

CODES Survey

The Code Official Digitization and Efficiency Support (CODES) project is a Department of Energy (DOE), Resilient and Efficient Codes Implementation (RECI) - funded initiative designed to address challenges in small and under-resourced jurisdictions by reducing administrative burdens and freeing resources. Improvements made through digitization allow Code Officials to dedicate themselves to their mission of advancing public safety and resiliency through the built environment.

To better understand current processes, roadblocks to digitization, and the needs of the building code community, the CODES project team created this survey so that those in the industry could submit feedback on these topics. The analysis below will assist in deciding themes to further explore and identify participants who may be open to further conversation.

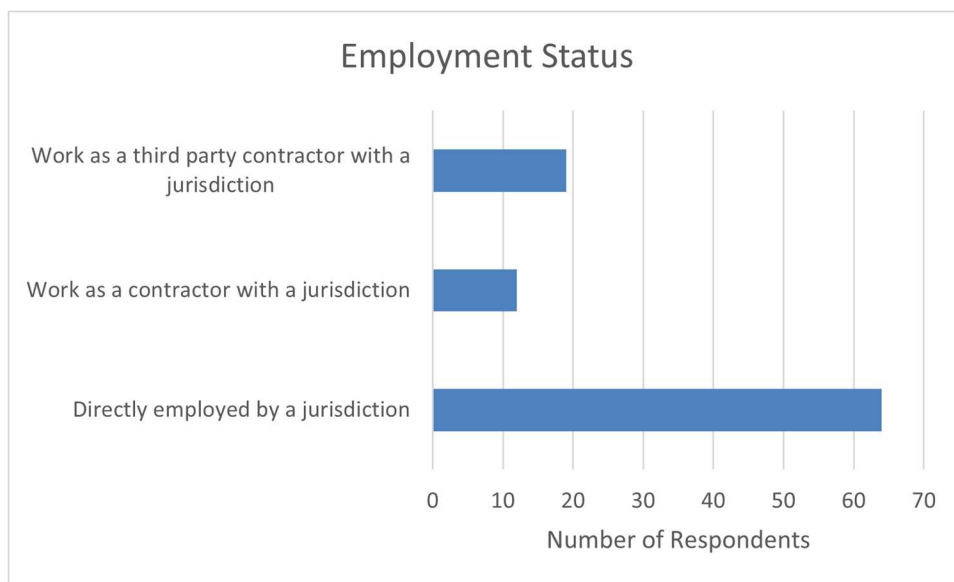
The survey was distributed over 4 months through various outlets such as social media, email, and word of mouth. There have been 97 responses, with a completion rate of 61%.

Survey Results

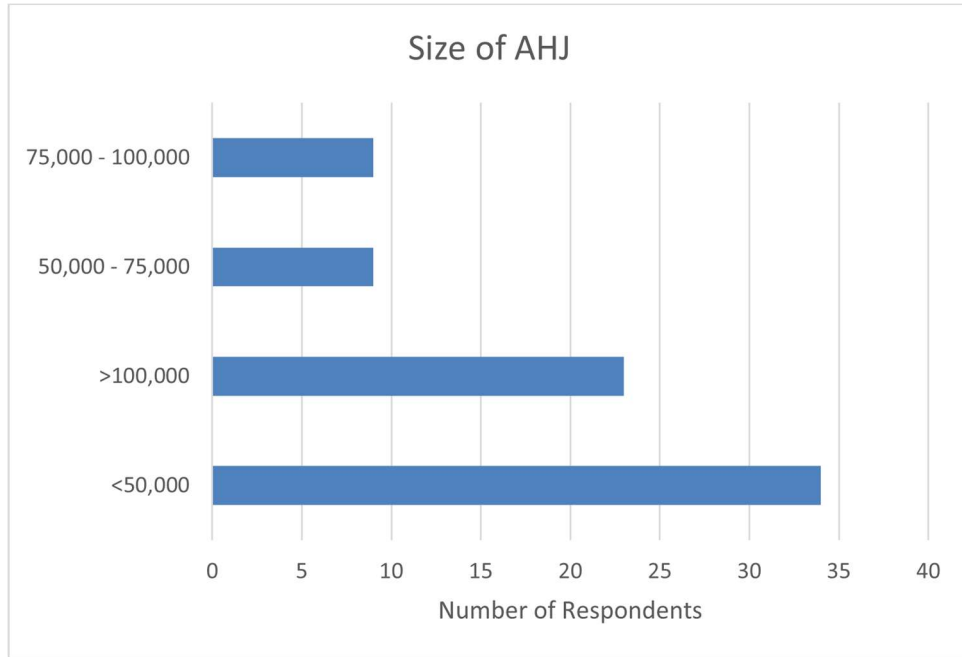
The survey included demographic questions and specific queries on the respondents' jurisdictions' status and relationship with digitization.

Demographics

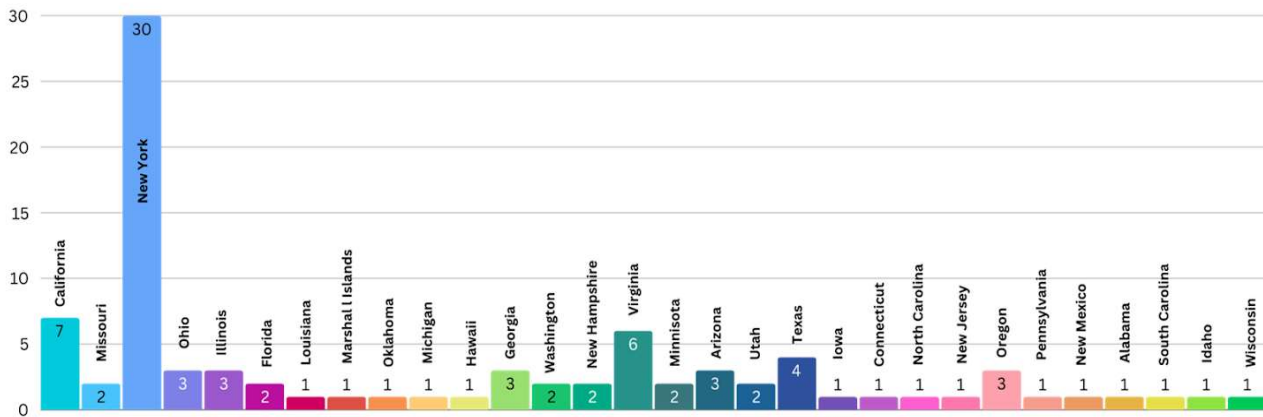
The survey respondents were asked how they were employed: directly by a jurisdiction, directly working as a contractor, or as a third party. Most respondents worked directly for a jurisdiction. Further distribution of the survey should focus on audiences that either work as a contractor with the jurisdiction or as a third-party contractor with a jurisdiction.



An additional demographic question asked what size of Authority Having Jurisdiction (AHJ) the respondents worked for or with; the options ranged from less than 50,000 residents to more than 100,000 residents. Most respondents worked in AHJs with less than 50,000 residents, which was the primary audience of this survey because of the focus on rural and underserved AHJs.

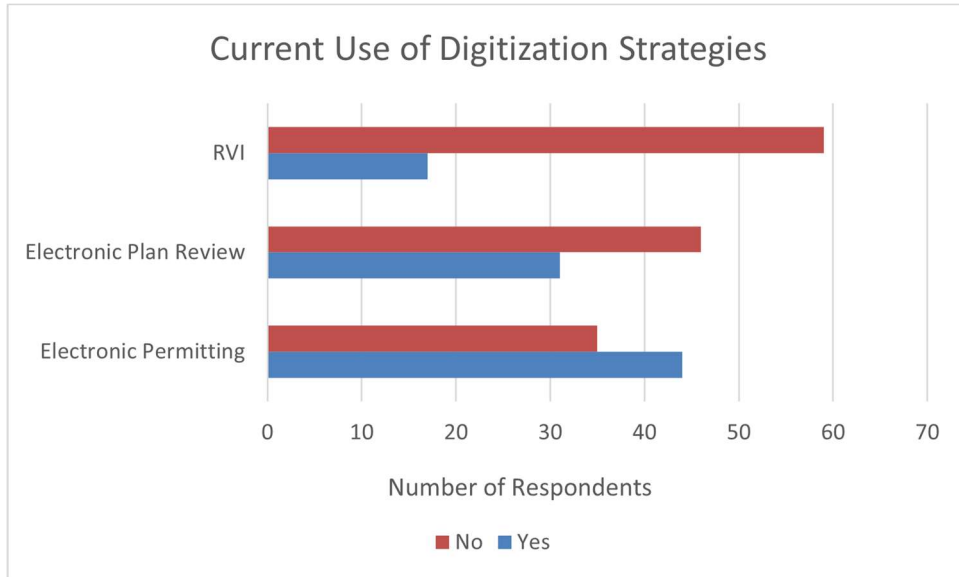


The geographic distribution of survey respondents is illustrated below. Most respondents came from New York, where outreach and distribution primarily occurred. While the response from other states was low, there was representation from all regions of the United States, including the territories. If distribution of the survey continues, there should be an extra emphasis on states that contain more significant percentages of rural and underserved communities, such as Idaho, Alabama, or Missouri.

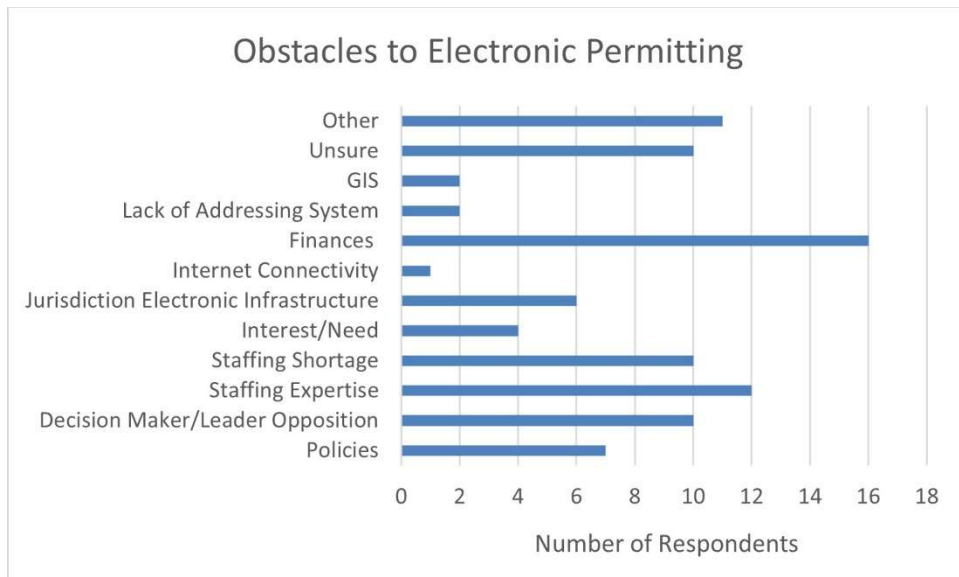


Digitization

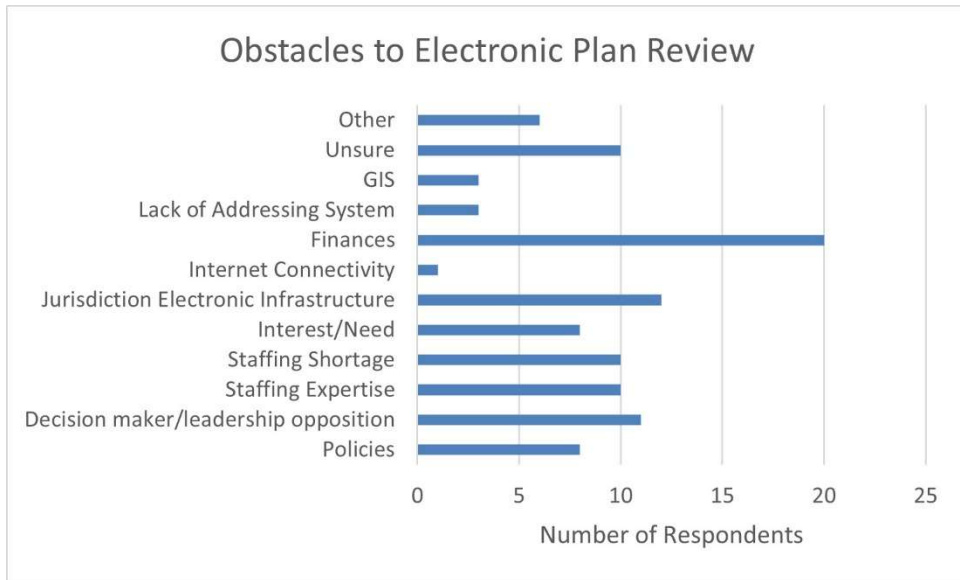
E-permitting was the most common form of digitization in use; less than half the jurisdictions used electronic plan review, and fewer still employed remote virtual inspection (RVI).



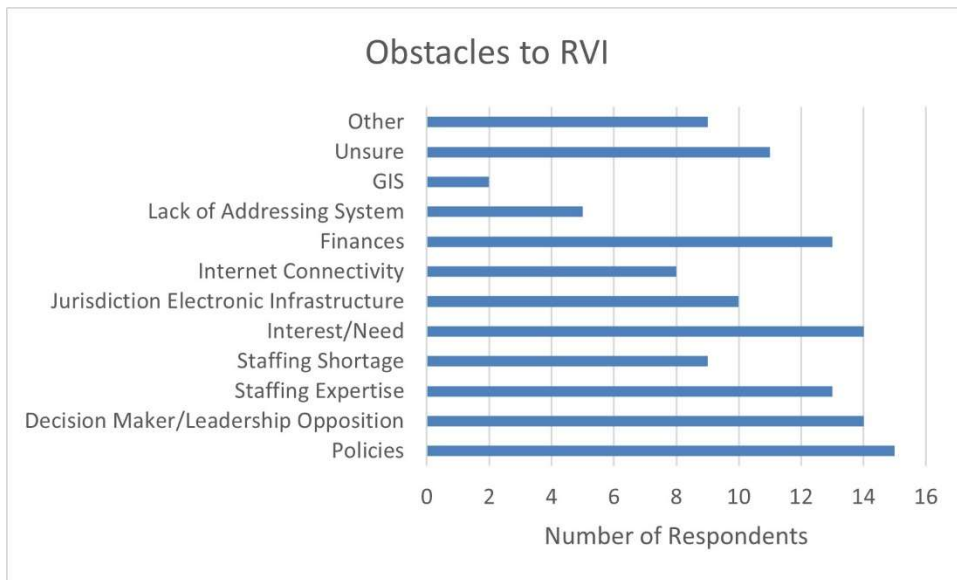
Over 56% of the respondents indicated their jurisdictions used e-permitting. Obstacles identified varied; however, many respondents listed staffing expertise and finances as barriers to conducting e-permitting.



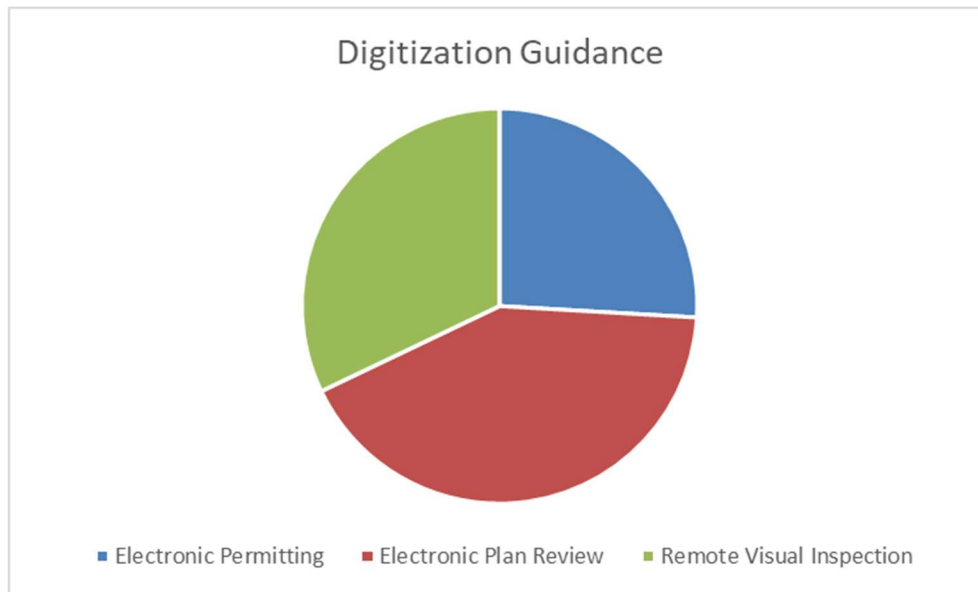
Fewer respondents' jurisdictions had a digital platform for conducting electronic plan reviews, with only 44% indicating they did have this ability. Of the obstacles listed, finances were seen as the most significant barrier to electronic plan review, with jurisdiction electronic infrastructure being the second most identified barrier.



Even fewer professionals surveyed had access to digital platforms that supported RVI, with 78% answering *no* to this ability. The obstacles identified were incredibly varied, with policies, opposition from decision-makers/leaders, and interest/need noted as the most prominent barriers.



When survey respondents were asked if, out of electronic permitting, electronic plan review, or remote visual inspection, they would like additional guidance or materials, they generally responded affirmative for all three - with electronic plan review showing a slight preference. As such, any materials or guidance published post survey should encompass all three topics to address the needs presented appropriately.



Recommendations

Based on survey results, interviews with respondents should prioritize the following themes that would benefit from a higher level of narrative and anecdotal understanding.

- Finances and staffing expertise identified as preventing electronic permitting (Q: *What has prevented electronic permitting*)
- Jurisdiction electronic infrastructure identified as preventing electronic plan review (Q: *What has prevented electronic plan review*)
- Exploring processes the survey takers thought could be automated or done better (Q: *Are there repetitive/time-intensive processes you wish could be automated or done better? If so, please describe.*)
- The identified resistance by AHJs to digitization (Q: *Are there challenges to digitization that this survey has not addressed? If so, please describe.*)

Potential follow-up questions, previously identified, include

- Can you describe your role in the organization and key responsibilities, particularly in highlighting your interaction with digital tools?
- What challenges do you face in your role, especially with processing/filing applications and using digital tools?

- Are there any specific roadblocks or hurdles for applicants or the application process?
- What digital tools does your department currently use, and how effectively are they achieving your desired outcomes?
 - Are there any gaps or challenges in their use?
- How do digital tools support collaboration and communication within your team and with stakeholders?
 - What improvements would you suggest enhancing these aspects?
- What recommendations do you have for improving the use of digital tools in your projects and workflows?
- Are there any emerging technologies or tools that could significantly enhance your work?

Of the respondents consenting to continued outreach, the ten below should be prioritized. Half represent jurisdictions with a population under 50,000, aligning with the focus of the study, and they represent a variety of geographical regions across the United States. They all had thoughtful and informative perspectives on the above-mentioned themes, making them ideal candidates for a more in-depth interview.

Name	Location	AHJ Size	Contact
Kota Wharton	Ohio	<50,000	kwharton@grovecityohio.gov
Amy Norling	Minnesota	<50,000	anorling@ci.cambridge.mn.us
Victor Gonzales	California	<50,000	vgonzales@emeryville.org
Jeff Ballew	Texas	<50,000	firechief@evgov.org
Robert Pennington	Florida	<50,000	rpennington@townofbelleair.net
Thurman Pllum	South Carolina	50,000 - 75,000	tpellum@cityofgoosecreek.com
Sophia Jungbauer	Minnesota	75,000 - 100,000	sjungbauer@mncee.org
Rick Meister	Missouri	>100,000	rmeister@sccmo.org
Ron Clements	Virginia	>100,000	clementsro@chesterfield.gov
Ted Zuk	Oregon	>100,000	zuktj@jacksoncountyor.gov