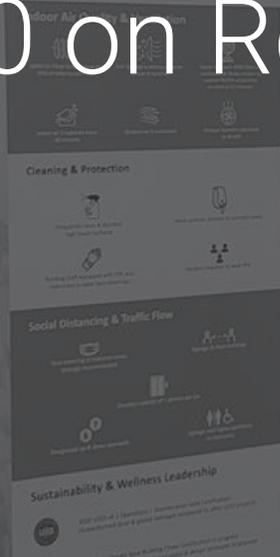


A Transformative Year: Impacts of 2020 on Real Estate

URBAN LAND INSTITUTE

JULY 14, 2021

1702 Your Healthy Workplace



The infographic is a vertical poster with a light background and dark text. It is divided into four main sections, each with a title and several bullet points or icons. The sections are: 1. Indoor Air Quality & Ventilation, 2. Cleaning & Protection, 3. Social Distancing & Traffic Flow, and 4. Sustainability & Wellness Leadership. Each section includes small icons and text describing best practices for a healthy workplace.

With a pandemic and a racial reckoning, 2020 was a challenging and impactful year for the country. ULI wanted to understand: What were the impacts of these forces on the real estate industry at the building and company levels? What changes are here to stay, and which are expected to fade?

Research Process

Consultant: RE Tech Advisors

ULI: Building Healthy Places, Greenprint Center for Building Performance, Center for Real Estate Economics and Capital Markets

Funded by: ULI Trustee Randall Lewis

Market
Research

Stakeholder
Interviews

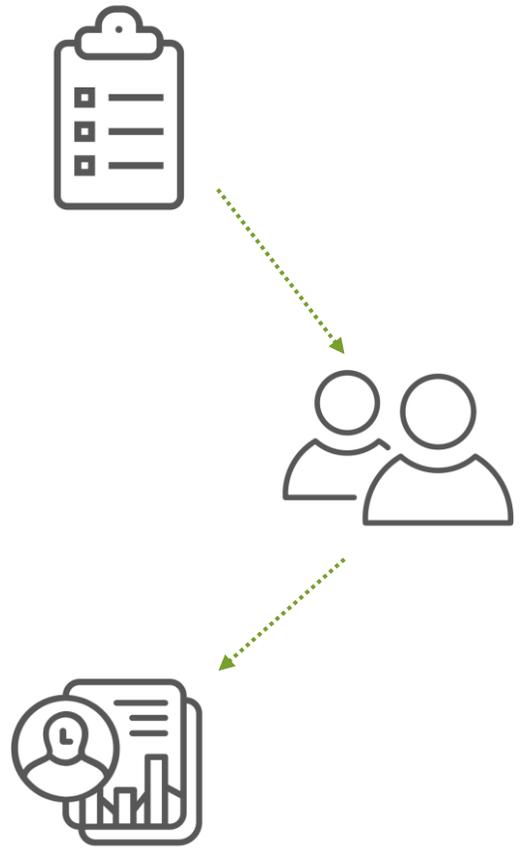
Survey
Development
& Distribution

Survey
Analysis

Key Takeaways

- Building managers and operators pivoted quickly to respond to the pandemic.
- Advanced filtration, mask wearing, temperature checks, and other measures were prevalent, as were enhanced communication strategies.
- Survey respondents forecast that many health-oriented building changes are here to stay.
- The industry wanted more guidance from government and other sources on how to navigate an unprecedented situation, especially when it comes to the COVID response.
- Flexibility was prevalent in navigating the financial impacts of the pandemic, with 80% of respondents implementing rent concessions and other measures.
- Many companies responded to the country's racial reckoning by adopting enhanced DEI measures.

Study Scope



Building Impacts

- Operations & Technology**
- HVAC
 - Lighting
 - Water
 - Lobbies, elevators
 - Staggered starts
 - Directing foot traffic

- Cleaning and Sanitation**
- Staff training
 - Equipment/products
 - Frequency

- Building Certifications**
- WELL
 - Fitwel
 - UL Healthy Building
 - LEED
 - Others

Human Impacts

- Employee Policies**
- Health/wellness
 - Work from home
 - Benefits
 - Behavioral norms (masks, etc.)

- DEI, ESG, People Ops**
- Hiring policies & recruiting
 - Community work and volunteering

- Communications**
- Landlords to tenants
 - Organizations to employees

Financial Impacts

- Leases and Rent**
- Rent concessions and amortizations

- Shift to Other Markets**
- Into suburbs
 - Out of cities

- Change in Space Needs**
- Loss of tenants
 - Tenants downsizing leased space
 - Expanded space to allow for social distancing

- Budget Adjustments**
- New budget lines for COVID operations



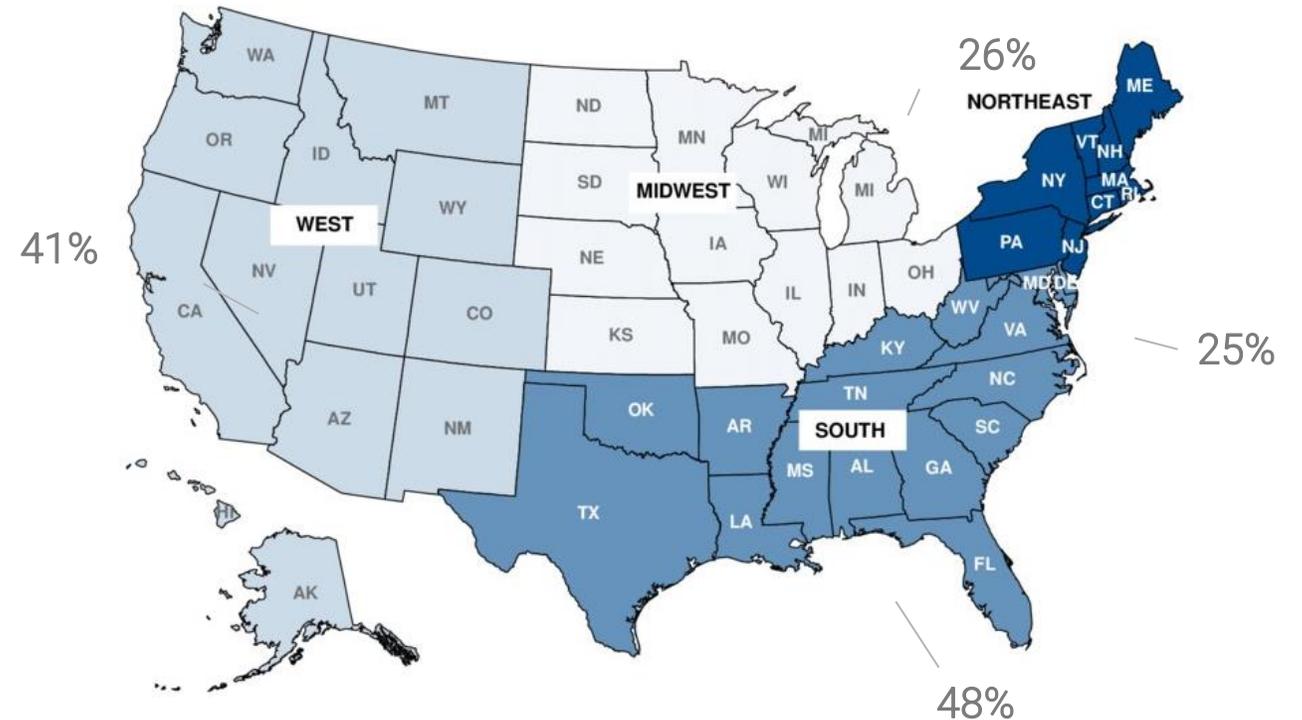
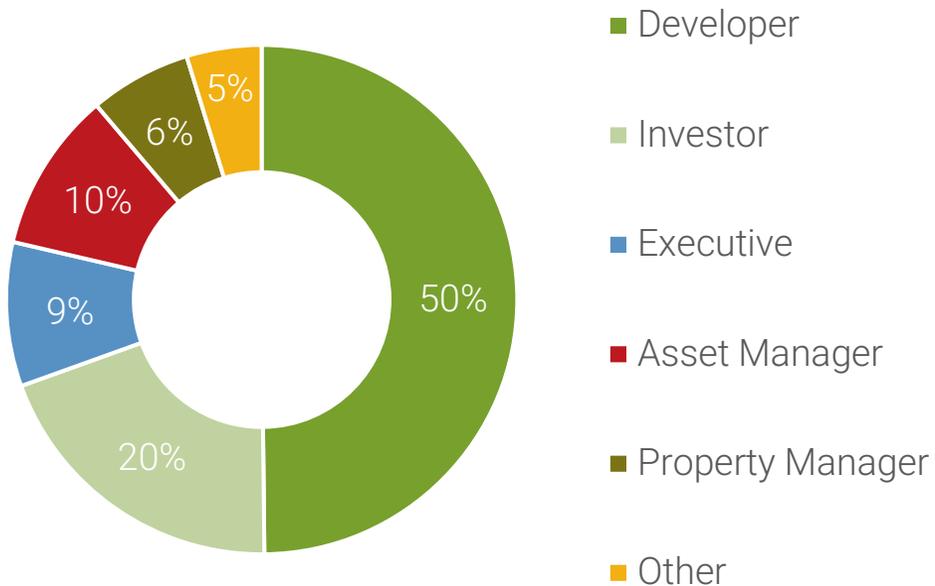
About the Survey

Respondent Profile

Nearly 300 respondents throughout the U.S.

Survey was fielded March 31 to April 21, 2021

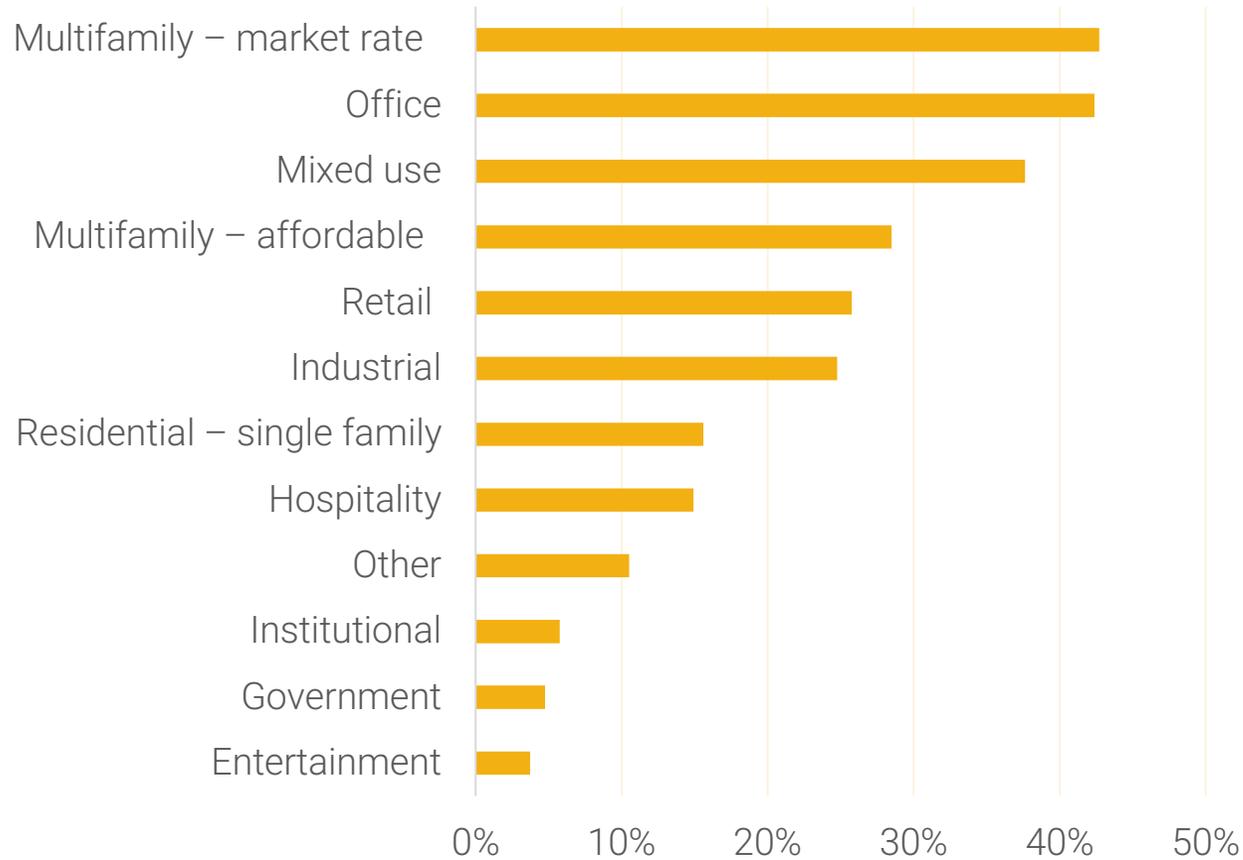
Real Estate Industry Role



Note: Percentages include respondents that selected multiple property types.

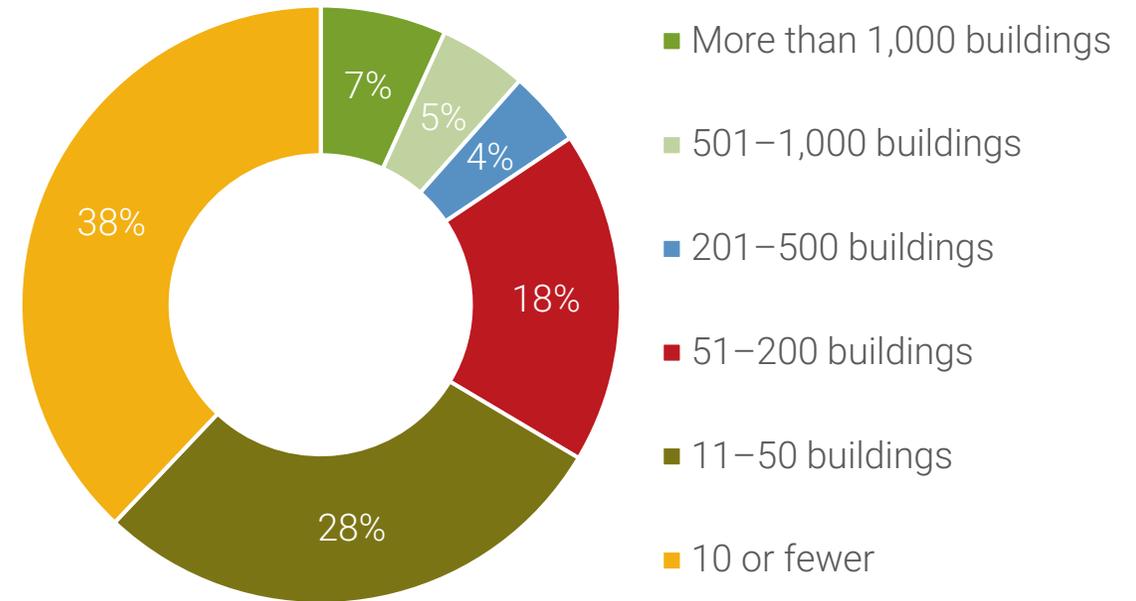
Respondent Profile

Property Type Specialization



Note: Percentages include respondents that selected multiple property types.

Portfolio Size



Survey questions were informed by interviews with:

- The Tower Companies
- LBA Realty
- Jamestown
- Granite Properties



Building Impacts

Property-Level Measures

Measures were included based on industry research, interviews, and experience.

Equipment/Operational	Space Layout	Occupancy
MERV-13 filters	Enhanced SOPs	Face covering requirement
MERV-15 filters	Increased cleaning training	Symptom checks
Portable air filtration units	Visual cues for social distancing	Elevator occupancy restrictions
Advanced filtration technology	Socially distant space layout	One-directional travel
Increased airflow and HVAC	Closure of common areas	Increased well-being comms
Increased outdoor air	Physical barriers	Increased health & safety comms
Nightly air flushing	Anti-microbial surface technology	Staggered shift schedule
Natural ventilation	Touchless experience	
UV-C lights in HVAC	UV far lighting technology	
Air quality testing		

Property-Level Measures: Overview

Adjustments to space layouts or occupancy were more prevalent among respondents than equipment measures.

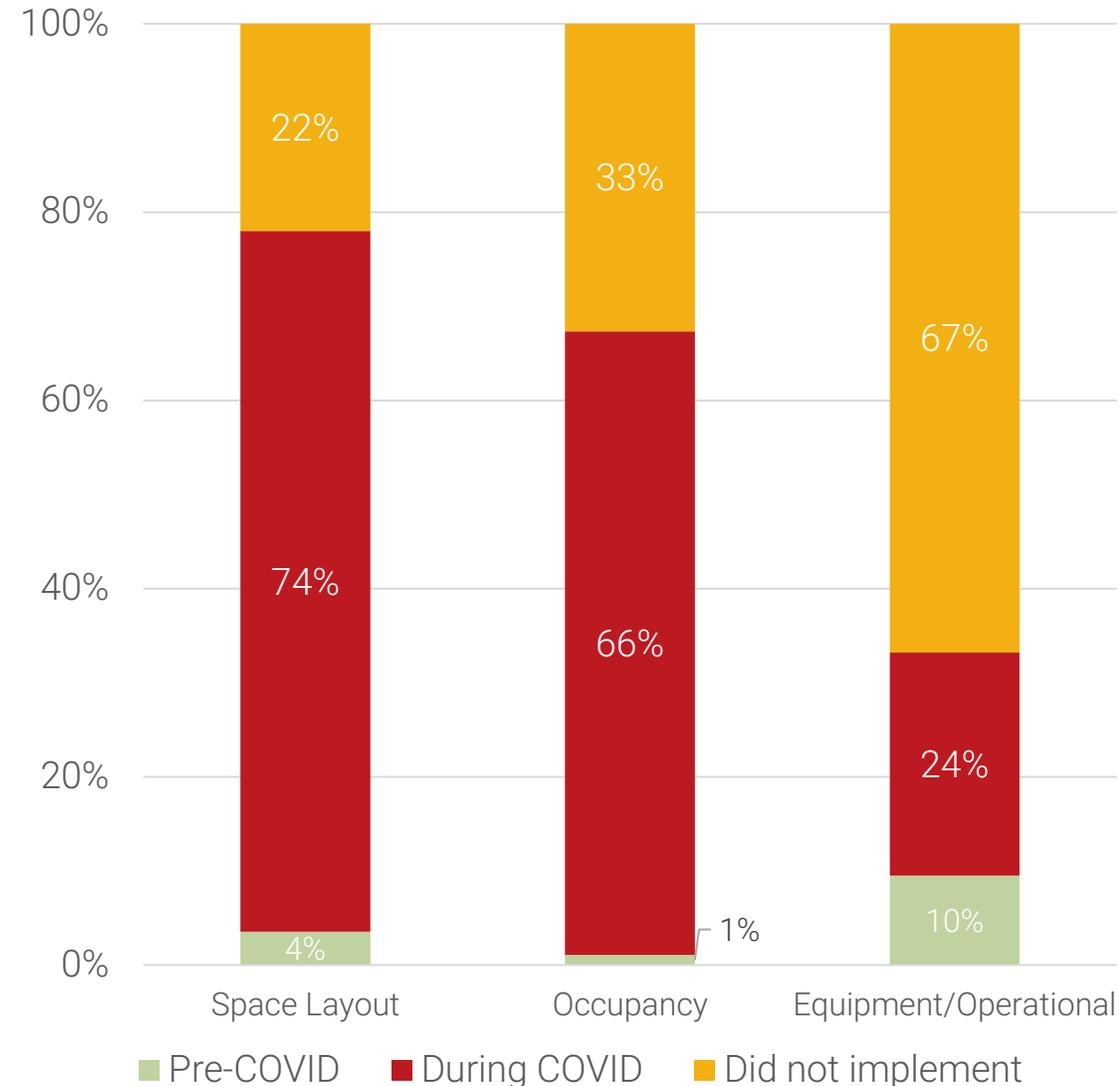
Of respondents who implemented measures (pre-COVID and during COVID), they on average implemented:

6 out of 9 space layout measures

5 out of 7 occupancy control measures

3 out of 10 equipment/operational measures

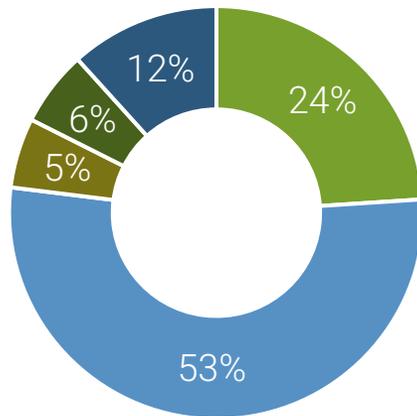
Type of Measures Implemented and Timeline



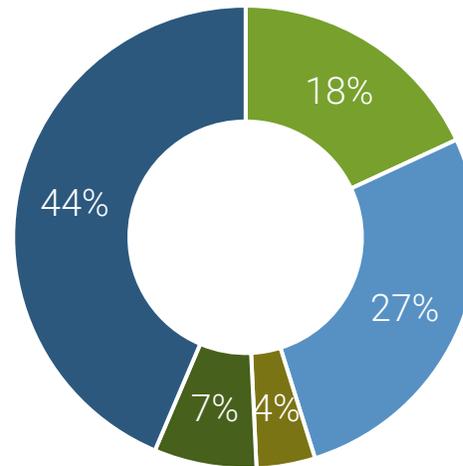
Property-Level Measures: Permanency Expectations

Equipment measures are here to stay, but occupancy and space measures are more likely to revert to former policy.

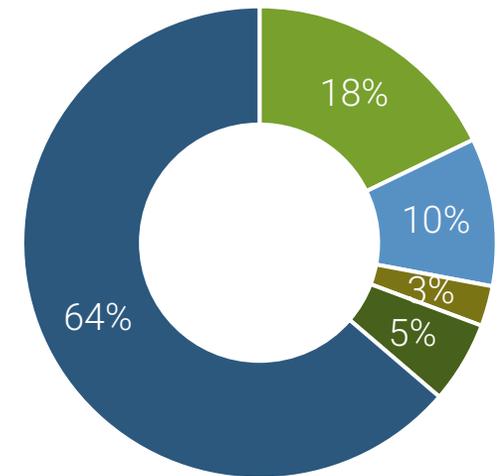
Equipment/Operational Measures



Space Layout Measures



Occupancy Control Measures



■ Until the pandemic is over

■ For at least 3 years

■ For at least 5 years

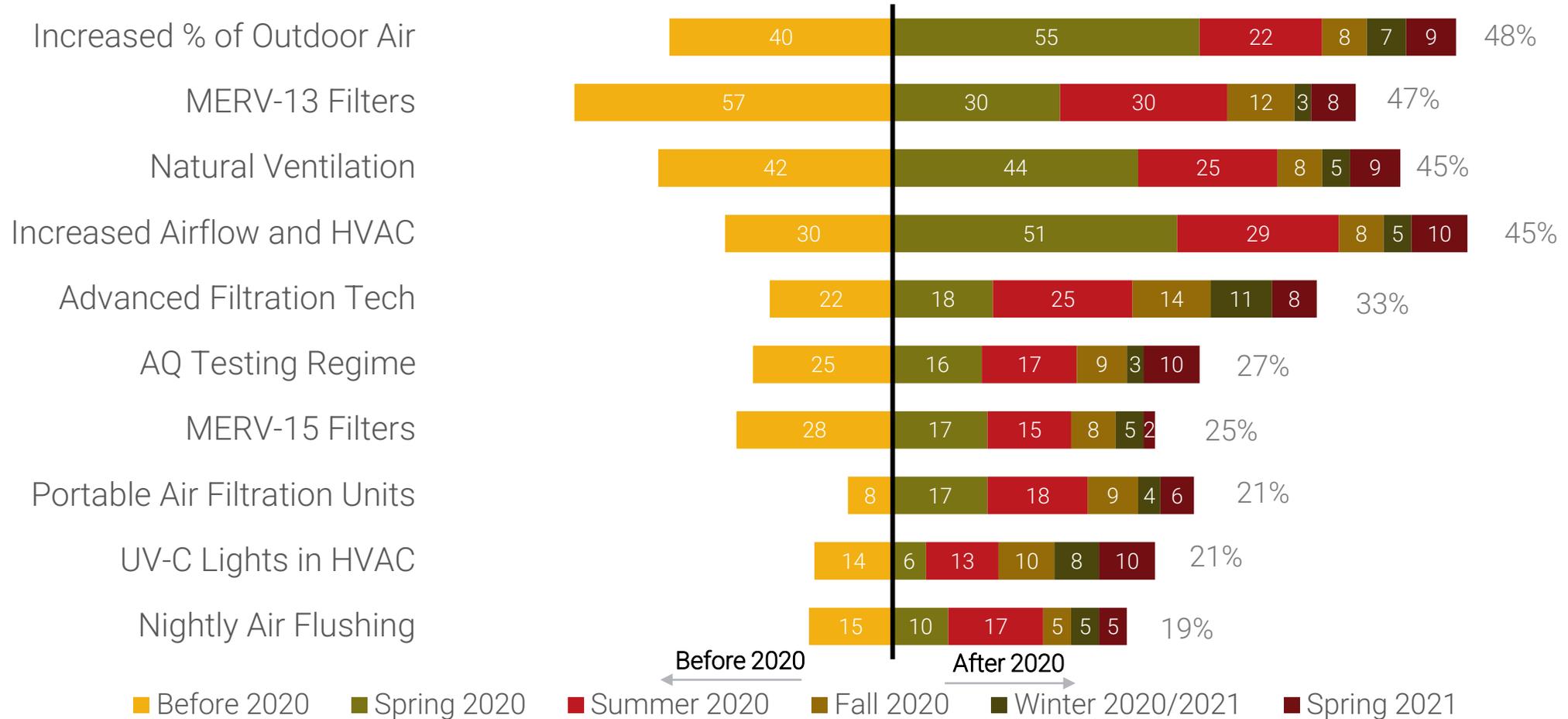
■ Permanently

■ Unsure

*“Will we bounce back, or is this a forever change to culture?”
—Director of operations*

Equipment/Operational Measures

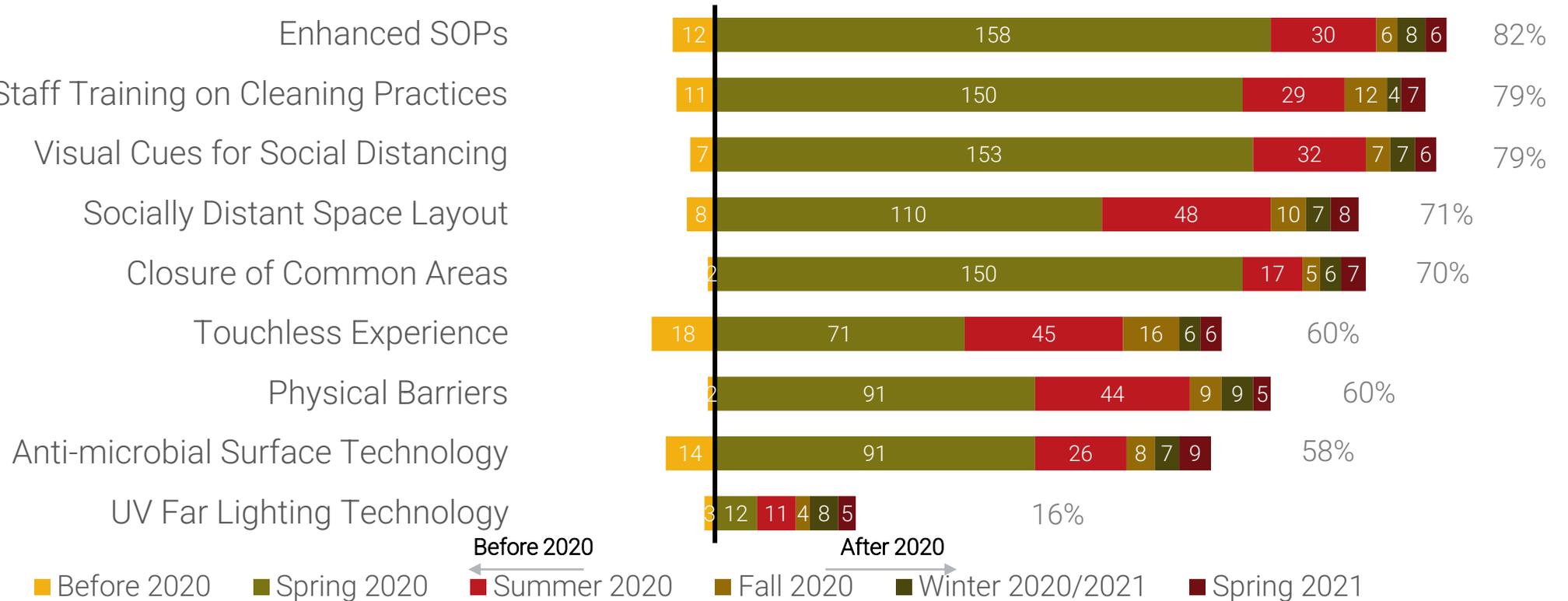
Measure Implemented and Timeline



Note: Percentages represent total respondents that applied each measure.

Space Layout Measures

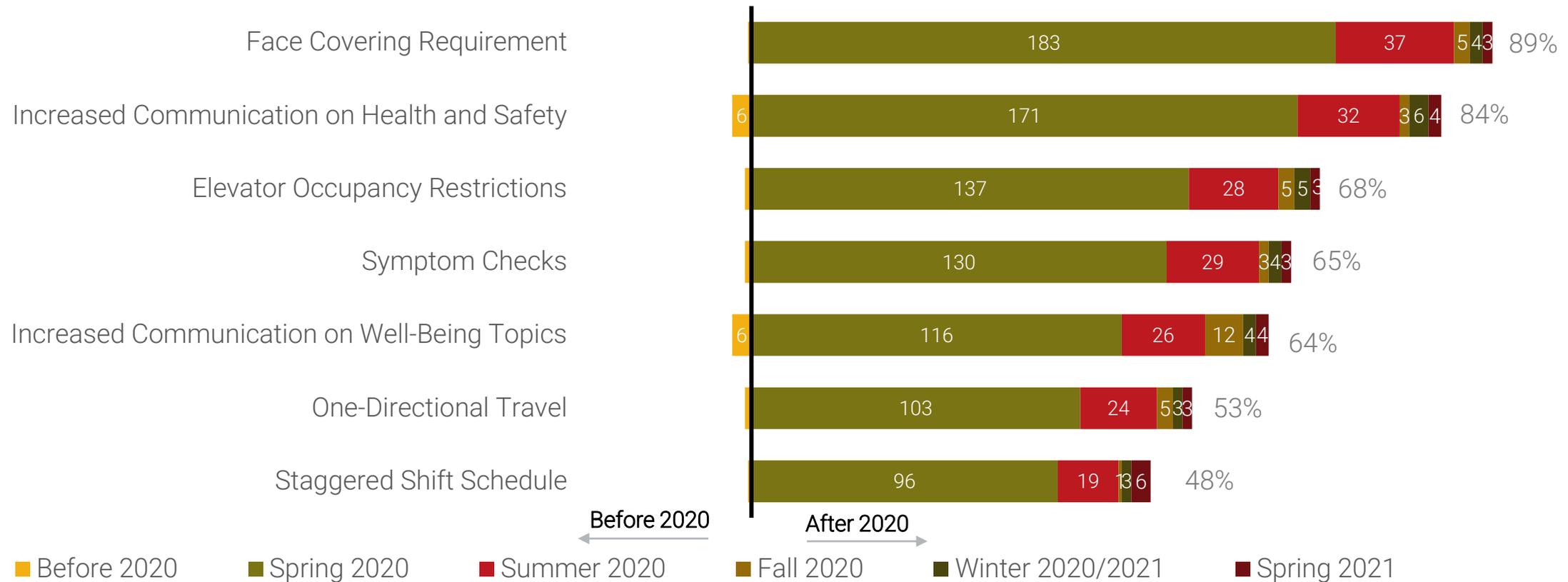
Measure Implemented and Timeline



Note: Percentages represent total respondents that applied each measure.

Occupancy Control Measures

Measure Implemented and Timeline

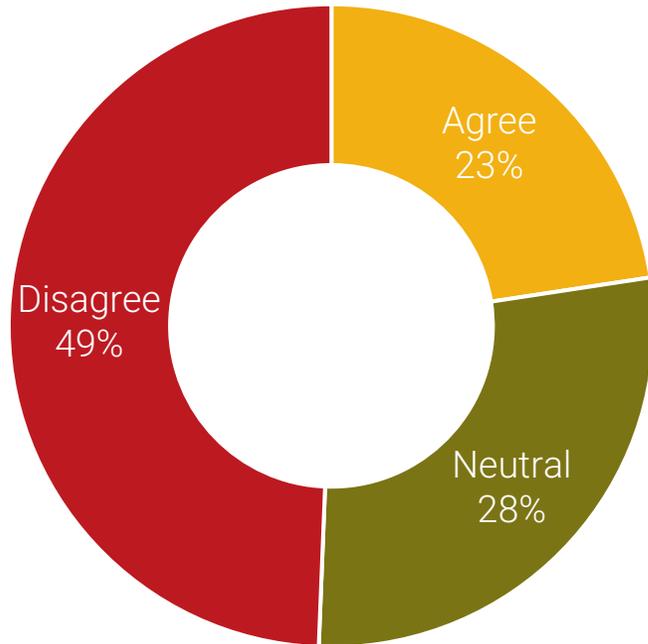


Note: Percentages represent total respondents that applied each measure. Any percentages not labeled on the graph are 2 percent or less.

Barriers

Most respondents reported few barriers to implementing changes in their buildings.

I faced barriers when implementing changes in response to COVID-19.



Most-Prevalent Barriers:

1. Lack of funding – 33%
2. Lack of internal support or buy-in – 24%
3. Lack of guidance from local or federal government – 23%
4. Lack of guidance from CDC or organizations relevant to my industry – 20%

Motivations

Respondents reacted primarily to third-party guidance and shared experiences from peers.

Top 5 Motivations

1. Guidance from CDC or organizations relevant to my industry (e.g., ASHRAE)
2. Local government guidance/regulations
3. Company's mission
4. Liability to staff, tenants, and other stakeholders
5. Reputation in the market

“The conversations at Greenprint meetings helped me get the buy-in I needed.”

—Sustainability manager

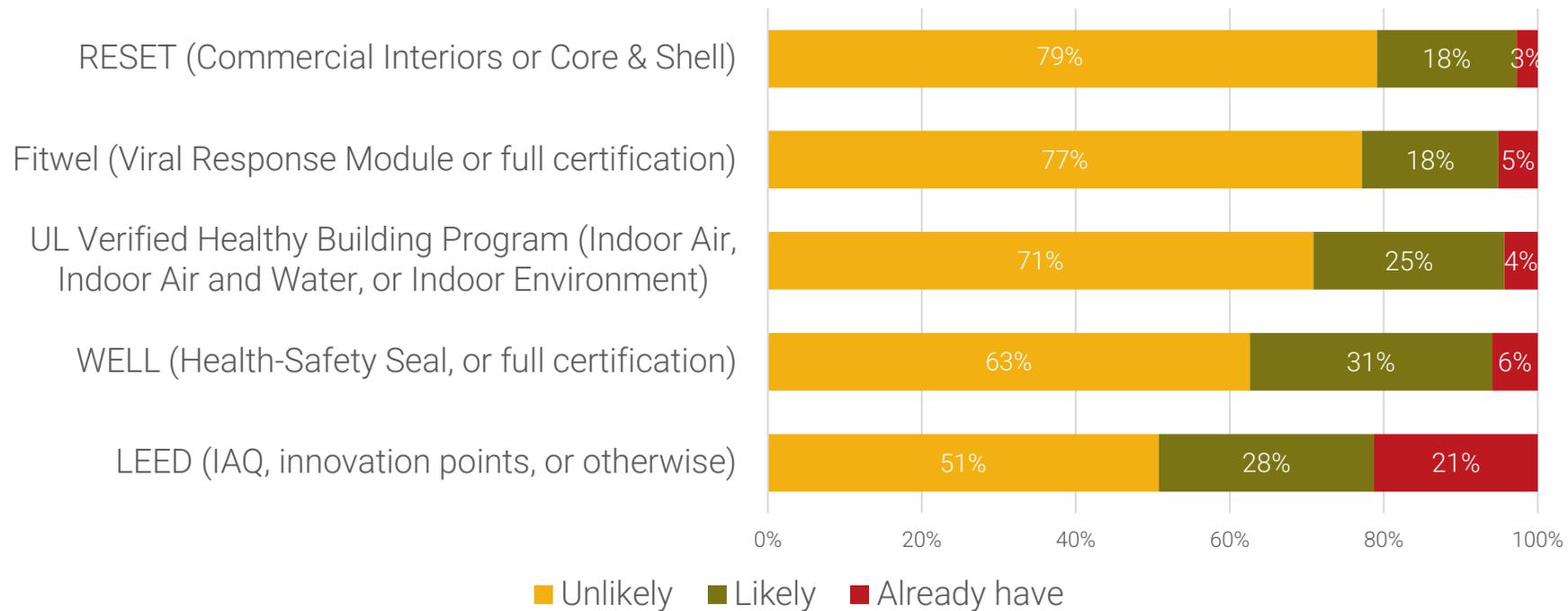
“We compared our due diligence and research to anecdotes from other firms.”

—Engineering and sustainability coordinator

Certifications

Overall, respondents said they were unlikely to pursue new health and wellness certifications.

Certification and Likelihood to Pursue



58%

of respondents already have at least one building certification, or are likely to pursue one

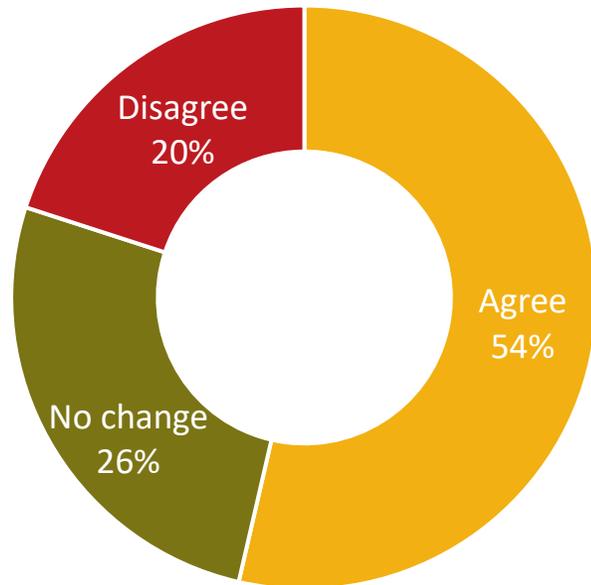


Financial Impacts

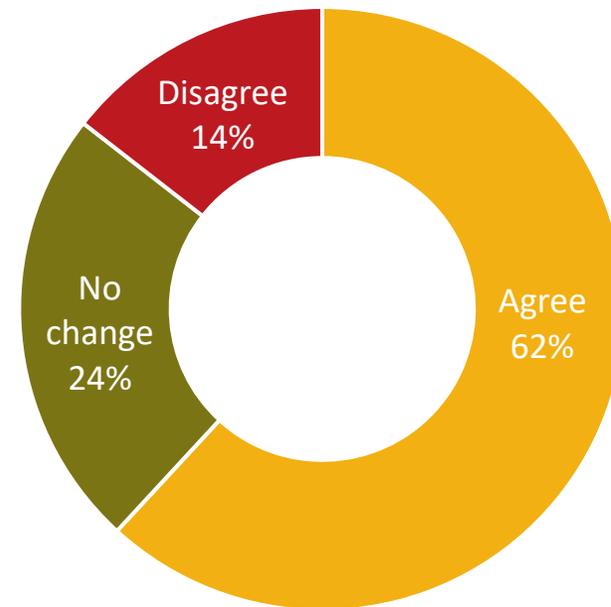
Financial Impacts

Most respondents saw an increase in operational costs and capital budgets.

Operational Costs Increased



Capital Budget Increased



"I saw rental income decrease throughout my portfolio, as well as costs increase."

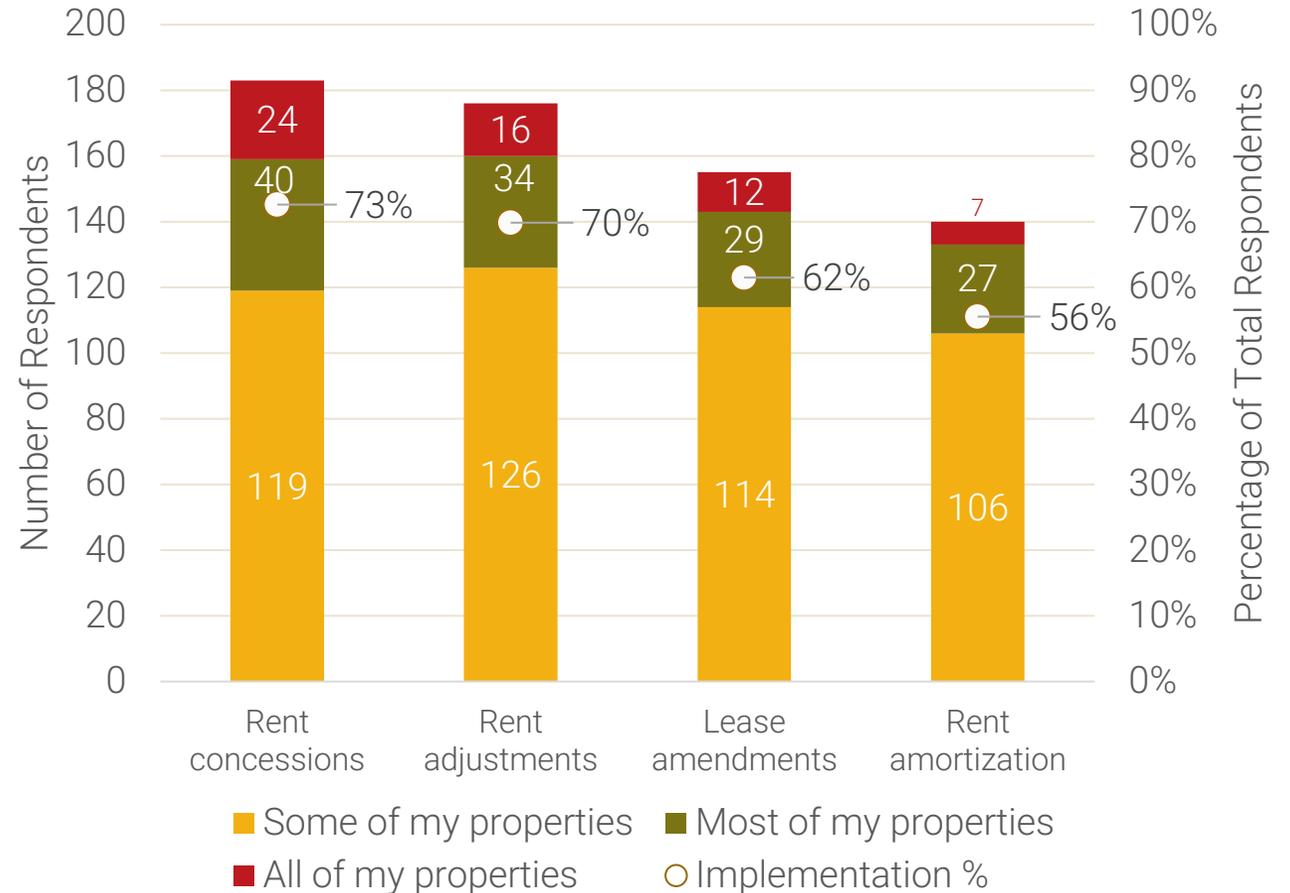
—Developer

Financial Impacts: Leasing

Most offered rent concessions and other adjustments. Collaboration, communication, and flexibility were essential.

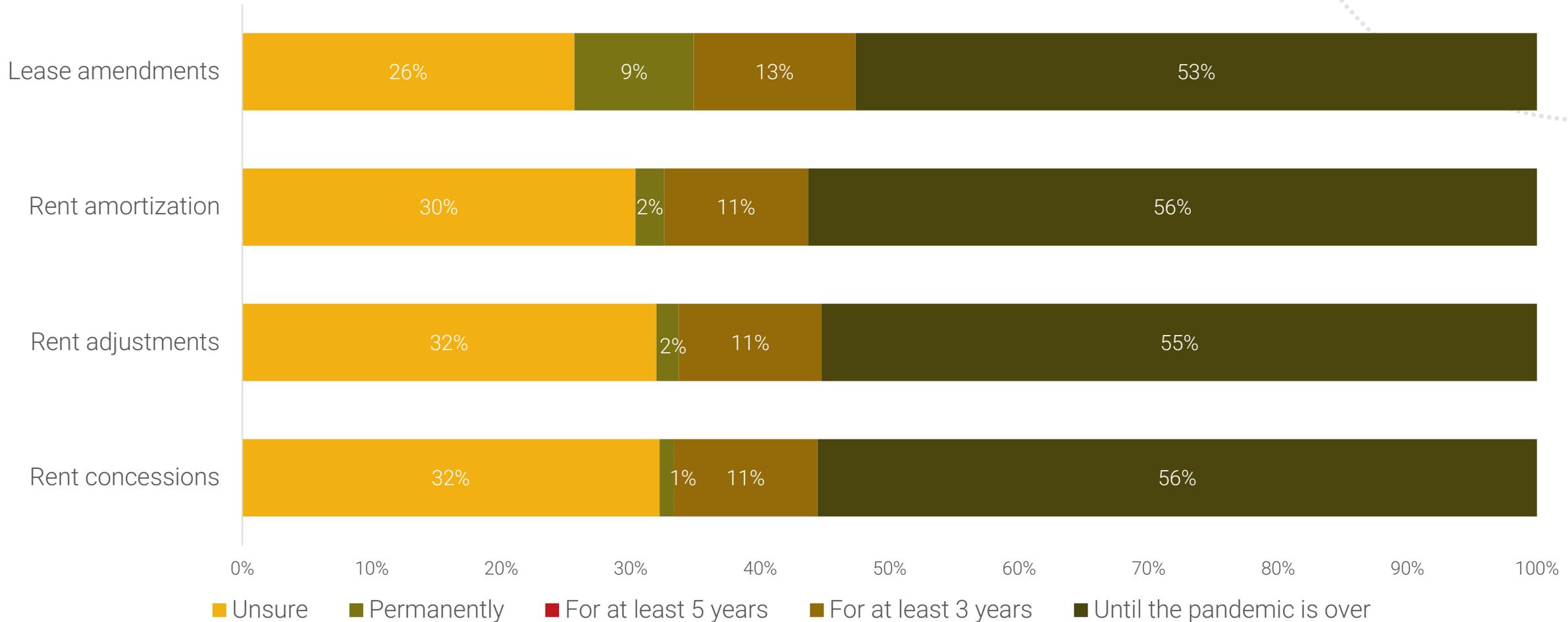
“You cannot overcommunicate with your customers.”
 —Engineering and sustainability coordinator

“We’re all in this together.”
 —Vice president of sustainability and social responsibility



Timeline Expectations

Respondents expect financial flexibility to be needed for extended periods.





Human Impacts

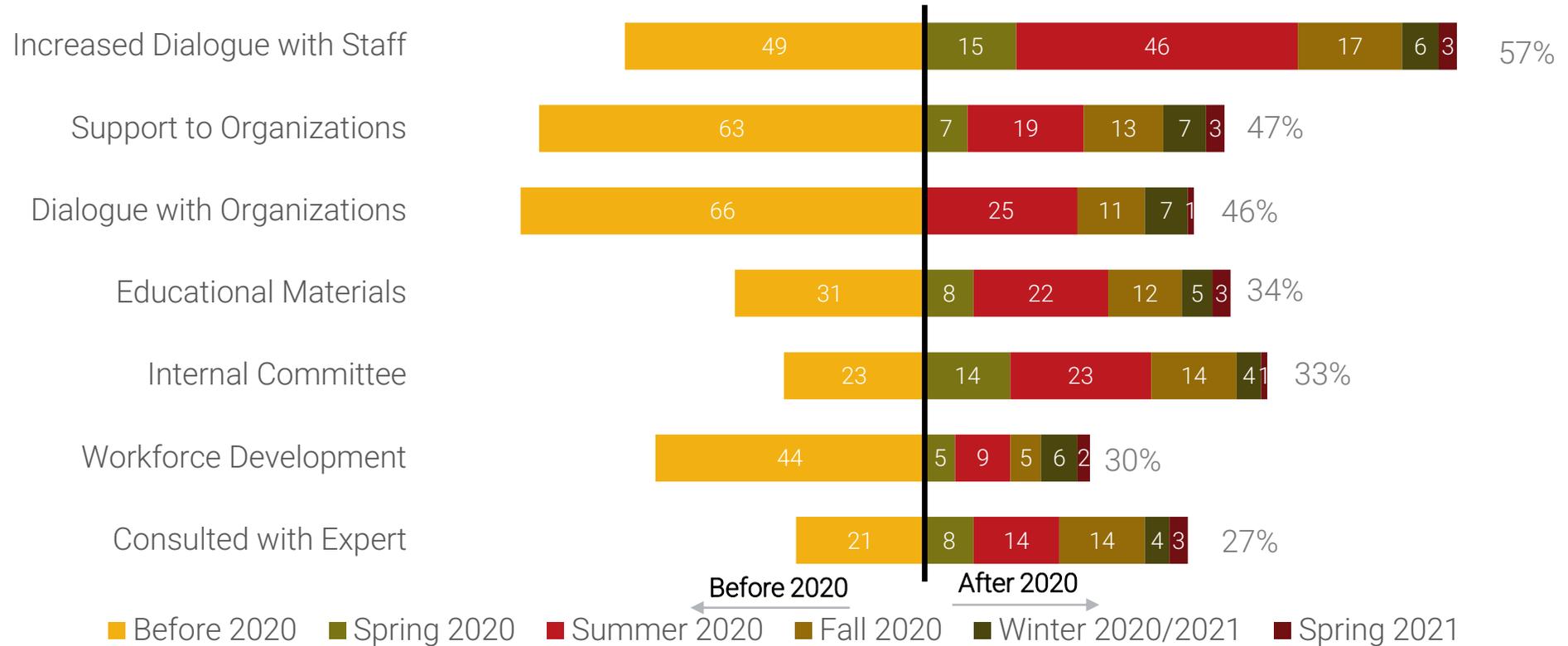
Diversity Equity and Inclusion

Respondents who implemented DEI measures on average had implemented 3 out of 7 DEI measures.

Rank	Measure	Percentage of Respondents
1	Increased dialogue with staff regarding issues related to race, injustice, and inequity	57%
2	Donated time or resources to local organizations focused on giving support to marginalized communities	47%
3	Dialogue with local organizations in communities affected by development projects	46%
4	Distribution of educational materials regarding DEI topics to staff	34%
5	Started an internal committee focused on advancing the awareness of topics surrounding DEI within the company	33%
6	Workforce development/job training programs for local residents	30%
7	Hired an in-house DEI expert or consulted external DEI experts to assess gaps and increase inclusion efforts	27%

Diversity, Equity, and Inclusion Measures

Measure Implemented and Timeline



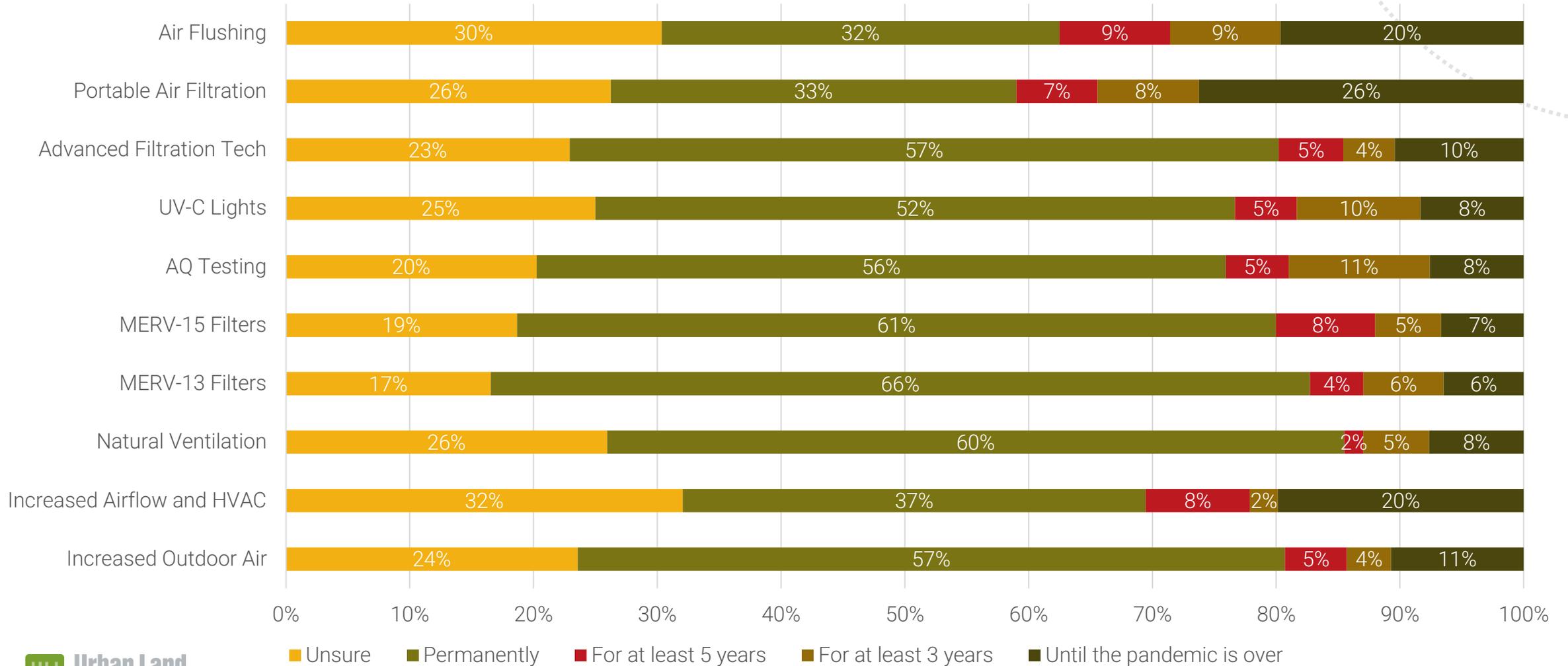
Note: Percentages represent total respondents that applied each measure



Data – In Depth

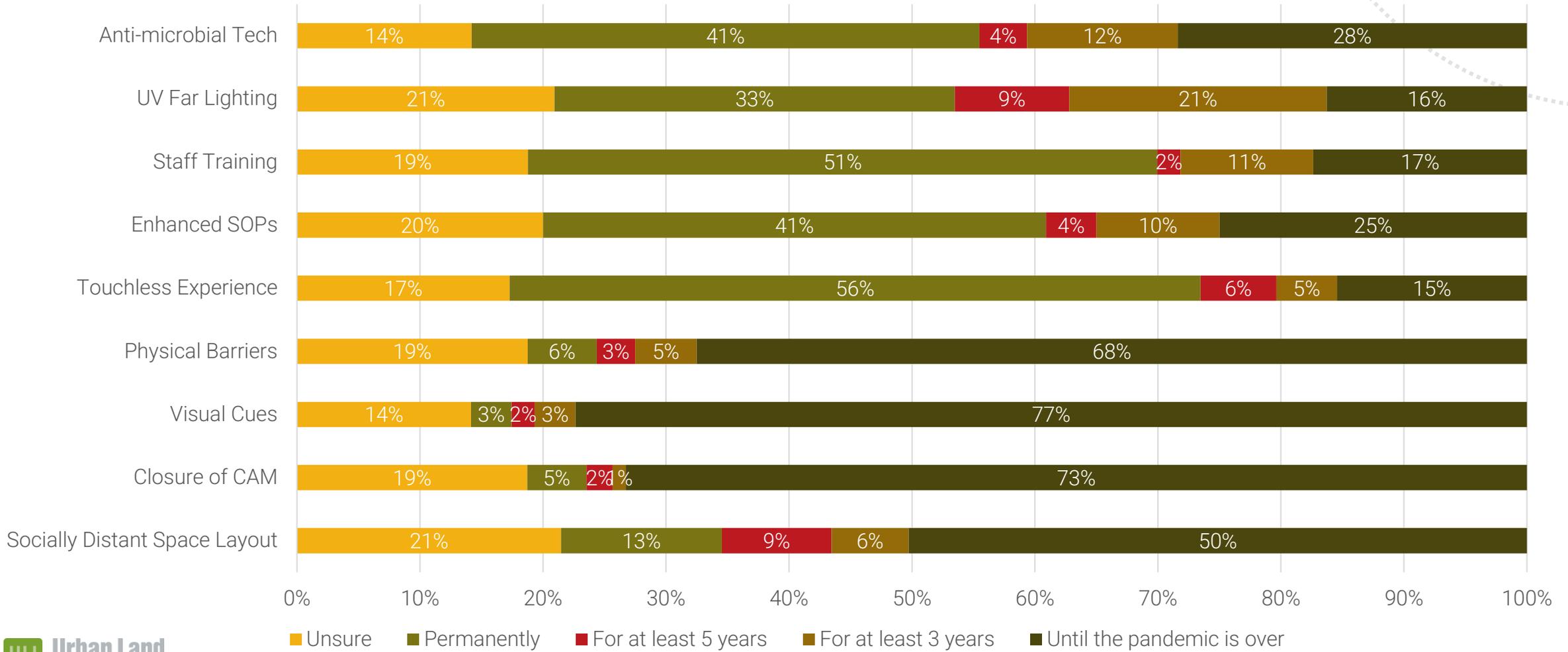
Timeline Expectations

Equipment/Operational Measures



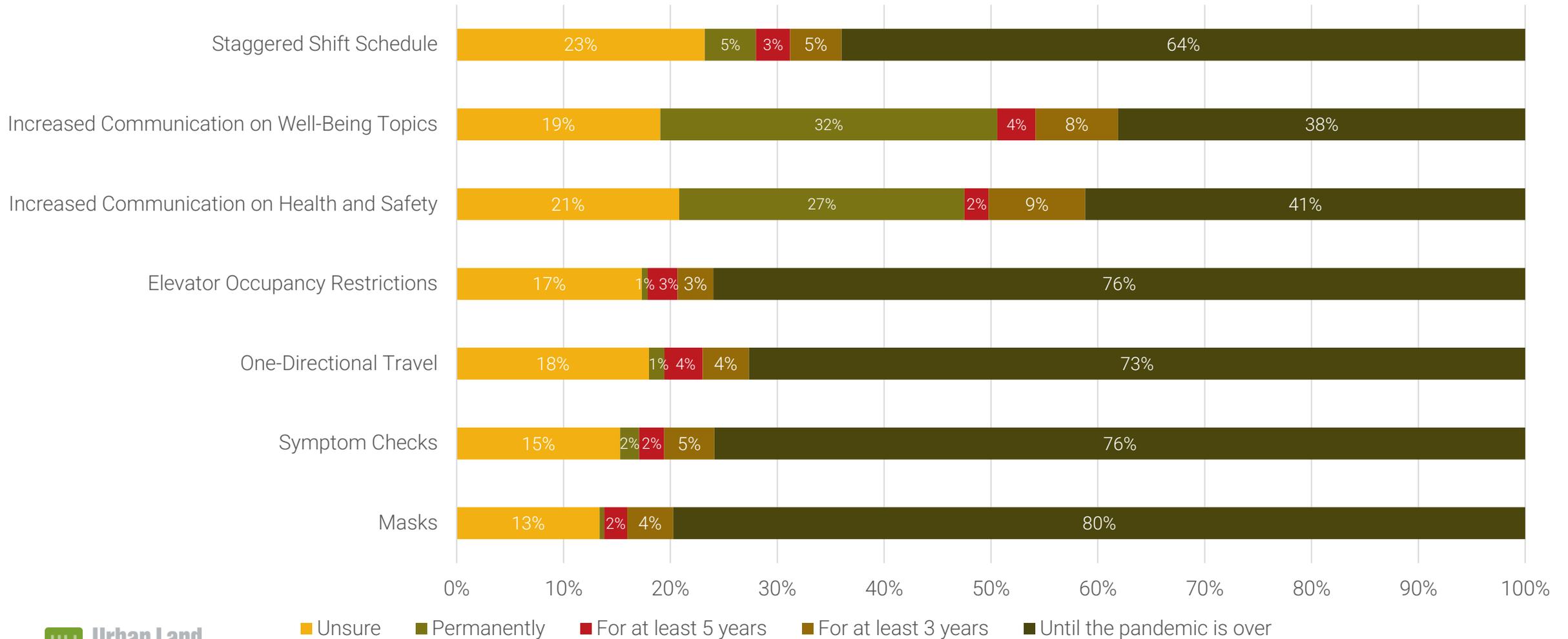
Timeline Expectations

Space Layout Measures



Timeline Expectations

Occupancy Measure Breakout



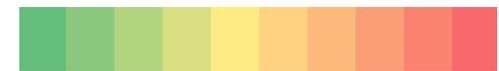
Median Number of Measures Implemented per Respondent

Regional Breakout

Region	Equipment/Operational	Space Layout	Occupancy	Financial	DEI
Midwest	2.5	6	5	3	2
Northeast	4	7	6	4	5
South	2	6	5	3	2
West	3	6	5	4	2

Maximum number of measures to select from:

- Equipment/Operational: 10
- Space Layout: 9
- Occupancy: 7
- Financial: 4
- DEI: 7



Least

Most

Note: Heat scale is assigned by column

Median Number of Measures Implemented per Respondent

Property Type Breakout

Property Type	Equipment/Operational	Space Layout	Occupancy	Financial	DEI
Government	0	N/A	N/A	N/A	N/A
Hospitality	4.5	7.5	5.5	1.5	1.5
Industrial	3	4.5	3.5	3	6
Institutional	4	7.5	7	2	6.5
Mixed use	4	7	4.5	4	0.5
Office	4	6	4	3	2
Other	4	6	4	2	1
Residential – multifamily affordable	1	6.5	6	2	3
Residential – multifamily market rate	0.5	7	4.5	4	2.5
Residential – single family	0	3	2.5	1	2.5
Retail	1	6.5	4.5	4	1.5

Maximum number of measures to select from:

- Equipment/Operational: 10
- Space Layout: 9
- Occupancy: 7
- Financial: 4
- DEI: 7



Least

Most

Note: Heat scale is assigned by column

Median Number of Measures Implemented per Respondent

Portfolio Size Breakout

Portfolio Size	Equipment/Operational	Space Layout	Occupancy	Financial	DEI
10 or fewer	3	6	5	2	2
11–50 buildings	3	7	5	4	2
51–200 buildings	3	7	6	4	2
201–500 buildings	5	6	6.5	4	4.5
501–1,000 buildings	0	4.5	6	2	3
More than 1,000 buildings	0	6.5	6	2.5	5.5

Maximum number of measures to select from:

- Equipment/Operational: 10
- Space Layout: 9
- Occupancy: 7
- Financial: 4
- DEI: 7



Least

Most

Note: Heat scale is assigned by column

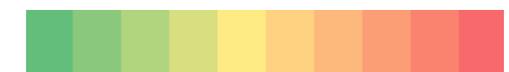
Median Number of Measures Implemented per Respondent

Job Category Breakout

Job Category	Equipment/Operational	Space Layout	Occupancy	Financial	DEI
Asset Manager	3	7	5	4	1.5
Developer	3	6	5	3	2
Executive	5	7	6	2	5
Investor	3	6	5	4	1
Other	0	4	5	0	3.5
Property Manager	5	8	6	4	2

Maximum number of measures to select from:

- Equipment/Operational: 10
- Space Layout: 9
- Occupancy: 7
- Financial: 4
- DEI: 7



Least

Most

Note: Heat scale is assigned by column