The State of Residential Development in Vermont in 2021

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vhfa

Vermont Housing Finance Agency

Executive Summary

Since the COVID-19 pandemic began in 2020, the process of developing homes in Vermont has become more lengthy, more costly, and more complicated than ever before. Although the difficulty of residential development has steadily increased for many years in the Green Mountain State, the pandemic confronted developers and contractors with an unprecedented barrage of challenges. Those challenges extended beyond the normal range of barriers typically seen by policy makers and funders.

Some of the impacts can be seen in rising costs of projects and the large number of homes being planned. In August 2021, the Vermont Housing Finance Agency (VHFA) conducted a survey and held a forum to hear directly from development professionals and contractors. These efforts sought to explore how the pandemic is affecting development capacity to move projects forward and to understand how resource capacity is being strained by escalating costs.

The survey found that nearly 90% of respondents were experiencing project delays and higher development costs beyond typical year-over-year increases. Respondents indicated that both delays and costs were mostly tied to a combination of availability and cost for labor and materials. Participants also described increased processing time and costs due to overlapping and sometimes excessive regulatory and permitting burdens. When development capacity is constrained and projects cost more due to materials and labor, projects will inevitably come online more slowly and cost more to complete.

To better understand Vermont's experience against the backdrop of a broader national development picture, VHFA also conducted a review of several national surveys and data which are referenced throughout this report.

Total development costs rose dramatically

In December 2019, the Vermont Affordable Rental Housing Development Cost Factors study[1] noted that multi-family development costs in Vermont and Northern New England were escalating more quickly than in other parts of the country. That means the impacts of the pandemic arrived while development costs were already further stretching available resources to fund affordable housing.

Between 2020 and 2021, the average cost of a proposed development for a Vermont apartment funded through the Low-Income Housing Tax Credit Program rose 9% to $333,774. The Vermont increase is just slightly higher than the increase in costs of multifamily homes under construction nationwide. Nationwide multifamily construction costs in the third quarter of 2021 were 8% higher than a year earlier, according to the Fisher Construction Price Index[2]. Meanwhile during that same period, setting aside temporary or short-term boosts to the program, the federal Low-Income Housing Tax Credit allocation has generally increased between 1-2% each year for Vermont.

While the sharpest jump in costs occurred between 2020 and 2021 applications, early estimates for the 2022 federal tax credits show a further increase of 4.1%, to $347,793 per unit.

Vermont applications for federal allocated tax credits*

Year	Average Cost Per Unit
2018	$285,705
2019	$309,740
2020	$305,188
2021	$333,774
2022 (early indication)	$347,793

**Typically ranges from 5-9 projects annually.*

[1] LSA and Neighborhood Fundamentals, *Analysis of Vermont Affordable Rental Housing Development Cost Factors*, 2019
[2] U.S Census Bureau, Price Deflator(Fisher) Index of Multifamily Residential Units Under Construction, 2021

Although apartments developed through federal allocated tax credits are only a subset of all homes developed each year in Vermont, they comprise VHFA's most consistent and available source of development cost information.

While the respondents to the survey and participants in the forum focused on multi-family housing, the pandemic has increased costs for single-family construction as well[3].

Housing permits issued remains stable

According to the U.S. Census Bureau, Vermont saw 1,270 homes in 1 to 4-unit structures permitted for construction in 2020, which was a slight increase over the 1,123 permitted for 2019.

Multifamily building permits (5+ units) remained consistent over the past three years, as shown in the table below. In 2021, as of the end of September, 56 multifamily building permits have been approved statewide, putting the state ahead of trends over the previous three years.

Vermont's experience is similar to Northern New England as a whole and the nation. Despite consistent reports of delays related to the pandemic and supply chain problems, we have not yet seen a substantial decrease in new home permitting.

	Multifamily buildings (5+ units)			**Single family units**		
	2019	2020	2021 (through September)	2019	2020	2021 (through September)
Vermont	47	48	56	987	1,154	1,034
Northern New England (ME, NH, VT)	170	145	172	7,207	8,367	8,011
National	15,961	15,383	14,859	862,084	979,360	864,184

Source: U.S. Census Bureau Building Permits Survey, 2021

National permits continue to increase, but "housing starts" have slowed later in 2021[4]. This could be an indicator that builders continue to be optimistic about demand and the ability for the market to take on more housing, but regulatory and financial barriers are keeping those permitted plans from turning into actual "starts."

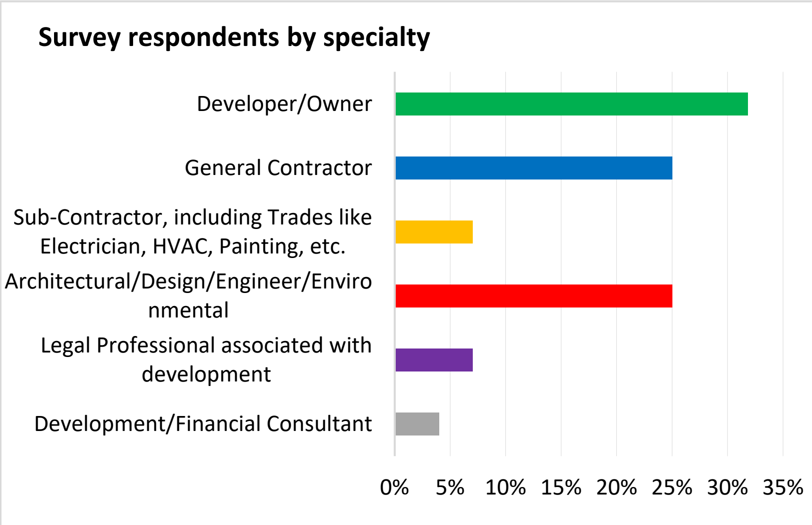
Recent Congressional testimony from the National Association of Homebuilders noted, "As a concerning sign that the market may be slowing down, the number of housing units authorized but not started has risen 40% over the past year, setting records both as a share of starts as well as in nominal terms."[5] If permits are a measurement that builders are optimistic about demand and need, starts are a measurement for the success that builders are having in bringing those projects to market. Starts data is not available on a state-by-state level, but housing start indicators suggest New England is outpacing national starts[6].

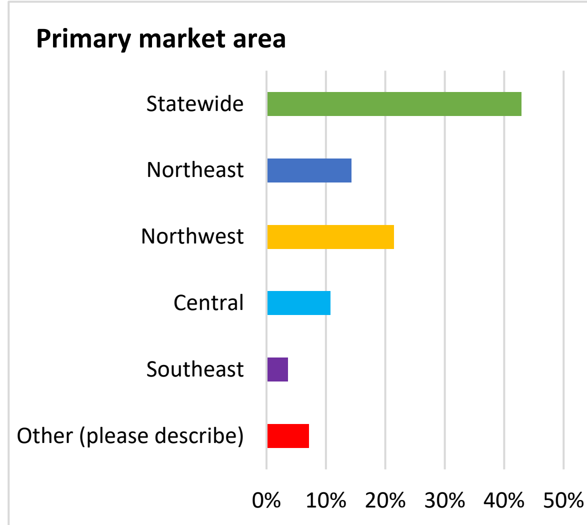
Experiences of Vermont Development Professionals

To gather information about the recent experiences of residential development professionals, VHFA administered a web-based survey in August 2021. The survey was developed in consultation with a number of real estate development professionals, professional organizations, and housing funders. The 28 respondents included a balance of building, development, and professional service providers. For the purposes of comparing the Vermont survey results to national construction surveys, it is important to note that Vermont survey results included Development and Professional Services industries (architecture, design, engineering). The range of industry professionals could impact respondent perspective on issues like wages, since some portions of the development/construction industry pay higher wages. The Vermont respondents were

[3] National Association of Homebuilders, "Builder Confidence Up on Strong Demand Even as Supply Side Challenges Persist", November 16, 2021
[4] U.S. Census Bureau, "Monthly New Residential Construction, October 2021", 2021
[5] National Association of Home Builders, Testimony of Chuck Fowke to the House Small Business Committee Subcommittee on Oversight, Investigations, and Regulations, October 20, 2021
[6] U.S. Census Bureau, "Monthly New Residential Construction, October 2021", 2021

geographically diverse, representing development professionals from across the state, including 43% of respondents reporting that they serve multiple markets throughout the state.

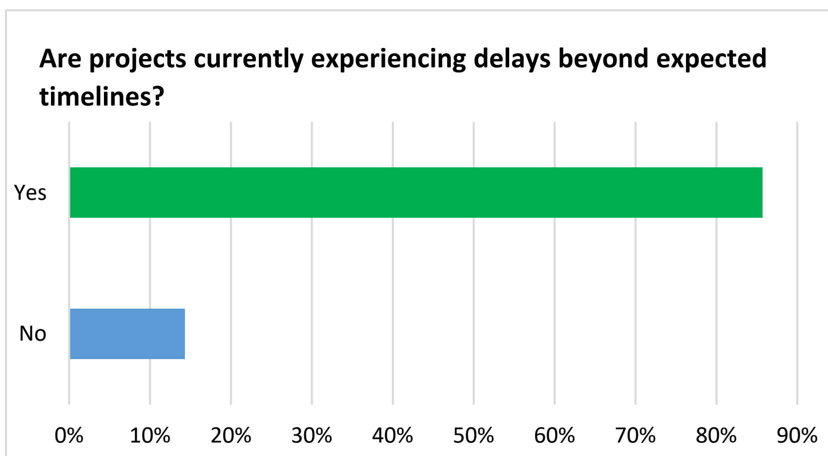




Later in August, VHFA convened a forum of development professionals and state regulators to share experiences navigating pandemic challenges and provide practical guidance about Vermont's permitting and approval processes. Over 60 developers, contractors and affordable housing practitioners participated in the forum. Given the size of Vermont's development community, participation in both the survey and the forum were strong, demonstrating an earnest interest in sharing experiences and seeking solutions to the challenges facing the development community.

Projects experienced delays and cost increases due to material and labor shortages and regulatory/permitting requirements

Survey respondents in Vermont and national surveys have confirmed that the pandemic has caused project delays. In Vermont, 86% of respondents indicated projects were delayed or not started because of market conditions over the last 18 months, with delays of four to seven months being the most common period of delays.



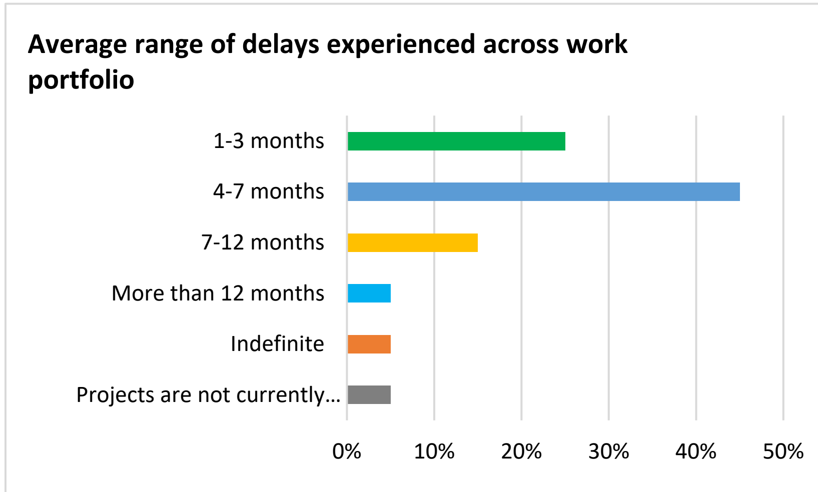
The annual National Outlook survey by the Associated General Contractors of America[7] at the beginning of 2021 indicated that 64% of its respondents expected project delays, and another 25% indicated they had put longer completion times (and higher costs) into their bids for new projects. A later labor-focused survey found that 88% of projects were experiencing delays[8]. While the industry may have started 2021 with confidence that material, labor, and regulatory issues causing delays would normalize in 2021, delays have touched nearly every project.

Participants said:

[7] Associated General Contractors of America, "2021 Construction Outlook National Survey Results", January 2021
[8] Associated General Contractors of America, "2021 Workforce Survey Analysis", September 2021

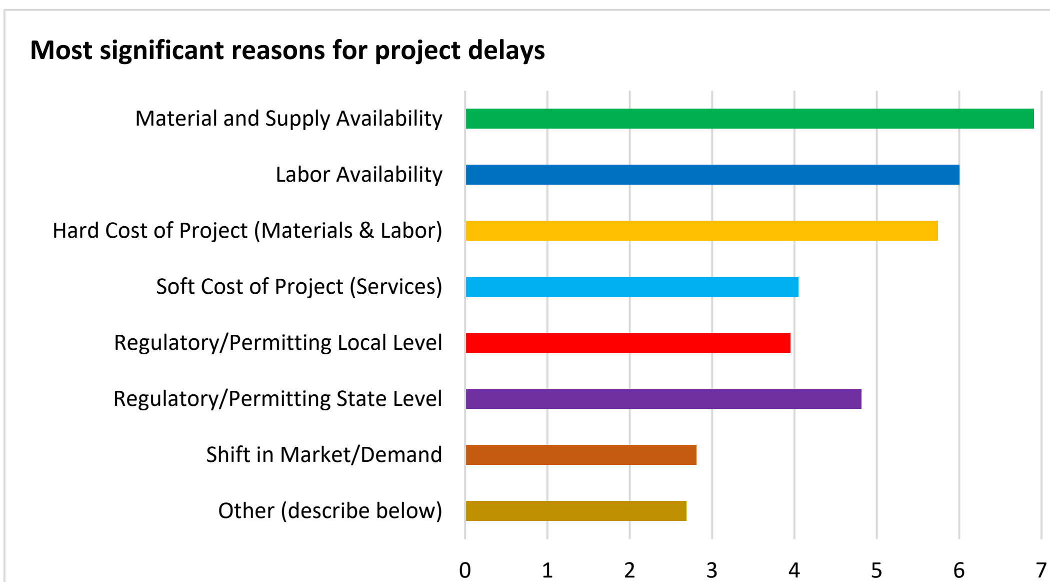
"We have seen increases in costs in materials such as lumber and steel needed for repair projects, and new construction prices have increased enough to justify longer value engineering processes to keep per-unit costs to pre-pandemic levels. When going through these [value engineering] processes, we are getting less product for the money."

"[In 2014-2015], we were building good quality rental housing at $130-150 per square foot [for] hard construction cost. By 2019, we saw that up to approximately $200 per square foot, a 30-50% increase in just 5 years, much faster than the pace of CPI level inflation. My sense is that we are looking at easily $225-250 per square foot today."



The availability of materials and labor were identified as the two primary drivers of costs and project delays. Demonstrating the connection between "availability and costs," respondents explained that to avoid indefinite delays, contractors were replacing cheaper unavailable materials with more expensive materials that were more readily accessible. However, there is no similar replacement option when it comes to labor.

While availability of materials and labor directly contributes to project delays, the impact is ultimately felt in the cost of project. Escalating costs make projects unviable, increase unaffordability, or require the developer to pause to seek out new funding sources. More than 89% of survey respondents indicated that costs have increased beyond expectations. Even more startling is that more than 64% reported that they had abandoned or substantially delayed starting a project due to cost pressures.



Respondents were asked to rank the reasons from most to least impactful. Displayed is the ranked choice value of the 8 options.

The Vermont numbers are only slightly better than national survey results from the Associated General Contractors of America, where 88% of respondent projects had experienced delays, 93% of projects were impacted by costs and 51% of respondents had either canceled, delayed, or scaled back projects[9].

Some Vermont forum participants described the mismatch outside Chittenden County between the cost of

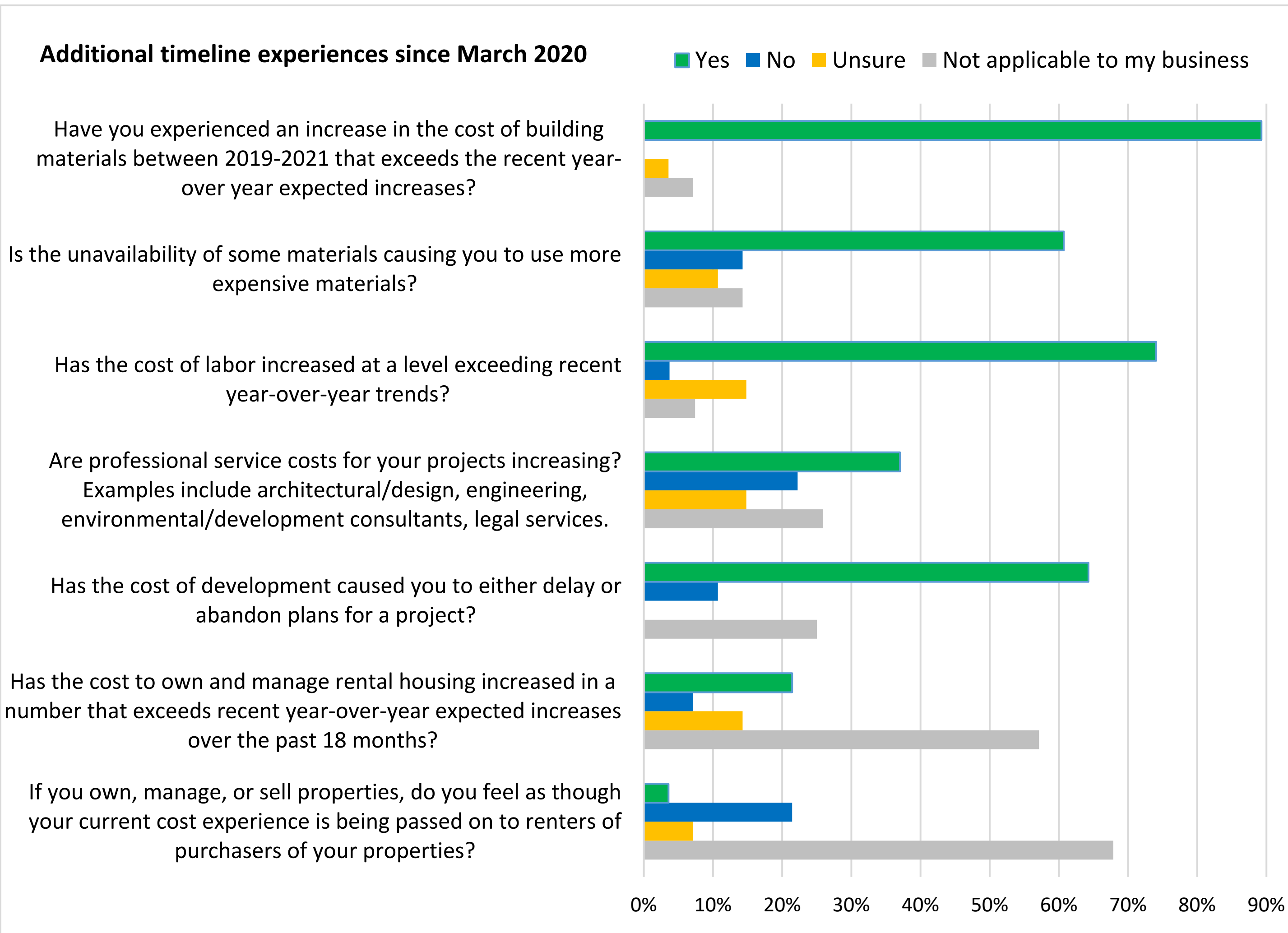
[9] Associated General Contractors of America, "2021 Workforce Survey Analysis", September 2021

developing housing compared to its value in the private marketplace to potential home buyers.

Outside Chittenden County "costs are as high as elsewhere but the rent and price levels affordable for middle income Vermonters is lower," explained David White of White and Burke Real Estate Advisors. "Economics just don't work for this sector," he continued. Another participant explained that Vermont developers can no longer build for $150/sq. ft the way many people have come to expect.

Next to material and labor constraints, survey respondents rated regulations and permitting at the state level as the largest contributor to project delays. According to forum participants, regulatory and permitting challenges have also increased since the start of the pandemic and have caused some potential projects to be abandoned altogether. Two developers at the forum estimated that it costs more than $10,000 per unit to meet Vermont's building stretch code and urged a closer look at the costs and benefits of the codes when the process to update them resumes. A 2020 study on the cost of housing development in Vermont[10] found that projects that received funding for meeting high standards of energy efficiency and green building had higher per-unit costs in excess of 10% of comparable units. Meanwhile, direct energy goal incentive funding in 2022 project applications to VHFA is estimated around 1% of the total funding for a project.

The perfect storm of increasing materials and supply constraints and regulatory burdens experienced during the pandemic was described repeatedly by participants at the August forum. *"The urgent need for housing*

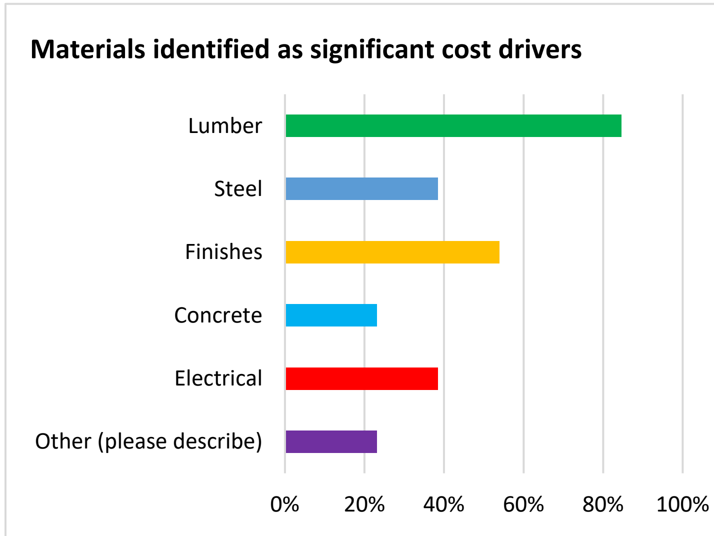


[10] LSA and Neighborhood Fundamentals, *Analysis of Vermont Affordable Rental Housing Development Cost Factors*, 2019

across the state means we can't let increasing costs limit residential building," commented Kathy Beyer of Evernorth. *"We must find ways to overcome the upward pressure that labor and materials shortages and stringent codes are having on development costs."*

Many respondents to the survey were construction or development professionals and so the cost of ownership and management of housing was not within their purview. From VHFA's work with affordable housing projects, we can confirm that budgets for property management and maintenance have generally increased over the expected or typical year-to-year growth assumptions. Several recent statewide and regional property management conferences and professional meetings have consistent themes about helping that industry navigate issues around labor availability and costs.

Lumber rated as top material cost driver



The material "culprits" for cost drivers are largely dependent on national and international market trends and were also identified in the national surveys around costs. About 85% of the Vermont survey respondents pointed to lumber as the most significant recent material cost driver. Lumber prices hit a high around May 2021 before starting to trend downward in recent months, but the market has remained highly volatile[11]. Fixed pricing has remained a challenge for suppliers and builders, and Vermont builders report that the market indicators that prices are falling are not translating to projects yet. Organizations like the National Homebuilders Association[12] are staying highly focused on lumber and advocating for federal regulatory changes to stabilize the market. In the meantime, Vermont builders will be subject to a national market on lumber pricing that is outside the state's control.

One survey respondent stated, *"Some materials costs have started to come down such as lumber. That said, while lumber commodity prices have come down, availability is still tough and prices in the wholesale/retail 'lumber yard' level have not adjusted as fast as the Wall Street commodity pricing would suggest."*

While electrical was also highlighted as a material cost increase by many respondents, some went on to describe their shortages of trained and skilled electricians as the primary driver cost increases in that area. Steel, tied with electrical as the third highest identified driver of cost, is tied to a more complex international market for pricing.

Labor shortages are prevalent, general, and specific

Seventy-nine percent of the development professionals surveyed were having trouble finding enough labor for projects and 59% said that specific skill sets among available labor were missing. Sixty-five percent of respondents said labor was costing significantly more in 2021 than 18 months ago. Furthermore, there was also dissatisfaction with the skill level or training of available workers, with only 32% of respondents reporting being satisfied with the skills and experience of the available labor pool.

A common thread showed up in survey responses regarding whether eligible laborers are returning to the work force: One respondent noted, *"I cannot find skilled carpenters, hard to find motivated hard workers."* Another said, *"Skilled craftsmen are in short supply, and even basic level skilled employees are very hard to come by".*

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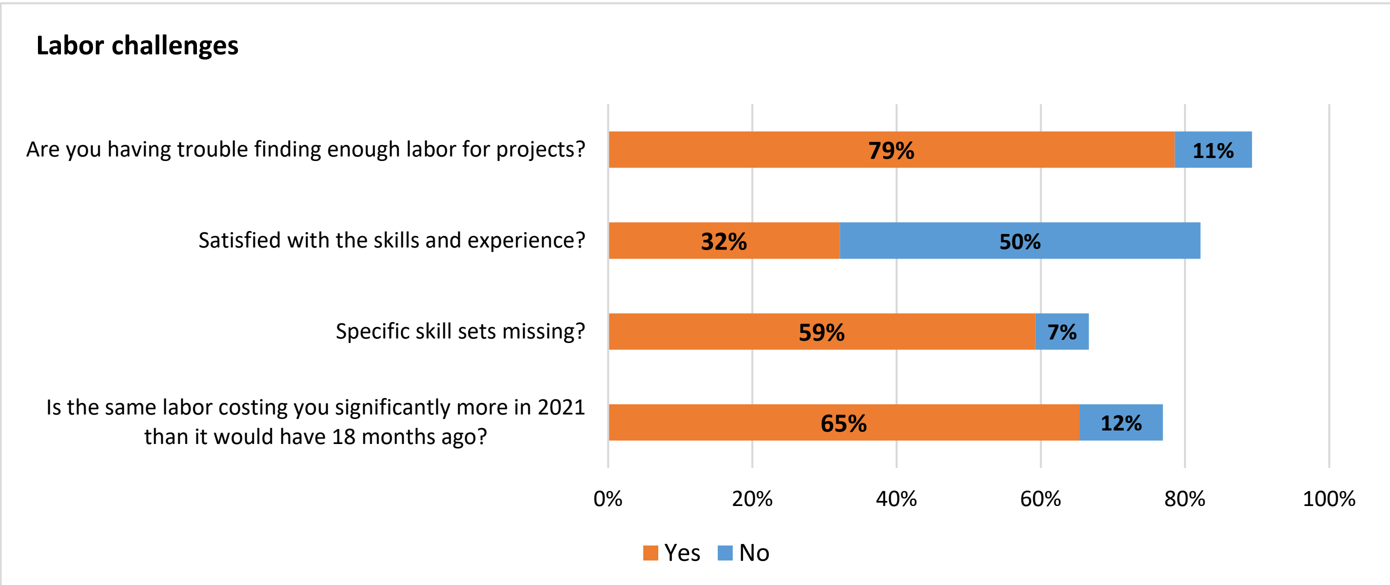
[11] U.S. Bureau of Labor Statistics, Producer Price Index by Commodity: Lumber and Wood Products: Softwood Lumber, retrieved from the Federal Reserve Bank of St. Louis, December 2021.
[12] National Association of Home Builders, Testimony of Chuck Fowke to the House Small Business Committee Subcommittee on Oversight, Investigations, and Regulations, October 20, 2021

At the forum, developers confirmed that construction trade labor is in short supply and needs action to get more young people pursuing these careers. *"To help address the current labor supply shortage, we should encourage high school students to consider building trade related occupations as a career path,"* suggested Patrick O'Brien.

There was also an expectation of increasing focus on compliance with Section 3 requirements when HUD funding is involved with projects.

Kathy Beyer, Evernorth's development director, noted, "One of the key contributing factors to rising construction costs is the limited labor pool for our mechanical and electrical trades."



Vermont survey respondents had trouble finding labor for their projects (79%) at a slightly lower level than the available national surveys for contractor firms, who reported 89% of firms were having difficulty finding enough labor[13]. However, Vermont's survey included higher wage industries like development offices, architects, and legal firms. The national survey found that 73% of respondents had raised base pay rates (a jump from 38% in the same survey a year earlier), and 64% of firms had changed their hiring practices to attract more qualified workers.

Beyond acknowledging general labor cost and availability issues, a few respondents "drew the line" where labor shortages became more critical at wages below $25-$30 per hour. One respondent provided a comprehensive overview of how they saw wage issue impacting costs: Entry level wage rates have risen rapidly. *"Positions that would have been $15-17 per hour a few years ago are well above $20 now. The entry level wage pressure ripples up through the entire system; $25 per hour experienced positions are now commanding high $20's/low $30's and so on. Wage growth is encouraging in some ways in terms of livable wages, etc. and a lack of meaningful wage growth previously. That said, it presents major challenges in that it drives up the cost of construction, maintaining properties effectively, etc. It's all related, so we expect to see continued inflationary pressure on all sorts of items as a result of wages increasing including food, energy, durable goods, and housing."*

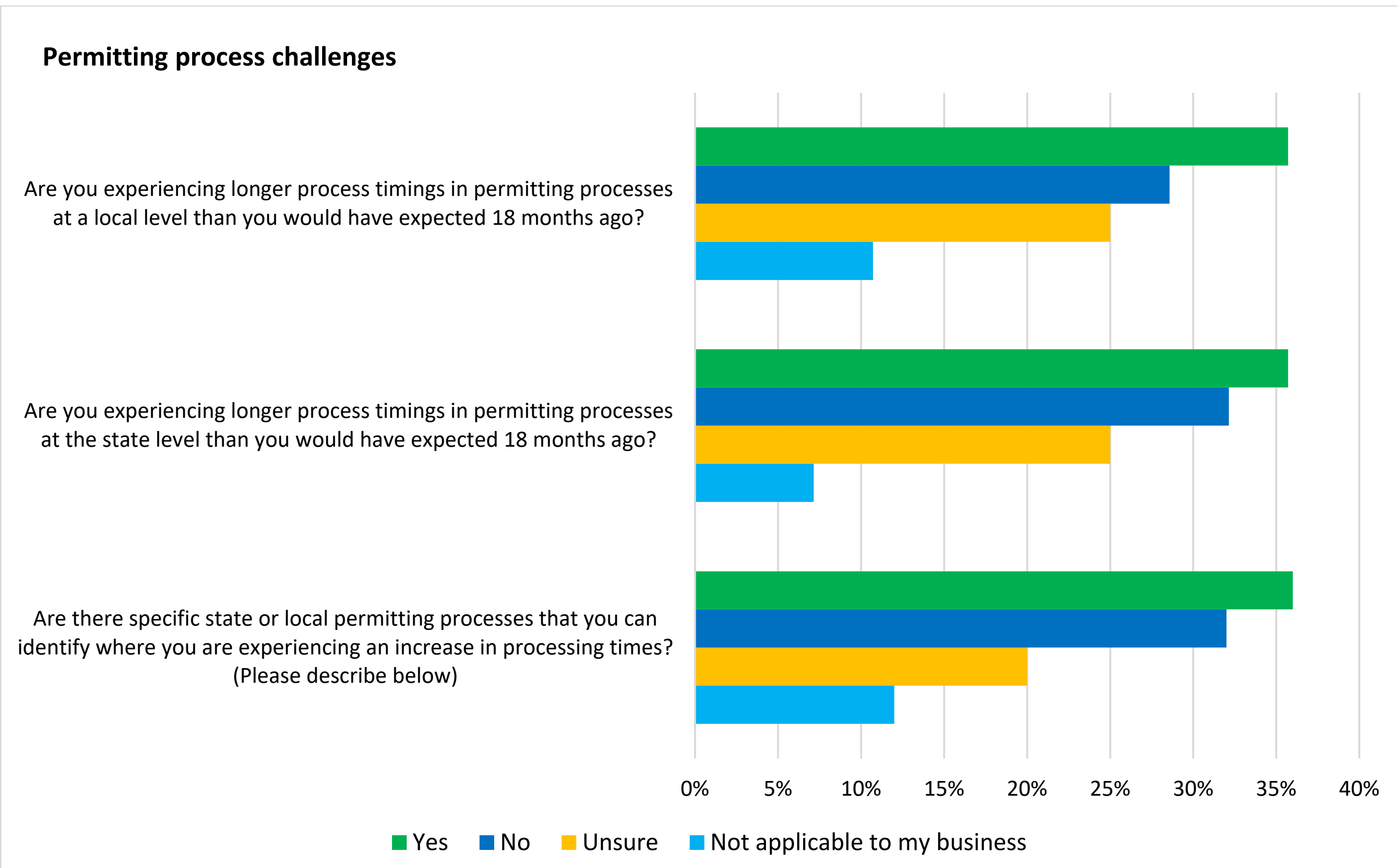
[13] Associated General Contractors of America, "2021 Workforce Survey Analysis", September 2021

An interesting trend to monitor from national surveys is an uptick in national firms indicating they are relying on technology investments to alleviate labor pressures. The Vermont survey did not ask whether firms are seeking to increase productivity using existing labor levels, but it is a national trend worth noting.

Permitting process and regulatory requirements

The most common frustration voiced among developers in the Vermont survey and forum was with permitting and regulations. Developers recognized the supply chain and labor constraints produced by the pandemic as beyond the control of policy makers. But they also expressed disappointment about the lack of attention to delays and costs caused by state and local regulations. One participant noted that even though improving the regulatory process could be done at little financial cost and would make development less expensive, Vermont policy makers have not shown a willingness to pursue improvements. Some developers explained that requirements at the state and local level levels are extremely complex, create additional risk, and suppress many projects from ever getting off the ground.

"Permit reform is terribly important right now because it is duplicative, complex, time-consuming and increases the costs of housing," noted David White. *"Wetlands requires approvals at the federal, state and local levels. Municipalities should not be allowed to impose land development restrictions relating to wetlands because they lack the expertise it requires."* Survey respondents identified Vermont state agencies of Natural Resources, Public Service, Department of Environmental Conservation, and local Departments of Public Works, as those specifically increasing permit timelines as well as municipal offices with lengthening review processes due to remote work during the pandemic.



"Complying with regulations at the local level that are substantially the same regulations imposed by the state drives up the permitting cost of housing and substantially delays the process," commented Patrick O'Brien. *"Removing duplicative reviews for municipal and state regulations would be a HUGE step forward."* O'Brien asked the regulators present at the forum *"to commence municipal and state dialogues to identify these*

duplicities so applicants only have to address any specific criteria once, regardless of who is doing the review (the state or the municipality). "

"Vermont's Covid recovery has prompted new cross-agency communication and coordination," noted Regina Mahoney. *"We should apply these improved approaches to eliminating duplication during the housing development process and ask, 'Which department/agency/level of government is the most suited to regulate each resource most effectively?'"*

Developers said that the absence of "by-right" permitting and multiple approval requirements extends the development timeline. *"Often a developer ends up agreeing to things that some neighbor or DRB member wants even though the regulations don't require it. More often than not, the developer accepts these one-off terms to reduce risk and delay. It's a form of extortion. Reducing units is an example,"* said David White.

Another participant lamented the lost housing that has occurred. *"How many projects aren't done at all because potential developers are scared off before the process even starts?"* remarked Austin Davis. *"I've talked with people who back out as soon as they hear about the complexity and length of time the process will likely take."*

Vermont regulators participating at the forum from the Agency of Commerce and Community Development, local Departments of Public Works, and the Agency of Natural Resources acknowledged the many steps required and suggested developers reach out to them as early as possible in the development process to try to minimize the time and cost of compliance. This is especially important when new housing development is financed through the American Rescue Plan Act (ARPA) funds and HUD funds such as National Housing Trust Fund and Community Development Block Grants because use of these funds triggers federal Section 3 and National Environmental Policy Act (NEPA) reviews, increasing an already lengthy process.

Policy and next steps

Respondents to both national and the Vermont surveys were slow to predict when things will be "normal". Nearly 54% of respondents to the Vermont survey were uncertain, less than 4% felt like they were already normalizing, and a combined 26% estimated stabilization by mid-2022.

While there are some indications of stabilization for individual material markets (for example, lumber prices), pandemic-related shortages are also being exacerbated by large scale national recovery investments. The State of Vermont has placed over three times the typical annual housing development capital into the system. Unmet needs and broad support for additional investment makes more funds for housing likely during 2022. While this investment is undoubtedly needed, the housing construction industry does not exist in a vacuum, and additional federal and state investments in infrastructure spending will cause competition for contractors, labor, and impact material markets.

After surveying the landscape, there are a few realities likely to manifest in 2022, with the potential to carry further into the future:

- Continued higher project costs. Prices will likely remain elevated, and a new inflationary pricing reality may be settling in for the long-term.
- Like inflation in our economy at large, it is too early to tell if increases in material and labor are permanent or transitory.
- The federal Infrastructure bill is likely to increase pressure on labor, material, and general development capacity.
- Projects are likely to continue to have delays, and some projects will delay starts, over the next 12 months.

Policy Implications

1. Due to the issues addressed in this paper, investments in the development of housing and public infrastructure will likely be more expensive and take longer to complete than pre-pandemic. Expectations for production of housing units, infrastructure projects, and other investments in the current material and labor market should reflect the current market environment.

2. Policy-related solutions should focus on regulatory barriers to housing development.
    a. Removing inefficiencies in the permitting and review process can help mitigate the impact of material and labor constraints.
    b. Duplicative federal, state, and local review processes should be integrated to the extent possible.
3. In other states, some efforts to curb affordable housing development cost increases have paused since those efforts can make developments infeasible.
    a. Some states with "hard caps" on development costs suspended or made upward adjustments.
    b. Multiple states reported using federal recovery funding to provide gap funding for multi-family projects that experienced cost escalation.
4. Meeting state and federal energy and climate change initiatives will likely increase upfront cost while ultimately saving in operations. As goals around energy and climate change continue to expand, so must funding increase to support the construction of buildings meeting those goals.
5. A growing body of research[14] is exploring the role of the "citizen voice" in project-level approval processes. Public processes intended to allow for broader participation are an important part of strong public policy outcomes, however, goal-rich projects that are adding density and much needed housing to Vermont's communities sometimes face delays and escalating costs as result.

[14] Brookings Institute, *Hutchins Center Working Paper #54: Infrastructure Costs*, 2019