Summary of Results for 2020 AGC of America-Autodesk Workforce Survey		2019 survey total	6/9-17 survey total	2020 survey total	Region					Highway & trans-	Utility Infra-	Federal & heavy	Revenue Size				Always Open
					North-east	Mid-west	South	West	Building	portation	structure		$50M or less	$50.1M-$500M	Over $500M	Always Union	Shop
Total number of responses (number varies by question):		1935	635	2005	159	386	505	525	1118	507	468	465	1041	443	96	430	764
Q1. How has your firm's headcount changed as a result of the pandemic? (mark all that apply)	No change		46%	50%	38%	48%	54%	48%	46%	54%	51%	44%	52%	44%	46%	46%	53%
	Furloughed or terminated employees:		27%	29%									0.6589	0.28038	0.0608		
	Furloughed employees			18%	28%	20%	12%	18%	20%	12%	15%	18%	16%	22%	25%	26%	13%
	Terminated employees			19%	16%	19%	18%	18%	21%	12%	17%	18%	15%	25%	13%	21%	17%
	Recalled furloughed/terminated employees			11%	26%	11%	7%	14%	13%	10%	11%	15%	10%	18%	22%	18%	9%
	Added employees		26%	23%	25%	27%	23%	24%	24%	28%	27%	30%	24%	26%	30%	20%	26%
Q2. By what percentage has your firm's headcount changed in the past 12 months?	No change		41%	32%	27%	29%	36%	28%	29%	32%	30%	25%	33%	26%	28%	27%	33%
	Decrease:		33%	41%	46%	42%	37%	41%	43%	33%	37%	41%	40%	42%	40%	50%	36%
	-1% to -10%		21%	26%	27%	25%	26%	24%	26%	23%	23%	27%	23%	31%	28%	29%	24%
	-11% to -25%		8%	11%	13%	12%	7%	13%	13%	9%	11%	11%	12%	9%	9%	13%	10%
	More than -25%		4%	4%	6%	4%	4%	4%	4%	2%	3%	3%	5%	2%	2%	7%	2%
	Increase:		26%	27%	28%	29%	27%	31%	28%	35%	33%	34%	28%	32%	31%	23%	31%
	1 to 10%		20%	22%	22%	24%	22%	25%	23%	29%	27%	27%	22%	27%	28%	18%	26%
	More than 10%		6%	5%	6%	4%	5%	6%	5%	6%	5%	8%	6%	5%	3%	5%	5%
Q3. Did you furlough employees and then recall any? (mark all that apply)	No, did not furlough any employees			68%	44%	67%	78%	65%	65%	75%	73%	67%	68%	66%	70%	55%	74%
	Have not tried to recall furloughed employees			7%	6%	6%	7%	8%	8%	3%	4%	5%	7%	6%	10%	7%	6%
	Tried to recall furloughed employees			25%	50%	27%	15%	27%	27%	22%	24%	28%	25%	28%	20%	38%	21%
	% of firms that recalled employees reported:																
	All furloughed employees reported when recalled		38%	56%	65%	62%	40%	57%	58%	55%	58%	58%	57%	56%	58%	59%	55%
	Some recalled employees have refused to work:			44%	35%	38%	60%	43%	42%	45%	42%	42%	43%	44%	42%	41%	45%
	Some cited preference for unemployment benefits		41%	36%	31%	38%	48%	33%	34%	41%	41%	35%	37%	39%	21%	39%	34%
	Some cited virus concerns or family responsibilities		24%	35%	29%	31%	44%	35%	35%	30%	37%	36%	29%	42%	47%	39%	32%
	Some cited other reasons (or unknown)		4%	15%	13%	12%	23%	15%	15%	14%	17%	15%	14%	17%	11%	14%	17%
Q4. How would you describe your current situation in filling salaried positions?	Having a hard time filling some or all salaried positions	57%		28%	30%	27%	26%	28%	27%	32%	31%	33%	23%	38%	30%	22%	28%
	Having no difficulty filling any salaried positions	12%		16%	11%	15%	16%	16%	17%	14%	16%	15%	11%	23%	34%	14%	16%
	We have no openings for salaried positons	32%		56%	58%	58%	57%	55%	56%	54%	53%	52%	66%	39%	35%	63%	56%
Q5. How would you describe your current situation in filling hourly craft positions?	Having a hard time filling some/all hourly craft positions	80%		52%	48%	55%	54%	53%	50%	65%	60%	61%	54%	56%	39%	43%	63%
	Having no difficulty filling any hourly craft positions	11%		20%	28%	22%	17%	19%	22%	18%	20%	21%	17%	23%	37%	31%	15%
	We have no openings for hourly craft positons	9%		28%	24%	23%	29%	28%	28%	18%	20%	19%	29%	21%	24%	26%	22%
Q6. How many unfilled salaried positions did you have on June 30, 2020?	0			58%	63%	61%	58%	56%	58%	57%	55%	56%	66%	45%	40%	65%	60%
	1			15%	14%	13%	15%	18%	16%	16%	15%	15%	17%	15%	4%	12%	17%
	2-5			21%	19%	22%	20%	21%	21%	22%	22%	23%	15%	34%	25%	19%	19%
	More than 5			6%	4%	4%	7%	5%	6%	6%	7%	6%	3%	5%	31%	4%	4%
Q7. How many unfilled hourly craft positions did you have on June 30, 2020?	0			40%	48%	39%	37%	36%	42%	27%	31%	31%	39%	36%	46%	52%	28%
	1			5%	3%	3%	5%	7%	4%	5%	4%	4%	7%	2%	3%	3%	6%
	2-5			32%	25%	33%	32%	35%	31%	35%	35%	32%	38%	25%	9%	24%	40%
	More than 5			23%	24%	24%	26%	21%	22%	33%	30%	32%	16%	37%	43%	21%	26%

Summary of Results for 2020 AGC of America-Autodesk Workforce Survey		2019 survey total	6/9-17 survey total	2020 survey total	Region					Highway & trans-	Utility Infra-	Federal & heavy	Revenue Size			Always Union	Always Open Shop
					North-east	Mid-west	South	West	Building	portation	structure		$50M or less	$50.1M-$500M	Over $500M		
Total number of responses (number varies by question):		1935	635	2005	159	386	505	525	1118	507	468	465	1041	443	96	430	764
Q8. Has your firm added or increased use of the following to provide workers in the last 6 months? (mark all that apply)	Have not tried to hire			19%	17%	17%	20%	18%	19%	13%	13%	13%	21%	11%	22%	19%	15%
	Applied for employee-based visas (e.g., H-1B, H-2B)	7%		2%	3%	1%	2%	2%	2%	2%	2%	3%	1%	3%	4%	2%	2%
	Engaged with career-building education program	50%		21%	19%	31%	21%	18%	23%	24%	28%	26%	16%	34%	33%	17%	26%
	Engaged with gov. workforce or unemployment agency	29%		12%	11%	13%	14%	11%	11%	16%	7%	14%	12%	14%	13%	6%	18%
	Executive and non-craft worker search firm or PEO	30%		14%	20%	16%	13%	15%	16%	15%	18%	19%	8%	26%	30%	15%	14%
	Staffing firm (craft)	27%		16%	3%	14%	24%	14%	17%	17%	17%	18%	17%	18%	10%	6%	24%
	Software to distribute job postings and manage applicants	27%		14%	11%	16%	16%	13%	14%	17%	18%	17%	13%	16%	19%	9%	18%
	Sub- or specialty contractors	26%		11%	13%	9%	14%	11%	14%	11%	12%	9%	12%	12%	13%	4%	17%
	Unions	21%		20%	36%	34%	5%	20%	20%	25%	28%	30%	17%	26%	25%	55%	0.4%
	Added Instagram Live sessions and other online strategies			4%	1%	4%	5%	5%	5%	7%	6%	7%	4%	6%	4%	3%	5%
	No changes	22%		27%	22%	21%	29%	27%	26%	23%	21%	23%	25%	26%	31%	20%	26%
Q9. Has your firm made changes in hiring, training or scheduling in the last 6 months? (mark all that apply)	Have not tried to hire			18%	16%	17%	17%	16%	17%	10%	12%	10%	19%	11%	13%	20%	13%
	Added Lean construction personnel			2%	2%	3%	3%	2%	3%	2%	3%	3%	2%	2%	9%	2%	2%
	Trained personnel in Lean construction methods			6%	8%	8%	6%	4%	8%	4%	7%	5%	4%	10%	15%	7%	5%
	Augmented/mixed/virtual reality training devices	8%		13%	13%	16%	13%	11%	15%	12%	15%	15%	8%	19%	36%	14%	12%
	Increased use of learning program with a strong online or video component (e.g., classes using Zoom or Teams)			21%	27%	25%	16%	20%	24%	20%	24%	26%	13%	33%	52%	25%	18%
	Lowered hiring standards (e.g., education, training, employment or arrest record)			9%	9%	9%	8%	11%	8%	14%	11%	12%	11%	7%	5%	6%	12%
	Raised hiring standards	27%		7%	4%	6%	7%	8%	7%	6%	6%	6%	6%	7%	13%	4%	7%
	Initiated/increased spending on training/prof. development	46%		18%	23%	16%	17%	21%	19%	21%	24%	23%	16%	23%	24%	13%	22%
	Decreased/eliminated spending on training/prof. devel.			3%	3%	5%	2%	3%	4%	3%	3%	4%	2%	5%	6%	4%	3%
	Initiated or increased online or mobile training options			19%	22%	23%	18%	21%	21%	22%	26%	24%	14%	31%	43%	21%	20%
	Overtime	31%		14%	18%	15%	13%	16%	15%	19%	19%	19%	16%	15%	9%	12%	19%
	No changes	32%		34%	28%	32%	39%	32%	33%	33%	31%	32%	37%	30%	15%	32%	36%
Q10. If your firm is having trouble filling salaried positions, please indicate all the position types you are having trouble filling (mark all that apply) [2019: % harder to fill than one year ago]	Architects	24%		2%	2%	1%	2%	1%	2%	0%	0%	0%	2%	1%	4%	0%	2%
	BIM personnel	27%		8%	8%	9%	5%	8%	9%	5%	8%	6%	4%	10%	14%	12%	5%
	Engineers	37%		20%	22%	30%	11%	22%	18%	31%	29%	33%	16%	26%	30%	27%	13%
	Environmental compliance professionals	35%		2%	0%	2%	3%	2%	2%	4%	3%	5%	3%	2%	0%	1%	2%
	IT personnel	13%		4%	3%	6%	3%	5%	5%	5%	7%	5%	3%	5%	6%	4%	2%
	Lean construction professionals			4%	3%	4%	5%	3%	4%	4%	3%	2%	5%	2%	4%	4%	4%
	Project managers/supervisors	48%		81%	85%	78%	82%	83%	81%	79%	82%	79%	82%	81%	80%	83%	86%
	Quality control personnel	31%		15%	3%	13%	16%	18%	14%	16%	15%	19%	13%	14%	26%	12%	13%
	Safety personnel	21%		18%	17%	17%	22%	16%	17%	22%	22%	25%	13%	22%	32%	17%	18%
	Software/database personnel	16%		4%	7%	3%	3%	5%	4%	4%	6%	6%	5%	3%	6%	5%	3%

Summary of Results for 2020 AGC of America-Autodesk Workforce Survey		2019 survey total	6/9-17 survey total	2020 survey total	Region					Highway & trans-	Utility Infra-	Federal & heavy	Revenue Size			Always Union	Always Open Shop
					North-east	Mid-west	South	West	Building	portation	structure		$50M or less	$50.1M-$500M	Over $500M		
Total number of responses (number varies by question):		1935	635	2005	159	386	505	525	1118	507	468	465	1041	443	96	430	764
Q11. If your firm is having trouble filling hourly craft positions, please indicate all the position types you are having trouble filling (mark all that apply) [2019: % harder to fill than one year ago]	Bricklayers	62%		5%	8%	9%	4%	2%	7%	3%	3%	4%	5%	4%	7%	9%	3%
	Carpenters	65%		35%	48%	43%	33%	30%	43%	24%	26%	27%	30%	49%	44%	35%	34%
	Cement masons	65%		12%	10%	21%	8%	10%	13%	14%	14%	14%	11%	15%	22%	20%	10%
	Concrete workers	69%		23%	17%	33%	24%	15%	23%	27%	25%	25%	19%	29%	36%	17%	25%
	Electricians	56%		9%	14%	6%	8%	9%	10%	5%	10%	8%	7%	11%	18%	8%	9%
	Equipment operators-cranes, heavy equipment	65%		29%	26%	34%	29%	28%	18%	58%	48%	48%	26%	35%	47%	25%	32%
	Installers-drywall	58%		5%	6%	6%	6%	3%	8%	1%	2%	2%	5%	5%	9%	7%	5%
	Instalers-other	62%		7%	8%	4%	9%	7%	9%	2%	3%	4%	8%	3%	7%	5%	7%
	Iron workers	64%		10%	6%	15%	8%	8%	12%	7%	9%	10%	9%	10%	13%	11%	10%
	Laborers	58%		43%	56%	45%	44%	37%	41%	50%	46%	4%	43%	44%	33%	37%	45%
	Mechanics	57%		12%	8%	9%	15%	12%	8%	19%	16%	17%	10%	13%	20%	7%	13%
	Mllwrights	57%		2%	1%	4%	2%	1%	2%	1%	3%	2%	1%	3%	9%	1%	2%
	Painters	49%		5%	2%	4%	6%	4%	6%	2%	2%	2%	5%	3%	7%	4%	4%
	Pipefitters/welders	60%		6%	2%	4%	7%	7%	6%	4%	8%	7%	4%	7%	18%	6%	6%
	Pipelayers	68%		6%	3%	9%	9%	9%	5%	13%	21%	14%	8%	11%	9%	5%	12%
	Plumbers	64%		9%	2%	4%	9%	6%	8%	2%	4%	4%	6%	7%	9%	4%	7%
	Roofers	57%		3%	1%	3%	3%	4%	4%	1%	2%	1%	4%	2%	7%	2%	4%
	Sheet metal workers	63%		5%	1%	5%	7%	6%	7%	1%	2%	3%	5%	5%	4%	5%	6%
	Traffic control personnel	50%		4%	6%	3%	6%	2%	2%	9%	6%	6%	3%	6%	2%	3%	5%
	Truck drivers	59%		25%	30%	23%	23%	26%	15%	45%	35%	36%	24%	26%	22%	15%	28%
Q12. Has your firm adjusted pay and/or benefits for hourly craft or salaried personnel in the last 6 months? (mark all that apply) [2019: for hourly craft workers in the last year]	Increased base pay rates	66%		38%	28%	38%	40%	42%	37%	46%	42%	42%	40%	38%	32%	28%	49%
	Provided incentives/bonuses	29%		17%	13%	19%	18%	16%	17%	21%	21%	20%	18%	17%	12%	13%	21%
	Increased our portion of benefit contributions and/or improved employee benefits	25%		8%	6%	8%	7%	9%	7%	10%	9%	10%	8%	8%	8%	4%	10%
	Reduced base pay rates			3%	4%	5%	2%	2%	4%	2%	4%	3%	2%	5%	4%	4%	2%
	Reduced our portion of benefit contributions and/or scaled back employee benefits			2%	1%	2%	2%	1%	2%	2%	2%	2%	2%	1%	2%	2%	1%
	No changes	18%		52%	61%	47%	49%	52%	51%	45%	47%	47%	50%	52%	58%	61%	42%
Q13. What technologies (hardware or software) have you employed recently to help alleviate any labor shortages your firm has experienced? (mark all that apply)	Adopted or increased Lean construction methods			6%	4%	10%	7%	4%	8%	4%	7%	6%	4%	11%	14%	8%	6%
	Bidding			9%	10%	10%	9%	10%	10%	9%	10%	9%	11%	8%	4%	10%	10%
	Cost management/ERP			7%	9%	7%	6%	7%	7%	7%	8%	8%	5%	10%	10%	9%	6%
	Document/file management			10%	9%	11%	10%	10%	12%	9%	12%	11%	9%	14%	8%	11%	9%
	Estimating			13%	13%	16%	12%	14%	15%	13%	16%	15%	14%	14%	12%	15%	13%
	Project management			16%	22%	17%	14%	17%	18%	13%	18%	16%	16%	19%	18%	18%	16%
	Field collaboration			13%	11%	17%	12%	12%	14%	12%	17%	16%	10%	18%	19%	15%	12%
	Reality capture			2%	1%	4%	2%	1%	2%	1%	2%	2%	1%	4%	7%	2%	2%
	Site safety			10%	13%	9%	12%	8%	10%	12%	12%	12%	7%	15%	16%	10%	10%
	Virtual/augmented/mixed reality			6%	3%	8%	5%	6%	7%	4%	6%	5%	3%	9%	20%	6%	5%
	Workforce management			10%	7%	13%	11%	9%	11%	10%	15%	12%	9%	14%	14%	10%	11%
	No changes			60%	63%	56%	63%	60%	57%	62%	55%	57%	64%	54%	47%	57%	61%

Summary of Results for 2020 AGC of America-Autodesk Workforce Survey		2019 survey total	6/9-17 survey total	2020 survey total	Region					Highway & trans-	Utility Infra-	Federal & heavy	Revenue Size			Always Union	Always Open Shop
					North-east	Mid-west	South	West	Building	portation	structure		$50M or less	$50.1M-$500M	Over $500M		
Total number of responses (number varies by question):		1935	635	2005	159	386	505	525	1118	507	468	465	1041	443	96	430	764
Q14. What impact, if any, has the pandemic had on your firm's projects? (mark all that apply) [2019: What impact if your firm is experiencing staffing challenges]	No impact	19%		12%	12%	12%	12%	10%	8%	17%	11%	11%	12%	10%	10%	10%	10%
	We have put longer completion times into bids or contracts	29%		22%	24%	17%	22%	26%	25%	16%	24%	20%	23%	21%	21%	20%	25%
	Projects have taken longer than we anticipated	44%		44%	45%	41%	43%	49%	49%	37%	44%	45%	44%	48%	41%	43%	46%
	We have put higher prices into our bids or contracts	44%		18%	18%	16%	16%	21%	20%	18%	21%	20%	18%	19%	18%	18%	18%
	Costs have been higher than we anticipated	43%		32%	39%	32%	27%	37%	35%	35%	38%	38%	33%	35%	28%	36%	35%
	Projects have taken less time or cost less than anticipated	3%		1%	0%	1%	2%	1%	1%	2%	1%	2%	1%	2%	2%	2%	1%
	We have won additional projects/add-ons to current projects		21%	12%	13%	8%	14%	12%	13%	9%	12%	14%	11%	13%	20%	9%	13%
	Projects under way have been halted		44%	33%	36%	37%	29%	35%	38%	29%	35%	35%	31%	41%	32%	41%	29%
	Scheduled projects have been postponed or canceled		32%	60%	58%	62%	57%	64%	66%	53%	62%	60%	56%	71%	69%	66%	59%
Q15. What impact, if any, has the pandemic had on your firm's safety and health program or performance?	More reportable injuries and illnesses	16%		7%	6%	7%	7%	9%	6%	1%	10%	12%	6%	11%	9%	7%	8%
	More jobsite hazards (physical and/or behavioral) identified in inspection reports	15%		9%	6%	7%	10%	11%	10%	9%	11%	11%	9%	11%	13%	12%	10%
	More workers compensation claims	11%		2%	1%	2%	2%	2%	1%	2%	1%	1%	1%	2%	3%	3%	2%
	No change	72%		75%	78%	76%	75%	71%	74%	72%	70%	66%	80%	66%	57%	72%	74%
	Fewer reportable injuries and illnesses	5%		5%	4%	7%	4%	4%	6%	5%	7%	7%	3%	6%	15%	5%	4%
	Fewer jobsite hazards (physical and/or behavioral) identified in inspection reports	2%		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	1%	1%
	Fewer workers compensation claims	4%		1%	4%	1%	1%	2%	2%	2%	1%	2%	1%	2%	1%	2%	1%
Q17. If Congress takes further action to address the economic fallout from the coronavirus, which of these measures would be helpful to your business? (mark all that apply)	No additional legislation is needed		17%	11%	8%	10%	12%	12%	12%	6%	7%	7%	12%	11%	6%	9%	10%
	Larger federal investment in all forms of public infrastructure and facilities		34%	55%	62%	59%	49%	56%	52%	46%	75%	75%	52%	63%	57%	61%	53%
	Multi-year surface transportation reauthorization with higher funding levels		23%	25%	34%	29%	20%	25%	17%	60%	40%	46%	22%	34%	29%	29%	23%
	Address funding shortfalls for multi-employer pension plans		10%	13%	19%	23%	5%	11%	14%	14%	17%	17%	11%	18%	15%	32%	3%
	Address federal unemployment benefits that serve as artificial barriers to returning people to work			41%	41%	43%	44%	40%	42%	42%	46%	45%	43%	40%	37%	41%	44%
	Funding for direct federal and federal-aid projects to compensate employers during project delays/shutdowns due to coronavirus			24%	28%	25%	19%	26%	24%	28%	30%	33%	22%	28%	23%	29%	2%
	Funding for state DOTs to help prevent project delays as a result of lost revenue from the pandemic		29%	29%	35%	32%	26%	28%	23%	57%	42%	48%	26%	35%	37%	33%	28%
	More funding for and flexibility in using loan programs to maintain cash flows		22%	30%	30%	27%	29%	33%	32%	24%	29%	31%	34%	22%	22%	30%	30%
	Enact a pandemic risk insurance/covid-19 business and employee continuity and recovery fund		28%	25%	25%	25%	26%	23%	28%	18%	23%	23%	26%	23%	24%	27%	25%
	Enact a "safe harbor" set of protocols to provide firms with protection from tort or employment liability for failing to prevent a covid-19 infection		57%	53%	53%	55%	55%	52%	56%	51%	59%	55%	51%	58%	51%	58%	56%
Q18. When do you expect your firm's volume of business will return to its normal level relative to one year earlier?	Volume already matches or exceeds year-ago level		26%	29%	24%	30%	30%	31%	26%	38%	31%	32%	29%	30%	26%	23%	33%
	1-6 months		26%	13%	13%	10%	16%	12%	14%	7%	11%	8%	14%	13%	6%	14%	13%
	More than 6 months (or never)		30%	38%	45%	42%	35%	34%	41%	33%	39%	39%	35%	40%	52%	44%	33%
	Don't know		17%	20%	18%	18%	19%	23%	19%	21%	19%	21%	22%	17%	16%	19%	20%
Q19. How do expect your firm's headcount to change in the next 12 months? (mark all that apply) [2019: expect to add craft personnel]	No net change			38%	32%	36%	39%	40%	36%	38%	37%	32%	39%	35%	35%	39%	37%
	We expect to furlough employees temporarily		12%	11%	18%	13%	7%	11%	11%	12%	11%	14%	12%	10%	6%	13%	11%
	We expect to terminate employees to reduce headcount			15%	20%	15%	13%	15%	17%	15%	14%	16%	13%	20%	19%	22%	12%
	We expect to recall furloughed/terminated employees		17%	5%	8%	6%	3%	6%	6%	3%	4%	5%	5%	5%	6%	9%	4%
	We expect to add new employees	72%		38%	34%	38%	42%	35%	38%	37%	38%	39%	38%	37%	44%	27%	42%