

Virtual Courtroom Survey: Analysis Report

Joseph A. Hamm¹; John Ropp²; Brent A. Scott³; Amanda R. Witwer²

¹Michigan Supreme Court Administrative Office

²School of Criminal Justice, Michigan State University

³Broad College of Business, Michigan State University

Executive Summary

In July of 2020, the Michigan Virtual Courtroom Taskforce fielded a survey to the Michigan Judiciary to understand experiences with virtual courtrooms during the early part of the COVID-19 Pandemic and to identify areas where additional support was needed.

Four key recommendations flow from this data:

1. Technology and connection issues were relatively uncommon for court staff but were much more of an issue for other participants. Efforts to support to individuals outside of the court are likely to yield benefit.
2. Respondents consistently reported concerns rooted in the fact that virtual courtroom participants are not co-located. Although would caution against excessive efforts to control participant behavior as they are likely to do more harm than good, the results do suggest that there may be an important subset of case types that could benefit from thinking creatively about how best to ensure justice while not compromising accessibility.
3. At the time of the survey, concern about virtual courtrooms and livestreaming court proceedings were relatively low among respondents and they generally felt comfortable with technology. Nonetheless, those who were more concerned and less comfortable did use virtual courtrooms differently. Efforts to identify and provide training and best-practices to these individuals may be especially helpful. It is important to note, however, that concerns and comfort may have shifted since the survey was fielded.
4. Most Supplementary Survey respondents appeared relatively insulated from the potential negative impacts of the pandemic on their attitudes toward work but this insulation was stronger for judges with circuit court responsibilities than other judges. Efforts to identify the elements of circuit court work that are most beneficial—and especially those that help these judges feel confident in their efficacy at work—and to deploy them in district and probate court are likely important.

These recommendations should be contextualized against two key limitations:

1. Despite a strong response rate, the current survey data represents only a portion of the Michigan Judiciary. The voices of African American respondents in particular are relatively poorly represented.
2. There is significant potential for completing a survey fielded by the SCAO to encourage respondents to report a more positive picture of themselves than they might truly feel, especially in the Supplementary Survey.

Acknowledgements

The authors would like to recognize the tireless support of the Michigan Supreme Court Administrative Office and especially of the Statistical Research Director, Laura Hutzal. We would also thank the entire Virtual Courtroom Taskforce for their work, both in generally supporting the Michigan Judiciary during the COVID-19 Pandemic and specifically in conducting this survey. Finally, we would like to thank all of the respondents to this survey for their willingness to provide their time and perspectives.

Background

The COVID-19 Pandemic upended court activities across the globe. In Michigan, Governor Whitmer declared a State of Emergency on March 10, 2020. On March 15th, the Michigan Supreme Court responded with an administrative order restricting access to the courts and encouraging increased remote access¹. Courts across the state responded by moving proceedings online where possible.

In response to this move to increase remote access to the courts, the Michigan Supreme Court Administrative Office (SCAO) formed the Virtual Courtroom Taskforce² to provide guidance and support to the judiciary during the pandemic. In July of 2020, the Taskforce fielded a survey to all Michigan judges as well as a number of referees, magistrates, court administrators, probate registers, court clerks, and court reporter/recorders. The survey was conducted online via SurveyMonkey and 516 distinct individuals started the survey.

As reported in Table 1, the survey was started by 225 (39.9%) of Michigan’s 564 judges. Response rates by race/ethnicity, sex, court type, and year of birth were largely comparable with the exception of African American judges, 23.2% of whom responded to the survey. The survey was also started by 70 referees, 45 magistrates, 86 court administrators, 21 probate registers, 12 court clerks, 37 court reporters/recorders, and 20 other individuals but demographic information is not available for these respondents.

Demographic Group		Judge Survey Responders	Judge Survey Non-responders	Survey Response Rate
Total		225	339	39.9%
Race/Ethnicity	African American	19	63	23.2%
	White	199	267	42.7%
	Other	7	9	43.8%
Sex	Female	106	129	45.1%
	Male	119	210	36.2%
Court Type	Circuit	90	129	41.1%
	District	94	147	39.0%
	Probate	41	63	39.4%
Year of Birth	< 1957	72	116	38.3%
	1957-1967	91	113	44.6%
	> 1967	62	110	36.0%

Note: “Other” includes racial and ethnic groups with less than 5 judges (Arab, Asian Pacific Islander, and Hispanic) and judges for whom race/ethnicity was missing.

At the completion of the main survey, judges were invited to complete an additional series of questions regarding their own experience of the pandemic. As reported in Table 2, approximately 30% of Michigan Judges completed³ the Supplemental Survey and this response rate largely held across demographic groups, again with the exception of African American judges.

¹ <https://courts.michigan.gov/News-Events/covid19-resources/Pages/AOs.aspx>

² <https://courts.michigan.gov/News-Events/covid19-resources/Pages/VCR.aspx>

³ Responses with missing data were excluded from Supplementary Survey analysis.

Demographic Group		Judge Supplemental Survey Responders	Judge Supplemental Survey Non-responders	Supplemental Survey Response Rate
Total		169	395	30.0%
Race/Ethnicity	African American	12	70	14.6%
	White	151	315	32.4%
	Other	6	10	37.5%
Sex	Female	73	162	31.1%
	Male	96	233	29.2%
Court Type	Circuit	70	149	32.0%
	District	70	171	29.0%
	Probate	29	75	27.9%
Year of Birth	< 1957	58	130	30.9%
	1957-1967	63	141	30.9%
	> 1967	48	124	27.9%

To further characterize the sample, respondents were asked to report the extent to which they were concerned about using virtual technology for court proceedings during the pandemic, concerned about livestreaming during the pandemic, and were comfortable using technology for court proceedings. As reported in Table 3, most respondents reported low concern and moderate comfort with technology but significant differences across roles were identified. In general court reporter/recorders and judges were most concerned about using virtual technology during the pandemic, while probate registers and clerks were typically less concerned. Concern with live streaming was highest among referees and judges and comfort with technology was lowest among court reporter/recorders.

Role in Court	Average Concern with Virtual Technology during the Pandemic*	Average Concern with Livestreaming during the Pandemic*	Average Comfort with Technology for Court Proceedings**
a. Judge	0.85 ^{b,d,e,f}	0.98 ^{e,d}	2.28 ^b
b. Referee	0.61 ^{a,c,g}	1.09 ^{e,d,e}	2.57 ^{a,c,g}
c. Magistrate	0.73 ^{e,f}	0.62 ^{a,b}	2.28 ^b
d. Court Administrator	0.59 ^{a,c,g}	0.77 ^{a,b}	2.45 ^g
e. Probate Register	0.22 ^{a,b,c,d,g,h}	0.67 ^b	2.47
f. Court Clerk	0.36 ^{a,c,g}	0.64	2.40
g. Court Reporter/Recorder	0.91 ^{b,d,e,f}	0.86	2.14 ^{b,d}
h. Other	0.61 ^c	0.72	2.41
All Participants	0.73	0.89	2.35

Note. *Response options: 0 = Not at all concerned, 1 = Concerned about certain types of cases, 2 = Concerned about all types of cases. **Response options: 0 = Not at all comfortable, 1 = Slightly comfortable, 2 = Moderately comfortable, 3 = Extremely comfortable. Means are statistically significantly different from roles indicated by superscript ($p < .05$).

Main Survey Results

Use of Virtual Courtroom Platforms. Respondents were first asked the extent to which they have used any of several available platforms for virtual courtroom proceedings. As reported in Table 4, the far majority used Zoom, Polycom, or both and relatively few reported not using any of the listed platforms (1.7%).

Platform	Number (%) of Main Survey Respondents Who Selected
Zoom	433 (83.9%)
Polycom	326 (63.2%)
Zoom and Polycom at the same time	323 (62.6%)
Adobe Connect	5 (1.0%)
Webex	16 (3.1%)
Google Meet	17 (3.3%)
GoTo Meeting	30 (5.8%)
Microsoft Teams	25 (4.8%)
Skype	19 (3.7%)
None	9 (1.7%)

To determine the extent to which platform usage was related to concern or comfort with technology, ANOVAs were conducted comparing the mean level of concern and comfort across those who did and did not use each platform. Few significant differences were identified but respondents who reported using Zoom and Polycom tended to report more comfort with technology ($M = 2.43$; “Moderately comfortable”) than those who did not ($M = 2.20^4$; “Moderately comfortable”), as did respondents who reported using GoTo Meeting ($M = 2.63$; “Extremely comfortable”) when compared to those who did not ($M = 2.33^5$; “Moderately comfortable”).

Case Types. Respondents next reported the portion of various case types that they had personally conducted via virtual courtrooms. As reported in Table 5, most responses corresponded to “Many”, but preliminary examinations, adoptions, and bench trials were notably lower.

Respondents also reported their willingness to continue hearing each case type if the administrative order were to be extended. Most were willing to continue virtual courtroom proceedings across case types but were again least willing to continue preliminary examinations and adoptions. Child protective/terminations were also notably low despite being currently conducted at a relatively higher rate.

Correlations were next computed to determine the extent to which the portion of each case type currently conducted virtually was related to concern or comfort. Comfort with livestreaming was never related, but the current portion of cases conducted online for approximately half of the case types was related to concern with technology and/or comfort with technology. The strongest consistent relationships were with criminal pleas, traffic or civil infractions, and civil or summary proceedings such that individuals who conducted more of these cases online tended to be less concerned and more comfortable with technology. Conducting adoptions, guardianship/conservatorship, and bench trials online were consistently unrelated to concern or comfort.

⁴ $F(1,477) = 10.47, p = .001, \eta^2 = .02$

⁵ $F(1,477) = 4.50, p = .03, \eta^2 = .01$

Table 5. Case Types Conducted Virtually

Case Type	Average Portion of Cases Conducted Online*	Percent Willing to Continue Online	Correlation of Average Portion of Cases Conducted Online with:		
			Concern with Virtual Proceedings	Concern with Livestream	Comfort with Technology
Criminal Pleas	2.05	82.3%	-.16	NR	.30
Criminal Sentencing	1.94	72.1%	NR	NR	.22
Traffic or Civil Infractions	1.84	88.9%	-.25	NR	.41
Preliminary Examinations	1.39	63.6%	-.24	NR	NR
Civil or Summary Proc.	1.82	84.2%	-.19	NR	.25
Delinquency	2.05	74.5%	NR	NR	.21
Child Protective/Terminations	1.80	64.5%	-.20	NR	NR
Domestic Relations	2.17	84.8%	NR	NR	.26
Adoptions	1.22	66.1%	NR	NR	NR
Guardianship/Conservatorship	1.81	78.3%	NR	NR	NR
Bench Trials	1.05	64.0%	NR	NR	NR
Evidentiary Hearings/Motions	1.83	74.5%	-.14	NR	.22
Non-Evid. Hearings/Motions	2.08	93.8%	NR	NR	.22
Other Proceeding Types	1.87	88.9%	NR	NR	.27

Note. * Response options: 0 = None, 1 = Some, 2 = Many, 3 = All. All reported correlation coefficients significant at $p < .05$. NR = no (sig.) relation between variables.

Table 6. Reasons for Not Holding at Least One Proceeding Online by Court Role

	Total	Judge	Referee	Magistrate	Probate Register
Someone else decided	16.1%	21.8%	20.0%	28.9%	33.3%
Judicial preference	14.1%	24.9%	7.1%	8.9%	38.1%
Limited demand or filings	1.4%	2.7%	0%	2.2%	0%
Tech. or connection issues for participants	33.3%	50.7%	45.7%	46.7%	23.8%
Security/encryption issues	5.6%	10.2%	4.3%	4.4%	4.8%
Lack of employee training	2.3%	4.4%	0%	4.4%	0%
Lack of other participant training	9.7%	15.1%	11.4%	17.8%	0%
Lack of funding	0.6%	1.3%	0%	0%	0%
Lack of participant resources	23.1%	36.9%	30.0%	28.9%	9.5%
Reduced participant engagement concerns	11.2%	20.9%	7.1%	13.3%	0%
Lack of participant platform familiarity	14.9%	25.3%	11.4%	26.7%	0%
Concerns about participant distractions	18.2%	30.2%	22.9%	20.0%	4.8%
Inability to assess witness credibility	24.4%	45.8%	25.7%	8.9%	4.8%
Inability to judge body language	21.9%	40.4%	22.9%	11.1%	4.8%
Off-screen guidance of witnesses	22.1%	36.9%	37.1%	6.7%	9.5%
Participants might look up information	13.2%	24.4%	14.3%	4.4%	4.8%
Virtual proceedings take longer	7.6%	12.4%	7.1%	13.3%	0%
Undermine court legitimacy	14.1%	25.8%	11.4%	15.6%	0%
Concern livestreaming specific case types	15.5%	26.7%	18.6%	8.9%	14.3%

Note. Court roles not listed here never endorsed any of the reasons for not moving a case online.

Reasons for Not Holding a Proceeding Virtually. Respondents were asked which of a list of reasons had ever prevented them from holding any proceeding online. As reported in Table 6, most reasons were relatively uncommon but roughly one-third of the total sample reported not moving at least one case online because of technical or connection issues for all participants. This number notably increased among judges, referees, and magistrates such that approximately half of each group endorsed it. Judges also endorsed concerns about assessing witness credibility, judging body language, and limiting off-screen guidance to witnesses at slightly higher rates but these concerns were more limited among other court roles.

Elements of a Virtual Proceeding. Participants were next asked about how they handle several elements of virtual proceedings. As reported in Table 7, the total sample frequently used waiting rooms but the other element averages were notably lower and this pattern largely held across court roles. Nonetheless, court administrator, probate register, and court clerk responses were suggestive of having others in the court handle the controls at a higher rate than the total sample.

To understand whether respondents who were more concerned about using virtual technology during the pandemic, concerned about livestreaming court proceedings, or were more comfortable with technology engaged differently with these elements, correlations were again estimated. As reported in Table 7, respondents who were more comfortable with technology were more likely to handle the controls and more likely to use breakout rooms. Breakout room use was also related to concern such that those who were more concerned, both with using technology for court proceedings and with livestreaming court proceedings, were less likely to use breakout rooms. Concern with livestreaming was also positively related to the extent to which participants handled their own controls.

Virtual Proceeding Element	Average Response*		Correlation with:		
			Concern with Virtual Proceedings	Concern with Livestream	Comfort with Technology
Personally handle controls	2.02	Sometimes	NR	NR	.14
Another court member handles controls	2.18	Sometimes	NR	NR	NR
Participants handle own controls	1.90	Sometimes	NR	.12	NR
Court uses waiting room	3.42	Most of the time	NR	NR	NR
Participants use breakout rooms	2.45	Sometimes	-.10	-.10	.14
Participants use chat feature	1.30	Rarely	NR	NR	NR
Participants share screens	1.46	Rarely	NR	NR	NR

Note. *Response options: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Most of the time, 4 = Always. All reported correlation coefficients significant at $p < .05$. NR = no (sig.) relation between variables.

Creating a Virtual Courtroom Record and YouTube. Respondents were asked about how they create a record from virtual courtroom proceedings. As reported in Table 8, traditional court reporting methods were slightly more common than using the virtual platform. Relatedly, respondents were asked about their use of YouTube for livestreaming cases. Although the average frequency of use corresponded to “Most of the time” (2.63), 93% of respondents indicated that they maintained these proceedings on YouTube one day or less.

Table 8. Frequency of Methods for Creating Court Record

Method	Average Frequency*	
Use Virtual Platform	2.01	Sometimes
Use Traditional Court Recording Method	3.38	Most of the time

Note. *Response options: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Most of the time, 4 = Always

Virtual Courtroom Locations. Respondents were asked where virtual courtroom participants are usually physically located during proceedings. As reported in Table 9, respondents reported having only the judicial officer in the court while all others were remote “Most of the time”. The next most common approach was to have the judicial officer and one other person at court. Having the judicial officer and more than one other at court or having all participants join from a non-court location were rare.

Table 9. Frequency of Participant Locations during Virtual Courtroom Proceedings

Location	Average Frequency*	
All join from non-court location	1.15	Rarely
Judicial officer at court—others remote	2.85	Most of the time
Judicial officer and one staff at court—others remote	2.37	Sometimes
Judicial officer and more than one staff at court—others remote	1.35	Rarely

Note. *Response options: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Most of the time, 4 = Always

Issues Experienced during Virtual Courtroom Proceedings. Respondents also completed a battery of questions regarding potential issues during virtual courtroom proceedings and how they responded to them. As reported in Table 10, technical issues “Sometimes” occurred for litigants, others, and other counsel, but were rare for judges and prosecuting attorneys. When technical issues arose, most respondents indicated that their courts asked participants to call in but some indicated that they typically adjourn.

Table 10. Frequency of Issues and Responses

		Average Frequency*	
How often does each role have technical issues	Judge	1.34	Rarely
	Prosecuting Attorney	1.27	Rarely
	Other Counsel	1.79	Sometimes
	Litigants	2.16	Sometimes
	Others	2.10	Sometimes
Response to technical issues	Adjourn	1.85	Sometimes
	Participants call in	2.43	Sometimes
	Proceed as usual	0.61	Rarely

Note. *Response options: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Most of the time, 4 = Always

Thoughts about Virtual Courtrooms. Respondents completed a battery of questions regarding their thoughts about virtual courtroom proceedings generally. As reported in Table 11, respondents generally agreed that virtual courtroom proceedings help reduce the transmission of COVID, are a good option during the pandemic, make access easier for participants, and make the courts more transparent. They were more likely to disagree that they make it easier to assess witness credibility and this pattern was largely consistent across roles.

Table 11. Thoughts about Virtual Courtroom Proceedings

To what extent do you agree that virtual courtrooms...*	Total	Judge	Referee	Magistrate	Court Administrator	Probate Register	Court Clerk	Court Reporter/Recorder	Other
...make it easier for participants to access the courts?	4.02	3.90	4.44	4.07	3.99	4.33	3.91	3.86	4.00
...make courts more transparent to the public?	3.38	3.25	3.43	3.51	3.58	3.88	3.45	3.26	3.33
...decrease stress for litigants?	3.42	3.28	3.58	3.63	3.44	3.94	3.60	3.33	3.39
...make participants feel safer?	3.80	3.66	4.06	3.80	3.88	4.00	3.80	3.91	3.65
...make participants feel freer to contribute?	3.27	3.04	3.63	3.33	3.38	3.44	3.60	3.41	3.35
...increase participation levels from children?	2.96	2.73	3.20	2.90	3.09	3.19	3.00	3.09	3.15
...increase participation levels from victims?	3.17	2.90	3.69	3.31	3.38	3.00	3.40	3.20	3.31
...make it easier to assess witness credibility?	2.10	1.84	2.29	2.32	2.23	2.72	2.57	2.30	2.38
...improve the reputation of Michigan's trial courts?	3.28	3.25	3.66	3.31	3.34	3.63	3.20	3.00	3.20
...reduce the risk of transmission of the COVID-19 virus?	4.66	4.64	4.87	4.57	4.68	4.76	4.45	4.59	4.44
...are a good option for Michigan's trial courts as they navigate the pandemic?	4.43	4.35	4.70	4.40	4.51	4.67	4.27	4.31	4.33
<i>Note. *Response options: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree</i>									

Supplementary Survey Results

As noted above, judges were invited to complete an additional Supplementary Survey which included a battery of questions addressing work related self-efficacy, the extent to which they felt that they are a legitimate authority, have a positive impact on those they interact with professionally, and the extent to which they have experienced issues with work-life balance as a result of the COVID-19 pandemic. As reported in Table 12, respondents largely “Agreed” to “Strongly agreed” with the questions addressing Self-Efficacy, Self-Legitimacy, and their Positive Impact but “Disagreed” regarding their experience of COVID Stress.

Table 13. Self-Efficacy, Self-Legitimacy, Positive Impact, and COVID Stress			
Scale	To what extent do you agree with the following statements?	Average	Agreement*
Self-Efficacy	When I am confronted with challenges in completing the responsibilities of my role with the Michigan Courts, I can usually find workable solutions without too much trouble.	4.49	Agree
	My past experiences with the Michigan Courts have prepared me well for my future in my role	4.44	Agree
	I feel prepared for most of the demands of my role with the Michigan Courts	4.56	Strongly agree
Self-Legitimacy	I believe that people should always follow my orders as long as they are lawful	4.57	Strongly agree
	The authority vested in me is important for maintaining order in Michigan	4.64	Strongly agree
	I feel that I am a legitimate legal authority in Michigan	4.67	Strongly agree
Positive Impact	I feel like my personal efforts have made a positive difference in others’ lives	4.56	Strongly agree
	My personal efforts have substantially improved the welfare of others	4.40	Agree
	My personal efforts have made others’ lives much better	4.25	Agree
COVID Stress	I have felt too tired at work because of things I have to do at home	1.92	Disagree
	My personal demands have been so many that they’ve taken me away from work	1.75	Disagree
	I’ve felt like my personal life has taken up time that I would like to spend at work	1.66	Disagree

Note. *Response options: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

Respondents also completed a battery of questions regarding the extent to which they currently felt able to accomplish a number of professional responsibilities. As reported in Table 12, respondents felt “Extremely able” to accomplish most but reported feeling only “Moderately able” to ensure professionalism in the courtroom and among the entire courtroom workgroup and to ensure timeliness in starting proceedings.

Table 12. Self-Rated Judicial Performance

Given the current conditions in your court, how able do you feel that you are to accomplish the following responsibilities in professional interactions?	Average Ability*	
Behaving in a manner that is free from impropriety and the appearance of impropriety.	4.88	Extremely able
Displaying fairness and impartiality toward all parties.	4.91	Extremely able
Avoiding ex-parte communication.	4.78	Extremely able
Being prepared for proceedings.	4.79	Extremely able
Allowing parties sufficient time to present their case.	4.60	Extremely able
Being courteous toward all parties, patrons, and participants.	4.91	Extremely able
Maintaining proper order and decorum in the courtroom.	4.01	Moderately able
Ensuring professionalism from the entire courtroom workgroup.	4.34	Moderately able
Demonstrating appropriate demeanor on the bench.	4.88	Extremely able
Clearly explaining all decisions.	4.78	Extremely able
Issuing opinions and orders without unnecessary delay.	4.72	Extremely able
Starting proceedings on time.	4.32	Moderately able

Note. *Response options: 1 = Not at all able, 2 = Slightly able, 3 = Somewhat able, 4 = Moderately able, 5 = Extremely able.

Scale Correlations. All five measures (Self-Rated Performance, Self-Efficacy, Self-Legitimacy, Positive Impact, and COVID Stress) were averaged to create scale scores. As reported in Table 14, reliability estimates (α) for all five scales were high. To assess the extent to which Self-Rated Performance corresponded to objective performance data collected by the MI Supreme Court Administrative Office, an additional variable was computed for all Supplementary Survey respondents. Specifically, SCAO data indicating the percentage of each case type that each judge had been responsible for in 2020 that was disposed within the longest official timeline were averaged to create a single score. Thus, this score indicates the average percentage of each case type that each respondent was responsible for during 2020 that was disposed of in a timely fashion. Table 14 reports the correlations among the Supplementary Survey scales and Case Performance. Self-Rated and Case Performance were moderately correlated suggesting that they are related but somewhat different approaches to understanding judicial performance. Regarding the remaining scales, Self-Rated Performance was significantly related to all four scales such that increases in performance generally corresponded to moderate increases in Self-Legitimacy, Positive Impact, and moderate decreases in COVID Stress. The relation between Self-Rated Performance and Self-Efficacy was considerably stronger and Self-Efficacy was the only significant correlate of Case Performance.

Table 14. Scale Correlation Coefficients

	Self-Rated Performance	Case Performance	Self-Efficacy	Self-Legitimacy	Positive Impact	COVID Stress
a. Self-Rated Performance	$\alpha = .87$					
b. Case Performance	.20	-				
c. Self-Efficacy	.54	.21	$\alpha = .84$			
d. Self-Legitimacy	.20	NR	.41	$\alpha = .85$		
e. Positive Impact	.23	NR	.40	.47	$\alpha = .91$	
f. COVID Stress	-.23	NR	-.26	NR	-.15	$\alpha = .91$

Note. All reported correlation coefficients sig. ($p < .05$). NR = no (sig.) relation between variables.

Mean Differences. To understand whether different judges reported different mean levels for the scales, we used ANOVAs to compare across sex, court type, and year of birth (note that we did not compare across race/ethnicity as the number of non-white judges who completed the Supplementary Survey was too small). As reported in Table 15, only Self-Legitimacy was different across sex such that male judges provided significantly higher ratings. Across court type, judges with circuit court responsibilities were generally most different, reporting higher Self-Rated Performance, Case Performance, and Self-Efficacy and lower COVID Stress when compared to judges who did not have circuit court responsibilities. Conversely judges with district court responsibilities had poorer Case Performance and more COVID Stress. Finally, judges with probate responsibilities had higher percentages in their Case Performance.

Demographic Group	Self-Rated Performance	Case Performance	Self-Efficacy	Self-Legitimacy	Positive Impact	COVID Stress
Total	4.65	.82	4.56	4.61	4.38	1.77
Sex						
a. Female	4.66	.81	4.39	4.52 ^b	4.41	1.83
b. Male	4.63	.83	4.51	4.69 ^a	4.34	1.71
Court Type						
Circuit	4.72 [*]	.80 [*]	4.58 [*]	4.67	4.39	1.57 [*]
District	4.59	.76 [*]	4.36	4.55	4.38	1.94 [*]
Probate	4.59	.91 [*]	4.38	4.62	4.35	1.85
Year of Birth						
a. < 1957	4.73	.81	4.45	4.57	4.31	1.83
b. 1957-67	4.61	.82	4.40	4.63	4.37	1.61 ^c
c. > 1967	4.62	.82	4.54	4.63	4.48	1.92 ^b

Note. Means are significantly different from the demographic group noted in superscript ($p < .05$).
^{*}indicates that the mean is significantly different from judges who did not indicate that they were part of that group ($p < .05$).

Findings and Limitations

Themes from the Main Survey. The findings of this survey shed light on use of virtual courtrooms during the early stages of the COVID-19 Pandemic. A few key themes identified in the data may be especially helpful in developing strategies to support the Michigan Judiciary going forward.

There does not seem to be especially wide variety in the technology platforms used or, presumably, in the physical devices that are being used to conduct virtual proceedings. The far majority of respondents reported using Zoom and/or Polycom, and judicial officers often participate from court, thus increasing the odds that they are using devices that can be easily supported by the court's IT staff. Indeed this is likely some of the reason why most technology issues are experienced from other participants who may lack this access. *This lack of access to IT support for participants may be a somewhat important piece of the VCS puzzle as a significant percentage of participants (and roughly half of judges, referees, and magistrates) indicated that technology or connection issues had prevented at least one proceeding from being held online.* Lack of participant resources generally was also a commonly cited barrier. Court efforts to provide technology guidance (or, if possible, support) and to limit the resources needed to join a virtual proceeding may therefore be especially helpful.

The next most cited barriers to virtual courtrooms tended to address the fact that participants were not physically co-located. A noteworthy portion of respondents noted that they had decided not to conduct an proceeding online because of an inability to judge credibility and body language, to prevent participants from being coached off-screen or looking up information, and to assure participant engagement in the proceedings. Some of these issues may be addressable by measures that could be implemented by the courts but we would caution against invasive attempts to exert control. Court buildings are often austere and, for many, fear-invoking places. Virtual proceedings have real potential to not only reduce the difficulty of getting to court but also to make them feel more accessible. Excessive efforts to control participants may undermine this benefit and detract from efforts to increase the accessibility of justice for Michigan communities.

Relatedly, however, the survey suggests a few situations where virtual courtrooms may be less appropriate. In general, respondents conducted fewer conduct bench trials, adoptions, and preliminary examinations virtually and were less willing to continue to conduct these into the future (respondents also reported relatively low willingness to continue child protective/terminations but were currently conducting these online at a relatively higher rate). The concerns about controlling the proceedings noted above may be especially relevant for these case types and may suggest is some benefit to thinking carefully about how best to conduct these virtually. We would again caution against excessive measures, but it may be that whatever measures are needed can be limited to certain case types where they would be most critical to ensuring justice.

It is also of note that, at the time of the survey, concern about conducting and livestreaming virtual proceedings were relatively low and that comfort with technology was relatively high. *Nonetheless, those who reported more concern (especially with using virtual technology) and less comfort with technology generally did tend to approach virtual proceedings differently.* Although concern and comfort may have shifted significantly since July, identifying and providing training and best practice strategies to these individuals may yet be beneficial.

Themes from the Supplementary Survey. The findings of the Supplementary Survey of judges shed light on how they have experienced the pandemic. Happily, judges reported relatively high agreement with their perceived ability to do their job, their legitimacy as a legal authority, and the extent to which their efforts

have positive impacts on the people with whom they interact professionally. They also tended to disagree that they felt particular strain in their work/life balance due to COVID. This suggests that, at least in July of 2020, most respondents still felt able to perform their responsibilities despite the organizational crisis posed by the pandemic. *Nonetheless, there is some evidence that not all judges were as well insulated from the negative impacts of COVID.* In particular, judges with district court responsibilities appeared least well supported. Judges with probate court responsibilities were similarly lower in self-efficacy and higher in COVID stress but were higher in case performance. These data suggest that it may be worthwhile to identify areas where judges with circuit court responsibilities have greater institutional support and to deploy some of those resources in district and probate court. The results also suggest that of the four potential correlates of performance, self-efficacy is generally most related. Thus, what may be most important for ensuring perceived and objective performance is providing the support judges feel they need to ensure their confidence in their efficacy at work.

Limitations. Two limitations of the current survey are especially worthy of note. *The first is that, despite the strong response rate, the current survey data represents only a portion of the Michigan Judiciary.* Although it is perfectly appropriate to draw insight from roughly 40% of a target population, the reality remains that the majority of the judiciary did not provide their thoughts. Our data provide little evidence that these missing responses are systematic, but it is important to note that African American judges responded at a notably lower rate. These voices may be important to secure in future efforts.

The other major limitation of this work is that there is significant potential for respondents to report a more positive picture of themselves to their administrative office, especially in the Supplementary Survey. This likely means that many of the average responses are somewhat inflated but there is little reason to expect that the extent of this inflation would differ across courts. Thus, even if judges do not generally feel quite as positive as they report, the relatively higher responses from judges with circuit court responsibilities are likely real.