

Report on the Colorado Arts & Cultural Economy Jobs/Gigs and Earnings Losses from the Covid-19 Epidemic for the Culture Subcommittee of the Governor Polis Emergency Council for Economic Stabilization and Growth (GECESG)

The Covid-19 epidemic has already caused calamitous damage to the arts and cultural economy of Colorado, and because of the nature of its workforce and the way they earn money within this sector, the situation is set to become exponentially worse. This report analyzed four sub-sectors of the arts and cultural economy: the art and design market, cultural heritage, performing arts, and media. Workers in these fields frequently do not have full-time positions but rather operate as self-employed, part-time, or outside contractors. Therefore, in terms of workplace losses, they are referred to as job/gig which encompasses the loss of a full-time job (through layoffs) or the loss of earnings opportunities. Those losses in jobs/gigs are then also calculated in monetary terms for 2-week pay periods starting with the beginning of March 2020 and continuing to the end of April 2020.

The job/gig losses in the first two weeks of March (until 3/18) were relatively modest, 26,083, out of 116,763 total workplaces (26%) in the art and cultural economy, and a loss of \$4,855,300 in earnings. By the end of March (4/1), however, losses begin to increase exponentially, as not just part-time workers see the livelihoods lost, and 36,558 cumulative jobs/gigs were lost, with much more significant losses in earnings, \$16,987,262 (reflecting the larger amount of lost work hours). By 4/15, projected 57,006 jobs/gigs will be lost with \$41,822,001 in lost earnings during that two-week period. If no turn around occurs by the end of April (4/29), then \$64,122,604 will be lost in earnings during the second half of the month. By then, more than half (57%) of all arts and cultural economy workplaces will be lost: 65,973 out of 116,763, and a total of \$127,787,166 will have been lost in terms of earnings over the two-month period (March and April 2020).

Fig.1.1. Colorado Arts and Cultural Economy - Covid 19 Jobs/Gigs and Earnings Losses

	Jobs/Gig 3/4/2020	Cumulative Jobs/Gigs lost 3/18/2020	Earnings Loss over 2 week period 3/18/2020	Cumulative Jobs/Gigs lost 4/1/2020	Earnings Losses over 2 week period 4/1/2020	Cumulative Jobs/Gigs lost 4/15/2020	Earnings Losses over 2 week period 4/15/2020	Cumulative Jobs/Gigs lost 4/29/2020	Earnings Losses over 2 week period 4/29/2020	Cumulative Earnings Losses from 3/18/2020- 4/29/2020
Art and Design Market Occupations	57,580	(16,135)	(\$2,500,246)	(20,743)	(\$7,627,312)	(26,930)	(\$14,366,240)	(33,549)	(\$25,193,690)	(\$49,687,487)
Cultural Heritage Occupations	14,660	(734)	(\$148,761)	(1,166)	(\$566,438)	(2,040)	(\$1,526,395)	(2,796)	(\$2,537,567)	(\$4,779,161)
Performing Arts Occupations	24,494	(6,431)	(\$1,524,575)	(10,143)	(\$6,046,214)	(19,025)	(\$17,687,470)	(20,165)	(\$24,852,693)	(\$50,110,952)
Media and Film Occupations	20,028	(2,783)	(\$681,718)	(4,506)	(\$2,747,298)	(9,011)	(\$8,241,895)	(9,462)	(\$11,538,654)	(\$23,209,565)
Totals	116,763	(26,083)	(\$4,855,300)	(36,558)	(\$16,987,262)	(57,006)	(\$41,822,001)	(65,973)	(\$64,122,604)	(\$127,787,166)
				Individuals Employed in the Cultural Economy as of 3/4/2020		116,763	Cumulative Jobs/Gigs lost by 4/29/2020	(65,973)	Cumulative Earnings Losses from 3/18/2020- 4/29/2020	(\$127,787,166)

The crisis has harmed the four sub-sectors differently depending on the type of occupations and the consumption of their cultural products. Hardest hit has been the performing arts which will have lost 82% of its workplaces (20,165 out of 24,494) by the end of April. The art and design market also faces cascading losses with 33,549 of its 57,580 workplaces (58%) gone by May 1. The cultural heritage sub-sector will remain more resilient because of the higher prevalence of full-time jobs and should see losses

of only 19% of its workplaces. Media, because of its delivery mechanisms, might have more opportunity to maintain revenue streams, but still could lose as much 47% of its workforce or 9,462 workers.

The methodology for this report relies on Bureau of Labor Statistics and Bureau of Economic Analysis data for Standard Occupational Classification System (SOC) codes and North American Industry Classification System (NAICS) codes, and this data is for the entire state of Colorado. The breakdown of occupations in each of the four sub-sectors can be viewed in Figs. I.2.-I.5. Using different employment classifications: QCEW (Quarterly Census of Employment and Wages) full-time jobs, self-employed, and extended proprietor (part-time or gig workers) and their relative earnings were used in the modelling of losses over four two-week periods. Using March 4, 2020 as the control, when few losses had yet occurred, occupation data from 2018 (the last year for which we have complete data) was employed, and earnings were structured with early losses occurring in the extended proprietor and self-employed categories, and in later periods more QCEW workplaces are lost.

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Fig. I.2. Art & Design Market Jobs/Gigs and Earnings Losses 3/4/2020 – 4/29/2020

SOC	Occupation	Jobs/Gig 3/4/2020	Cumulative Jobs/Gigs lost 3/18/2020	Earnings Loss over 2 week period 3/18/2020	Cumulative Jobs/Gigs lost 4/1/2020	Earnings Losses over 2 week period 4/1/2020	Cumulative Jobs/Gigs lost 4/15/2020	Earnings Losses over 2 week period 4/15/2020	Cumulative Jobs/Gigs lost 4/29/2020	Earnings Losses over 2 week period 4/29/2020
27-1011	Art Directors	3,847	(1,226)	(\$279,245)	(1,349)	(\$768,348)	(1,473)	(\$1,257,876)	(1,534)	(\$1,747,405)
27-1012	Craft Artists	2,879	(1,090)	(\$95,929)	(1,120)	(\$246,535)	(1,151)	(\$379,869)	(1,166)	(\$513,203)
27-1013	Fine Artists	5,380	(2,078)	(\$250,548)	(2,120)	(\$639,084)	(2,162)	(\$977,698)	(2,183)	(\$1,316,312)
27-1014	Multimedia Artists	1,876	(806)	(\$132,844)	(857)	(\$353,107)	(908)	(\$561,155)	(934)	(\$769,203)
27-1019	All other Artists	678	(343)	(\$52,402)	(391)	(\$149,486)	(439)	(\$251,951)	(463)	(\$354,415)
27-1022	Fashion Designers	474	(197)	(\$61,720)	(224)	(\$175,728)	(251)	(\$295,734)	(265)	(\$415,739)
27-1024	Graphic Designers	10,814	(3,716)	(\$841,571)	(4,655)	(\$2,635,882)	(5,595)	(\$4,751,755)	(6,065)	(\$6,867,627)
27-1025	Interior Designers	1,338	(268)	(\$66,625)	(535)	(\$333,126)	(803)	(\$749,534)	(937)	(\$1,165,942)
27-1029	All other Designers	527	(173)	(\$46,692)	(229)	(\$153,918)	(284)	(\$286,660)	(312)	(\$419,403)
27-4021	Photographers	22,980	(4,920)	(\$489,239)	(7,149)	(\$1,421,791)	(10,724)	(\$3,199,031)	(16,086)	(\$6,398,061)
541922	Commercial Photographers	3,033	(499)	(\$68,566)	(982)	(\$337,742)	(1,466)	(\$756,104)	(1,708)	(\$1,174,465)
51-7011	Furniture Makers	107	(21)	(\$2,670)	(43)	(\$13,349)	(64)	(\$30,036)	(75)	(\$1,200,276)
51-7021	Furniture Restorers	57	(11)	(\$1,457)	(23)	(\$7,283)	(34)	(\$16,387)	(40)	(\$1,553,991)
51-9194	Print Makers	245	(150)	(\$18,223)	(162)	(\$49,284)	(391)	(\$178,391)	(451)	(\$300,799)
51-9195	Ceramists	142	(28)	(\$5,117)	(57)	(\$25,584)	(85)	(\$57,565)	(99)	(\$76,753)
327212	Glass Artists	165	(33)	(\$8,519)	(66)	(\$42,594)	(99)	(\$95,836)	(116)	(\$149,078)
332323	Metal Artists	225	(45)	(\$9,887)	(90)	(\$49,434)	(135)	(\$111,226)	(158)	(\$173,019)
453920	Art Dealers	2,125	(343)	(\$52,402)	(391)	(\$149,486)	(439)	(\$251,951)	(463)	(\$354,415)
453310	Antiques Dealers	574	(130)	(\$11,478)	(230)	(\$50,542)	(345)	(\$113,719)	(402)	(\$176,896)
453310	Auctioneers	115	(58)	(\$5,112)	(70)	(\$25,008)	(81)	(\$43,764)	(93)	(\$66,687)
		57,580	(16,135)	(\$2,500,246)	(20,743)	(\$7,627,312)	(26,930)	(\$14,366,240)	(33,549)	(\$25,193,690)

Fig. I.3. Cultural Heritage Jobs/Gigs and Earnings Losses 3/4/2020 – 4/29/2020

SOC	Occupation	Jobs/Gigs 3/4/2020	Cumulative Jobs/Gigs lost 3/18/2020	Earnings Loss over 2 week period 3/18/2020	Cumulative Jobs/Gigs lost 4/1/2020	Earnings Losses over 2 week period 4/1/2020	Cumulative Jobs/Gigs lost 4/15/2020	Earnings Losses over 2 week period 4/15/2020	Cumulative Jobs/Gigs lost 4/29/2020	Earnings Losses over 2 week period 4/29/2020
19-3091	Anthropologists and archeologists	252	(38)	(\$9,122)	(49)	(\$29,238)	(99)	(\$88,899)	(125)	(\$148,560)
19-3093	Historical and Cultural Heritage sites	221	(105)	(\$23,630)	(117)	(\$65,576)	(161)	(\$135,638)	(183)	(\$205,699)
25-4011	Archivists	115	(16)	(\$3,328)	(26)	(\$13,193)	(49)	(\$37,364)	(60)	(\$61,534)
25-4012	Curators	285	(21)	(\$5,086)	(30)	(\$17,968)	(87)	(\$78,440)	(115)	(\$138,913)
25-4013	Museum technicians and conservators	315	(16)	(\$2,617)	(23)	(\$9,535)	(86)	(\$53,483)	(117)	(\$97,430)
712110	Museum Employees	1,748	(175)	(\$29,530)	(350)	(\$147,649)	(524)	(\$332,209)	(699)	(\$442,946)
712130	Zoos and botanical gardens	1,273	(127)	(\$20,879)	(255)	(\$104,394)	(382)	(\$234,887)	(509)	(\$313,183)
712190	Nature parks	300	(30)	(\$4,173)	(60)	(\$20,863)	(90)	(\$46,943)	(120)	(\$62,590)
25-4021	Librarians	6,103	(205)	(\$50,398)	(257)	(\$158,022)	(562)	(\$518,533)	(867)	(\$1,066,712)
		14,660	(734)	(\$148,761)	(1,166)	(\$566,438)	(2,040)	(\$1,526,395)	(2,796)	(\$2,537,567)

Fig. I.4. Performing Arts Jobs/Gigs and Earnings Losses 3/4/2020 – 4/29/2020

SOC Code	Occupation	Jobs/Gig 3/4/2020	Cumulative Jobs/Gigs lost 3/18/2020	Earnings Loss over 2 week period 3/18/2020	Cumulative Jobs/Gigs lost 4/1/2020	Earnings Losses over 2 week period 4/1/2020	Cumulative Jobs/Gigs lost 4/15/2020	Earnings Losses over 2 week period 4/15/2020	Cumulative Jobs/Gigs lost 4/29/2020	Earnings Losses over 2 week period 4/29/2020
13-1011	Agents and business managers of artists, performers	1,159	(321)	(\$76,402)	(508)	(\$302,666)	(1,016)	(\$907,999)	(1,067)	(\$1,271,199)
27-1027	Set and exhibit designers	386	(79)	(\$18,839)	(137)	(\$81,454)	(273)	(\$244,361)	(287)	(\$342,105)
27-2011	Actors	2,849	(716)	(\$246,130)	(1,131)	(\$972,959)	(2,263)	(\$2,918,878)	(2,376)	(\$4,086,429)
27-2012	Producers and directors	2,875	(299)	(\$76,868)	(599)	(\$385,048)	(1,197)	(\$1,155,144)	(1,257)	(\$1,617,202)
27-2031	Dancers	641	(118)	(\$17,364)	(186)	(\$68,291)	(372)	(\$204,873)	(391)	(\$286,822)
27-2032	Choreographers	153	(41)	(\$9,222)	(68)	(\$37,982)	(136)	(\$113,946)	(143)	(\$159,524)
27-2041	Music directors and composers	1,391	(408)	(\$93,641)	(639)	(\$366,760)	(1,278)	(\$1,100,281)	(1,342)	(\$1,540,393)
27-2042	Musicians and singers	9,047	(2,731)	(\$784,574)	(4,242)	(\$3,046,716)	(8,485)	(\$9,140,147)	(8,909)	(\$12,796,206)
27-4011	Audio and video equipment technicians	1,567	(166)	(\$32,284)	(277)	(\$134,667)	(553)	(\$404,001)	(581)	(\$565,602)
27-4014	Sound engineering technicians	407	(67)	(\$15,195)	(114)	(\$65,119)	(229)	(\$195,358)	(240)	(\$273,501)
39-3031	Ushers, lobby attendants, and ticket takers	2,973	(1,189)	(\$110,166)	(1,784)	(\$413,122)	(2,378)	(\$826,244)	(2,676)	(\$1,239,366)
39-3092	Costume attendants	112	(45)	(\$7,311)	(67)	(\$27,418)	(90)	(\$54,836)	(101)	(\$82,254)
39-3099	Entertainment attendants and related workers	70	(28)	(\$2,835)	(42)	(\$10,632)	(56)	(\$21,264)	(63)	(\$31,897)
39-5091	Makeup artists, theatrical and performance	190	(45)	(\$11,822)	(76)	(\$49,890)	(153)	(\$149,670)	(160)	(\$209,538)
49-9063	Musical instrument repairers and tuners	673	(179)	(\$21,923)	(273)	(\$83,489)	(545)	(\$250,468)	(573)	(\$350,655)
Total		24,494	(6,431)	(\$1,524,575)	(10,143)	(\$6,046,214)	(19,025)	(\$17,687,470)	(20,165)	(\$24,852,693)

Fig. I.5. Media Jobs/Gigs and Earnings Losses 3/4/2020 – 4/29/2020

SOC Code	Occupation	Jobs/Gig 3/4/2020	Cumulative Jobs/Gigs lost 3/18/2020	Earnings Loss over 2 week period 3/18/2020	Cumulative Jobs/Gigs lost 4/1/2020	Earnings Losses over 2 week period 4/1/2020	Cumulative Jobs/Gigs lost 4/15/2020	Earnings Losses over 2 week period 4/15/2020	Cumulative Jobs/Gigs lost 4/29/2020	Earnings Losses over 2 week period 4/29/2020
27-2099	Entertainers and performers, sports, and related	2,925	(828)	(\$221,281)	(1,267)	(\$846,419)	(2,534)	(\$2,539,257)	(2,661)	(\$3,554,960)
27-3011	Radio and television announcers	740	(120)	(\$26,693)	(194)	(\$107,794)	(387)	(\$323,383)	(406)	(\$452,737)
27-3021	Broadcast news analysts	414	(95)	(\$34,284)	(147)	(\$133,042)	(295)	(\$399,125)	(309)	(\$558,776)
27-3022	Reporters and correspondents	1,005	(144)	(\$29,840)	(224)	(\$116,381)	(449)	(\$349,143)	(471)	(\$488,800)
27-3031	Public relations specialists	6,133	(314)	(\$83,196)	(484)	(\$321,093)	(968)	(\$963,278)	(1,017)	(\$1,348,589)
27-3041	Editors	4,665	(799)	(\$176,541)	(1,342)	(\$741,368)	(2,684)	(\$2,224,103)	(2,818)	(\$3,113,744)
27-3099	Media and communication workers, all other	797	(152)	(\$37,300)	(227)	(\$138,828)	(454)	(\$416,484)	(476)	(\$583,077)
27-4012	Broadcast technicians	706	(43)	(\$8,538)	(71)	(\$35,430)	(141)	(\$106,290)	(148)	(\$148,806)
27-4031	Camera operators, television, video, and motion picture	873	(127)	(\$24,945)	(220)	(\$108,014)	(440)	(\$324,043)	(462)	(\$453,660)
27-4032	Film and video editors	931	(141)	(\$33,892)	(285)	(\$171,551)	(570)	(\$514,652)	(599)	(\$720,512)
27-4099	Media and communication equipment workers	841	(21)	(\$5,208)	(45)	(\$27,379)	(90)	(\$82,138)	(94)	(\$114,993)
Total		20,028	(2,783)	(\$681,718)	(4,506)	(\$2,747,298)	(9,011)	(\$8,241,895)	(9,462)	(\$11,538,654)