire, not protection of building occupants. Such codes, for example, emphasized construction methods that would prevent the spread of fire and not, say, requirements for exits for the people inside. During this time, “fireproof” building construction for buildings over 70 feet high—structural iron frames, masonry walls, and concrete slabs—coincided with a sudden rise in industrial production. Because “fireproof” buildings were perceived as noncombustible, building code requirements that applied to lower, wood-frame buildings—such as exterior stairs, outward swinging doors, and sprinkler systems—were not required. So when an industrial boom led to factory expansions into high-rise buildings that lacked these safety measures, the result was a series of multiple fire-related tragedies in the upper stories of high-rise factory buildings.¹²

Problems with the building code were compounded by exploitative practices by employers, too. In March 1911, 146 workers, mostly immigrant women, died in a factory fire that broke out on the 8th floor of the Triangle Shirtwaist Factory in New York City. Many workers jumped to their deaths to avoid the flames. The Triangle Factory was one of the few firms that had not settled with the International Ladies’ Garment Workers’ Union (ILGWU) in the 1909 “Uprising of Twenty Thousand,” an 11-week strike. Labor organizers identified that some of the operational issues

that led to the tragedy at the Triangle Factory—locked exit doors and densely packed floors—could have been prevented if the Triangle Factory had signed with the union. Union safety measures prohibited these practices. In the wake of the disastrous fire, a group of reformers, socialists, and trade union leaders organized to seek relief for the workers and demand that building laws be implemented to create safer buildings. At a strike and protest organized by the ILGWU at the funeral of Triangle Factory workers, building law reform was a central concern. Banners were unfurled that read “We Demand Fire Protection.”¹³

Following the Triangle Factory Fire, New York State established a Factory Investigating Commission, and other states, responding to similar tragedies, followed suit. State inspectors partnered with architecture and other industry professionals to propose regulatory changes based on the dangerous conditions they observed in their state-required field inspections of factories.¹⁴ By 1916, the building code in New York had expansive new requirements for fire safety, including requirements for egress stairs (that is, fire towers) and more stringent requirements to protect paths of egress with fire-resistant materials. Political scientist Heather Pool argues that the mourning that followed the Triangle Factory Fire accomplished what the Uprising of Twenty Thousand, a strike, could not—a public consensus that produced regulatory change, notably one that spanned racial and political lines.¹⁵

But even as advancements were made in support of factory workers, people with disabilities continued to be overlooked by the building code. In historian Sara Wermiel’s research on the origins of the fire escape, she notes architect Samuel Sloan’s 1868 critique of the early spindly inventions required by code. “Looking at fire escapes,” Sloan wrote in *The Architectural Review and American Builder’s Journal*, “as more peculiarly required for women and children, or the aged and disabled, these balconies are, at best, but a poor device; and as for the *ladders*, they are a most stupid contrivance. Who, but a man of nerve would venture on them at the fifth or sixth story of a house? ... Means of escape for the weak and the

timid should be provided, for the sake of humanity.”¹⁶

A little more than a century later—in the 1970s—activists again brought important reform to building codes, winning major civil rights battles for disability rights. Prior to this movement, American National Standards Institute 117.1 (ANSI 117.1) was the standard for accessibility measures in buildings adopted by federal law, but it governed new construction only.¹⁷ In 1973, more expansive requirements for accessibility were implemented when the Rehabilitation Act was passed, including Section 504, which included civil rights language protecting against discrimination on the basis of disability. As disability advocate Kitty Cone observed, building code had the potential to shift questions of access from the individual to the collective. “Before Section 504,” she wrote, “responsibility for the consequences of disability rested only on the shoulders of the person with a disability rather than being understood as a societal responsibility. Section 504 dramatically changed that societal and legal perception.”¹⁸

Yet despite the passage of the Rehabilitation Act, the federal government dragged its heels on passing the actual regulations that would require specific changes to the building code, like requirements for ramps, parking spaces, and accessible bathrooms. So in 1977, the American Coalition of Citizens with Disabilities and their allies organized protests against the Carter administration’s proposed compromises to Section 504, which granted a range of loopholes that diminished its effect, including opt-out waivers, longer compliance schedules, and weaker rules. These protests included occupying the Federal Building in San Francisco for 26 days in the 504 Sit-In. Protests finally ended when regulations were successfully passed without the compromises.¹⁹

Accessibility in the building code continued to be a contentious issue. A little over a decade later, on March 13, 1990, more than a thousand people protested at the US Capitol to demand that Congress pass the Americans with Disabilities Act (ADA). Sixty protesters cast aside their wheelchairs and other mobility aids at the Capitol steps in what became known as the “Capitol

Crawl,” to draw attention to the pervasive challenges and discrimination faced by disabled people. And on July 26, 1990, President George H.W. Bush signed into law the ADA, which expanded the purview of Section 504 from federally funded buildings to privately owned commercial buildings as well. The IBC now refers to a revised version of the ANSI 117.1 standard, aiming for local and municipal codes that align with, or exceed, the federal ADA law.

2.

Which battles become widely known? It is said that history is written by the victors, and this is nowhere more explicitly true than in efforts to revise the law, including the building code. The transformation of building codes around workers’ rights and accessibility are well known in part because organized labor and disability rights advocates deployed approaches—protests, civil disobedience, and media attention—that brought their battles into the public realm. Countless other battles, however, have been fought behind the closed doors of the ICC’s amendment process, out of public view. Indeed, the general public is likely content to leave technical questions about seismic design, structural performance, and ventilation requirements to experts. But the opaqueness of the process of drafting building codes, and particularly who authors them, reached the level of congressional review during a scandal in 2019 involving the National Association of Home Builders (NAHB). Among other things, the scandal revealed that critical issues concerning public health and housing affordability were being decided in part by unknown actors, and the process of building code transformation itself became a matter of public concern.

In October 2019, *New York Times* journalist Christopher Flavelle exposed the fact that the NAHB, an organization of 140,000 home builders, had attempted to stop a series of code amendments intended to promote sustainability, building performance and resiliency, and affordability measures for residential construction.²⁰ The “secret deal,” as Flavelle described it, referred to a memorandum of agreement between the ICC and the NAHB that promised NAHB members four of 11 voting seats

on two major committees governing the International Residential Code (IRC). These guaranteed seats came in exchange for NAHB’s support in implementing the ICC codes in local jurisdictions. As a private, nonsubsidized entity, ICC must generate revenue in order to fund its operations, including the important work of code development. It does so by selling its building code and other associated products to local municipalities, and as a result changes to the code are subject to influence by ICC’s business model. For the NAHB, the IRC committee seats were critical. While all building code amendments are voted on by the ICC’s general body—made up only of public officials and not industry lobbyists—voters usually defer to committees’ recommendations on account of their specialized experience.

Following Flavelle’s article, the House Energy and Commerce Committee launched a congressional review that found that the NAHB’s block of committee votes had obstructed amendments that would drive up construction costs and were therefore unfavorable to their members. These included changes that required better insulation in attics and around heating, ventilation, and air-conditioning ducts; stipulated circuitry to support electric vehicle charging stations; and insisted on life-safety measures, such as windows that are more resilient to hurricanes in areas prone to climate change related disasters. Some of these changes would have contributed directly toward the building performance of residential construction. Their failure to advance simultaneously shortchanged homebuyers of operational savings and had climate-scale effects. In 2015, the NAHB itself began claiming credit for preventing the advancement of these code provisions, and review of the data has shown the effect. Over the previous two code change cycles, in 2009 and 2012, a Department of Energy analysis showed that energy efficiency in residential construction had increased 32 percent. Code changes made over the 2015 and 2018 cycles, with the NAHB’s new seats on council committees, produced improvements of only 3 percent over the same period.²¹

The House committee asked the ICC to respond to a series of questions, many of which went to the heart of the

consensus model and decision-making process that drive code changes. Why were certain organizations privileged over others? Had any other organizations been given preferential treatment resembling that given to the NAHB?²² What emerges from these questions is the revelation that these kinds of battles are fought every three years by a diversity of voices and lobbyists. On one hand, the ICC’s code development process is, at its core, built on values around openness and inclusivity of opinion and involves an ecosystem of participants who work in design and construction. On the other hand, paradoxically, the expansiveness of the ICC’s mission necessitates a complex review process, which in turn creates a level of bureaucracy that makes it difficult for laypeople to participate. Moreover, the inherently “open” nature of the review process creates opportunity for pressure from financially motivated private interests and can also enable the kind of bias toward stagnation that is characteristic of any small, inward-facing group that isn’t subject to outside scrutiny.

3.

The building code is inherently co-authored. Who participates, and how, matters. In the last 150 years, progress achieved by activism in the building code shows that transformative change is possible when the voices of people directly affected—immigrant garment workers, disabled people, owners of single-family homes affected by climate change and rising costs—come together with the expertise of allied regulators and professionals working in design, construction, and engineering. Expanding co-authorship of the building code to reach such groups is both a matter of checks and balances and an important driver of critical authorial change. But how can that expansion of participation be achieved?²³ Federal agencies (and UN bodies) have a mandate to publish legislation and allow for a period of public comment before enacting resolutions.²⁴ In the case of the building code, first, we need to create more open access, through the defense of fair use over more restrictive interpretations of copyright, and through the integration of simple, user-friendly technology. Second, we need to actively seek out public voices through a more inclusive



Eight year old Jennifer Keenan, left, leads a crawl up the steps of the US Capitol to draw support for a key bill pending in the House that would extend civil rights to disabled persons, Washington, DC, March 12, 1990.



JSA / MIXdesign / BKP Architects, I. King Jordan Student Academic Center, inclusive restrooms, as part of Stalled! project for inclusive facilities, Gallaudet University, Washington DC, 2021.

code-amendment process and public comment period.

Recent efforts to make the building code more easily accessible reveal why doing so is challenging. In 2013, the organization Public.Resource.org—a nonprofit dedicated to making government information like building codes more easily accessible—was sued for copyright and trademark infringement by several private organizations that develop building and construction standards, including requirements around electrical, fire protection, and HVAC. In a statement following the decision by the U.S. Court of Appeals to uphold Public.Resource.org’s right to post such standards publicly, the Electronic Frontier Foundation (EFF), which represented Public.Resource.org in the suit, shared that “in a nation governed by the rule of law, private parties have no business controlling who can read, share, and speak the rules to which we are all subject.”²⁵

The ICC’s model codes are indeed difficult for the public to access. Their online versions aren’t searchable, users can’t copy and paste from them, and they can’t be printed. The ICC has a vested interest in maintaining such

tight control over their contents. The organization sells subscriptions for more usable and legible presentations of their codes—as well as the code amendment process.²⁶ But others are trying to change that. UpCodes, a for-profit start-up launched in 2016, is working to reinvent how building codes are accessed online through “UpCodes Web,” a digital searchable format. With another product called “UpCodes AI,” which includes AI-driven assessment of building compliance, a user can also connect directly to Revit—a Building Information Modeling (BIM) software used by architects, builders, and engineers. But, like Public.Resource.org, UpCodes has been tied up in federal court, where they are arguing for the “fair use” of codes that are incorporated into local law. There are obvious economic upsides in allowing building code to become more accessible, but such transparency is also a fundamental matter of democratic governance. As EFF intellectual property attorney Mitch Stoltz was quoted as saying, “Supposedly the Roman emperor Caligula would write the laws in small print and hang them up very high, so no one could actually read them. That’s a problem for democracy.”²⁷

Questions about transparency and accountability also extend to the ways that local municipalities and building officials enforce the building code. For example, activists called for a “landlord scofflaw” list in Chicago after deadly fires killed four children in a South Side apartment building. Then-Mayor Rahm Emanuel announced the implementation of the new policy in 2014 with strong words—the city would be putting problem landlords “on notice”—but the list was abandoned just two years after its implementation.²⁸ In design schools, architects sometimes describe the building code as the “lowest common denominator,” meaning that students should aspire to design projects that substantially exceed the basic life-safety requirements of the code. In major cities like Chicago, however, decades of disinvestment in communities of color has meant that many buildings have fallen into disrepair and out of compliance with the building code, as the public record of building violations documents all too well.²⁹ The people whose lives are most impacted by the building code—owing to the failure of building owners to remediate issues and to the lack of resources available to single-family homeowners to address them—should be central to

these discussions, not excluded from them.

A more expansive and ambitious approach to include the public in the development of building code has the potential to create a feedback loop between those who draft the code and those who experience firsthand how it manifests in cities. While zoning code is currently the subject of lively debate around questions of equity and affordability, the opacity of the building code has kept it out of scholarly and public debate. Indeed, even at a conference focused on the relationship between building code and housing, researchers found that they had to address the lack of certain significant areas of research that emerge from the perception that the density and technical complexity of building code presents a “leviathan”

project unappealing for deep engagement by economists and policymakers.³⁰ The very density of certain codes makes accountability more challenging at the same time it creates opportunities for bad actors to exploit them.

Yet in the building code’s density, there is beauty and potential. While the field of architecture is often constrained in its capacity to effect social change, the building code, for all its wonkiness, has been the site where architects have been able to stand shoulder to shoulder with civil rights activists throughout the past 150 years. In 1997, the late architect and urbanist Michael Sorkin wrote *Local Code: The Constitution of a City at 42 Degrees North Latitude*, an ode to New York in the format of a building code. The book is organized poetically into sections of requirements

that span everything from “IV-18: Party Walls” to “V-1: The Beach.” In its most quietly radical section, “II-1: Bill of Rights,” Sorkin lists 19 “civic rights” that “City Dwellers shall enjoy.” Number 16 on that list is “The right to change.” Our right to change the built environment begins in part with the right to change the building code, to understand it not as something written in stone and handed down from above but instead as a living document worthy of debate, antagonism, and revision. It is only a tiny cog in the complex machines that govern how we live together, but it is also one with razor-sharp edges whose impact draws blood. Sorkin concludes his list of rights with “The right to architecture.” It is in these two rights *together*—architecture as change—where the power of design resides.³¹

1 The evolving definitions of the words “sex” and “gender,” as well as the advancement of civil rights for transgender people and people of all gender identities, are obviously at the core of the debates on this topic. In this text, for clarity, I use “sex” when referring to the text of the plumbing code, such as in “sex-separated bathrooms,” and “gender identity” and “gender expression” as defined by the National Organization for Transgender Rights: <https://transequality.org/issues/resources/understanding-transgender-people-the-basics>.

2 Thank you to Terry Kogan, professor emeritus at the University of Utah, for his feedback on this text as well as his leadership on inclusive bathrooms as both a scholar and activist, including his work on the Stalled! project. Any misunderstandings or mistakes I make about the code-amendment process are completely my own, and Terry did his best to encourage me toward a more generous reading of both this specific history as well as the overall process of code amendment.

3 The proponent for code amendment P14-18 is listed as Josephine Ortega, representing the University California. The proponent for P15-18 was David Collins, representing the American Institute of Architects. The proponents for P17-18, a related amendment in the discussion, were James P. Colgate, representing the National Center for Transgender Equality and David Collins, representing the American Institute of Architects.

4 ICC operates based on a “government consensus process,” a series of procedures which prioritize values including openness, transparency, due process, and more. It is both a technical and a wonky system, as well as a profoundly democratic one, which produces a critical tension explored later in this text. One can read more about the process on the ICC’s website: <https://www.iccsafe.org/products-and-services/i-codes/code-development/code-development-procedures/>.

5 Code amendments are heard first at Committee Action Hearings which are intended, per the ICC, “to permit interested parties to present their views including the cost and benefits on the code change proposals.” These results then proceed to a Public Comment Hearings period and vote by the assembly. The results were as follows: P14: Committee Action Hearings—10-4; Public Comment Hearings—57 percent support; 43 percent oppose. P15: Committee Action Hearings—approved as modified, 11-3; Public Comment Hearings—60 percent support; 39 percent oppose. Source: “Hearing Videos from the 2018 Committee Action Hearings, Group A Codes,” https://codes.iccsafe.org/content/IPC2021P3/chapter-4-fixtures-faucets-and-fixture-fittings#IPC2021P3_Ch04_Sec403. Accessed March 19, 2024.

6 Ibid.

7 Southern Building Code Congress, *Southern Standard Building Code (Birmingham, AL: The Congress, 1958)*.

8 The city of New York’s passage of the Tenement House Act in 1867 is cited as the first comprehensive building law.

9 A few books serve as go-to resources for architects in understanding how to implement the building code. Some of these also include histories of the development of the code. For more, see: Melvyn Green, *Building Codes for Existing*

and *Historic Buildings*, 2nd ed. (Hoboken, NJ: Wiley, 2011), 13; Francis D. K. Ching and Steven R. Winkler, *Building Codes Illustrated: A Guide to Understanding the 2018 International Building Code*, 6th ed. (Hoboken, NJ: Wiley, 2018), 2.

10 The Building Officials and Code Administrators, used in the Midwest and Northeast, was established in Illinois in 1915. The Southern Building Code Congress came about in 1940 and was in use in Southern states. The International Conference of Building Officials, established in California in 1952, was used primarily on the West Coast.

11 According to the ICC, outside of the US, the IBC is a model code for the building codes of Abu Dhabi, the Caribbean, Mexico, Haiti, Honduras, Georgia, and Saudi Arabia.

12 Historian Sara Wermiel, in her research on the emergence of fireproof construction as well as life-safety building laws, documented the ways in which public outcry, pressure from building professionals, and findings from state factory inspectors brought about substantial changes to early building codes, against the resistance of factory owners. Sara E. Wermiel, “No Exit: The Rise and Demise of the Outside Fire Escape,” *Technology and Culture* 44, no. 2 (2003): 258–84.

13 Richard A. Greenwald, “The Burning Building at 23 Washington Place: The Triangle Fire, Workers and Reformers in Progressive Era New York,” *New York History* 83, no. 1 (2002): 79.

14 After a deadly fire in 1874 in a Massachusetts textile mill, Carroll D. Wright, the head of the Massachusetts Bureau of Statistics of Labor—an office established to pass a factory worker protection act—passed a worker safety bill that included state regulated fire exits. This bill, in a way, was a building code: “It was more of a building exits law than a worker protection law,” according to Wermiel, and included provisions for state inspectors to assess and order improvements around egress. See Wermiel, “No Exit,” 265.

15 Heather Pool, “The Politics of Mourning: The Triangle Fire and Political Belonging,” *Polity* 44, no. 2 (2012): 182–211, <http://www.jstor.org/stable/41426930>.

16 “Fire Escapes,” parts 1 and 2, *The Architectural Review and American Builders’ Journal (November 1868)*: 352, and *(December 1869)*: 310 11.

17 This standard has continued to be revised regularly in the years since and can be adopted on a voluntary basis. American National Standards Institute, Inc., *Specifications for Making Building and Facilities Accessible to, and Usable by, the Physically Handicapped* (New York: American Standards Association, 1961).

18 Kitty Cone, “Short History of the 504 Sit In,” *Disability Rights Education & Defense Fund*, April 4, 2013, <https://dredf.org/504-sit-in-20th-anniversary/short-history-of-the-504-sit-in/>.

19 Many parallel advances during this time on the front of building code and accessibility rights came through ground-up, grassroots efforts by the disability community working collaboratively with architects and architecture students. As documented by historian Bess Williamson, the independent living movement was a student action disability rights movement at the University of California, Berkeley, centered around the Center for Independent Living. It was focused on a design approach that prioritized disabled people’s

experiences, including prototyping new models for inclusive access. The work of this movement led Berkeley to become the first US city to implement a planned, continuously accessible route in the public right of way, including upgrades to curbs and crosswalks. See Bess Williamson, *Accessible America: A History of Disability and Design* (New York: NYU Press, 2020).

20 Christopher Flavelle, “Secret Deal Helped Housing Industry Stop Tougher Rules on Climate Change,” *The New York Times*, October 26, 2019, Climate, <https://www.nytimes.com/2019/10/26/climate/building-codes-secret-deal.html>.

21 Ibid.

22 Commerce Newswire, “E&C Leaders Question Integrity of International Code Council’s Code Development Process,” *Federal Newswire*, January 19, 2021, <https://thefederalnewswire.com/stories/620281187-e-c-leaders-question-integrity-of-international-code-council-s-code-development-process>.

23 Currently, the composition of the ICC’s committees seems to reflect the structural diversity issues that face all the architecture, engineering, and construction industries. This failure of representation creates blind spots around the lived experiences of the increasingly diverse population of the US that is served by their work.

24 Thank you to Juliet Sorensen, clinical professor of law at Northwestern University and executive director of Injustice Watch, who pointed me toward public comment processes and has encouraged me to continue to look for ways that building codes can produce a more just city for all its residents.

25 Electronic Frontier Foundation, “Appeals Court Upholds Public.Resource.Org’s Right to Post Public Laws and Regulations Online,” press release, September 12, 2023, <https://www.eff.org/press/releases/appeals-court-upholds-publicresourceorgs-right-post-public-laws-and-regulations>.

26 I even had to subscribe to view the ICC videos of code changes in order to write this text.

27 Bill Millard, “The International Code Council Goes to Court over Free Access to Building Codes,” *The Architect’s Newspaper*, July 9, 2019, <https://www.archpaper.com/2019/07/international-code-council-start-ups/>.

28 Madison Hopkins and Cecilia Reyes, “Deadly Fires, Broken Promises,” Illinois Answers Project, April 23, 2021, <http://illinoisanswers.org/2021/04/23/deadly-fires-broken-promises/>.

29 I previously wrote about the ways that building violations stem from redlining and other issues of structural racism, and are upstream from Chicago’s well-known issue of vacant lots. I argued that more equitable access to professional services would begin to address this issue. See Ann Lui, “Toward an Office of the Public Architect,” *Log* 48, 2020.

30 Carlos Martín, “Response to ‘Building Codes and Housing’ by David Listokin and David B. Hattis,” *Cityscape* 8, no. 1 (2005): 253–59, <http://www.jstor.org/stable/20868578>.

31 Michael Sorkin, “Bill of Rights,” in *Local Code: The Constitution of a City at 42 Degrees North Latitude* (New York: Princeton Architectural Press, 1997).