New Jersey Energy Code Collaborative

Code Compliance and Workforce Subcommittee

Meeting Minutes

March 5, 2026, 1:00 – 2:00 PM

Attendees

- Brian Penschow, NJ AIA
- Cathy Yuhas, NJ EDA
- Cornelia Wu, NEEP
- David Hattis, Rutgers CUPR
- Dragana Thibault, NEEP
- Ian Rayfield, NJ DCA
- Indrani Pal, NJ BPU
- Jason Kliwinski, Rutgers CUPR
- Jeff Kolakowski, NJBA
- Jennifer Senick, Rutgers CUPR
- Jennifer Souder, Rutgers CUPR
- Kiran Ghosh, Rutgers CUPR
- Liu Liu, KEA Engineers
- Nicole Provost, DEP
- Rupa Deshmukh, NJ BPU
- Ryan Jerome, NJ NG
- Ryan Richardson, NJ DOL
- Stacy Richardson, NJ BPU
- Yousaf Shahid, Rutgers CUPR

1. Introduction

Cornelia Wu (NEEP) welcomed participants to the third meeting of the Code Compliance and Workforce Subcommittee of the New Jersey Energy Code Collaborative. She reviewed the agenda, which included updates on the Building and Industry Leadership Team (BILT), the Energy Code Official Training and Education Collaborative (ECO Tech), Phase 2 of the NJEDA Green Workforce Training Grant Challenge, an overview of NEEP's Code Official Workforce Roadmap, and a workforce development mapping overview.

She provided an antitrust reminder and reiterated the purpose of the New Jersey Energy Code Collaborative: to establish a timely and robust stakeholder-guided process to research and develop a New Jersey Zero Energy Building Roadmap that advances increasingly efficient building energy codes and improves administration, enforcement, and compliance aligned with state energy policies and Energy Master Plan goals. She noted that the roadmap is a living document with three concurrent pathways: the new building base code path, the stretch code/zero energy building path, and the existing building path, which together are intended to lead New Jersey to implement zero energy building codes for both new construction and existing buildings by 2030 or sooner.

Cornelia Wu (NEEP) then turned the discussion over to Jennifer Souder for the first set of updates.

2. BILT, ECO TEC, and Green Workforce Grant Updates

Jennifer Souder (Rutgers Center for Urban Policy Research) provided an update on BILT, the Building and Industry Leadership Team initiative. She explained that BILT is led by NJBPU and

the Department of Labor, together with workforce partners across the state, and is intended to align New Jersey's energy efficiency and building decarbonization efforts by strengthening workforce capacity. She noted that the next meeting would be held on March 11 and said that anyone on the subcommittee who was not already participating in BILT and wanted to be involved should reach out. She added that the upcoming session would include useful information from workforce partners and work-based learning programs, including contractor and union perspectives.

Jennifer gave a brief update on the Energy Code Official Training and Education Collaborative (ECO TEC). She noted that some members of this group and other subject matter experts had provided feedback on ASHRAE 90.1 training modules at the end of 2025, and that ASHRAE and NASEO had met with DOE counterparts. She explained that the project remains on hold and that the team is waiting to hear whether a no-cost extension request will be approved. She noted that if the project remains on hold or is terminated, the subcommittee may want to think about how to work together to move that training forward.

Jennifer also highlighted Phase 2 of the NJ EDA Green Workforce Training Grant Challenge. She said the opportunity is currently open, is focused on green workforce training, and may be relevant to members of the subcommittee either individually or through partnerships. She noted that applications are due on April 20 and that the process requires lead time, making early coordination important.

3. NEEP Code Official Workforce Roadmap Overview

Dragana Thibault (NEEP) presented NEEP's Code Official Workforce Roadmap, a new resource published recently. She explained that it focuses on how the Northeast and Mid-Atlantic region can strengthen the workforce responsible for enforcing building and energy codes. The roadmap builds on NEEP's Code Enforcement Workforce Gap Analysis from the end of 2024 and incorporates input from code officials and stakeholders across the region. About 80% of the survey responses received for the gap analysis came from New Jersey, and many of the suggestions from New Jersey code officials informed the development of the roadmap.

Dragana said several major trends emerged from the survey and regional engagement. Many building departments are already understaffed, even before accounting for upcoming retirements. Nearly 40% of current code officials are expected to retire by 2029, and more than half of the workforce by 2034. At the same time, the job is becoming more demanding because officials are responsible for more complex technologies and systems, more frequent code updates, and an increasing share of renovation and retrofit projects, which are often more complicated than new construction. She said the roadmap identifies six major workforce challenge areas and recommends actions for different stakeholders, including state energy offices, local building departments, training and educational organizations, and other partners.

Dragana explained that the first two challenge areas are recruitment and retention. On recruitment, the roadmap emphasizes stronger career awareness, clearer entry pathways into the profession, and lower barriers to entry. She noted that because the profession does not require a four-year college degree, there are opportunities for people entering from trade and technical programs and for mid-career transitions. On retention, many jurisdictions face salaries that lag comparable private-sector roles, heavy workloads, and outdated systems that make the work harder than it could be. She said the roadmap points to improved compensation competitiveness, modernization of permitting systems and inspection tools, and regional support models such as circuit-rider programs as ways to help retain staff and reduce burnout.

The next two challenge areas are training and continuous education. The 2024 survey found that a significant number of code officials reported gaps in energy-code knowledge, and many rely heavily on self-study, with only a relatively small share saying they felt fully confident applying energy codes. To address this, the roadmap recommends structured onboarding, code-enforcement 101 boot camps, expanded energy-code training, and more cross-training with industry professionals. She emphasized that training should not stop after certification and should instead be built into the job through paid training time, mentorship programs, and peer learning networks.

The fifth challenge area reflects the reality that most permits today involve existing buildings, where application of modern codes can be more complex than in new construction. The roadmap actions in this area include clearer retrofit guidelines, simplified compliance tools, and earlier consultation processes to identify requirements sooner, reduce surprises, improve compliance, and reduce tension between code officials, contractors, and property owners.

The final challenge area is succession planning. With many retirements expected, succession planning will be critical. Many departments lack formal plans to transfer institutional knowledge or prepare future leaders, and that when experienced staff leave, their experience often leaves with them. The roadmap therefore recommends documenting local practices, mentoring newer staff, cross-training future leaders, and engaging retirees as mentors or trainers.

The roadmap recognizes that implementation requires funding. Several possible funding mechanisms included in the roadmap are allocating a small portion of permit or inspection fees to workforce development, state appropriations to support hiring and training of code officials, utility or energy-program funding that supports training and compliance, federal grants when available, private-sector partnerships including utilities and insurers, and support from foundations focused on workforce or climate outcomes. The idea is not to rely on one funding source, but to blend funding approaches to support long-term workforce development.

4. Workforce Development Mapping Overview and Discussion

Brian Penschow (AIA) described the workforce development mapping work prepared for the subcommittee. It is focused largely on the cost and time required to develop candidates from different starting points into code officials, particularly energy-code inspectors and reviewers. He explained that the mapping helps identify where the low hanging fruit is, those who are already most of the way toward meeting the education requirements, and also shows where the greatest investment of time, money, and effort would be needed to bring someone to the level of a minimally qualified candidate.

The mapping also included a few possible pilot programs that had not yet been launched. One idea was a concierge-style program that would help guide people through the process and reduce friction for those changing careers or entering the profession for the first time.

Ryan Richardson (NJ DOL) asked whether the need is primarily to replace retiring workers or whether there is also projected growth in the number of jobs. **Brian Penschow (AIA)** responded that it is a combination of both, but emphasized that the immediate shortage already exists and needs to be addressed now. Solving the present shortage would make future workforce development easier, since it would create more mentors, trainees, and visible local role models within communities.

Indrani Pal (NJBPU) asked about the data collection method and sample size. Dragana Thibault (NEEP) explained that the previous workforce gap analysis was based on a survey conducted at the end of 2024 that received around 500 responses, with over 300 responses from New Jersey. She said the survey asked about retirement expectations and training and education needs. Indrani Pal (NJBPU) also asked whether the roadmap included the survey questions and methodology. **Dragana Thibault (NEEP)** explained that the survey included open-ended questions to allow code officials to express where they thought the code-enforcement workforce was headed, and that those suggestions helped shape the roadmap. The roadmap also drew from discussions in this subcommittee and NEEP's other code collaboratives in the region, meaning it is regional in scope even though much of the input came from New Jersey. **Cornelia Wu (NEEP)** added that there is an earlier resource on which the roadmap is based that contains the actual survey questions and summaries of answers, and she said she would share that in the chat.

Liu Liu (KEA Engineers) commented that the previous studies clearly showed both demand for code officials and a need for more education and skill improvement. Liu asked how the findings could be made useful at the state level and implemented in practice, including whether counties or jurisdictions would create more code-reviewer positions.

Brian Penschow (NJ AIA) responded that in New Jersey, code officials often wear many hats. There can be six or seven different inspection and code-official functions within a single department, across more than 550 jurisdictions in the state, which creates many potential jobs.

He explained that the size of each department, its budget, and the amount of work in each municipality affect whether officials serve one jurisdiction or multiple jurisdictions in order to create a full-time position. New Jersey's home-rule system is a major structural factor, since each municipality has its own building department and jurisdiction, unlike some neighboring states where responsibilities are handled more regionally. This highly localized structure likely contributes to the especially strong response from New Jersey code officials to the survey. He also observed that while this municipal structure is a longstanding issue that cannot be changed quickly, it still leaves the state needing to fill these positions, especially if a new energy code adds separate inspection needs beyond existing inspections.

Liu Liu (KEA Engineers) then asked whether there is a way to move toward more standardized procedures in the future, noting that in practice each county or jurisdiction seems to treat the energy code differently. **Brian Penschow (NJ AIA)** responded that New Jersey is on a long arc of improvement in this area. The state has already moved from having different codes across jurisdictions to having a uniform energy code that is supposed to be applied uniformly, and that plan reviewers and inspectors should be applying it consistently across the state. He acknowledged, however, that there are still gray areas and interpretive differences, often resolved by referring questions back to code-writing bodies such as ICC. Regionalization could produce greater uniformity by creating larger jurisdictions with more centralized intake, review, and inspection functions, but that doing so would also reduce home rule and might lose some local sensitivity to different climate conditions and other factors. He characterized the issue as a balancing act between uniformity and resolution in how energy requirements are applied. More broadly, New Jersey is trying to work within a commuter-community, township-based structure while seeking more consistent application, which makes it a large project-management problem.

Brian Penschow (NJ AIA) asked how the committee might begin rolling out some of the proposed pilots, how it should decide between advancing one program versus multiple programs, and how it could begin tracking and measuring outcomes. Even getting ten people into the pipeline would be a significant help. He asked whether the group should try some option and see how they are received or instead concentrate resources on the option that seems most likely to succeed and then move on to others sequentially. When **Cornelia Wu (NEEP)** asked whether he was referring to determining which of the programs could be advanced as pilots, **Brian** said yes, including possibly all of them at once. In his personal opinion, the accelerated engineer-or-architect-to-subcode-official pathway may be the one that could be advanced in the shortest amount of time and might produce the greatest number of candidates.

Jason Kliwinski (Rutgers CUPR) asked whether the DCA courses are listed and accessible on the DCA website, and whether someone interested in pursuing the path could easily find them.

Brian Penschow (NJ AIA) responded that the information is technically available, but not easily available. The materials look like they had been typed decades ago and then scanned, and said they are difficult to navigate and not machine-readable without OCR. The information can be found under the DCA website's code-official development, education, and training section, but emphasized that simply making the material easier to find would not necessarily be enough to attract people. Initial interest often develops through word of mouth or some other form of awareness-building before people go looking for the details. A short, attention-grabbing advertising campaign could help introduce the idea of becoming a building inspector or code official.

Cornelia Wu (NEEP) suggested that continuing education requirements in New Jersey might provide another way to make people aware of these courses, since licensed professionals are already looking for continuing education every three years. **Brian Penschow (NJ AIA)** agreed and said that one reason he became a building inspector was that it allowed him to earn free continuing education credits for his architect's license. This could be a strong selling point for architects and engineers and that dual licensure is already being maintained by a number of architects in New Jersey, making it a realistic recruitment path. Brian returned to the trade-to-inspector apprenticeship idea, explaining that it could allow tradespeople to earn supervised, paid inspection experience and coursework at the same time, similar to certain teacher-certification models. In his view, the two ideas with the strongest potential to bring the most new faces into the field were the accelerated architect/engineer pathway and the trade-to-inspector apprenticeship pathway.

Jeff Kolakowski (NJ Builders Association) said the issue had been under discussion for at least a decade. ICC has been warning about the coming shortage since at least 2014 and said the problem connects to broader workforce issues, including parental aversion to blue-collar occupations and the difficulty of making part-time municipal inspection work into a stable full-time career. He raised a question of why is this group having this conversation, and is the real concern code compliance? He said there has already been extensive discussion in New Jersey about code-official shortages, including prior efforts on regionalization, privatized inspections, certified plan review, and electronic submission improvements. He wanted clarity on whether this subcommittee's purpose was broader workforce development or whether it was specifically trying to address compliance.

Cornelia Wu (NEEP) responded that this is the Code Compliance and Workforce Subcommittee, so both topics come together here. Shortage places pressure on inspectors who may already be understaffed and are responsible for many issues beyond energy code, including life safety. Makes it important to think about new training pipelines and how to deal with the large number of retirements coming. **Brian Penschow (NJ AIA)** added that if legislation is advanced

without addressing how it can be enforced, it is unlikely to succeed, so these workforce questions have to be answered in advance.

Jeff Kolakowski (NJ Builders Association) pressed the question further, asking whether the concern is that putting pressure on understaffed code officials will reduce compliance. **Brian Penschow (NJ AIA)** said compliance is one major concern, but not the only one. He said that when inspections are legally required but there is no one available to perform them, construction is delayed. He argued that strengthening the workforce could improve compliance, speed up construction, improve comfort and well-being in buildings, and create jobs.

Cornelia Wu (NEEP) added that states often use DOE compliance-study methodologies not only to assess compliance but also to inform future training priorities. These studies are generally done anonymously at job sites and do not report findings back to individual departments, but instead aggregate results to show where training should be strengthened. She gave air sealing as an example: if it emerges as a weakness in compliance studies, then the state may elevate air sealing within training and continuing education priorities. She said that many different things can come out of looking at compliance in this way.

Jeff Kolakowski (NJ Builders Association) responded that, as he understood it, the group's interest is specifically in compliance with the energy portion of the code, and potentially stretch codes in New Jersey, rather than general code compliance. **Cornelia Wu (NEEP)** confirmed that, and said the connection to workforce and workforce training is part of that focus. Jeff Kolakowski then asked whether New Jersey's current compliance record is known and how it compares with other states. **Jennifer Souder (Rutgers CUPR)** responded that New Jersey has done an energy-code compliance study and said she would place that resource in the chat.

Jeff Kolakowski (NJ Builders Association) then noted that frequent code updates can themselves contribute to compliance problems, especially with an older workforce that has been adapting to new codes for decades. This can create pain points for builders when officials are not fully familiar with the current code. He also said he believes the private sector is the solution, pointing to his support for private inspections and efforts to enable architects and engineering firms to help fill the gap, while acknowledging that those efforts have not yet produced many actual private inspection firms. **Brian Penschow (NJ AIA)** agreed that private inspections have not really taken off because, despite the gap, it does not appear financially feasible for firms to fill it. **Jeff** added that liability issues for architects and others are part of the challenge. If the goal is compliance, then the group should look more directly at the reasons there may be less compliance than desired in New Jersey.

Cornelia Wu (NEEP) responded that this is part of the emphasis on training. If the workforce is accustomed to an older code and does not know the newest code well enough, then one

response is to provide better training, especially when new codes are adopted, and to offer trainings that explicitly compare the code people have been using with the code about to take effect.

Jeff Kolakowski (NJ Builders Association) then broadened the point by noting that the building code includes many elements beyond the energy code, IBC, IRC, fuel code, and others, and said that code officials understandably prioritize health and safety first. He asked whether code officials are even the right people to achieve energy-code compliance, or whether third parties such as energy-rating companies already involved in blower-door testing might be better suited for that part of the work. He said that if the agenda is to advance the energy code, then the group should specifically discuss compliance within IECC rather than code compliance overall.

Cornelia Wu (NEEP) agreed that the group is focused on the energy code, not structural inspections, and said that in commercial settings ASHRAE also figures into the discussion. While the focus is energy efficiency, measures such as tight air sealing also implicate occupant comfort and, to some extent, health and safety because they bring ventilation requirements such as ERVs or HRVs into play. When **Jeff Kolakowski** asked whether the group is concerned with training subcode officials such as electrical, HVAC, and plumbing officials, **Cornelia** responded that nothing presented that day was focused on that specifically. She said that the roadmap discussed earlier drew from code officials in New Jersey who perform many types of work, but specifically asked them about their experiences with the energy code.

Jason Kliwinski (Rutgers CUPR) said that while the topic is bigger than energy codes, this group is specifically trying to make sure the energy-code piece is not lost inside that larger discussion. The group is trying to ensure there is a code-official workforce in place that can conduct reviews in a timely way, avoid holding up permits, and potentially even fast-track projects that follow certain enhanced standards such as stretch codes, as some other jurisdictions do. The group is concerned with workforce capacity, the aging-out of the current workforce, training and recruitment, and how consistently energy codes are enforced across the state.

Jason Kliwinski (Rutgers CUPR) emphasized that consistency matters not just in recruitment and certification, but in making sure builders and architects do not receive different rulings and mixed messages in different municipalities. This means the group is not just focused on getting people into code-official roles, but also on training them to interpret and enforce energy codes consistently, while avoiding permitting bottlenecks and costly back-and-forth on job sites. These issues need to be rolled into the broader workforce-development discussion so that the energy-code dimension is not forgotten.

Jeff Kolakowski (NJ Builders Association) responded that he agreed with Jason's framing and reiterated that the reason for his question was that the energy-code piece may require different solutions than the other subcodes. In his view that private-sector and third-party

involvement is likely the bigger solution, especially bringing trained building-science professionals further into inspections and plan review.

Jason Kliwinski (Rutgers CUPR) responded that this may be one piece of the solution, but said there is likely to remain some concern in New Jersey if the same firm responsible for design is also responsible for code review, unless it is someone independent of the project. New York City allows architects to inspect their own building envelope work for energy-code compliance and that many states permit similar practices. **Jeff Kolakowski (NJ Builders Association)** replied that in New Jersey this is currently allowed only in rehab settings, and he said he is advocating for possible expansion. He again pointed to opportunities identified in the governor's transition report, including automation for solar and other permit efficiencies. **Jason Kliwinski (Rutgers CUPR)** concluded that the outdated nature of DCA training materials demonstrates the need for broader modernization and automation, both to recruit younger professionals and to improve training and enforcement more generally.

5. Closing

Cornelia Wu (NEEP) thanked participants, reminded everyone that the full Energy Code Collaborative would meet on April 17 at 10 am, with presentations and report-outs from the other subcommittees, and that the meeting notes would be shared with the group for review before being posted publicly on the website.

ZOOM Chat Discussion Notes

Dragana Thibault (NEEP): Here is link to BILT https://njcelc.com/business-industry-leadership-team-bilt/

Ryan Richardson (NJ DOL): Here is the link to register for BILT-6 if anyone would like to join us! **Register Here**

Cornelia Wu (NEEP): https://neep.org/code-official-workforce-roadmap

Dragana Thibault (NEEP): https://neep.org/sites/default/files/media-files/neep_code_enforcement_gap_analysis_final_updated.pdf

Indrani Pal (NJ BPU): Appreciate it! WOW, NJ's number is 338!

It seems like a significant portion of these results might be driven by the NJ-specific data set!

Jennifer Senick (Rutgers CUPR): https://cupr.rutgers.edu/products/new-jersey-energy-code-compliance-study/

Brian Penschow (NJ AIA): I gotta run all, I will see you next meeting. And if you have more for me to work on, send an email.

Acronyms and Abbreviations

AIA – American Institute of Architects
ASHRAE – American Society of Heating, Refrigerating and Air-Conditioning Engineers
BILT – Building and Industry Leadership Team
NJ DCA – New Jersey Department of Community Affairs
DOE – U.S. Department of Energy
ECO TEC – Energy Code Official Training and Education Collaborative
ERV – Energy Recovery Ventilator
HRV – Heat Recovery Ventilator
IBC – International Building Code
ICC – International Code Council
IECC – International Energy Conservation Code
IRC – International Residential Code
NASEO – National Association of State Energy Officials
NEEP – Northeast Energy Efficiency Partnerships
NJ BPU – New Jersey Board of Public Utilities
NJ EDA – New Jersey Economic Development Authority