



UTAH DEPARTMENT
OF COMMERCE

Office of Professional Licensure Review

2024 Periodic Review

Building Inspection

Published January 2025

Executive Summary

Purpose of Review

Under Utah Code 13-1b, the Office of Professional Licensure Review (OPLR) reviewed Utah's licensing laws for building inspectors. The review evaluated how well current regulations:

1. Protect the public from physical and financial harm
2. Ensure fair access to the occupation by consumers and practitioners
3. Limit the economic impact of regulation on consumers and practitioners¹

Building inspector licensure was proposed for review in part because of the critical role that local building departments, building officials, and building inspectors play in growing Utah's residential and commercial building stock safely and quickly. While there are relatively few licensed building inspectors in the state, their work has a high impact on construction and real estate activity.

OPLR's research to conduct this review included surveying all current licensees, analyzing DOPL licensee and complaint data, reviewing relevant academic literature, interviewing prominent stakeholders, accompanying building inspectors to construction sites, and scanning state regulation of building inspection.

Background

Building inspectors work for municipalities to inspect new or altered buildings to ensure their compliance with the relevant building permits and building codes. A city cannot issue a certificate of occupancy until required inspections are performed and any noted violations are resolved.

Anyone performing building, mechanical, plumbing and electrical inspections on behalf of a Utah municipality must be licensed as a building inspector by the Utah Division of Professional Licensure (DOPL). Building inspections are performed largely by public employees under the oversight of municipalities.

Building inspections do not appear to be a cause of any major construction delays.

There is a wide variation in how states regulate this occupation.

Key Findings

Safety and Consumer Harm: The main potential for harm in this industry is largely the failure to inspect and enforce building codes properly, either through under-enforcement or enforcing beyond code requirements. This causes financial harm to property owners and potential safety risks (in the case of under-enforcement).

¹ UCA 13-1b

OPLR did not find evidence that the Utah public is at significant risk from this type of harm. The main issue OPLR found was excessive variability in technical code interpretation and enforcement by building inspectors across different municipalities. This causes friction and unneeded costs in a critical industry.

OPLR suggests that variability in enforcement and process is largely driven and exacerbated by two related factors:

1. Insufficient oversight and accountability for building officials and building departments
2. Lack of a workable appeals process for permit holders

Access: OPLR found Utah's licensure requirements for building inspectors range from minimal to moderate. Evidence, such as inspector workloads and workforce attrition, suggests that there is a workforce shortage of building inspectors. Given the relatively low barriers to this profession, possible causes of this shortage include its low pay relative to other occupations, its low profile as a profession, and barriers to training new inspectors.

Recommendations

- To help reduce variability in inspection processes, **OPLR recommends empowering the Uniform Building Code Commission (UBCC) to collect data on building inspection and code enforcement and publish a report on the performance of local building departments** across the state. Establishing this feedback mechanism within the UBCC is the least burdensome way, in OPLR's view, to improve transparency and reduce variability.
- **OPLR recommends creating a new building official license, while simply requiring in statute that building inspectors be ICC certified in lieu of a state license.** This change would place accountability on those with responsibility for managing code enforcement consistency and professionalism (building officials) and reduce the administrative burden of a state license for building inspectors who would retain the requirement for ICC certification.
- **OPLR recommends allowing licensed journeymen and master plumbers and electricians to inspect according to their expertise** without the related ICC certification, thereby creating an entry point for talent into the building inspector industry.
- **OPLR recommends maintaining the current public-private balance within the building inspection industry.** Private companies provide specialized technical knowledge and increase the capacity of building departments, while public control maintains equity across permit holders and protects against regulatory capture of private inspection firms by permit holders or builders.

Context

Consistent with its legislative mandate, the Office of Professional Licensure Review (OPLR) reviewed Utah's licensing laws for building inspectors. The review evaluated how well current regulations:

1. Protect the public from physical and financial harm
2. Ensure fair access to the occupation
3. Limit the economic impact of regulation on consumers and practitioners²

Building inspector licensure was proposed for review in part because of the critical role that local building departments, building officials, and building inspectors play in growing Utah's residential and commercial building stock safely and quickly. While there are relatively few licensed building inspectors in the state, their work has a high impact on construction and real estate activity.

OPLR's research to conduct this review included surveying all current licensees, analyzing DOPL licensee and complaint data, reviewing relevant academic literature, interviewing prominent stakeholders, accompanying building inspectors to construction sites, and scanning state regulations of building inspection. See [the Appendix](#) for more information.

Background

Building Inspection Overview

In most cases, any new building or significant alteration to an existing structure, including work on electrical, plumbing, and mechanical aspects, requires a permit issued by the city within which it's located.³ Building inspectors work for municipalities⁴ to inspect new or altered buildings to ensure their compliance with the relevant building permit and building codes. A city cannot issue a certificate of occupancy until required inspections are performed and any noted violations are resolved.⁵

The purpose of government-mandated building codes is to ensure that buildings are safe for current and future occupants and that they adequately withstand natural disasters (e.g., floods, fires). The U.S. Federal Emergency Management Agency estimates that adherence to building codes results in billions of dollars in avoided losses.⁶

Building Inspection in Utah

Anyone performing building, mechanical, plumbing and electrical inspections on behalf of a

² [UCA 13-1b](#)

³ [Utah Building Code \(2021\) Section 105](#)

⁴ Umbrella term for cities, counties, unincorporated areas, or any other political subdivision of the state

⁵ [Utah Building Code \(2021\) Section 110](#)

⁶ [Federal Emergency Management Agency \(2020\)](#)

Utah municipality must be licensed as a building inspector by the state.⁷ Licensure requires proof of certification through the International Code Council (ICC),⁸ the preeminent industry organization that publishes the majority of nationally accepted building codes.^{9,10} Inspectors must maintain their ICC certification to maintain licensure.

Utah has two building inspector license designations: limited and combination. Limited inspectors can only perform inspections for which they are ICC certified, while combination inspectors are required to be ICC certified in eight specific areas, which enables them to perform any residential or commercial inspection.¹¹ There are currently 408 licensed limited inspectors and 348 licensed combination inspectors.¹²

In Utah, the building inspection process is largely directed and carried out by public employees. Municipalities may choose to contract with private, third-party inspection companies to perform parts of the process, but only municipal building departments may issue a building permit and certificate of occupancy. The direct, daily management of building inspectors by local governments makes the building inspector's state license fairly unique when compared to other professions. A significant majority of inspectors in Utah are employed directly by municipal building departments, putting them under the authority of a building official who is in turn overseen by elected officials.^{13,14}

A minority of inspectors work for third-party firms that complete inspections for municipal governments. These firms experience some oversight by local governments, as a municipality may end a contract if inspectors are not performing properly. Even in the rare cases when a permit holder can contract directly with a third party, permit holders are limited to utilizing firms approved by the local government.¹⁵ This added capacity from private inspection firms helps the public by providing trained, flexible, and mobile capacity without adding permanent municipal staff.

Impact on Utah's Housing Shortage

Utah is one of the least affordable states in the nation for housing¹⁶ and experts point to a lack of housing as a main contributor. The Kem C. Gardener Institute predicted that by 2024, Utah's housing shortage would exceed 37,000 units, and growing shortages are likely to further

⁷ [UCA 56-58](#)

⁸ Electrical inspectors can become qualified for licensure by becoming certified from either the ICC or the International Association of Electrical Inspectors (IAEI)

⁹ [International Code Council \(2024\). Code Adoption by State](#)

¹⁰ For more information on the ICC, see Appendix [2.1 International Code Council](#)

¹¹ See Appendix [2.2 Building Inspector Licensing Structure](#)

¹² DOPL Active License Count Report, accessed 12/11/2024

¹³ OPLR Building Inspector Licensee Survey (May 2024); 84% work directly for a city, county, or state, whereas 19% work for a third party. These percentages do not add to 100% because inspectors can be employed by both a government and a third-party firm.

¹⁴ There are relatively few such occupations where the state licenses government employees hired and managed by the local government— a subdivision of the state.

¹⁵ [S.B. 185](#)

¹⁶ Depending on the method of measurement, Utah ranks anywhere from 47th to 35th in terms of housing affordability. See: [Today's Homeowner \(2023\)](#), [US News & World Report \(2024\)](#)

exacerbate the lack of affordable housing.¹⁷

There are concerns that building inspections may create a bottleneck if not completed in a timely manner. Despite this, a study conducted by the Utah League of Cities and Towns found that, even with significant building throughout the state, 96% of the studied cities had average inspection times within the statutorily mandated three-day period.¹⁸ OPLR's findings corroborate this information. The majority of building officials OPLR interviewed claimed that their municipality meets the three-day deadline, with some expressing that next-day inspections are common.¹⁹ Builders OPLR interviewed largely agreed with this, pointing to the permitting and plan review processes (both outside the scope of this review), as the causes of major delays in construction.²⁰ Although the housing shortage and related affordability are significant issues, OPLR found that they are not, in large part, being driven by inspection timelines.

Approaches in Other Jurisdictions

There is wide variation in the regulation of building inspectors across the country. Twenty-seven states regulate inspectors to some degree, all with disparate methods of regulation and varying requirements, while twenty-three states do not regulate building inspectors at all. However, a few states that do not license inspectors still mandate certain qualifications in statute.²¹

Findings: Safety and Consumer Harm

Building codes are only effective to the degree they are enforced. Therefore, the potential for harm in this industry is largely driven by the failure to inspect and enforce code properly. Under enforcement may allow unsafe code violations in Utah's built environment, which can cause financial harm to owners and pose a safety risk to occupants and neighbors if not discovered and remedied. Conversely, over-enforcement may also cause harm. When inspectors hold builders to standards above those in code, construction may be delayed. Addressing the issues raised can be expensive and may trigger a series of subsequent delays due to scheduling conflicts.²² The cost of rework and interest on loans are passed to the homeowner or buyer.²³

OPLR did not find evidence that the Utah public is at significant risk due to negligent or unqualified inspectors. Building inspectors receive very few formal public complaints. Although formal complaints to DOPL likely underestimate the true number of complaints,²⁴ DOPL only received 8 substantiated²⁵ complaints between 2017 and 2022. Of these, only 2 were severe

¹⁷ [Kem C. Gardner Policy Institute \(2023\)](#)

¹⁸ Utah League of Cities and Towns (2020)

¹⁹ OPLR interview series

²⁰ OPLR interview series

²¹ See Section 2.3 State-by-State Policy Scan in the Appendix

²² OPLR interview series

²³ OPLR interview series.

²⁴ See Appendix [3.1 DOPL Complaint Analysis](#) for further discussion of complaint data

²⁵ Substantiated refers to a complaint where an action was taken against the complainant- the action can vary from letter of concern to license revocation.

enough to have potentially caused any harm.²⁶

Although instances of extreme negligence or unlawful behavior are rare, the main issue OPLR found was variability in technical code interpretation and enforcement by building inspectors across different municipalities. This causes harm primarily through inefficiency and increased costs, although it can potentially impact safety.

Utah's state-wide building code should ensure consistency in the construction industry. However, most interviewees expressed frustration with excessive variation in building inspection processes between municipalities and inspectors. This is largely driven by a few municipalities falling too far outside an acceptable range of variability and discretion - either by requiring work to be beyond code, engaging with permit holders unprofessionally, or failing to enforce certain codes entirely.^{27,28}

Over-enforcement - more than underenforcement - appears to be stakeholders' primary concern. In particular, builders that OPLR interviewed expressed significant frustration with some municipalities holding them to unreasonable standards unrelated to the safety of the structure, recalling incidents where they lost significant time and/or money.²⁹ Stakeholders noted that a few specific building departments drove the majority of their complaints, with some builders stating that they may bid \$10K-\$15K higher in those jurisdictions due to their incorrect and/or excessively inflexible code enforcement.³⁰ Builders also pointed to cases where enforcement was variable between inspectors in the same department, where an inspector would require them to go back and fix multiple violations that were seemingly approved in previously passed inspections.³¹

Another primary issue included some building departments using unnecessarily burdensome or unprofessional processes, including unnecessarily halting all construction pending resolution of violations, holding different builders to different standards, and refusing to communicate within reasonable timeframes.³² These behaviors can increase friction and costs in a critical industry, ultimately impacting homeowners or buyers.

Discussion: Addressing Variability in Building Inspection

The majority of jurisdictions and inspectors across Utah enforce building codes accurately and consistently. In addition, as noted above, some discretion in code enforcement and process is

²⁶ One complaint led to a surrender of license due to severe incompetence and negligence in duties.

²⁷ OPLR interview series

²⁸ See Appendix [3.2 Variability in Code Enforcement](#) for discussion on the variability inherent to code enforcement and acceptable range of variability and discretion in building inspection

²⁹ OPLR interview series

³⁰ OPLR interview series. Incorrect code enforcement refers to requiring work beyond code, while excessively inflexible code enforcement refers to instances in which code may be reasonably interpreted in multiple ways, yet the builder is held to the highest possible interpretation in circumstances where required work has negative financial implications despite no real safety implications.

³¹ OPLR interview series

³² OPLR interview series

considered normal.³³ However, the small number of municipalities causing most issues, including inappropriately utilizing discretion, may cause legitimate consumer harm that warrants legislative action.

OPLR suggests that variability in enforcement and process is largely driven and exacerbated by two related factors: 1) insufficient oversight and accountability for building officials and building departments, and 2) lack of a workable appeals process for permit holders.

1. Insufficient Accountability

Building officials are the ultimate authority on the interpretation of building codes in their municipality, as well as supervisors of the building inspectors working within their department.³⁴ When there are code disputes unless the permit holder chooses to appeal, the building official's interpretation is binding. Building departments also have governmental immunity, a necessary condition for regulators, ensuring that officials are immune from legal action when operating within their role.³⁵

Most responsibility for variation in code enforcement rests with the building officials, since they handle appeals and can discipline problem inspectors, engage in training efforts, and set a culture of consistent enforcement.³⁶ Despite this responsibility, there are no established standards of conduct or mandatory experience requirements for building officials. While the majority of building officials are licensed building inspectors,³⁷ this is not a requirement. In Utah, it is possible (both legally and in practice) to act as a building official without demonstrating a basic understanding of building code.

The role of building officials has few practical accountability mechanisms for code interpretation or enforcement. While building officials report to city officials, most local authorities lack the technical knowledge to resolve concerns over code. Given the responsibility and discretion given to building officials, additional oversight is likely appropriate. While the majority of building officials in Utah are knowledgeable, fair, and highly engaged public servants, the current system does not provide accountability for the few municipalities that fail to manage their departments in consistent and professional ways.

2. Lack of Workable Appeals Methods

A lack of a workable appeals process exacerbates issues of variability and may further impede the ability to hold building officials accountable. Permit holders may appeal a building inspector's interpretation of code, but the existing channels fail to meet their needs.

³³ See Appendix [3.2 Variability in Code Enforcement](#)

³⁴ [Utah State Residential Code \(2021\)](#)

³⁵ See [UCA 63G-7](#) for more information regarding immunity. Governmental immunity may be waived under specific circumstances according to [UCA 63G-7-301](#)

³⁶ OPLR interview series

³⁷ OPLR reviewed building officials from 32 jurisdictions across the state, focusing primarily on larger cities and county departments, and found all but one has a current combination license. DOPL Active Licensee Information, January 2025

The primary appeal method is to go through the building department, first asking the relevant municipal building official to overturn the decision. If the official upholds the inspector's decision, the permit holder may go to the city manager or city council or invoke their right to appeal to a city appeals board, which can hear code disputes and uphold or overturn decisions.³⁸ A permit holder may also go straight to a city appeals board if they choose not to work through city management first.

Builders and permit holders may also report inspectors to DOPL if they believe an inspector is enforcing unacceptably outside of code or engaging in negligent or unethical behavior prohibited in the practice act. While state statute gives DOPL the authority to take action against an inspector who "requir[es] work that *materially* varies from the building codes,"³⁹ DOPL's stance is that highly technical code disputes should be left to the building official and the oversight of local elected officials. As such, DOPL will only investigate instances where the inspector's finding is egregiously and obviously outside code.

Builders OPLR interviewed expressed fear that engaging in any appeals process may worsen their relationships with municipalities, building officials, or inspectors and drive retaliatory behaviors.⁴⁰ They were also frustrated by the slow timeline of DOPL and city appeals processes, which can take upwards of 90 days.^{41,42} Builders explained that they often found the cost of complying with questionable code interpretation lower than the cost associated with a slow appeals process that may or may not resolve their issue.⁴³

The lack of workable appeals exacerbates the issue of variation, as builders feel they must comply with questionable code decisions rather than complain or appeal to remedy the situation. This situation both harms individual permit holders and builders but also robs municipalities of feedback on building department performance. With such limited transparency, oversight, and accountability, low-performing building departments or inspectors may feel emboldened to continue inconsistent enforcement and poor customer service.

Findings: Access

Because occupational licensing policy limits who can work in a specific job, the State should ensure that licensure requirements are not so stringent that they unnecessarily limit the public's

³⁸ [UCA 15A-1-207](#) requires compliance agencies (the authority over code, such as a municipality) to establish a method of appeal regarding the application and interpretation of a code. If a city does not have an appeals board, permit holders may go to the Unified Building Code Commission, who will convene members into an appeals board.

³⁹ [UCA 58-56](#)

⁴⁰ OPLR interview series

⁴¹ Appeals processes can exceed 90 days. State law dictates that municipal appeal boards may take up to 90 days from the date an appeal is filed to convene and make a decision before the appellant may go to the Unified Building Code Commission. See [UCA 15A-1-207](#) and [UAR 156-15A-102](#)

⁴² Builders may also go to the Utah League of Cities and Towns (ULCT) or organizations that exist to train and address issues with building officials, such as the Utah Association of Building Officials (UABO), to appeal and ask them to liaison or address an issue with a building official or building department. However, members of these organizations have said that builders do not typically choose these avenues due to concerns over potential backlash.

⁴³ OPLR interview series

access to services or restrict those who can safely perform the service from doing so.

Burden of entry

OPLR found Utah's licensure requirements for building inspectors range from minimal to moderate. A limited building inspector license requires only one ICC certification. This typically takes only a few weeks to achieve.⁴⁴ Achieving a combination license takes substantially longer, as this requires passing eight ICC tests.⁴⁵ The cost to achieve ICC certification is moderate, as each ICC exam is approximately \$300.⁴⁶ However, cities or third-party firms often assist with study and exam costs. Only one-quarter of inspectors OPLR surveyed indicated they paid out of pocket for the majority of their exams.⁴⁷

While the burden of entry is low, OPLR notes that there are no post-secondary training programs for building inspectors in the state. Municipalities bear the cost of paying new inspectors during training, onboarding, and ramp-up, which may benefit the individual but disincentivize municipalities from hiring sufficient numbers of inspectors.

Workforce Shortage

Anecdotal evidence suggests that demand for inspection services may outpace the supply of inspectors.⁴⁸ The significant increase in the number of building permits issued in the last ten years has outpaced growth in the building inspection profession in Utah. Estimates of permit increases range from ~30% to ~60%⁴⁹ compared to ~20% growth in licensed building inspectors⁵⁰, likely contributing to a feeling in the industry of being 'spread thin'. While not creating a bottleneck in the progress of building in Utah, this issue puts pressure on the workforce. A manager with a third-party firm shared with OPLR that while the consensus in the industry is that inspectors should be completing about 15 inspections a day, inspectors in some Utah cities are completing 25-30.⁵¹

The workforce shortage may worsen in the near future. OPLR estimates only 25% of licensees are below the age of 41, which stands out given Utah's young workforce, which has a median age of 32.^{52,53} OPLR's survey of licensed building inspectors found that ~25% plan to retire in the next five years, while ~60% plan to retire in the next 15 years.⁵⁴ Despite overall growth in the

⁴⁴ OPLR Building Inspector Licensee Survey (May 2024). Some exams took approximately 40-50 hours to study for, whereas other exams took almost twice as many hours. See Appendix [4.2 Burden of Entry](#).

⁴⁵ Ibid. Most surveyed combination inspectors (60%) reported taking between one and three years to get their combination license after they decided to pursue it

⁴⁶ It would cost \$2,440 for someone to take all of the exams for a combination inspector, assuming they pass each test on the first attempt. See the [ICC Certification Exam Catalogue](#)

⁴⁷ OPLR Building Inspector Licensee Survey (May 2024)

⁴⁸ OPLR interview series

⁴⁹ [U.S. Census Bureau. Building Permit Survey](#). Between 2013 and 2023, the number of building permits issued in **Utah rose by 27%, the number of total units permitted rose 60%, and the valuation rose more than 100%**

⁵⁰ See Appendix 4.1 DOPL Licensee Data for more information

⁵¹ OPLR interview series

⁵² DOPL Licensee Data

⁵³ [U.S. Census \(2023\)](#)

⁵⁴ See Appendix [1.2 OPLR Building Inspector Survey](#) for more information on the survey and its limitations

number of licensees, licensees have exited the field at an increased rate over the past few years.⁵⁵ Attrition may lead to a significant loss of institutional knowledge and overburden the inspectors that remain.^{56,57} Finally, there is no clear ‘talent pipeline’ in building inspection. 35% of survey respondents indicated they were hired with no ICC certifications, meaning they were trained after they were hired.⁵⁸

Discussion: Implications of a workforce shortage

A workforce shortage appears to exist despite the relatively low time and cost burdens associated with licensure. Potential explanations for this include low pay for inspectors, the low profile of the industry, and barriers to training new inspectors.⁵⁹

A workforce shortage in the building inspection industry may have a negative impact on public safety. Safety could decrease as inspectors are forced to complete more inspections per day, leading to errors. A professor of construction management commonly involved in litigation regarding building code enforcement cited inspectors being rushed as the primary cause of quality issues in legal disputes.⁶⁰ Additionally, if building officials worry about their ability to hire inspectors, they may be less likely to discipline or fire inspectors who are not performing.⁶¹ The quality of candidates for inspectors may also suffer due to limited competition for these roles in the job market.

While it appears that building departments have responded by increasing inspector workloads rather than extending inspection timelines, a material shortage of qualified inspectors in the future could force building departments to miss statutory deadlines more often. As discussed above, delays in the construction process can add thousands of dollars to the cost of construction, a cost that may be passed on to consumers.

While the relatively high average age of inspectors is concerning, this may also be an attribute of the occupation. It is fairly common to transition from a trade occupation,⁶² such as electrical or plumbing work, to inspection work later in their career.⁶³ Additionally, the survey data likely overestimates the percentage of individuals retiring soon, as those with more years in the industry were overrepresented.⁶⁴

⁵⁵ See Appendix [4.1 DOPL Licensee Data](#) for more information on licensee entry and exit over time

⁵⁶ [Williams, George. \(2015\).](#)

⁵⁷ OPLR interview series

⁵⁸ OPLR Building Inspector Licensee Survey (May 2024)

⁵⁹ See Appendix [4.3 Low Demand for Building Inspector Jobs](#) in the Appendix for a more detailed discussion

⁶⁰ OPLR interview series

⁶¹ OPLR interview series

⁶² OPLR Building Inspector Licensee Survey (May 2024). Approximately 80% of survey respondents indicated that they had experience in one of the following trades before becoming a building inspector: Electrical, plumbing, construction, HVAC, or carpentry

⁶³ DOPL licensee Data. Individuals enter the field, on average, when they are ~40. Only one-quarter appear to enter before the age of 33

⁶⁴ See [Appendix 1.2 OPLR Building Inspector Survey](#) for more information on survey representativeness

Recommendation 1: Use the UBCC as a feedback mechanism

To help reduce variability in inspection processes, OPLR recommends empowering the Uniform Building Code Commission (UBCC) to collect data on building inspection and code enforcement and publish a report on the performance of local building departments across the state. For more information on the role of the UBCC, see [Appendix 5.1](#).

Recommendation

The UBCC, with assistance from DOPL staff,⁶⁵ should engage in proactive data collection, which may include:

- Surveying and interviewing key stakeholders such as builders, permit holders, city officials, building officials, and building inspectors,⁶⁶
- Monitoring inspection times and appeals submitted to departments,
- Reviewing training opportunities, internal management, and inspection processes.

The UBCC could use this data to selectively:

- Disseminate guidance on disputed code items
- Send letters of concern to building departments or builders consistently failing to adhere to code, or allowing/creating unprofessional inspection or building processes
- Inform continuing education funding, and
- Provide guidance to the legislature on any necessary code amendments.

Data should then be compiled into an anonymized publicly available report on the performance of municipal building departments across the state, reviewing them on the basis of consistent, accurate, timely, and equitable code enforcement and interpretation for all permit holders. The report may also provide information on common issues faced by departments and any patterns in commonly disputed code items. Ultimately, the report should rate municipal building departments, issue recommendations on best practices and methods of improvement for failing departments, and highlight best practices. OPLR also recommends that the UBCC report to the appropriate subcommittee of the legislature on its findings annually or biannually.

Although the scope of OPLR's review focused on inspectors rather than other actors the research should uncover all parties failing to reasonably interpret or enforce code, which may include both building departments and residential and commercial builders. The report should reflect those findings.

For more information on the details of this recommendation, see [Appendix 5.2](#) and [5.3](#).

Rationale

⁶⁵ Existing money from the percent of the permit surcharge fee set aside for building inspector training would be shifted to support added DOPL capacity to support the UBCC. See Appendix [5.2 Permit Surcharge Fees](#) for more information on the permit surcharge fee usage

⁶⁶ Including home builders, third-party inspection firms, industry organization leaders, city and county member organizations, city administrators, and building officials and inspectors

Establishing this feedback mechanism within the UBCC is the least burdensome way, in OPLR's view, to improve transparency and reduce variability. It establishes a data-driven method to identify ambiguous elements in code enforcement and variability in the inspection process. For example, the UBCC could take data suggesting that specific sections of code drive a majority of complaints and clarify the correct interpretation through published guidance. Then, if the issue persists, the UBCC could recommend amending and clarifying that section of building code to the legislature, thereby ensuring that municipalities and builders are legally bound to that standard.

This recommendation may also increase accountability for building departments and city administrators through required transparency regarding the holistic performance of the building department. The report would highlight building departments failing to enforce code professionally, accurately, and consistently. Such transparency may prompt local change or legislative action in the future if necessary.

Recommendation 2: Transition from licensing inspectors to licensing building officials

OPLR recommends creating a new building official license, while simply requiring in statute that building inspectors be ICC certified in lieu of a state license.

This change would place accountability on those with responsibility for managing code enforcement consistency and professionalism (building officials) and reduce the administrative burden of a state license for building inspectors who would retain the requirement for ICC certification.

Recommendation

OPLR suggests removing licensure requirements for building inspectors and instead requiring in statute that building inspectors be ICC certified. Jurisdictions, in order to comply with state building code, must then only allow inspectors who are certified in a specific code area to inspect for compliance with that code.

In its place, UCA 58-56 should be amended to license building officials rather than building inspectors. The definition and scope of a building official should be defined as the individual in charge of building safety who holds the authority to enforce, interpret, and clarify provisions of the Utah Construction code.⁶⁷ The requirements for licensure should include: 8-way certification through the ICC, management training, and 6 years of experience in a related field. State statute should establish that all municipalities and third-party inspection firms (in the rare cases in which a third-party firm does not have to work through the building department) must employ

⁶⁷ See the [Utah State Residential Code \(2021\)](#) for the definition of a Building Official

or contract with a licensed building official in order to perform inspection services.

See [Appendix 5.4](#) for OPLR's recommendations regarding the implementation of this policy.

Rationale

Building inspector licensure is largely unnecessary. Hiring, verification of qualifications, and direct employer oversight are almost entirely handled at the local level by building officials,⁶⁸ rendering DOPL's oversight and enforcement mechanisms redundant. Additionally, licensure is not an effective method of addressing technical code interpretation disputes, as DOPL has very limited jurisdiction and limited expertise on that issue.⁶⁹ Therefore, state licensure does little to address consistency or professionalism issues beyond simply enforcing the entry requirements (ICC certification).

However, licensure is not the only method for seeking consistency in inspections. Utah can move away from licensing without jeopardizing the quality of inspectors or building safety by defining qualified inspectors in the Utah Construction Code similar to Georgia and Idaho.^{70,71} This ensures the same qualifications for building inspectors without the need for a state license.

Despite its limitations for inspectors, licensure does provide a mechanism to hold individuals accountable for egregious violations. OPLR has found that interpreting and enforcing building code does come with discretion and autonomy and, thus, an inherent risk of abuse. Licensure should be required for building officials only, as they perform with less oversight and far more discretion than inspectors as the authority on building code interpretation. Minnesota has adopted similar regulation, certifying building officials rather than individual inspectors.⁷²

This approach may help decrease the variability in code enforcement by holding officials accountable for meeting a common standard of supervision, training, and consistent enforcement across their inspectors and departments. From OPLR's conversations with stakeholders, variation across municipalities is a larger impediment than variation across individual inspectors. This recommendation, in tandem with Recommendation 1 for the UBCC feedback mechanism, may help incentivize more uniform enforcement practices across the state.

Recommendation 3: Increase the workforce by expanding on-ramps into building inspector jobs

OPLR recommends allowing licensed journeyman, and master plumbers and electricians, to inspect according to their expertise - without the related ICC certification - thereby creating an

⁶⁸ OPLR interview series

⁶⁹ As mentioned above, DOPL prefers to leave technical code interpretation to building officials

⁷⁰ [O.C.G.A. § 8-2-26.1](#)

⁷¹ [Idaho Code § 39-4108](#)

⁷² [Minnesota Department of Labor and Industry](#)

entry point for talent into the building inspector industry.

Recommendation

Under this proposal, a licensed electrician or plumber would qualify to perform residential and commercial electrical or plumbing inspections, respectively.⁷³ To perform other types of inspections, these individuals must obtain ICC certification in the other specialties.

Rationale

Multiple experts confirmed with OPLR that individuals who hold a valid journeymen or a master-level plumber or electrician license can perform inspections according to their expertise just as competently as those who hold a related ICC certification. These professionals have practical experience in building to code and have passed exams indicating their competency in understanding and applying code to their work.⁷⁴ Many other states already allow a plumbing or electrical license to be used as a qualification to be an inspector, with some even requiring licensure as an electrician or a plumber before completing inspections.⁷⁵ Additionally, the majority of stakeholders interviewed agreed that a plumber or electrician license is an appropriate alternative path to ICC certification.⁷⁶

Licensed tradespeople looking to transition into the building code enforcement industry should be able to do so seamlessly. Reducing the friction in this transition may help alleviate some workforce shortages and hiring difficulties, as these professionals could be hired and utilized by building departments and third-party firms immediately, even while they train for other ICC exams.

Additional Ideas

- Utah could attempt to address the workforce shortage by increasing state funding or using grants to help those interested in the profession become ICC-certified.⁷⁷ This could be accomplished by creating a centralized training for new entrants, granting municipalities funding to offset training costs, or subsidizing code training through Utah colleges.
- Another avenue for easing workforce shortages could be a voluntary registry for home inspectors that would require at least one ICC certification. Light regulation in the form of a voluntary certification could improve professionalism within the home inspection industry (distinct from but related to building inspection) and create a larger pool of people in the state with at least one ICC certification. Thus 'state-certified' home

⁷³ This could also be accomplished by exempting journeyman and master plumbers (or electricians) from licensing requirements for plumbing (or electrical) inspections.

⁷⁴ See Appendix [5.5 Requirements for Plumbing and Electrical Licenses](#)

⁷⁵ OPLR State-by-State Policy Scan

⁷⁶ OPLR interview series

⁷⁷ Grant money and training could be sought through organizations like [Talent Ready Utah](#) and the [Governor's Office of Economic Opportunity](#)

inspectors could become a ready pool of talent for cities looking for building inspectors.

Recommendation 4: Maintain current public-private balance

OPLR strongly recommends maintaining the current public-private balance within the building inspection industry. A study of building code enforcement regimes in Australia and Canada found that structures weighted more towards private inspections can increase the effectiveness and efficiency of the regulatory process, but often at the cost of accountability and equity.⁷⁸ When private firms compete with public building departments, private companies may prioritize large, profitable inspections, leaving smaller, more costly inspections to cities. This loss of equity between permit holders may ultimately lead to safety issues, as public departments lose revenue and are left without sufficient resources or talent to adequately enforce code. Private control may also increase the risk of unsafe construction practices due to conflicts of interest when the builders or permit holders select their own private regulators.⁷⁹

Therefore, OPLR finds Utah's current balance of private and public to be beneficial. Private companies provide specialized technical knowledge and increase the capacity of building departments, while public control maintains equity across permit holders and protects against regulatory capture of private inspection firms by permit holders or builders.

⁷⁸ [Heijden, Jeroen van der \(2010\)](#)

⁷⁹ Ibid.

Appendix

Contents

1. **Context**
 - a. 1.1 General Research Methodology
 - b. 1.2 OPLR Building Inspector Survey
 - i. Table 1. Utah Building Inspector Licensing Survey: Data Collection Inventory
 - ii. Table 2. Survey Representativeness
2. **Background**
 - a. 2.1 International Code Council
 - b. 2.2 Building Inspector Licensing Structure
 - i. Table 3. Building Inspector Licensure
 - ii. Table 4. ICC Exams Required for Licensure
 - c. 2.3 State-by-State Policy Scan
3. **Findings: Safety and Consumer Harm**
 - a. 3.1 DOPL Complaint Analysis
 - b. 3.2 Variability in Code Enforcement
4. **Findings: Access**
 - a. 4.1 DOPL Licensee Data
 - i. Figure 1: Building Inspector Licensee Count Over Time
 - ii. Figure 2: Building Inspector Licensee Exit Over Time
 - b. 4.2 Burden of Entry
 - i. Table 5. Median Time Spent to Prepare and Take Exam
 - ii. Figure 3. How Individuals Paid for the Majority of their ICC Exams
 - c. 4.3 Low Demand for Building Inspector Jobs
5. **Recommendations**
 - a. UBCC Feedback Mechanism
 - i. 5.1 The Uniform Building Code Commission
 - ii. 5.2 Permit Surcharge Fees
 - iii. 5.3 Additional Details and Considerations
 - b. Transition from Licensing Inspectors to Licensing Officials
 - i. 5.4 Additional Considerations
 - c. Increase Workforce By Expanding On-Ramps Into Building Inspector Jobs
 - i. 5.5 Requirements for Plumbing and Electrical Licenses
 1. Table 6. Plumber and Electrician Licensure
6. **Stakeholder Outreach**
 - a. 6.1 OPLR Interview Series
7. **References**

1. Context

1.1 General Research Methodology

OPLR engaged in the following:

- Administering and analyzing a survey that was sent to all active licensees in Utah
- Conducting quantitative analysis on DOPL licensee and complaint data and
- Reviewing academic literature related to building inspection
- Engaging extensively with stakeholders from various state regulatory authorities, industry organizations, building officials, third-party inspection firms, homebuilders, Utah associations of cities and counties, academics, and other parties connected to the industry
- Visiting a municipal building department and shadowing active building inspections
- Reviewing building inspection regulation in all U.S. states

1.2 OPLR Building Inspector Survey

A. Survey overview

OPLR conducted this survey in May 2024 through Qualtrics. The survey was emailed to a list of all actively licensed building inspectors in Utah as of April 2024. The survey was open from May 8th to May 15th. The first email was sent on May 8, with follow-up reminder emails sent on May 11th and May 15th. Emails were sent to 705 accounts; 14 emails bounced and 0 failed. Emails and surveys were offered in English. Emails asking inspectors to take the survey were also sent by a few industry organizations once the survey opened.

OPLR sent survey invitations to building inspectors at the same time as massage therapists and cosmetologists, as those professions were reviewed during the same timeframe. The email sent to massage therapists inadvertently included a link to the building inspector survey rather than the massage therapy survey. This issue was found and corrected within ten minutes when a follow-up email was sent to massage therapists with the correct link. However, a few licensed massage therapists did begin the building inspector survey. As a result, only completed surveys were included in OPLR's response rate estimate and survey analysis for building inspectors. OPLR reviewed item responses for all finished surveys and did not find anything that suggested anyone other than a building inspector completed the survey. 237 individuals completed the survey, resulting in a response rate of 33.6% for the one-week time period the survey was open.

The survey contained questions according to the following table. The survey items and response options were constructed with the help of a professional within the industry. All survey data analysis was conducted in R.

Table 1. Utah Building Inspector Licensing Survey: Data Collection Inventory
License type

Employment status
Age
Highest level of education
Retirement and future career plans
Current job role
Hours per week spent inspecting
Employer type
Length of time in the inspection industry
Experience in related fields
ICC/IAEI certifications held
Certification preparation methods
Time spent preparing for certifications
Number of attempts needed to pass certification
How preparation and certification costs were paid
Time to combination licensure
Opinions on necessity of ICC certification

B. Survey Limitations

OPLR sent the survey to all building inspector licensees so that survey results were not impacted by sampling bias. Despite the survey's high response rate, it was likely impacted by non-response bias. A representativeness check on license type, age, and years in the industry showed that combination inspectors and those with many years in the industry were highly overrepresented (see the table below for details). Unfortunately, OPLR was unable to conduct representativeness checks using any other variables as these were the only survey items with a corresponding variable in the DOPL data. Therefore, the survey results should not be taken as representative of new building inspectors or licensed limited inspectors. Caution should also be taken in interpreting data about years until retirement, as the survey likely overestimates the true number.

The overrepresentation of combination inspectors and long-time inspectors may be due, in part, to the email reminders sent by the industry organizations. Although this likely boosted the survey response rate, it likely came at the cost of representativeness. It is likely that members of these organizations are longer-term members of the industry.

Other possible limitations include measurement error (which occurs when questions do not accurately measure the variable interest due to errors in question design) and recall bias (where respondents misremember and inaccurately answer questions). Recall bias may particularly impact survey responses regarding time spent preparing for exams, the time it took to achieve a combination license, and a respondent's length of time in the industry. Estimates of these results should not be interpreted as exact.

As a result of these factors, the survey data should primarily be used to outline patterns and general trends.

Table 2. Survey Representativeness			
Variable		Survey	DOPL Data
License type	Combination	68.5%	47.2%
	Limited	31.5%	52.8%
Age	18-20	0%	0%
	21-29	3.9%	5.6%
	30-39	13.7%	15.3%
	40-49	23.2%	26.2%
	50-59	26.2%	24.5%
	60-69	24.0%	20.1%
	70+	9.0%	8.3%
Years in Industry ⁸⁰	Less than one year	2.8%	9.9%
	1-5	22.4%	31.5%
	6-10	16.4%	17.1%
	11-15	5.1%	6.5%
	16-20	13.6%	13.6%
	20-25	9.3%	5.1%
	25-30	12.1%	6.9%
	30+	18.2%	9.4%

2. Background

2.1 International Code Council

The International Code Council (ICC) is a “leading global source of model codes and standards and building safety solutions that include product evaluation, accreditation, technology, training, and certification”.⁸¹ ICC building codes are “the most widely used and adopted set of model

⁸⁰ The time intervals do not match exactly between the survey and DOPL data. As shown in this table; 20, 25, and 30 all appear within two intervals each. The survey data is reported as is, but the DOPL intervals differ by a year. The interval 16-20 in the survey is compared to the DOPL data interval of 16-19, the interval 20-25 is compared to the DOPL interval of 20-24, and the interval 25-30 is compared to 25-29.

⁸¹ [International Code Council- Who We Are](#)

codes in the world” and have been adopted internationally and across all fifty states.⁸² The ICC is relevant to both the construction and building inspection industries in Utah. The state construction code is based upon ICC model codes, with Utah-specific amendments, and individuals must be certified through the ICC to act as a building inspector.⁸³

2.2 Building Inspector Licensing Structure

Table 3. Building Inspector Licensure		
License	Scope	Qualifications
Combination Inspector	<ul style="list-style-type: none"> Inspect the components of any building, structure, or work for which a standard is provided in the state construction codes. Determine whether the construction, alteration, remodeling, repair, or installation of all components of any building/structure is in compliance with state construction code. Take appropriate action as is provided in the codes after determination of compliance or noncompliance. 	<ul style="list-style-type: none"> Has passed the exam for and maintained either the Combination Inspector Certificate issued by the ICC or a combination of the 4 certifications listed in the paragraph below⁸⁴. See table 3 for information regarding the ICC exams.
Limited Inspector	<ul style="list-style-type: none"> Same as above, subject to the following limitation: They may only conduct the previous activities for which the licensee has maintained current certificates under state construction codes (i.e. if they only have an electrical inspector certificate, they may only inspect electrical work) 	<ul style="list-style-type: none"> Has passed the exam for and maintained as current one or more certifications listed in table 3⁸⁵

Licensure depends on national certification through the ICC, as does renewal. To be certified by the ICC, an applicant must pass the exam associated with the certification. There are no other requirements beyond the exam. To qualify for the Utah Combination Inspector license, an applicant must pass the corresponding exams and maintain as current:⁸⁶

- The ICC Combination Inspector Designation⁸⁷, granted after passing all 8 exams detailed in the table below, **OR**
- The four following ICC Building Inspector Designations:

⁸² [International Code Council- The International Codes \(I-Codes\)](#)

⁸³ [UAC 15A-2-103](#)

⁸⁴ [UAR 156-56-302](#)

⁸⁵ DOPL will accept certifications beyond those listed in table 3 for limited inspectors. This includes any limited inspector code used by ICC or a Welding Inspector Certification (CWI) through the American Welding Society. See [here](#) for more information on the CWI

⁸⁶ [International Code Council. Combination Designations](#)

⁸⁷ Utah rule currently refers to these designations as certifications.

- The B5 Building Inspector Designation requires passing both residential and commercial building inspector exams
- The E5 Electrical Inspector Designation requires passing both residential and commercial electrical inspector exams
- The M5 Mechanical Inspector Designation requires passing both residential and commercial mechanical inspector exams
- The P5 Plumbing Inspector Designation requires passing both residential and commercial plumbing inspector exams.

There is no material difference between these two pathways, as they both require taking all of the exams listed in the table below.

Table 4. ICC Exams Required for Licensure⁸⁸

Exam	Cost	Length	Scope
Residential Inspector (B1)	\$305	2 hours, 60 questions	A Residential Building Inspector will be responsible for performing inspections of structures to determine compliance with the various Building Codes and Standards adopted by their jurisdiction. At this level of certification, the Inspector shall be able to inspect one-and-two family dwellings, townhomes not more than three stories in height, and accessory structures
Residential Electrical Inspector (E1)	\$305	2 hours, 60 questions	The Residential Electrical Inspector is responsible for performing inspections of the installation or alteration of electrical systems indoors and outdoors including services, conductors, equipment, components, fixtures, appliances, devices, and electrical appurtenances for one-and-two-family dwellings limited to 120/240 volts, single phase, up to 400 amperes
Residential Mechanical Inspector (M1)	\$305	2 hours, 60 questions	The Residential Mechanical Inspector is responsible for performing inspections of the installation, maintenance, alteration of mechanical systems that are installed and utilized to provide control of environmental conditions and related processes for one-and-two family dwellings not more than three stories. The residential mechanical inspector is also responsible for verifying the installation of fuel gas distribution piping and

⁸⁸ [International Code Council. Exam Catalog](#)

			equipment, fuel-gas-fired appliances and fuel gas-fired appliance wiring. The inspector shall have knowledge and understand minimum standards required to safeguard life or limb, health, property, and public welfare by regulating the design, construction, installation, quality of materials, location, operation, and maintenance or use of mechanical and fuel gas systems. The inspector shall also have the knowledge and understanding of “soft skills.”
Residential Plumbing Inspector (P1)	\$305	2 hours, 60 questions	The Residential Plumbing Inspector is responsible for verifying that the installation of the entire plumbing system is compliant with the codes and standards adopted by their jurisdiction. The Inspector’s duties include but are not limited to the following: verifying the installation and testing of piping systems, protection of piping systems and building components, the minimum required fixtures, approved materials, approved fixtures, flow rates, pressures, volume and temperature, and protection of the potable water supply and distribution system. Other duties include verifying that all materials, joints, connections and appliances are of the approved type. Fuel gas piping combustion air and required venting are also included
Commercial Building Inspector (B2)	\$305	3.5 hours, 80 questions	A Commercial Building Inspector will be responsible for performing inspections of structures to determine compliance with the various Building Codes and Standards adopted by their jurisdiction. At this level of certification, the Inspector shall be able to inspect commercial structures of any size or occupancy
Commercial Electrical Inspector (E2)	\$305	3.5 hours, 80 questions	The Commercial Electrical Inspector is responsible for performing inspections of the installation or alteration of electrical systems indoors and outdoors including services, conductors, equipment, components, fixtures, appliances, devices, and electrical appurtenances for all types of buildings and structures, both commercial and industrial, with no limit as to voltage or amperage

Commercial Mechanical Inspector (M2)	\$305	2 hours, 50 questions	<p>The Commercial Mechanical Inspector is responsible for performing inspections of mechanical systems installed in commercial applications and regulated by the International Mechanical Code. The inspector shall be capable of locating specific sections in the International Mechanical Code in order to interpret regulations and provide accurate information to applicants, contractors, property owners, and colleagues.</p>
Commercial Plumbing Inspector (P2)	\$305	2.5 hours, 60 questions	<p>The responsibility of a Commercial Plumbing Inspector is to verify the design, installation and inspections for all commercially installed plumbing systems complete with their fixtures, equipment, appurtenances, and appliances. The Inspector shall also be responsible to verify the installation, design, and inspections for all stormwater systems, special waste systems, and all nonflammable medical and nonmedical oxygen piping systems and compliance with the International Plumbing Code and the standards of the local jurisdiction. Responsibilities and duties shall include but not be limited to the verification of the following: proper pipe sizing, installation, design, and testing for the DWV system, potable and nonpotable water supply and storage systems; the installation of all fixtures, appurtenances, and appliances; the installation of all regulated safety devices, water heater installation, and appurtenances; the installation, design, and protection of all specialty fixtures that serve special functions and the connections to the DWV and water supply systems; the design, pipe sizing, and testing for the storm drainage system; the design, installation of all special piping and storage systems for non-flammable medical gasses and non-medical oxygen systems; and that all permitting, documentation, and approved drawings have been filed and completed.</p>

Non-ICC certifications

Certification as an electrical inspector through the Independent Alliance of the Electrical Industry (IAEI)⁸⁹ may be accepted in lieu of certification as an electrical inspector through the ICC.

2.3 State-by-State Policy Scan

To better understand the licensing environment for building inspection, OPLR reviewed U.S. state regulation, first determining which states in the United States regulated building inspectors. OPLR then collected data on all 50 states regarding the structure of regulation, requirements for licensure or certification, the role of the ICC in their regulatory structure, provisions regarding third-party inspectors, provisions regarding experienced plumbers/electricians in the industry, and if state-sponsored training exists.

OPLR collected this data through state licensing websites, state construction codes and job postings for building inspector positions in various states. Consistent information regarding building inspector regulation was not available. Counts regarding the frequency of any given data field are estimates based on the best information available.

Regulation varied extensively across each state. It was not possible to summarize data beyond basic counts (e.g., the number of states with a certification). Despite this limitation, OPLR could find patterns in regulation, make cross-state comparisons, discover outliers, and use this data to inform recommendations.

OPLR found that 27 states and D.C. likely do not regulate building inspectors in any way. The remaining 23 states do regulate inspectors to some degree, but OPLR could not categorize the type of regulation easily (i.e., registration, certification, license). The states that use licensure tend to have more extensive requirements for licensure/certification, such as a license as an electrician or plumber. In comparison with these states, Utah has greater access to the profession.

⁸⁹ For more information regarding certification through the IAEI, see: <https://www.iaei.org/page/certification>

3. Findings: Safety and Consumer Harm

3.1 DOPL Complaint Analysis

The Utah Division of Professional Licensing (DOPL) receives complaints about licensed professionals from aggrieved individuals, other state agencies, co-workers, professional associations, and licensing boards. DOPL is required to “investigate unlicensed practice in regulated professions, acts or practices inconsistent with recognized standards of conduct, allegations of gross negligence or incompetence, and patterns of gross negligence or incompetence”.⁹⁰ Violations that meet the criteria for investigation are then prioritized and assigned to an investigator. DOPL may resolve investigations in a variety of ways, including closing an investigation due to a lack of evidence; referring the case to another agency or to law enforcement if appropriate; carrying out informal or formal administrative sanctions or stipulated agreements; issuing a citation; or denying, suspending, or revoking an individual’s license.⁹¹

To analyze complaints sent to DOPL, OPLR used My License Office (MLO) to access closed complaints investigated by DOPL between 2017-2022 for building inspectors. This data contains information on the license name, the complaint type, and the disposition of the complaint. OPLR then worked with DOPL personnel to code the complaint dispositions as either substantiated or unsubstantiated. Substantiated complaints are those where a disposition includes some type of disciplinary action (e.g., letter of concern, verbal warning, surrender of license), whereas unsubstantiated complaints have dispositions without a disciplinary action (e.g., dismissed, lack of evidence, unfounded).

Complaints were filtered to include only those that were substantiated, leaving a small number of only 8 complaints. To understand the nature of these complaints, OPLR then received case notes and investigation details for each of these complaints.

This complaint data likely underestimates the true nature of harm, given OPLR’s findings regarding 1) the harm caused by variability in code enforcement - which is not conveyed through complaint data, and 2) the disincentive that exists for homebuilders to complain. Therefore, OPLR used DOPL’s complaint data to contextualize the issue of severe instances of harm rather than the potential for harm overall.

3.2 Variability in Code Enforcement

Building code interpretation is not black and white. Industry stakeholders explain that there are many provisions within the state construction codes that can be reasonably interpreted in multiple ways, and it is up to the discretion of the building inspector and building official to make that final determination.

As a result, some degree of variability in enforcement is inherent and is considered to be beneficial. Inspectors have the latitude to make a “stricter” interpretation in circumstances

⁹⁰ [Bureau of Investigation. Division of Professional Licensing](#)

⁹¹ Ibid.

necessary to ensure building safety and a less strict interpretation (that is still permissible by the code) when a stricter interpretation would not necessarily increase building safety but would cause expensive re-work or delays.

Discretion and variability that falls outside the norm refers to the instances in which: 1) code is interpreted or applied incorrectly because an inspector requires work beyond the code or fails to enforce the code and 2) an inspector uses discretion inappropriately or inefficiently. In this latter case, forcing builders and contractors to comply with a more rigid and costly interpretation of the code when it is not necessary for safety, and the code could be interpreted reasonably in a less stringent manner, is considered an inappropriate and inefficient use of discretion.

The issue of variability OPLR uncovered in its conversations with stakeholders is driven by inspectors and building departments, who consistently fail to interpret code correctly, utilize their discretion to uphold the strictest possible interpretation in all circumstances or retaliate against builders.

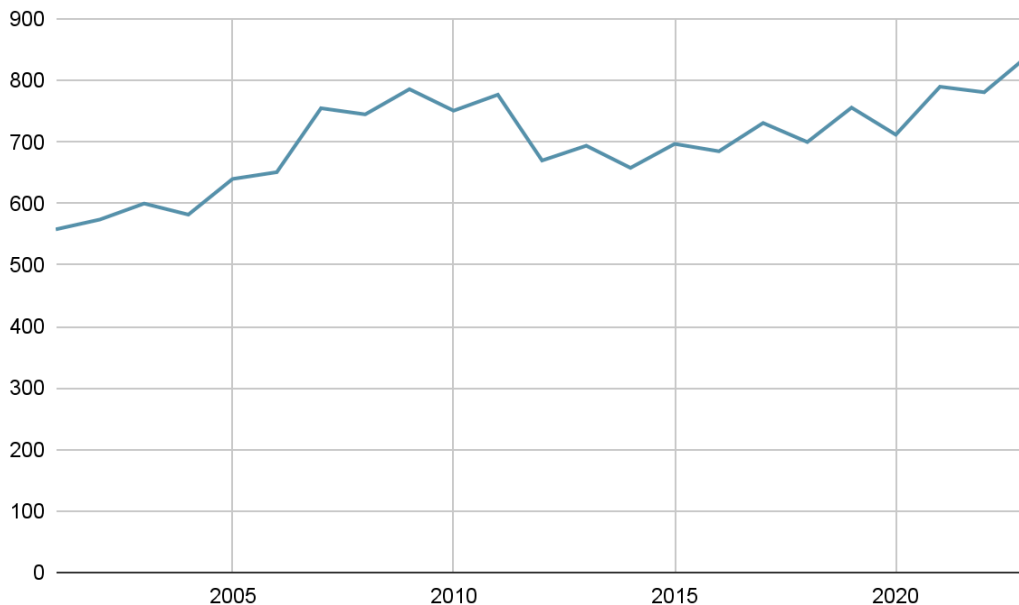
4. Findings: Access

4.1 DOPL Licensee Data

OPLR used DOPL licensee data queried in June 2024 to conduct analyses on the number of licensees per year, inflow and outflow, attrition, and to determine the demographic data included in the survey representativeness table. The licensee dataset included individuals first licensed in 1993, when the license was created, to those actively licensed as of June 2024. Each row in this dataset was a unique combination of individual and license type and contained information regarding when the license was issued, the status of the license, the date the status was last updated, and the sex and year of birth of the individuals. OPLR excluded 2 individuals who did not have a license issue date and 71 individuals whose entry date (the date they were first licensed) was the same as their exit date (the date their license became inactive).

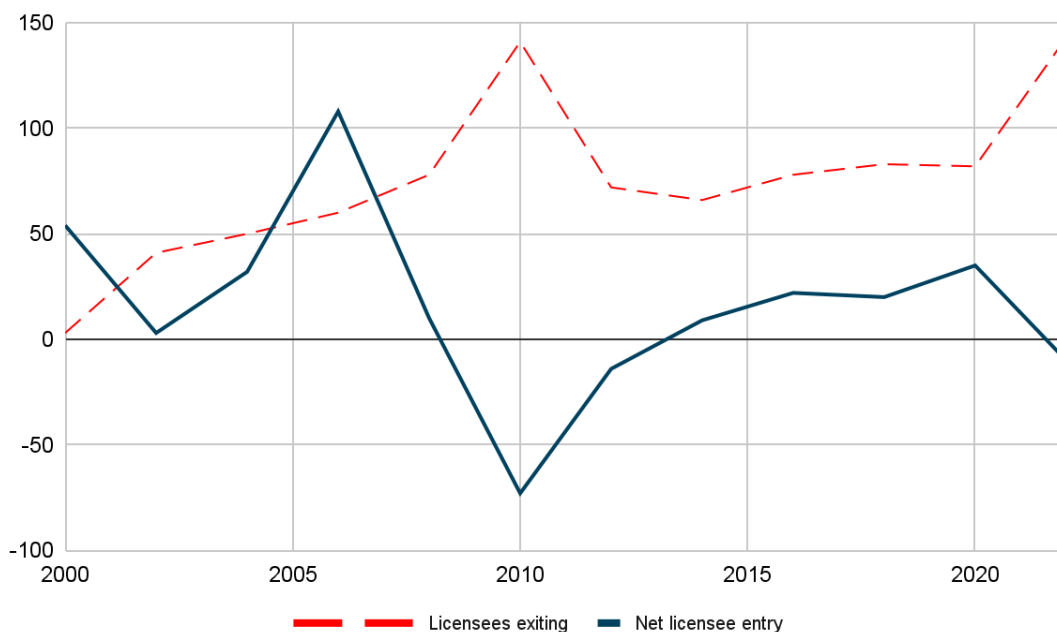
OPLR estimated the number of licensees in each year by summing up the number of unique individuals whose license was active at any given point in each year. This means that, at any given date within that year, there may have been fewer active licensees than the estimate in the following figure.

Figure 1: Building Inspector Licensee Count Over Time



OPLR calculated licensee exit over periods of two years, because licenses expire on a two-year cycle. Therefore, each point in Figure 2 represents two years (for example, the 2000 estimate represents the number of licensees exiting the profession from 2000-2001, the 2002 estimate represents the number of licensees exiting the profession from 2002-2003, etc.). Although entrance (date of first license issuance) can be calculated for each year, it was also summed over periods of two years to match the exit data. The date of licensee entrance is the date an individual’s first license was issued. If an inspector obtained a limited license and then a combination license, the date when the limited license was issued would be their entrance date. Similarly, the exit date is the date their most recent license expired.⁹² Net licensee entry is the total new entrants subtracted by the total number of individuals who exited over the same time period.

Figure 2: Building Inspector Licensee Exit Over Time



There are limitations to this data. The date of license expiration is not a perfect proxy for the actual date an individual stopped working as a building inspector, as licenses only expire every two years. Therefore, the true “exit” date for an individual may be up to two years earlier than the license expiration date estimates. Additionally, an individual may stop working and keep their license active, although this isn’t as likely.

⁹² Expired, revoked, or otherwise became not active.

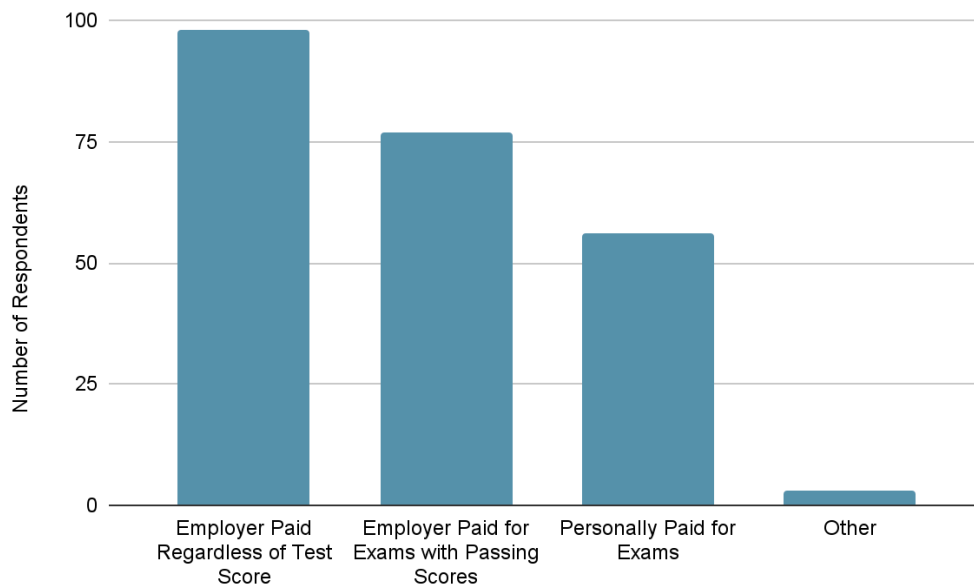
4.2 Burden of Entry

This section illustrates the moderate burden to individuals from building inspector training.

Table 5. Median Time Spent to Prepare and Take Exam	
Exam	Time Spent Preparing
Residential Building	41-50 hours
Residential Electrical	51-60 hours
Residential Mechanical	41-50 hours
Residential Plumbing	31-40 hours
Commercial Building	61-80 hours
Commercial Electrical	81-100 hours
Commercial Mechanical	61-80 hours
Commercial Plumbing	61-80 hours

Table data note: The survey item response options were in 10-hour intervals for residential exams and 20-hour intervals for commercial exams. The survey response options for the residential exams ranged from 0-10 to 70+ and 0-20 to 140+ for commercial exams. To find the median, the responses were factored so that the lowest interval was coded with a 1 and the highest with an 8, and this numeric coding enabled basic quantitative analysis.

Figure 3. How Individuals Paid for the Majority of Their ICC Exams



4.3 Low Demand for Building Inspector Jobs

OPLR suggests that low pay, the low profile of building inspection, and barriers to training new inspectors are primary factors contributing to the lack of entrants into this field.

Low Pay

Those currently in the building inspection industry point to low pay as one reason for the workforce shortage. Members of the Utah Chapter of the International Code Council (UCICC) mentioned that, in recruiting, the industry competes with other city positions and private sector jobs that pay more than inspector jobs.⁹³ Transparent Utah estimates the median wage for building inspectors as approximately \$57,500,⁹⁴ which is lower than the U.S. Bureau of Labor Statistics estimates for the median wages of plumbers (\$61,550) and electricians (\$61,590), and far lower than the estimate for construction manager salaries.^{95,96,97} A review of job openings for building inspectors in June 2024 shows wage ranges of around \$22-\$34 an hour, with initial pay likely dependent on the number of ICC certifications a person holds.

When construction is booming, the need for inspectors increases, as does pay. However, this is also when business and pay for contractors and tradespeople improve, meaning that departments struggle to attract inspectors during the times inspectors are needed most.⁹⁸ One UCICC member reported taking 80 to 90 students along on inspections, over the course of many years, with the result of only one student pursuing a career as an inspector.⁹⁹ While the lack of uptake among this group likely had several sources, it is reasonable to assume that many were drawn to different parts of the construction industry that pay more.

Low Profile of the Industry

Another potential reason for a workforce shortage is the relative obscurity of building inspection as an occupation. Several industry stakeholders OPLR interviewed stated that young people don't know this job exists. The owner of a third-party inspection firm said that he worked through California community colleges to spread the word about the industry and that many young people said they did not even know it was an option.¹⁰⁰ Utah Valley University used to have a building inspector program, but it was discontinued because of a lack of student interest.

⁹³ OPLR Interview Series

⁹⁴ See: <https://transparent.utah.gov/> OPLR utilized the "job title search" function, searched for the term "building inspector", and filtered the search to include only the years 2020-2023 and excluded titles including "part-time", "apprentice", "in-training", "temporary", or other terms suggesting limited hours and/or scope

⁹⁵ [U.S. Bureau of Labor Statistics. Plumbers, Pipefitters, and Steamfitters](#)
[U.S. Bureau of Labor Statistics. Electricians](#)

⁹⁶ Comparing the Transparent Utah estimates of electricians and plumbers employed by the public sector over the same timeframe (2020-2023), and similar exclusions of apprentices, reveals a similar difference in median wage. Electricians have a median wage of around \$61,500 while plumbers have a median wage of \$57,400 - the latter is slightly lower than the estimate for inspectors.

⁹⁷ [Indeed](#) estimates the average construction manager salary is \$96,679 in Utah, while the [U.S. News & World Report](#) estimates the median as \$104,900 nationally.

⁹⁸ OPLR Interview Series

⁹⁹ OPLR Interview Series

¹⁰⁰ OPLR Interview Series

Without programs on campuses, many young people may go through the process of choosing a career without even knowing that becoming a building inspector is an option.

Barriers to Training New Inspectors

Unlike many other industries, those who employ building inspectors often do not hire from an existing pool of candidates with the requisite training—rather, they hire candidates who then gain ICC certification.

Employers often bear the burden of paying inspectors while they train. Municipalities must pay wages to an individual who cannot perform inspections and divert other inspectors from their jobs to assist in training, both of which incur costs. One third-party employer said they spent \$3,700 to train someone only to see the person leave for a job in a city.¹⁰¹

Some states, such as Rhode Island and Ohio, have mandatory state training programs for applicants wanting to become certified inspectors. The Rhode Island Building Code Academy is a 20-hour, 10-week course that covers state building codes, though those who are ICC-certified or complete trade school only need to complete 10 of the 20 hours. Administering this program is relatively inexpensive. The main cost is a \$100 per hour fee for the instructor.¹⁰²

Utah does not have a statewide training program. The state currently charges a 1% surcharge fee on building permits, 30% of which is awarded to providers of building inspection education, like local chapters of the ICC.¹⁰³ However, this funding is mainly used to provide continuing education for those already in the industry rather than train prospective inspectors.¹⁰⁴

¹⁰¹ OPLR Interview Series

¹⁰² OPLR Interview Series

¹⁰³ [UCA 15A-1-209\(5\)](#)

¹⁰⁴ OPLR Interview Series

5. Recommendations

Recommendation 1: The UBCC Feedback Mechanism

5.1 The Uniform Building Code Commission¹⁰⁵

The Uniform Building Code Commission (UBCC) is an advisory board to DOPL regarding the administration of construction code. The UBCC consists of 13 members who represent a wide variety of parties within the construction industry (contractors, engineers, building inspectors, architects, fire officials, etc.). Their primary duties are to:

- Make recommendations to the Utah legislature regarding 1) the adoption of new nationally recognized code and 2) amending or repealing provisions within the state construction code. The UBCC may amend code only in extreme circumstances,¹⁰⁶ otherwise, that power lies with the legislature
- Act as an appeals board when a municipality either cannot convene one or fails to make a timely decision.
- Establish advisory peer committees on either a standing or ad hoc basis to advise the UBCC with respect to matters related to a code
- Assist the division in overseeing code-related training.

5.2 Permit Surcharge Fees

UCA [15A-1-209\(5\)](#) requires that compliance agencies¹⁰⁷ charge a 1% surcharge on building permits that the agency issues, transmitting 85% of that 1% to DOPL to be used as follows:

- 30% of the money to provide education to building inspectors regarding the codes and code amendments.
- 10% of the money to provide education to individuals licensed in construction trades or related professions through the construction trade association or other professional associations.
- 60% of the money is transmitted to the Office of the Property Rights Ombudsman to provide education and training regarding 1) the drafting and application of land use laws and regulations, and 2) land use dispute resolution.

Currently, for any given building permit, 0.255% of the fee goes towards building inspector training, 0.085% goes towards education for those in the construction trade, and 0.51% goes to the Property Rights Ombudsman.

¹⁰⁵ [UCA 15A-1-203](#) and [UCA 15A-1-204](#)

¹⁰⁶ The UBCC may only amend code if they determine that waiting for legislative action in the next general session would 1) cause an imminent peril to the public health, safety, or welfare or 2) place a person in violation of federal or other state law. See [UCA 15A-1-204\(6\)](#)

¹⁰⁷ A compliance agency is an agency of the state or any of its political subdivisions that issues permits or otherwise enforces code compliance, including third-party inspection firms in specific instances.

OPLR recommends increasing the percentage of the permit surcharge fee set aside for building inspector education from 30% to 40%, decreasing the amount set aside for the Ombudsman by 10%, to offset the additional cost imposed by the proposed UBCC feedback mechanism.

5.3 Additional Details and Considerations

Although this recommendation seeks to improve accountability, it should not be implemented in a manner that disproportionately or unfairly harms building departments. OPLR recommends the following in the implementation of this recommendation:

- Although the report is meant to primarily cover the performance of building departments across Utah, research efforts should focus on the performance of builders, contractors, and third parties as well as the municipalities. Issues in this space may result from building departments failing or refusing to enforce code appropriately or from builders failing or refusing to interpret and build to code correctly. Action should be taken in either case, and the performance of a building department should be evaluated in the context of behaviors by other actors in the construction industry in their municipality.
- The report should not call out any individual building inspectors by name, and caution should be taken in reporting on small departments with only one or two inspectors.¹⁰⁸ Additionally, this recommendation should include a natural escalation process. The report should focus on poor behavior in building departments that refuse to improve their processes rather than building departments that, upon being notified by the UBCC, implement changes and show evidence of improvement. Informal letters of concern should be sent to the offending party, with sufficient time given to departments to implement changes.
- Establishing this recommendation would require hiring a part-time analyst with DOPL to complete the data collection, analysis, and report writing. UBCC members are volunteers and would not be appropriately compensated to do this work. The DOPL analyst should regularly update the UBCC to inform them of findings. Funding this position will be revenue neutral, taking funds from the percentage of the permit surcharge fee currently used for building inspector training. Currently, there is sufficient money to engage in both efforts, but that fund varies depending on the state of the economy. Should there be a downturn or significant decrease in the issuance of building permits, the UBCC may need to consider other funding sources, or reallocating funds to ensure continued staffing for this position.
- The current makeup of the UBCC may favor those in the construction industry over those in the inspection industry,¹⁰⁹ which risks biasing the actions of the UBCC in favor of

¹⁰⁸ Caution could mean extra time and/or effort in communicating and educating the department before reporting on their performance to their peers and the legislature.

¹⁰⁹ There are only a few individuals on the UBCC representing the interests of inspectors in comparison with those representing the interest of contractors and builders. This is appropriate for the current duties of the UBCC, but may not be appropriate for the actions recommended by OPLR.

contractors and builders. Therefore, an advisory peer committee should be created within the UBCC to carry out the responsibilities detailed in this recommendation. The makeup of this committee should ensure equal representation for both industries, with the proposed structure:

- Two building officials nominated by the ULCT or UABO
 - One third-party building official or inspector
 - One public member
 - Two individuals with knowledge of the industry and code (i.e. inspectors, contractors, etc.) nominated by the HBA or other industry groups representing the interests of commercial or residential builders/contractors.
- To ensure that building inspection reporting is useful to the UBCC and Utah public, it should be published on a biennial basis on DOPL's website and presented to the political subdivisions committee within the Utah legislature.

Alternative Idea

Implementing a rapid appeals process, where permit holders may appeal a code enforcement decision to an independent board and receive a near-immediate response, may accomplish some of the same goals as the UBCC feedback mechanism. This would also provide a fast, independent appeals method well suited to the needs and concerns of builders. OPLR considered this option but ultimately found it too resource-heavy, as the state would have to invest in staffing multiple, high-level full-time positions.

Recommendation 2: Transition from Licensing Inspectors to Building Officials

5.4 Additional Considerations and Alternative Ideas

OPLR recommends the following in the implementation of this recommendation:

- Requirements for licensure as a building official should differ for municipalities under a certain size, such as 4th-6th class county/city designations. For building officials within these small municipalities, DOPL should consider evidence of an applicant working towards combination licensure as sufficient, so long as the applicant has the residential building, residential mechanical, residential plumbing, and residential electrical ICC certifications. The complexity of the built environment in these small areas does not compare with the complexity of the built environment in areas of high growth or larger populations, which have large residential and commercial complexes that small cities and counties typically do not have. The requirements for licensure should reflect that difference in complexity. Additionally, smaller jurisdictions may struggle to find and hire an individual with the qualifications recommended by OPLR, which could unfairly force them out of compliance with state law.

- Municipalities should be given at least three years to comply initially with the requirement that they employ and/or contract with a licensed building official.
- License renewal should include a continuing education (CE) requirement that building officials receive at least four hours of education on Utah construction code. This will help ensure that building officials are up to date on new versions of adopted codes or any amendments to code. Utah’s standards for continuing education must comply with those required by the ICC for certification renewal so that building officials may use the Utah CE requirement towards the renewal of their ICC certifications.
- New provisions should be included in the unprofessional and unlawful conduct sections of the statute to better reflect the scope of a building official and ensure they are properly supervising and training inspectors. Examples of these provisions include:
 - directing or knowingly allowing an employed inspector to perform beyond the scope of their license held under this chapter
 - failing to maintain a current knowledge of amendments to Utah’s building code
 - falsifying inspection reports or purporting to perform an inspection that was not actually performed as a building inspector, or knowingly allowing an employed inspector to do the same
 - engaging in retaliatory actions as a building inspector against individuals or companies who file complaints or question the building department’s decisions, or knowingly allowing an employed inspector to do the same
 - accepting what would reasonably be viewed as a bribe, which could be monetary, goods, materials, or other benefits in the course of duty as a building inspector, or knowingly allowing an employed inspector to do the same
 - any willful, fraudulent, or deceitful act by a licensee, caused by a licensee, or at a licensee’s direction which causes material injury to another
 - knowingly or willfully allowing an inspector contracted and/or employed within their jurisdiction or firm to engage in any action prohibited by statute for licensed building officials

Alternative Idea

To increase accountability measures for building officials while maintaining the current structure of licensing building inspectors, building departments could be required in state statute to employ and/or contract with a “qualified building official”, defined as an individual who meets the same requirements as established in this recommendation. As this would require a building inspector license for building officials, the unprofessional and unlawful conduct provisions in the Building Inspector Licensing Act could be expanded to account for behaviors that *inspectors acting in the capacity of the building official* engage in. This would accomplish the same goals as licensing building officials, although it would not deregulate inspectors, a profession that OPLR believes does not need to be licensed.

Recommendation 3: Increase Workforce by Expanding On-Ramps into Building Inspector Jobs

5.5 Requirements for Plumbing and Electrical Licenses

Table 6. Plumber and Electrician Licensure ¹¹⁰	
License	Qualifications
Master Plumber	<ul style="list-style-type: none"> ● Either: <ul style="list-style-type: none"> ○ Complete 4,000 hours of work experience and 4,000 hours of supervisory experience as a licensed Journeyman Plumber; or ○ Hold at least an associate of applied science degree or a similar degree, from an institution recognized by the Council for Higher Education Accreditation (CHEA); and have at least 2,000 hours of supervisory experience as a licensed Journeyman Plumber ● Pass the Utah Plumber Law and Rule Exam
Journeyman Plumber	<ul style="list-style-type: none"> ● Complete either: <ul style="list-style-type: none"> ○ 576 hours of a planned program of training that meets Division requirements and 8,000 hours of full-time work experience as a licensed Apprentice Plumber; or ○ At least 16,000 hours of lawful full-time work experience as an Apprentice Plumber ● Pass the Utah Journeyman Plumber Written Exam and the Utah Plumber Practical Exam with a score of least 70%.
Master Electrician	<ul style="list-style-type: none"> ● Either: <ul style="list-style-type: none"> ○ Hold a graduate electrical engineering degree through an accredited college or university approved by the division and have 2,000 hours of practical electrical experience as a licensed apprentice electrician; or ○ Graduate from an electrical trade school, having received an associate of applied sciences degree following successful completion of a course of study approved by the division, and have 4,000 hours of practical experience as a licensed journeyman electrician; or ○ Complete 8,000 hours of practical experience as a journeyman electrician

¹¹⁰ See: [UCA 58-55](#), [UAR 156-55c](#), and [UAR 156-55b](#)

	<ul style="list-style-type: none"> ● Pass the Utah Master Electrician Code Exam, the Utah Master Electrician Theory Exam, and the Utah Electrician Practical Exam
Journeyman Electrician	<ul style="list-style-type: none"> ● Complete either: <ul style="list-style-type: none"> ○ At least 576 hours (four years) of a program of electrical study that meets the requirements of the division and have at least 8,000 hours of full-time work experience as a licensed Apprentice Electrician; or ○ 16,000 hours (eight years) of full-time experience approved by the division in collaboration with the Electricians and Plumbers Licensing Board ● Pass the Utah Journeyman Electrician Code Exam, the Utah Journeyman Electrician Theory Exam, and the Utah Electrician Practical Exam

6. Stakeholder Outreach

6.1 OPLR Interview Series

OPLR relied heavily on stakeholder engagement and qualitative interview data to conduct this review. OPLR engaged with the Utah League of Cities and Towns, the Utah Association of Counties, multiple members of various, relevant industry organizations across the state (e.g., Utah Chapter of the ICC), many building officials, experts within DOPL, third-party inspection firms working within Utah, state building officials, the Utah Home Builder's Association, academics, and regulators in various states. OPLR prioritized diversity in perspective and relevance to the industry in selecting stakeholders to reduce potential bias and deepen understanding.

Interviews were conducted in-person, over the phone, and via video conferencing using semi-structured interview methods. Interviews were conducted one-on-one and with multiple members. Notes were taken for all interviews and reviewed multiple times.

Initial interviews were conducted to understand the role of building inspection, determine the largest issues within the industry as they related to safety and access (access to the profession and access to housing), and identify ideas for change. This informed OPLR's findings and preliminary recommendations. OPLR reflected on and synthesized multiple rounds of feedback to develop clear and achievable evidence-based recommendations.

Limitations

This interview sample was not randomly selected¹¹¹ and, therefore, is not completely representative. OPLR spoke to individuals most likely to represent the broad aims and concerns of their groups. Additionally, OPLR did not contact builders within the commercial construction industry or anyone representing the interests of the largest group of building inspection "consumers"- permit holders not associated with large homebuilding companies. Thus, the stakeholder engagement and findings from those interviews cannot and should not be understood to be fully representative of the views of all Utahns, of all building inspectors or officials, of all homebuilders, or of any other person, group, or population.

¹¹¹ Building officials were chosen semi-randomly. OPLR chose some officials based upon the prominence and population of the city, while others were chosen at random. OPLR classified building departments according to their city classification, which is based on population, and chose at random for these classifications. Some departments had no contact information or did not respond to our request, causing us to repeat this process of selection.

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