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The Power of Music – An Economic Analysis of Oregon’s Emerging Commercial Music Industry

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The Power of Music - An Economic Analysis of Oregon's Emerging Commercial Music Industry

NeRC

Northwest Economic Research Center
College of Urban and Public Affairs

Final Report
March 2023

NeRC

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Business Oregon is the State of Oregon’s economic development arm. It is the Department’s mission to invest in Oregon businesses, communities, and people to promote a globally competitive, diverse, and inclusive economy. The 2022 Oregon Legislature directed Business Oregon to conduct several comprehensive market analyses of emerging industry sectors within the state. Oregon Laws 2022, Chapter 110, Section 296 authorized an appropriation for Business Oregon to complete market analyses for several emerging sectors, including Commercial Music, Live Performance, Organic Agriculture and Food Products, Cannabis, and Ocean Resources and the Blue Economy.



NERC is based at Portland State University in the College of Urban and Public Affairs. The Center focuses on economic research that supports public-policy decision-making and relates to issues important to Oregon and the Portland Metropolitan Area. NERC serves the public, nonprofit, and private sector community with high quality, unbiased, and credible economic analysis. Dr. Tom Potiowsky is the Senior Advisor of NERC, and also the former Chair of the Department of Economics at Portland State University. Dr. Jenny H. Liu is NERC’s Assistant Director and Associate Professor in the Toulon School of Urban Studies and Planning. This report was researched and written by Dr. Jenny Liu, Dr. Steve Marotta, Emma Brophy, Rohan Khanvilkar and Hyeoncheol Kim.

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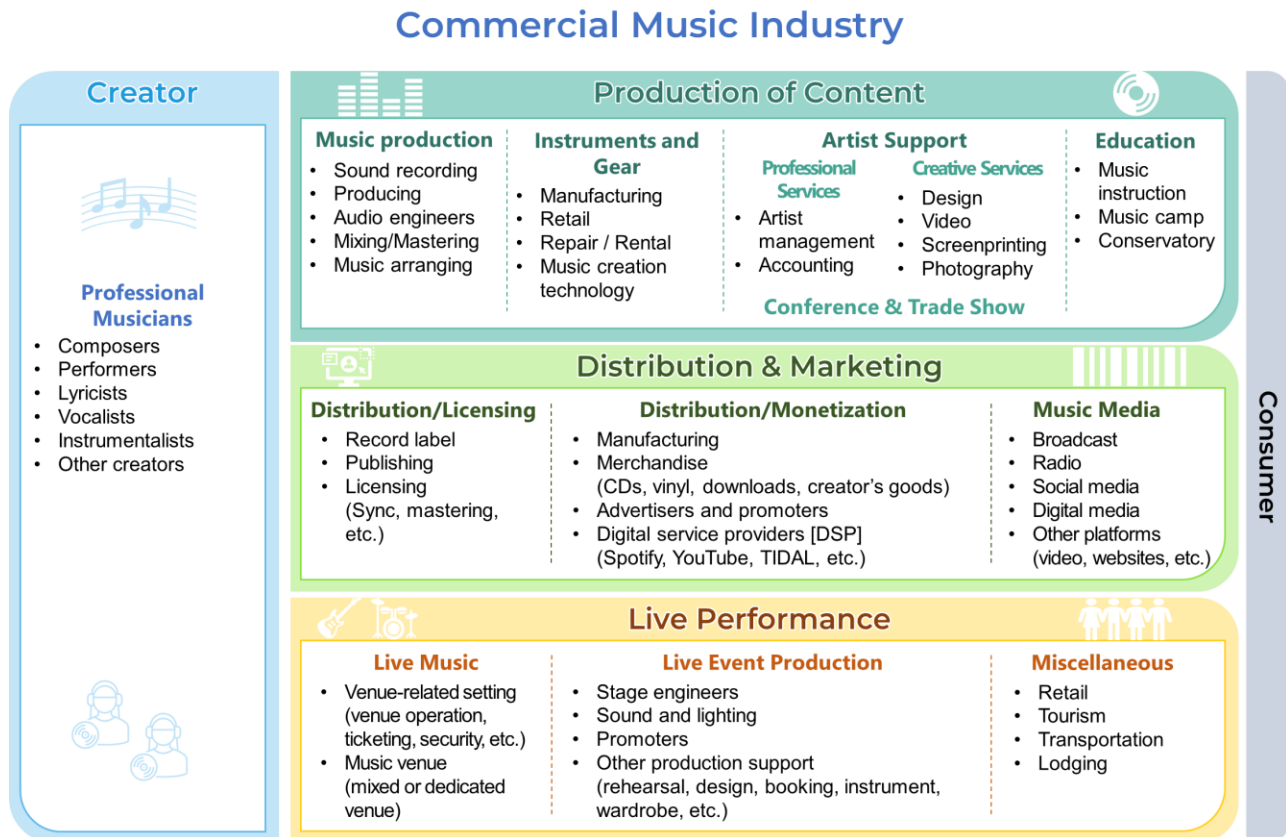
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Executive Summary

Oregon has a vibrant creative presence, producing a diverse array of artists known on the national scale, in addition to independent artists mostly familiar on the local scene. The state is also home to many annual music festivals and live performance events that attract large numbers of attendees, while also playing host to music businesses big and small spanning sound recording studios, mastering engineers, composers, tuners, digital streaming services, graphic designers and music educators. All of these components of the Oregon commercial music industry economically impact their communities by providing entertainment and increasing profits for performance venues, distributing wages, and creating culture that attracts people from inside and outside the state. As such, Business Oregon and the Oregon Legislature recognized the commercial music industry as an important emerging industry sector.

This first-of-its-kind study in Oregon aims to provide a framework and baseline to understand the economic significance of the commercial music industry. To define Oregon’s commercial music industry, the Portland State University NERC (Northwest Economic Research Center) research team synthesized past academic research, regional reports, cluster analysis and expert guidance from the Industry Advisory Group to develop a Commercial Music Conceptual Diagram that visualizes the industry sectors that connect the creators to the consumers - Production of Content, Distribution & Marketing and Live Performance.

Figure 1 - Commercial Music Industry Conceptual Diagram



To quantify the industry, the team mapped the conceptual industry diagram to NAICS codes through several processes, consolidating data from the 2022 Oregon Music Census, QCEW, OEWS, industry lists and IMPLAN to build inputs for the economic impact analysis. An economic profile that includes longer-term industry trends as well as detailed analysis of employment and payroll trends for each industry sector, geographical distribution, occupational statistics, and growth subsectors. Economic impact analysis was conducted using IMPLAN, an input-output model that tracks economic activity through supply chain relationships within regional economies. To further provide context to our understanding of the commercial music industry ecosystem in Oregon, NERC conducted semi-structured interviews of commercial music industry professionals and analyzed responses from the Oregon Music Census in our qualitative research process. Finally, based on the comprehensive quantitative and qualitative analyses, the study identifies challenges and gaps within the industry, along with potential opportunities and strategies.

Based on NERC's quantitative and qualitative research and analysis, here are some key findings in this first exploration of Oregon's commercial music industry:

- Table 1 shows that in 2021 the commercial music industry contributed over 16,400 jobs directly in the state, for a total of 22,927 jobs (direct, indirect, and induced).
- These 22,927 commercial music industry jobs generated just below \$1 billion in labor income and nearly \$3.8 billion in economic output in the state, predominantly impacting *performing arts companies, independent artists and performers* and *other education services* (which includes music education) sectors.
- The commercial music industry's economic impacts in Oregon span all four sectors (Table 2), with more than 10,000 total jobs attributed to the Creator sector, 7,989 total jobs in the Production of Content sector, 1,557 total jobs in the Distribution and Marketing sector, and 3,035 total jobs in the Live Performance sector.
- The commercial music industry's economic activity, labor income, and hiring also has effects on public tax revenues, contributing more than \$68 million towards Oregon's state and local governments (Table 3).
- Music industry workers and owner/operators highlighted Oregon's resourceful and creative communities and cross-genre and cross-sectoral networks as being major regional advantages, despite the challenges associated with stagnant wages and lingering effects of the pandemic-related closures and economic downturn.
- Additionally, we identified Audio Equipment Manufacturing (334310) as well as Promoters of Performing Arts with Facilities (711310 - music venues, festivals and concert halls) as potential growth subsectors. Some instrument and gear manufacturers reported difficulties in expanding their business due to strictures in affording the time involved in training apprentices from scratch. However, businesses, especially manufacturers, were able to rely on networks to help accelerate their businesses. The importance of networks, to this end, cannot be overstated.
- Rough estimates of additional off-site spending by attendees at live performance events suggest that it may contribute another 4,154 total jobs across the Oregon economy, and more than \$186 million in total labor income and \$503 million in total economic output, mostly distributed through the restaurant, hotel, transportation and retail industries.
- Many music venues experience challenges in providing sufficient wages/compensation to performers due to increases in various costs of operating in the form of licensing fees, rising costs of labor, having to pay for noise abatement improvements in response to residential

developments changing community guidelines, and limitations in drawing enough customers due to the inability to host all-ages performances.

- The prevalence of informal contracting and “handshake agreements” may also hurt venues due to the implicit challenges of an inability to scale-up their operations in addition to being potentially ineligible for public assistance grants due to a lack of “formally employed” staff.
- The pandemic was a significant challenge, especially for venue and event operators, performers and businesses that support these activities. Mandated COVID-19 closures starting in March 2020 led to employment drops of up to 60% in these sectors, compared to an overall decrease of 13% in Oregon. However, a number of gear and instrument manufacturers saw upticks in their businesses as people began looking for new hobbies during pandemic-related closures.

The following are some recommendations that can improve the competitiveness and support the growth of the emerging Oregon commercial music industry:

- We recommend the establishment of an Oregon Music Office – much along the lines of the Texas Music Office, New York Office of Media and Entertainment, or Oregon Film – to help develop and grow the industry in an equitable manner. Such an office may also assist in interfacing with local and state-level policy makers, future researchers and data collectors, as well as within the industry itself.
- Grants or incentives may be necessary to allow small businesses and independent professionals to scale up their production in Oregon, and to bridge the gap during economic downturns, severe weather or wildfire events for creators and live performance related businesses.
- Many commercial music businesses are currently misclassified in economic databases. To more accurately capture the industry, additional outreach and educational efforts are essential to help firms input an appropriate NAICS code or to participate in databases.
- On-going research on both quantitative and qualitative fronts is critical to build on this baseline understanding about the full extent of commercial music industry’s economic contributions, to address gaps in the existing network, and to strategize around how to foster inclusive environments for the industry to grow.

Table 1 - Oregon Commercial Music Industry Economic Impact Summary (2021 Dollars)

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	16,439	\$531,376,572	\$1,345,156,922	\$2,547,480,493
Indirect Effect	3,665	\$268,840,827	\$381,061,808	\$686,339,739
Induced Effect	2,823	\$177,126,746	\$313,318,172	\$524,120,737
Total Effect	22,927	\$977,344,145	\$ 2,039,536,902	\$3,757,940,969

Table 2 - Oregon Commercial Music Industry Economic Impacts by Industry Sector (2021 Dollars)

	Type	Employment	Labor Income	Total Value Added	Output
Creator	Direct	8,702	\$142,477,251	\$670,367,722	\$976,288,396
	Indirect	911	\$53,111,096	\$74,427,253	\$139,770,876
	Induced	696	\$43,601,191	\$77,134,098	\$129,041,084
	Total	10,308	\$239,189,538	\$821,929,073	\$1,245,100,357
Production of Content	Direct	4,934	\$273,705,593	\$485,571,127	\$1,048,910,271
	Indirect	1,585	\$144,762,587	\$207,545,025	\$365,296,392
	Induced	1,470	\$92,247,556	\$163,165,810	\$272,931,744
	Total	7,989	\$510,715,736	\$856,281,962	\$1,687,138,406
Distribution & Marketing	Direct	417	\$46,736,599	\$75,439,955	\$322,071,553
	Indirect	808	\$47,299,174	\$64,457,476	\$115,554,743
	Induced	332	\$20,851,900	\$36,885,766	\$61,704,036
	Total	1,557	\$114,887,673	\$176,783,197	\$499,330,333
Live Performance	Direct	2,361	\$67,319,023	\$110,102,046	\$194,439,711
	Indirect	355	\$23,206,248	\$33,934,007	\$64,389,623
	Induced	320	\$20,074,512	\$35,510,646	\$59,403,725
	Total	3,035	\$110,599,783	\$179,546,699	\$318,233,059

Table 3 - Live Performance Attendee Additional Spending Economic Impact Summary (2021 Dollars)

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	2,940	\$106,565,028	\$160,511,033	\$276,229,170
Indirect Effect	551	\$40,050,385	\$60,025,050	\$110,876,624
Induced Effect	663	\$40,084,627	\$69,232,696	\$116,594,970
Total Effect	4,154	\$186,700,039	\$289,768,779	\$503,700,764

The Power of Music: An Economic Analysis of Oregon's Emerging Commercial Music Industry

Oregon's commercial music industry has been identified as an important emerging industry, but analysis is difficult due to the lack of a cohesive classification schema. Music affects a variety of sectors that are not grouped in the NAICS framework, and does not follow a traditional supply chain, because it has attributes of both a good and a service. In order to situate and define commercial music activity, the report briefly summarizes the importance of this sector on a broad basis, as the justification for developing policies for support. Next, it describes conventional modeling techniques for assessing economic impact and the scope of the industry in Oregon, and provides sources from other geographies as a basis for the identification of useful methodologies and data sources and examples of policy initiatives that have been proposed and implemented elsewhere.

A thorough examination of the many sectors included for this analysis forms the basis for the body of results, which has two parts. First, a detailed conceptualization of the commercial music industry is constructed, which subsequently informs economic impact analysis that estimates the economic footprint of the commercial music industry as represented by music production and distribution entities in Oregon. Secondly, the quantitative results are supplemented by qualitative survey and interview data in order to create a more comprehensive summary of economic activity related to commercial music production in the state. Finally, we provide a discussion of the challenges and gaps identified through our research processes, and present potential opportunities and strategies to address them.

I. Defining Oregon's Commercial Music Industry

The commercial music industry can be described as the creation, production, distribution and consumption of music-related objects and activities for profit. This report attempts to capture as much relevant economic activity as possible by including every sector directly related to commercial music production as economic modeling inputs for strong quantitative results, supplemented with extensive qualitative survey and interview data.

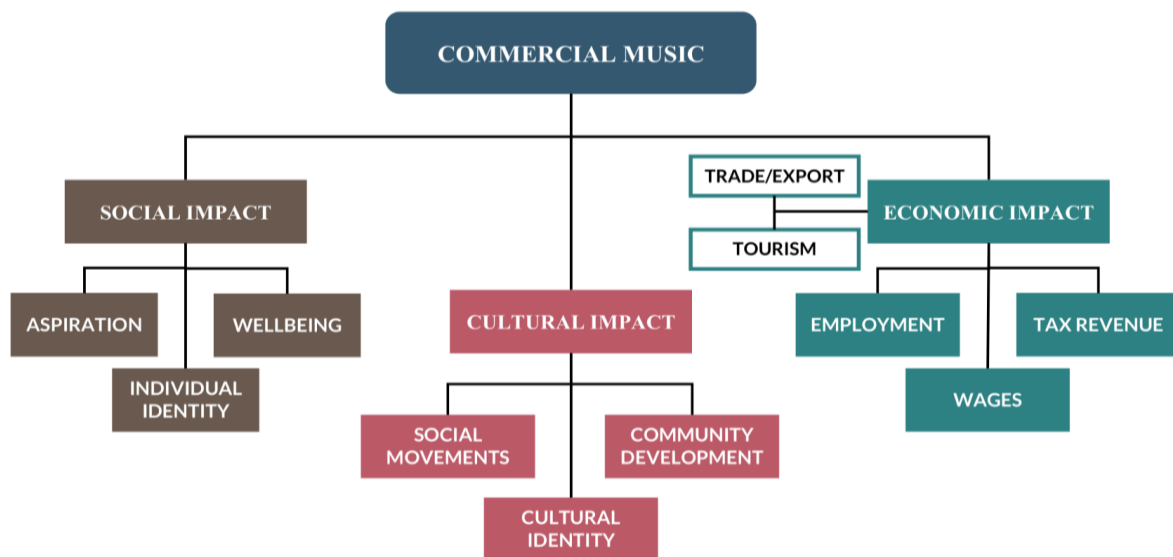
The commercial music industry contributes to culture, social movements, wellbeing, community, and identity. While societies large and small have demonstrated their recognition of these contributions through public and private support for the music (especially when they are made available to the community free of cost) by devoting public and private grants to producers, the majority of commercial music industry participants do not enjoy comparative support, demonstrating a lack in the understanding of the importance of commercialization in the development and sustenance of artistic activity that provides revenue.

Defining a commercial music industry is quite difficult for many reasons: there is no consensus on which industries constitute the commercial music industry—there are many economic entities connected to the production of music, from the obvious to the less apparent but integral. While it is clear that all forms of commercial music production, distribution, and consumption are core components, related industries include, for example, marketing organizations and support infrastructure. These relations and linkages are termed industry clusters.

Given the breadth of industries impacted by commercial music, it is also challenging to decide what should be included— what degree of mutual interaction warrants consideration, and what metric should be used to determine the industries placed in a cluster. The music industry is not represented by existing industrial classification systems, and music commodities flow in wide-ranging ways dissimilar to the traditional supply chain. Thus, it is important to understand the industrial relations and linkages within the commercial music industry by capturing them with not only data, but qualitative expert testimony.

Sociologists present music conceptually as both an object and an activity: the creative activity results in tangible tradeable goods with stability of characteristics across time and place, while also producing effects as it is carried out. In other words, it is both a generative process of creation and dissemination, and a productive process that results in a final good.¹ Over time, both of these elements have evolved, as traditional folk music inspires popular music, both of which inform and parallel changes in society. Urbanization, industrialization, and the rise of consumer society in the nineteenth century increased the reach and profitability of commercial music, driving both the advancement of recording technology and the incentive for artists of every genre to convert their work into commercial forms.^{2,3} Today, the ways in which music is commodified, recorded, and reproduced in various formats have never been more diverse. Music has reached a phase of globalization, enabling the transnational creation and diffusion of music, and subsequently spurring emphasis on creativity and diversity of music and innovation in marketing and distribution.⁴

Figure 2 - Impacts of Commercial Music Production



While the importance of funding the arts due to their tremendous cultural and inspirational impacts goes nearly without saying, the economic importance of the arts sector is not always as evident in the public consciousness, and in fact there can be a perception that investment in the arts comes at the

¹ William G. Roy and Timothy J. Dowd, "What Is Sociological about Music?," *Annual Review of Sociology* 36 (2010): 183–203.

² Roy Shuker, *Understanding Popular Music, Second Edition* (Routledge, 2001).

³ Roy Shuker, *Popular Music Culture: The Key Concepts* (Florence, UNITED STATES: Taylor & Francis Group, 2011).

⁴ John Connell and Chris Gibson, "World Music: Deterritorializing Place and Identity," *Progress in Human Geography* 28, no. 3 (June 2004): 342–61, <https://doi.org/10.1191/0309132504ph493oa>.

expense of economic development initiatives. Nevertheless, policymakers and community stakeholders have long recognized this industry as an economic force in urban and rural areas, and this impact has been described in reports going back for decades.

It is through commercialization that the music industry gains the financial resources with which to support both itself and the industries and communities in which it flourishes. The commercial music industry centers around the production and distribution of recorded media, and live or digital events that require ticket purchases. The impact of the former group is the area of focus for this report— a narrower focus than many previous analyses, that allows for a more specific result, while still capturing the economic ripple effect through many other industries through the use of economic modeling.

In addition to the revitalization of urban areas through public investment in the arts, a policy emphasis on increased activity in this sector can create growth in industries outside of the arts through the stimulation of industries related to trade (due to the export of cultural goods) and associated products and services.⁵ The production and distribution industry is a primary source of export in the music industry, and as our economy becomes increasingly globalized, commodification and commercialization increase in scope and economic importance.⁶ Through various forms of commercialization, music not only reaches its local community, but crosses geographic boundaries, exporting culture as it imports capital— an influx that supports its producers and the local economy in which it becomes distributed.

Previous Research in Oregon

Oregon has a vibrant creative presence, producing a diverse array of artists known on the national scale— including Sleater-Kinney, the Dandy Warhols, Robert Cray, Everclear, Pink Martini, Mel Brown, and Portugal The Man. No less culturally important, artists mostly familiar on the local scene economically impact their communities by providing entertainment and increasing profits for performance venues, distributing wages, and creating culture that attracts both permanent residents and visitors from inside and outside the state.

In recent years, there is evidence that the state is a prominent emergent music destination. In December of 2022, the *Oxford American* magazine published an article highlighting Oregon's contribution to modern country attracting considerable attention as it undergoes an internal revolution — as represented by artists who performed at that year's Pickathon. This annual music festival takes place each year in Happy Valley, Oregon, and draws visitors from across the state and beyond.⁷ Earlier this year, *Downbeat* magazine cited local jazz club The 1905 as a top global venue for jazz music in its February 2023 Venue Guide.⁸ Project management software company Workamajig conducted an analysis of 331 metropolitan areas with populations over 100,000 on the basis of its creative innovation, based on a number of factors including the number of creative jobs, artists, and musicians, as well as number of film and music festivals per capita. Portland ranked as third: the West Coast capital of the blues (and home of the Waterfront Blues Festival), with a musical scene that also features some of the hottest metal and hip-hop scenes in the nation. Bend also showed distinction at number 85.⁹ Every year,

⁵ Ann Markusen and Anne Gadwa, "Arts and Culture in Urban or Regional Planning: A Review and Research Agenda," *Journal of Planning Education and Research* 29, no. 3 (March 1, 2010): 379–91, <https://doi.org/10.1177/0739456X09354380>.

⁶ Connell and Gibson, "World Music."

⁷ Justin Taylor, "Not Country, Not Western, Just West," *Oxford American*, 2022.

⁸ Jashayla Pettigrew, "This Portland OR Jazz Venue Has Been Named One of World's Best," *KOIN*, 2023.

⁹ "Best Cities and Small Towns in the U.S. for Creative |," Workamajig, 2023.

a diverse array of music festivals draw tourists and generate economic activity through commercial music, including the Oregon Bach Festival and Oregon Country Fair in Eugene, the eponymous Pendleton Whisky Music Festival, and Oregon Jamboree in Sweet Home. By supporting live performance outside of the Portland metropolitan area, policy makers can increase tourism to those areas, as well as expanding the benefits of production discussed above.

In addition to an increasingly vibrant live music scene, Oregon boasts many firms prominent in the commercial music industry. Portland-based CD Baby, an online distributor for independent musicians, provides a variety of services ranging from digital streaming to YouTube monetization and marketing—vital tools for any modern professional musician. Ear Trumpet Labs manufactures one-of-a-kind handmade microphones used by world-famous artists spanning the genres, from Brandi Carlisle to the Violent Femmes. Biamp, located in Beaverton, provides top-tier audio visual services, and has been the title sponsor of the PDX Jazz Festival multiple times.

Oregon's top venues both attract visitors and generate substantial economic activity. Five of Portland's best known performance spaces— in the 2016-17 fiscal year, Keller Auditorium, the Arlene Schnitzer Concert Hall (affectionately known as the Schnitz), and the Newmark, Dolores Winningstad, and Brunish Theaters, generated \$104.4 million dollars in spending and supported 1,050 full-time equivalent jobs.¹⁰ These venues frequently host nationally and globally famous artists, whose presence draws visitors and injects money into the local commercial music industry. Equally prominent are the Roseland Theater (which hosts crowds up to 1,400), McMenamins Crystal Ballroom, and the Moda Center, a massive space that doubles as the home of the Portland Trail Blazers. Smaller venues thrive as well— the Doug Fir Lounge serves as an indie showcase for both national and local artists, and Mississippi Studios (which additionally serves as a recording studio) is a frequent destination for both tourists and locals alike. Outside of Portland, Cuthbert Amphitheater in Eugene and McMenamins Edgefield in Troutdale provide outdoor concerts that sell out every summer to crowds numbering in the thousands.

The sole economic analysis of the arts and music industry in Oregon is the relevant section from the 2017 fifth edition report produced by Americans for the Arts, *Arts and Economic Prosperity 5*.¹¹ This report focuses solely on nonprofit arts, but the results are nevertheless striking— by utilizing a standard economic cluster analysis approach, the authors find that nonprofit arts in Oregon gave rise to \$687 million in total spending in 2015, \$323 million of which came from event-related spending by audiences attending live performances. Additionally, nonprofit arts organizations supported labor hours equivalent to 13,939 full-time jobs, and generated \$26.7 million in local and state tax revenues. The next update in this series, *Arts and Economic Prosperity 6*, is set to be underway in May of 2023.

Research in Other Geographies

This section of the review summarizes previous reports in other areas, with an emphasis on the data sources used for analysis. Nearly all reports used to inform this one are economic impact analyses, meaning that they select industry sectors for inclusion in input-output modeling, with or without supplemental data presentation and interview or survey components. Table 4 below summarizes the

¹⁰ Portland's Centers for the Arts, "Connecting Community and Culture Portland's Centers for the Arts FY 2016-17 Report," 2018.

¹¹ Americans for the Arts, "Arts & Economic Prosperity 5 - The Economic Impact of Nonprofit Arts & Cultural Organizations & Their Audiences in the State of Oregon," 2017.

included reports. The prevalent method is impact analysis, informed by various forms of qualitative input to provide refinement and context for the results. The majority of studies focused on city or county level music industry activities, with only a few that examine state-level economic impacts in Georgia, Texas and Colorado. We summarize the localized studies, grouped by region, below.

Table 4 - Summary of Prior Research

Year	Authors	Area	Data Used		Methodologies Employed
			Publicly Available / Author-Collected	Proprietary Data / Secondary Sources	
2004	Gnuschke, John & Wallace, Jeff ¹²	Memphis and Shelby County	Individual Surveys of Independent Music Workers; Music Business Survey from Sparks Bureau of Economic Research		Impact Analysis (Input-Output: RIMS II)
2005	Tasic, Nikola & Wallace, Sally ¹³	Atlanta and the state of Georgia		Employment Estimates (ReferenceUSA)	Impact Analysis (Input-Output: IMPLAN) Literature Review
2007	Raines, Patrick & Brown, LaTanya ¹⁴	Nashville metropolitan region	County-level Business Financial Data	Survey data from Nashville Music Association Task Force, Music Row Magazine, and Country Music Association Festival in 2005.	Impact Analysis (Simulation: REMI)
2007	Rothfield et al. ¹⁵	Chicago	County Business Pattern Data	Music Sales Data (Nielsen SoundScan) and Live Performance Data (POLLSTAR Tour Histories) from 2004	Comparative Statics Analysis Spatial Analysis
2008	Markusen et al. ¹⁶	U.S. (national)	Economic Census and Public Use Microdata Sample for aggregate cultural employment and occupational information.	Dun & Bradstreet (D&B) data on frequency and typology of arts-centric businesses and employees	Case Studies Semi-Bibliometric Precedent Literature Review
2008	Beyers et al. ¹⁷	Seattle and King County	County Business Patterns, PUMS	Commercial Marking Data (NameFinders) Employment estimates (Reference USA)	Impact Analysis (Input-Output: IMPLAN) Interviews (Structure Undefined)
2013	Harper et al. ¹⁸	Nashville metropolitan region	Expert Interviews	EMS, Equifax, OneSource (Thomson Reuters)	In-Depth Interviews (Unstructured) Cluster Analysis Impact Analysis (Input-Output: IMPLAN)
2015	Brown, Megan ¹⁹	Seattle	County Business Patterns, NES Survey Data of Working Musicians in Seattle MSA		Impact Analysis (Input-Output: Modified Washington State Tables)
2017	New York City Mayor's Office of Media and	New York	The Quarterly Census of Employment and Wages (QCEW) Non-Employer Statistics (NES)		Impact Analysis (Input-Output: IMPLAN) Aggregate Metrics' Trends Analysis

¹² John E. Gnuschke and Jeff Wallace, "Economic Impact of the Music Industry in Memphis and Shelby County," *Business Perspectives* 16, no. 3 (2004).

¹³ Nikola Tasic and Sally Wallace, "Economic Impact of the Commercial Music Industry in Atlanta and the State of Georgia: New Estimates," 2005, 27.

¹⁴ Patrick Raines and LaTanya Brown, "Evaluating the Economic Impact of the Music Industry of the Nashville, Tennessee Metropolitan Statistical Area," *Journal of the Music & Entertainment Industry Educators Association* 7, no. 1 (2007).

¹⁵ "Chicago Music City," 2007, <https://doi.org/10.6082/uchicago.1273>.

¹⁶ Ann Markusen et al., "Defining the Creative Economy: Industry and Occupational Approaches," *Economic Development Quarterly* 22, no. 1 (February 2008): 24–45, <https://doi.org/10.1177/0891242407311862>.

¹⁷ William B Beyers, Christopher Fowler, and Derik Andreoli, "The Economic Impact of Music in Seattle and King County," November 2008, 54.

¹⁸ Garrett Harper, Chris Cotton, and Zandra Benefield, "NASHVILLE MUSIC INDUSTRY Impact, Contribution and Cluster Analysis," 2013.

¹⁹ Megan Brown, "Seattle's Working Musicians," *Fair Trade Music Project of the Musicians' Association of Seattle*, 2015, 46.

	Entertainment ²⁰				
2018	Seman, Michael ²¹	Colorado	Census and BLS Data, audited financial statements, media reports, and qualitative information from industry representatives Live performance data from Denver Arts & Venues	EMSI, InfoGroup, and POLLSTAR data	Impact Analysis (Input-Output: EMSI) Spatial Analysis
2020	Recording Industry Association of America (RIAA) ²²	U.S. (national)	Census Data		Impact Analysis (Input-Output: RIMS II) Aggregate Metrics Trend Analysis
2020	Gedgaudas, Lisa ²³	Denver metropolitan region	Top-level (Census and BLS), Local (Denver Arts & Venues, Denver Economic Development & Opportunity)	EMSI Analysis of Local Data	Cluster Analysis Impact Analysis (Key Metrics' Trends)
2020	Nashville Area Chamber of Commerce ²⁴	Nashville metropolitan region	Qualitative interview and Survey Data		In-Depth Interviews Cluster Analysis Impact Analysis (Input-Output: IMPLAN)
2021	TXP, Inc. ²⁵	Texas	Texas Music Directory QCEW		Impact Analysis (Input-Output: Model Undefined)

Memphis and Shelby County, Tennessee²⁶

Economic impact of the music industry in Memphis and Shelby County (2004) considers three complications in its analysis: the music industry includes both non-profit and for-profit organizations; music can be consumed in a variety of ways; and participants are often part-time or self-employed, thereby making it difficult to capture detailed information about the industry. Commercial music studios, producers, bands, lawyers, musicians, retail establishments, and teachers are all included. The objective is to capture music-related tourism, music education, and even casinos.

Atlanta and the State of Georgia²⁷

This report, titled *Economic Impact of the Commercial Music Industry in Atlanta and the State of Georgia: New Estimates*, was written in 2007 to provide a basic outline of the music industry at that point in time. Following a literature review in order to determine relevant sectors, the report presents a basic IMPLAN analysis. The authors argue that music industry displays increasing returns to scale, due to the concentration of activity in few areas and subsequent amplification of effects in the local economy.

²⁰ New York City Mayor’s Office of Media and Entertainment and The Boston Consulting Group, “Economic Impact, Trends, and Opportunities Music in New York City,” 2017.

²¹ Michael Seman, “Colorado’s Music Industry: A Current Analysis and Look Forward,” 2018, 29.

²² RIAA, “The U.S. Music Industries: Jobs & Benefits” (RIAA, 2020).

²³ Lisa Gedgaudas, “2020 City of Denver Creative Economy Report,” 2020, 23.

²⁴ Nashville Area Chamber of Commerce, “2020 Music Industry Report,” 2020.

²⁵ TXP, “The 2020 Economic Impact of Music in Texas,” 2021.

²⁶ John E. Gnuttschke and Jeff Wallace, “Economic Impact of the Music Industry in Memphis and Shelby County,” *Business Perspectives* 16, no. 3 (2004).

²⁷ Tasic and Wallace, “Economic Impact of the Commercial Music Industry in Atlanta and the State of Georgia: New Estimates.”

Nashville, Tennessee²⁸

Three reports have defined the scope and impact of the music industry in the city of Nashville in recent years. The first, written in 2007, cross-checks data from the 2002 U.S. Census County Business Patterns Database against three different sources: proprietary data from ReferenceUSA, a 2005 survey of 325 local music industry leaders, and a model for estimating the impact of touring artists in Nashville. This ensures a more complete accounting of the industry than a single source would allow. Next, the authors used the Regional Economic Models, Inc. (REMI) input-output analysis program to translate this scope into economic and fiscal impacts in the Nashville metropolitan statistical area.

In 2013 and 2020, two more reports came out, both using IMPLAN software to describe the scope and impact of the local music industry. The first, published in 2013, identifies notable music industry sectors in Nashville that have a traded relationship with other sectors. Next, the study provides jobs supported, earnings, and location quotient for these sectors. Location quotient is a measure that indicates the relative concentration of a particular industry in a given area— in other words, that area's degree of specialization in a given industry (Harper et. al 2013). For this analysis, proprietary data from Economic Modeling Specialists International (EMSI), Equifax, and OneSource are used to inform and modify IMPLAN's input-output matrix, and expert interviews offer context for the report and insider knowledge of the industry.

In 2020, the city of Nashville produced the second report, with additional detail and qualitative research. In this report, the authors enhance the previous IMPLAN analysis approach by using EMSI data in combination with more granular data from applied economic consulting firm Chmura Economics. Additionally, the report includes summaries of the results of a 98-question survey of music industry professionals and a 50-question survey of music consumers. These surveys were conducted online from March to September of 2020 and received a total of 2,589 responses.

Chicago, Illinois²⁹

Chicago Music City, written in 2007, assesses the vitality of the city's music industry by comparing spending, employment, payroll, and other data from the music industry with data from other cities. Subsectors are separated into core and peripheral industries. After assembling all relevant data, the authors compare Chicago with fifty other metropolitan areas in order to determine its comparative strength via location quotient, with the goal of setting a benchmark in order to enable tracking. Expert input from music industry and arts advocates informs the report.

Seattle and King County^{30,31}

A 2005 report for the Mayor's Office of Film and Music, *The Economic Impact of Music in Seattle, and King County*, emphasizes the difficulty in determining what portions of a related NAICS sector should be included. The authors note that while the entirety of Musical Instrument Manufacturing is clearly part of the industry, Truck Transport of Household Goods, which might include pianos or other types of musical equipment, is also involved. From this perspective, it is clear how elusive the music industry can be, when examined using the only largely-available data classification system. In order to get around this

²⁸ Nashville Area Chamber of Commerce, "2020 Music Industry Report."

²⁹ "Chicago Music City," 2007.

³⁰ Beyers, Fowler, and Andreoli, "The Economic Impact of Music in Seattle and King County."

³¹ Brown, "Seattle's Working Musicians."

problem as much as possible, the authors used lists of registered businesses in combination with publicly available data to construct informed employment estimates, which were subsequently used in an input-output model to estimate the full set of impacts for both Seattle and King County as a whole.

In 2015, The Musicians Association of Seattle produced a report titled *Seattle's Working Musicians* in collaboration with a local musicians' union and the American Federation of Musicians. The authors outline the general composition of the industry and provide an economic impact analysis performed using IMPLAN using publicly-available data. A survey of Seattle musicians conducted over the course of six months informs a thorough description of working conditions and the nature of the musical gig economy, as well as a selection of policies that could support the industry.

New York City³²

This report defines four categories of activity in the music industry: local artist communities (artists, small venues, rehearsal spaces, and educational institutions), mass music consumption (professional performing groups, radio broadcasting, streaming services, radio, and large venues), the global record business (record labels, music publishers, and talent managers and promoters), and infrastructure and support services (recording studios, digital services, royalty and accounting services, entertainment lawyers, and others). Rather than defining industries as core and peripheral, this report seeks to capture the most comprehensive impacts by using this expanded set of sectors in its impact analysis.

Colorado³³

This 2018 statewide report, *Colorado's Music Industry: A Current Analysis and Look Forward*, uses NAICS codes to define the music industry. After music-related industries are identified with NAICS codes, they are classified by what industries are involved in the production and consumption of music directly and indirectly. In cases of indirect connection, complementary data sources are used to estimate how much of the subsector in question is dedicated solely to music. Results are calculated using an EMSI impact analysis.

Commercial Music Industry Conceptual Diagram

Cluster analysis methodology was utilized as one of the first steps in constructing the commercial music industry conceptual framework.³⁴ The U.S. Cluster Mapping Project provides nationally consistent benchmark cluster definitions that can be used to assess the presence of clusters at any regional unit. The methodology groups 778 six-digit NAICS (North American Industry Classification System) industries into 51 traded cluster categories, and 310 NAICS industries into 16 local cluster categories (all mutually exclusive). The tables below list the sectors included for the music and sound recording and performing arts industries. These definitions inform, but do not constitute, the NAICS sectors used for this analysis, which both refines and expands upon these groupings.

³² New York City Mayor's Office of Media and Entertainment and The Boston Consulting Group, "Economic Impact, Trends, and Opportunities Music in New York City," 2017.

³³ Michael Seman, "Colorado's Music Industry: A Current Analysis and Look Forward," 2018, 29.

³⁴ Mercedes Delgado, Michael E. Porter, and Scott Stern, "Defining Clusters of Related Industries," NBER, 2014.

Table 5 - Traded Cluster (2007 NAICS codes) – Music and Sound Recording

NAICS	NAICS Name	Subcluster Name
512210	Record Production	Music and Sound Recording
512220	Integrated Record Production/Distribution	Music and Sound Recording
512230	Music Publishers	Music and Sound Recording
512240	Sound Recording Studios	Music and Sound Recording
512290	Other Sound Recording Industries	Music and Sound Recording

Table 6 - Traded Cluster (2007 NAICS codes) – Performing Arts

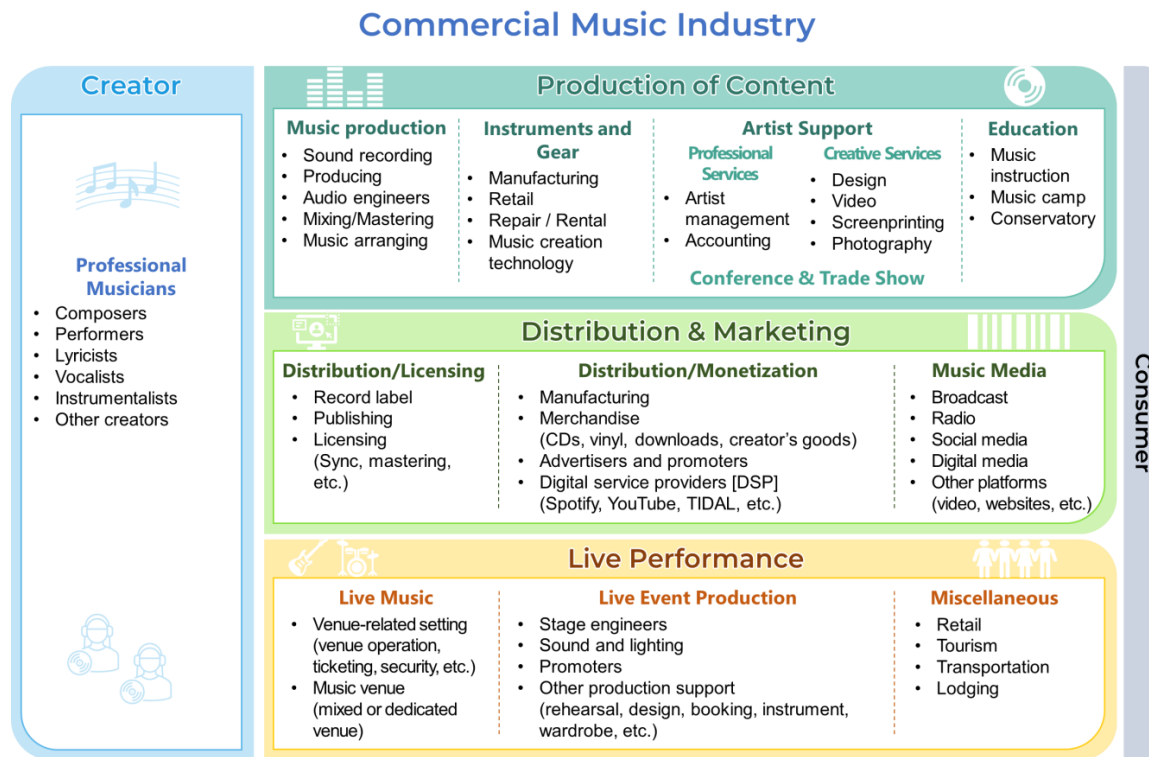
NAICS	NAICS Name	Subcluster Name
711110	Theater Companies and Dinner Theaters	Performing Artists
711120	Dance Companies	Performing Artists
711130	Musical Groups and Artists	Performing Artists
711190	Other Performing Arts Companies	Performing Artists
711510	Independent Artists, Writers, and Performers	Performing Artists
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	Promoters and Managers
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	Promoters and Managers
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Figures	Promoters and Managers

The commercial music industry involves the creation, production, distribution, and promotion of commercial music for the purpose of generating profit. However, defining the commercial music industry can be challenging: it does not conform to standard industry classification, definitions and measurements for key concepts such as sales, royalties, and market share, making it difficult to compare and analyze data across different sectors and markets; and various sectors within the industry often overlap and interact in complex ways (with combinations of horizontal and/or vertical integration within the commercial music ecosystem), further complicating the process to clearly delineate each sector or subsector.

For example, a record label may also engage in producing live performances, music publishing, and merchandising; or a performer may be an individual recording artist but also play an instrument within a larger ensemble, in addition to managing an artist booking business; or a session player may be engaged in live performances as well as in the manufacturing and sale of merchandise, and also spend some time supplementing their income with private music lessons; or someone who operates a music venue (and all of its related operations) might also be a professional musician themselves. To understand the complexity of the commercial music industry, a commercial music industry conceptual diagram (see Figure 3 below) was created based on the existing research literature, cluster analysis, guidance from industry experts in the Industry Advisory Group and interviews with industry participants to visualize three major industry sectors that exist between the creators and consumers, and descriptions of the sectors follow the diagram.³⁵

³⁵ Note that this industry conceptual diagram is representative in nature. It does not comprehensively list all examples of those who may belong within the industry, nor does it depict any potential overlaps or integration between different sectors of the industry.

Figure 3 - Commercial Music Industry Conceptual Diagram



- **Creators:** Creators are responsible for writing, performing, recording, and producing music that will be marketed and sold to end users, who may be consumers and/or businesses. They may work with record labels, managers, and agents to advance their careers, generate additional value, and maximize their revenue potential. Creators earn revenue from a variety of sources, including sales of physical and digital music products, live performance revenue, royalties from public performance rights, and licensing fees for the use of music in film, television, and other media. They can be categorized in different ways, such as composers, performers, lyricists, vocalists, instrumentalists, and others who contribute to the creation of music content.
- **Production of Content:** As a crucial part of the commercial music industry, production of content encompasses the vast range of infrastructure necessary for creating various forms of music. Businesses and people in this sector, both directly and indirectly, assist creators in realizing their ideas in the form of music, providing them with support to create music content in a suitable environment, and preparing commercial music commodities and experiences.
 - **Music Production:** Music production helps produce and transform musical content that originate from the creativity and musical talents of creators through various processes, including recording, mixing and mastering, arranging, and so on. It is a complex and collaborative process that involves many individuals and companies working together to bring music to audiences.
 - **Instruments and Gear:** The instrument and gear subsector in music production provides musicians, producers, and other creative professionals with the tools and equipment they need to create and produce music. These tools and equipment include musical instruments, audio equipment, studio equipment, DJ equipment, and accessories, among others. By providing access to high-quality and versatile musical instruments and equipment through the processes of manufacturing, retail, repair and rental, the

instrument and gear subsector enables creators to bring their musical visions to life and to produce content of the highest quality.

- **Artist Support:** This industry subsector provides support to artists and creators with professional and creative services, by enabling creators to focus on creating content or performing, and by creating engaging and visually appealing music content and promotional materials through design, photography, etc.; or, by providing legal or accounting/payroll services. Additionally, conferences and trade shows serve as an opportunity to network, connect with other industry professionals, and gain access to the latest industry information and trends.
- **Education:** Music education can take many different forms, including formal training at music schools and universities, as well as informal training through private/group lessons, workshops, online courses, and mentorship programs. It can be an important component for musical content creators to develop their abilities and competence in the commercial music industry. At the same time, these creators may also be educators, sharing their knowledge and skills with future generations of musicians and producers, while benefiting from a reliable source of revenue.
- **Distribution & Marketing:** In the commercial music industry, distribution and marketing refers to the processes of making music available to audiences and promoting it to generate interest and sales. This involves making music available to audiences through various channels, including physical products (e.g. CDs, vinyl records), digital downloads and streaming services. In addition, it involves promoting music through advertising, music videos, tours, and other promotional activities.
 - **Distribution/Licensing:** The role of distribution and licensing is to facilitate the transfer of music from the creators to various users, such as film studios, advertisers, or video game developers. When it comes to music licensing, it refers to the process of obtaining legal permission to use a specific piece of music in a particular context. In exchange for the use of the music, the licensee pays a fee to the copyright holder, typically the artist, songwriter, or music publisher. Distribution companies work to secure licenses for the use of music in various contexts, negotiate the terms of the license agreements, and manage the payment of licensing fees.
 - **Distribution/Monetization:** Closely related to licensing in distribution of musical content, monetization is strongly tied to the process of generating revenue from music, enabling artists and producers to monetize their music and reach a wider audience. This revenue can be achieved through various means, such as selling CDs, downloads, and streaming services, licensing music for use in films, television shows, commercials, and video games, through live performances and merchandise sales.
 - **Music Media:** Music media refers to the various platforms and channels through which music is distributed and consumed. In terms of a communicative space, it provides artists and producers with a means to reach audiences, build fan bases, and generate revenue from their music. As online environments become increasingly important for enjoying music, music media is progressing toward the consolidation of diverse platforms from broadcasts, radio to social and digital media.
- **Live Performance:** As a face-to-face channel of musical content delivered to audiences, live performance refers to musical performances by artists in front of live audiences including concerts, festivals, and other live events. It is a key part of the music industry's ecosystem not only because it allows artists to connect with their listeners and generate income through ticket sales and merchandise, but also because it is a significant source of revenue for both artists and relevant industries like sound engineers, lighting designers, and ticketing agencies.

- **Live Music:** Live music refers to musical performances that take place in front of a live attendee, offering artists and listeners a unique and dynamic musical experience. For organizing live music, various elements are interplaying within the music venues, such as venue operation, ticketing, and security, to support live music events and provide a dynamic and enjoyable musical experience for artists and fans alike. Furthermore, live music varies according to music venues. Depending on the type of music being performed, they can be divided into two categories: mixed venues, which are multi-purpose spaces that host a variety of events, and dedicated venues, which are specifically designed for live music events with optimal acoustics, lighting, and stage setups.
- **Live Event Production:** Live event production involves a variety of industries working together in order to create a high-quality, safe, and memorable musical experience for the audience. More focused on building live music events, it includes technical production and other supportive industries to plan and coordinate successful performances. Technical production entails companies responsible for setting up and running all the technical aspects of the performance, such as sound, lighting, video, and special effects. Supportive industries include various actors who engage in the operation and organization of the live events through promoting, booking, and complementing with instruments and wardrobes.
- **Miscellaneous:** In terms of contributions of listeners participating in live performances, attendees can affect the music economy in various ways of generating additional revenue. Within a broad network related to the commercial music industry, attendees' contributions appear in several ways: retail (purchase merchandise such as t-shirts, CDs, and other merchandise related to the artist or event), tourism (attract tourists who are eager to attend live music performances outside of the venue), transportation (travel to and from the event), and lodging (need to book a hotel or other accommodation in order to attend a live event).

II. Quantifying the Commercial Music Industry

The constructed commercial music industry conceptual diagram provides us with a solid basis to understand the various components that contribute towards the industry, but it is still necessary to progress from this conceptual understanding to quantify the contribution of the industry to Oregon's economy. The following section starts with a description of the process to translate the conceptual industry diagram to NAICS codes, data sources, data summaries and the identification process that will produce the necessary inputs for the economic impact analysis. Then, we follow with an overview of the economic impact analysis (or more accurately, in this case, an economic contribution analysis), and the estimated economic impacts of the commercial music industry in Oregon.

Conceptual Diagram to NAICS Codes

The commercial music industry generates revenue from a wide range of sources, including the sale of physical and digital music products (such as CDs, vinyl records, and digital downloads), streaming services (such as Spotify and Apple Music), live performances and tours, merchandise sales (such as t-shirts and posters), licensing of music for use in TV, film, and advertising, and publishing rights (such as royalties for the use of a song's lyrics). Additionally, the commercial music industry also generates

revenue from the provision of goods and services that facilitate the creation, production, distribution and promotion of music, such as the those who manufacture and sell musical instruments, synthesizers, amplifiers, headphones, apps and software, vinyl records; or those who provide services ranging from editing, arranging, mastering to graph design and sound and lighting providers. In addition, there are other revenue streams such as sponsorships, endorsements, and brand partnerships, as well as revenue from social media and digital content creation.

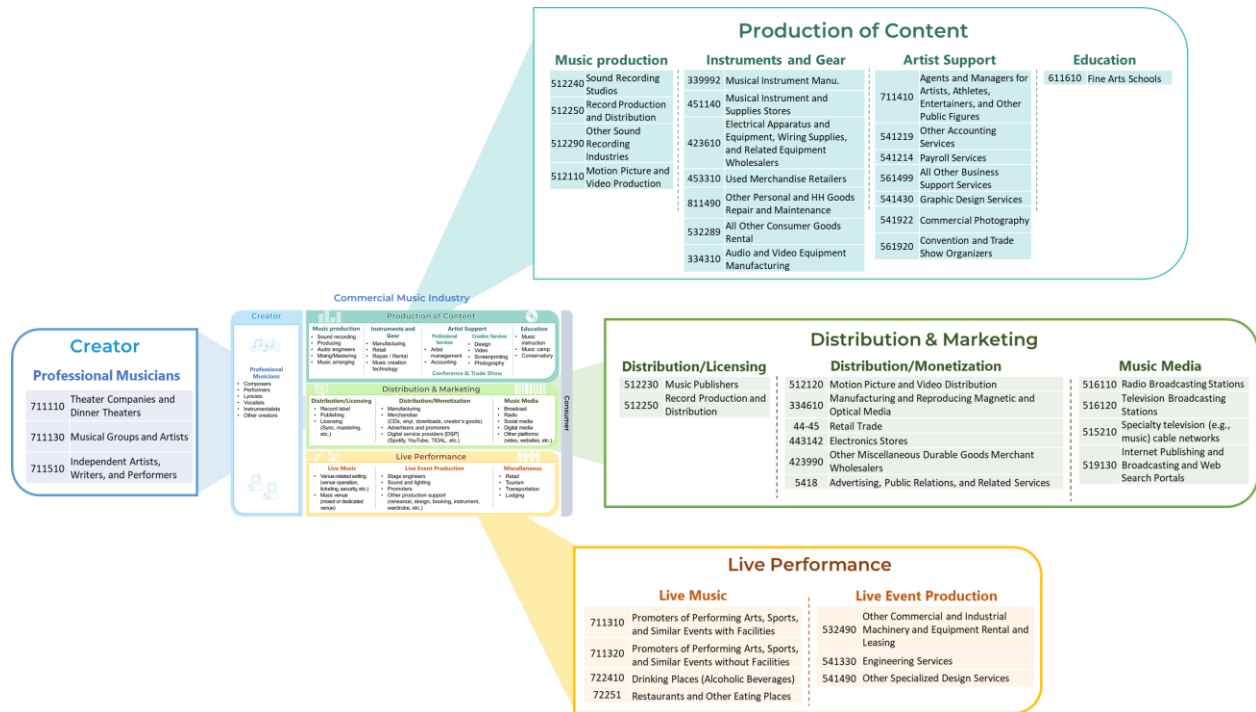
These income streams are all interconnected and support one another in the commercial music industry. For example, the revenue from music sales and streaming can help support the creation of new music, which can then be performed at live shows and festivals, generating additional revenue from ticket sales and merchandise. Moreover, publishing and royalties play essential roles in ensuring that creators are paid for their work and continue to create new music.

Within the framework of the Commercial Music Industry Conceptual Diagram (**Figure 4**) and how revenue and income streams flow between the final consumers and the creators, producers, distributors and promoters of the commercial music industry, it is essential to translate these industry categories into NAICS (North American Industry Classification System) codes, a standardized way to classify business establishments “used by Federal statistical agencies (...) for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy”³⁶. While certain NAICS industry sectors clearly map to various categories of the conceptual diagram such as 711130 for Musical Groups and Artists, 512250 Record Production and Distribution or 339992 Musical Instrument Manufacturing, many other parts of the industry do not fall under well-defined NAICS codes, such as 334310 Audio and Video Equipment Manufacturing (which might include car stereo manufacturers or aviation headset manufacturers) or 711310/711320 Promoters of Performing Arts, Sports and Similar Events (which might include basketball teams, marathon organizers or quilting festivals). Generally, industries that fall under the commercial music umbrella are those that are primarily engaged in the creation, production, and distribution of music recordings, and related products and services. The following are the primary inclusion criteria for NAICS codes to be mapped to the Commercial Music Industry Conceptual Diagram:

1. **Primary business activity:** Companies or people that have music creation, production, distribution or promotion as their primary business activity would be included in this industry. This includes record labels, music publishers, music distributors, and recording studios.
2. **Revenue source:** Companies or people that generate a significant portion of their revenue from the commercial use of music, such as licensing, royalties, or music streaming, may be considered part of the commercial music industry.
3. **Target market:** Companies or people that primarily target consumers who are interested in music-related products or services, such as concert promoters, music retailers, and ticketing companies, may be considered part of the commercial music industry.
4. **Music commodities (related products or services):** Companies or people that provide services or products that are directly related to the creation, production, or distribution of music, such as musical instrument manufacturers, music software developers, or sound equipment providers, may also be considered part of the commercial music industry.

³⁶ <https://www.census.gov/naics/>

Figure 4 - Commercial Music Industry Conceptual Diagram to NAICS Codes Conversion



Data Sources

To quantify the commercial music industry in Oregon, we obtained data from several sources, including the Quarterly Census of Employment and Wages (QCEW) and Occupational Employment and Wage Survey (OEWS) data from the Oregon Department of Employment, lists of music industry participants by industry category from MusicOregon, a list of venues and festivals from the Independent Venue Coalition (IVC), survey results from the 2022 Oregon Music Census, and IMPLAN (described in more detail in a later section).

2022 Oregon Music Census

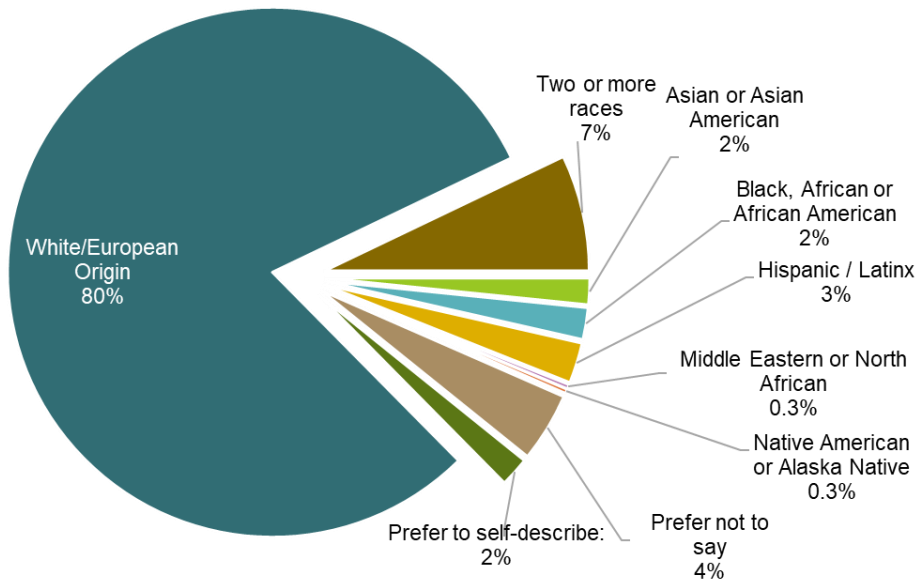
A key component of the qualitative and quantitative analysis in this report is informed by the 2022 Oregon Music Census, which helped calibrate assumptions made about the size of Oregon’s music industry in the QCEW and OEWS datasets, isolate relevant NAICS sector groupings, and informed the scope and focus of the qualitative interviews. Funded by Business Oregon, the Music Census was managed and conducted by the non-profit advocacy organization MusicPortland in a first attempt at establishing an industry-wide benchmark of commercial music in the state of Oregon. Consequently, MusicPortland defined and targeted the Census to capture economic and operational information across Oregon’s music through the following sub-sectors: Instrument and Gear Manufacturing and repair; Labels, Distribution, and Licensing; Composing, Recording, and Performing Artists; and Production Professionals.

The Census was marketed to the music industry in Oregon through various channels of MusicPortland’s self-hosted web properties, a direct email contacting list sourced from registered members of MusicPortland, soliciting participation from social media and in-person music networks and communities, targeted paid advertisements, editorial commitments from local news organizations and

radio stations. The Census was active from December 2, 2022, through January 15, 2023, and collected 3,116 responses, nearly 2,431 of which were from respondents who met the survey’s inclusion criteria; that is, identified themselves as being part of the music industry in Oregon in their capacity as a musician (40.5% of respondents), as manager of a commercial venture in the music industry (22.4% of respondents), or as somebody who is both a musician and manages a commercial music venture (37.1% of respondents). See the appendix (p.56) for a flowchart representation of the Oregon Music Census. Below, we present a selection of the data extracted from the Census.

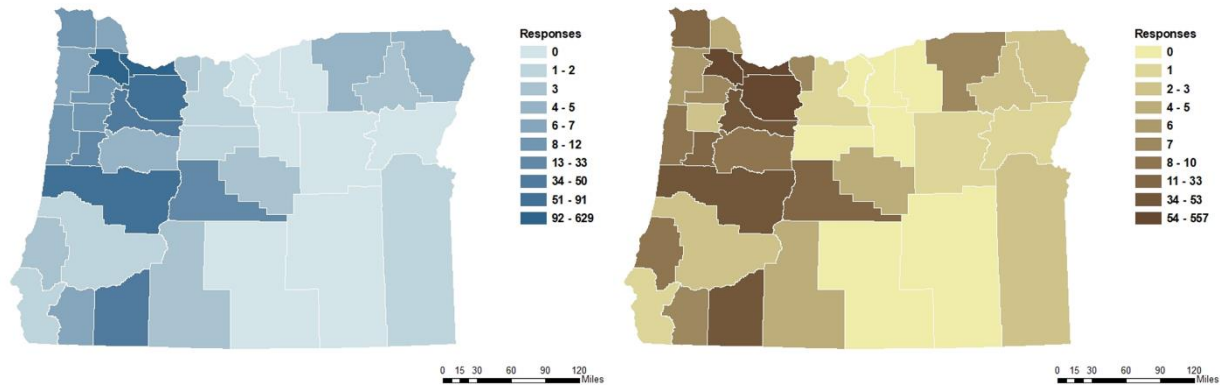
Demographically, of the respondents that chose to report their race and gender, a majority identified as White/European Origin male (see Figure 5). When examining demographics by sub-sector, the survey showed the sub-sectors of Distribution, Instrument and Gear, and Production to be most heavily dominated by respondents identifying as male; Mixed-Use Music Venues and Music Education sub-sectors were the highest in respondents identifying as female; and respondents identifying as non-binary or preferring to self-describe their gender identity were highest (relative to their presence in other sub-sectors) in the Music Event Promotion and Music Media sub-sectors.

Figure 5 - 2022 Oregon Music Census self-identification of race and ethnicity (% of responses)



To better understand the geographic distribution of respondents, the business zip codes of 1,134 musicians and 993 music business managers are mapped by county in Figure 6 (note that these two subgroups have large overlaps as many musicians are also managers of businesses). Multnomah County garnered the largest number of responses in both groups, followed by Washington County and Clackamas County. This is likely due to both the larger populations in these counties, as well as the higher concentration of those on contact lists for the survey in these areas. Six counties recorded no responses in either category: Gilliam, Harney, Lake, Morrow, Sherman, and Wheeler Counties.

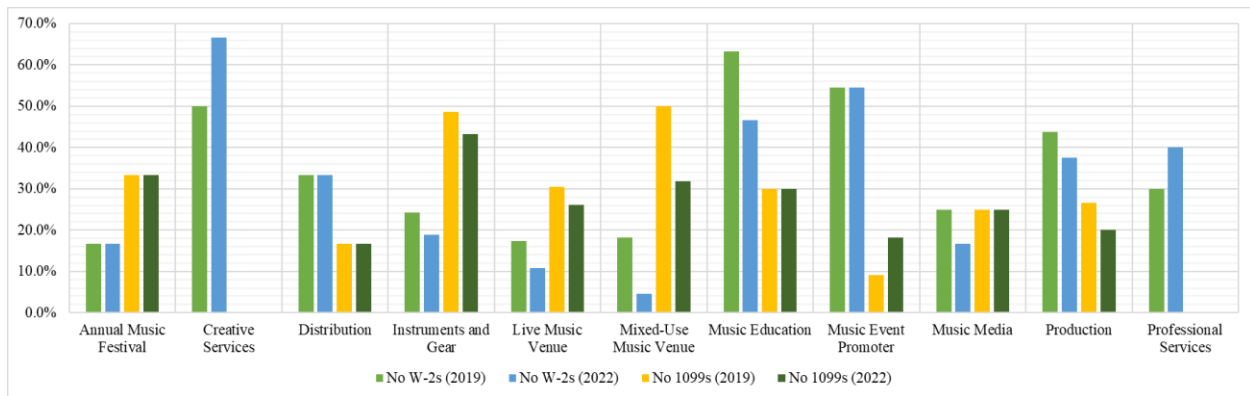
Figure 6 - 2022 Oregon Music Census geographic distribution of responses by county



(a) Response as a musician

(b) Response as a music business manager

Figure 7 - 2022 Oregon Music Census percentage of respondents reporting no 1099 or W-2 expenditures (for 2019 and 2022)



The majority of respondents across all sub-sectors identified their commercial music ventures as sole proprietors or independent contractors, with the largest frequency occurring in Production, follo

wed by self-defined sub-sectors and Music Education. Regarding labor expenditures, the survey had 202 respondents that volunteered W-2 expenditures and 201 respondents that volunteered 1099 expenditures. Of these, Live Music (Dedicated) venues were by far the largest in terms of both labor expenditures and gross revenues.

When considering the difference between average reported labor expenditures and gross revenues, the sub-sectors of Annual Music Festivals, Creative Services, Music Education, Music Media, and Production all reported labor expenditures greater than their gross revenues for 2019 and 2022 (anticipated) – however only Creative Services reported and lower live music anticipated labor expenditures than their gross revenues for 2022. In fairness, we cannot be certain of the true gap between dedicated venues and the rest of the sectors because of the lack of distribution among respondents – nearly 22% of the respondents reporting expenditures were from live music (dedicated) venues. More importantly, a vast number of respondents across all sectors reported having no W-2 or 1099 expenditures whatsoever for both 2019 and 2022. Lastly, all the sub-sectors in the survey showed most respondents as having less than 20% of

their revenues come from out-of-state for both 2019 and 2022, the only exception being the Instrument and Gear Manufacturing sector, who were distributed along the spectrum, the majority having less than 20% of their business come from out of Oregon. Figure 8 also shows the distribution of years in business by category. Instruments and Gear, Live Music Venue, Music Education as well Production have the largest numbers of businesses that have been operating for more than 25 years.

The survey also accounted for respondents from creative services (photography, graphic design, merchandising), music media (radio, podcast, TV), and professional services (artist booking, accounting, public relations, legal). Businesses in these sub-sectors, although often discounted for their rather intangible presence, are very involved in the music industry. Figure 12 shows that most respondents from each of these sub-sectors stated that their business is between 75% to completely involved – either directly or indirectly – in Oregon’s music industry.

Figure 8 - 2022 Oregon Music Census years in business by category (number of respondents)

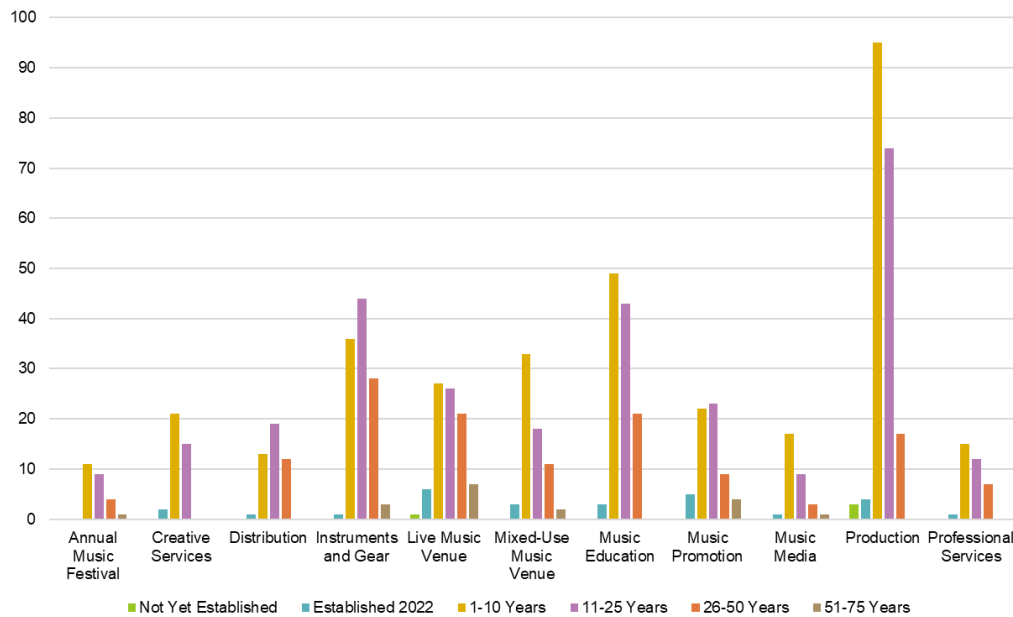
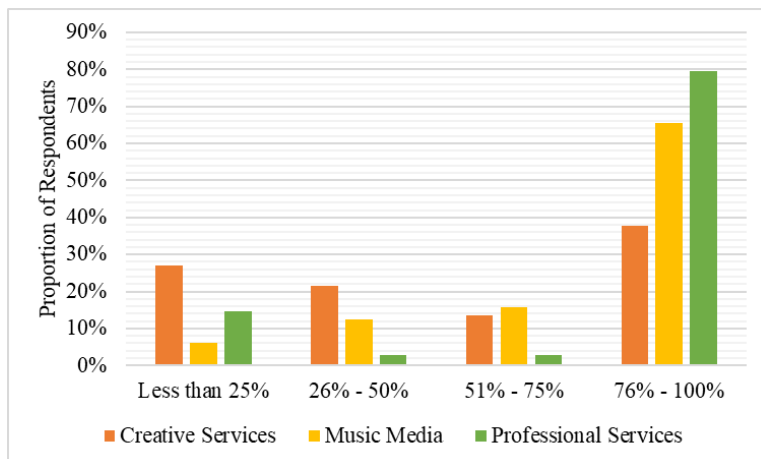


Figure 9 - 2022 Oregon Music Census proportion of business related to music



Quarterly Census of Employment and Wages (QCEW)

The QCEW dataset is a comprehensive establishment-level data that includes employment levels and wages of all workers that are covered by state unemployment insurance. The non-aggregated establishment level data is typically confidential, but is available for state and local policy analysis or research purposes. NERC obtained QCEW data for the state of Oregon between 2017 and 2021 (the latest year of data available). It is typically straightforward to filter the QCEW data by NAICS codes when industries are well-defined, such as the food processing or wood product manufacturing industries, but quantifying the commercial music industry using these data sources presents a few significant challenges. First, there is the aforementioned lack of well-defined NAICS codes that represent the full scope of the industry's ecosystem; second, the commercial music industry is characterized by a large number of independent sole proprietors who are not covered by the QCEW dataset, such as independent professional musicians or graphic designers who might be sole proprietors or work on a gig basis; third, because NAICS codes are generally assigned to the primary business function of a firm, we may not be able to identify the businesses that work within multiple industries (for example, a combined record and bookstore may be classified as a bookstore); finally, the wide-ranging activities of commercial music businesses mean that they may be classified into NAICS codes that appear to have little relationship to music (for example, professional grade audio cable makers may be classified within 423610 Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers, or online music distributors may be classified as 454110 Electronic Shopping and Mail-Order Houses).

Our first round of identification attempted to filter the QCEW dataset based on the industry lists from MusicOregon and IVC, by names and addresses, as well as by manual matching of alternative names and addresses found online. These merging processes also helped the research team identify wrongly coded businesses and additional NAICS codes to be included as a part of the industry, but ultimately this did not yield a high percentage of match. That is, out of a total of 707 businesses, only 18% (127) were found to match the industry lists.

We then started with a short list of NAICS industries at the six-digit (most detailed) level that belong fully (or mostly) to the industry ecosystem (see **Table 7** below) based on the translation of the Commercial Music Industry Conceptual Diagram to NAICS codes. Then, for the other NAICS industries such as 334310 Audio and Video Equipment Manufacturing, 711310/711320 Promoters of Events, or 515112 Radio Broadcasting Stations, the research team sorted through the full or partial sample of QCEW businesses to estimate the percentage of those NAICS codes that comprise the commercial music industry. For the industry sectors that support the commercial music industry, we utilized the 2022 Oregon Music Census with broad assumptions about the response rates³⁷ to estimate numbers of commercial music related jobs within industries such as 541214 Payroll Services or 541330 Engineering Services. Matched businesses from the industry lists that are not a part of the identified NAICS codes were added back in at this stage.

³⁷ Because the 2022 Oregon Music Census was anonymous and did not collect identifying information, we are unable to calculate the response rate. Given some of the known numbers of Oregon musical acts and mixed-use venues, we assumed that the response rate for independent sole proprietors to be 20% and the response rate for businesses with employees to be 50%. We also assumed a 90% response rate for dedicated music venues.

Table 7 - Majority and Partial Commercial Music NAICS Codes

Majority NAICS		Partial NAICS	
339992	Musical Instrument Manufacturing	334310	Audio and Video Equipment Manufacturing
451140	Musical Instrument and Supplies Stores	334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing and Reproducing Magnetic and Optical Media
512230	Music Publishers	423990	Other Miscellaneous Durable Goods Merchant Wholesalers
512240	Sound Recording Studios	443142	Electronics Stores
512250	Record Production and Distribution	453310	Used Merchandise Retailers
512290	Other Sound Recording Industries	5121	Motion Picture and Video Production and Distribution
611610	Fine Arts Schools	515210	Specialty television (e.g., music) cable networks
711130	Musical Groups and Artists	515112	Radio Broadcasting Stations
711510	Independent Artists, Writers, and Performers	515120	Television Broadcasting Stations
		519130	Internet Publishing and Broadcasting and Web Search Portals
		532289	All Other Consumer Goods Rental
		532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing
		541110	Office of Lawyers
		541214	Payroll Services
		541219	Other Accounting Services
		541330	Engineering Services
		541430	Graphic Design Services
		541490	Other Specialized Design Services
		541820	Public Relations Agencies
		541922	Commercial Photography
		561499	All Other Business Support Services
		561920	Convention and Trade Show Organizers
		711110	Theater Companies and Dinner Theaters
		711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities
		711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities
		711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
		722410	Drinking Places (Alcoholic Beverages)
		722511	Full-Service Restaurants
		811490	Other Personal and Household Goods Repair and Maintenance
		813319	Other Social Advocacy Organizations
		813910	Trade Associations
		813930	Labor unions

Commercial Music Industry Economic Profile

Longer-Term Trends in Employment and Wages

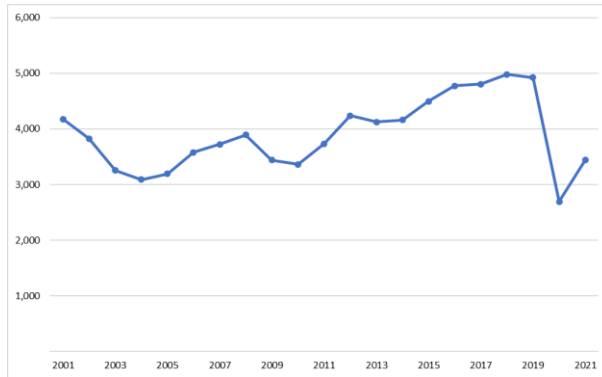
Figure 10 and Figure 11 show employment and wage trends in two larger sectors and two smaller sectors of the commercial music industry: Motion Picture and Sound Recording (NAICS 512), Sound Recording Studios (NAICS 51224), Performance Arts, Spectator Sports, and Related Industries (NAICS 711), and Musical Groups and Artists (NAICS 71113). The Motion Picture and Sound Recording industry sector is chosen as representative of patterns in music production as a whole due to the completeness of available QCEW data. Sound Recording Studios comprise the largest segment of this larger sector. Musical Groups and Artists are chosen as most representative of the Performance Arts, Spectator Sports, and Related Industries due to the prevalence of sectors unrelated to music in the larger sector.

Over the last twenty years, the Motion Picture and Sound Recording sector (NAICS 512) has followed the general pattern observed in the U.S economy— steady growth, with an exception during the Great Recession. A steep decline is recorded in 2020, as the COVID pandemic shut down firms (or necessitated strict contractions). Sound Recording Studios (NAICS 51224) did not experience the same drop in employment as that in the other sectors: jobs in this sector can be performed in isolation.

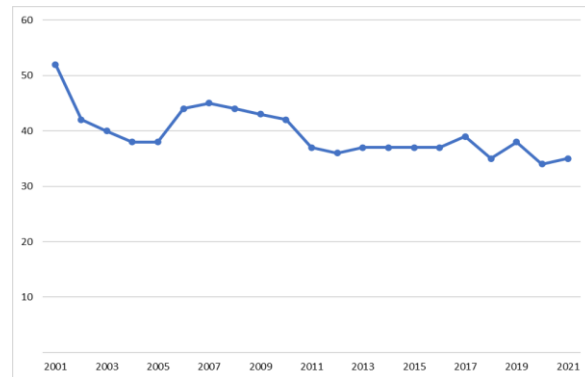
Figure 12 also describes employment in Performance Arts, Spectator Sports, and Related Industries (NAICS 711). Like the previous trend graph, steady growth punctuated by the Great Recession falls dramatically with COVID’s impacts, as venues shut down and economic activity contracted. However, as indicated in the next graph, the average wage rose— again, indicating that most jobs were lost in the lower-paid segments of the industry. Musical Groups and Artists (NAICS 711130) are used to demonstrate the trend from 2001 to 2021 in a smaller-scale section of the industry due to the inclusion

of all performing arts, specifically sporting events, in the larger sector. This sector is a subset of the larger NAICS 711 sector. The trend shown in the figure indicates the susceptibility of this sector to economic expansion and recession, as artists shift in and out of the industry. As in the larger sector, COVID's impact is profound.

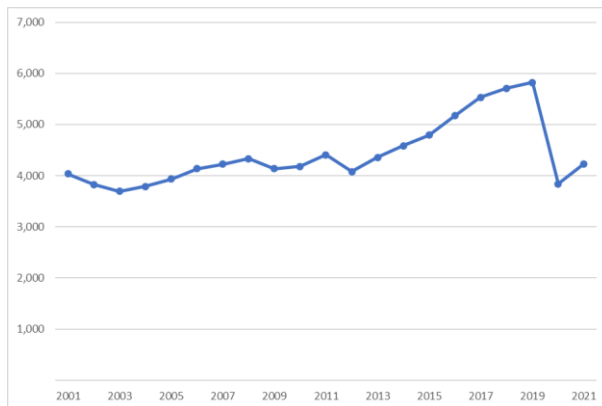
Figure 10 - 2001-2021 Average Annual Employment in Commercial Music Industry Sectors (Source: QCEW 2001-2021)



(a) NAICS 512: Motion Picture and Sound Recording Industry



(b) NAICS 51224: Sound Recording Studios



(c) NAICS 711: Performance Arts, Spectator Sports, Related Industries

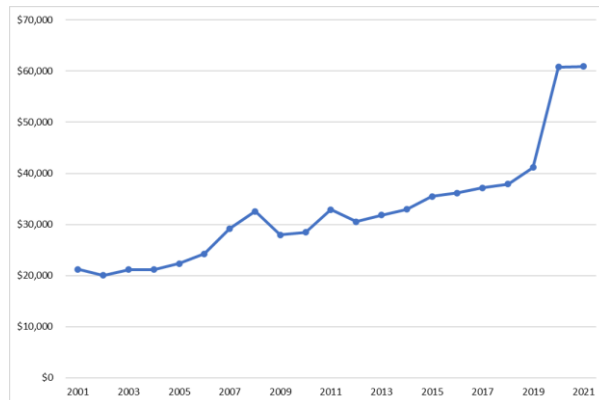


(d) NAICS 711130: Musical Groups, Artists

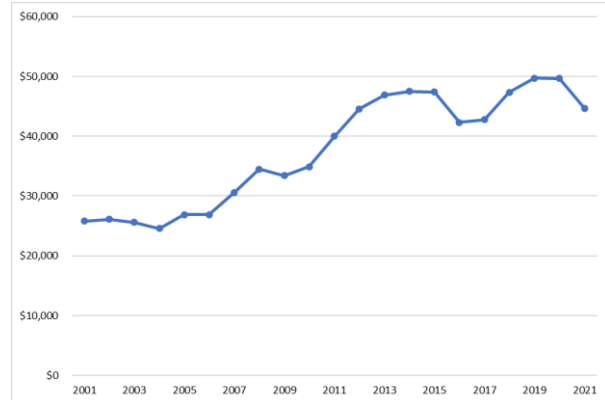
Turning to wages in Figure 11, the lost jobs in the Motion Picture and Sound Recording Industry (NAICS 512) occurred primarily in lower-paid positions within the industry, which caused a dramatic rise in the average wage. This assumption is backed up by the survey and interview data collected for this report. In Sound Recording Studios (NAICS 51224) alone, the wage drop is not significant, perhaps indicative of a narrower range of wages in this sector.

Wage gains in Performance Arts, Spectator Sports, and Related Industries (NAICS 711) and Musical Groups and Artists (NAICS 711130) also showed through 2021, indicating again that those employed at lower wages in these sector are most impacted by economic contraction (note the differences in the vertical scale, as wages for musical groups and artists are generally half as much as those in the umbrella sector). However, wages in Promoters of Performing Arts, Sports and Similar with facilities (NAICS 711310), Independent Artists, Writers, Performers (NAICS 711510) and Musical Groups and Artists (NAICS 711130) remain below Oregon average wages, and wage growth rates within these sectors similarly lag behind both in nominal and inflation adjusted terms.

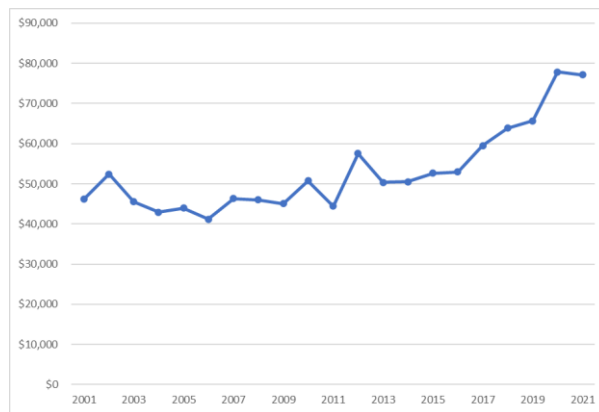
Figure 11 - Average Annual Wage in Motion Picture and Sound Recording Industry (Source: QCEW 2001-2021)



a) NAICS 512: Motion Picture and Sound Recording Industry



(b) NAICS 51224: Sound Recording Studios



(c) NAICS 711: Performance Arts, Spectator Sports, Related Industries



(d) NAICS 711130: Musical Groups, Artists

Economic Profile Analysis by Sector

Next, we take a closer examination of the commercial music industry using more detailed QCEW data, to construct an economic profile of the industry and identify growth subsectors within the industry. For each commercial industry sector (Creator, Production of Content, Distribution and Marketing, and Live Performance), the general descriptive statistics and employment and wage trends are analyzed in Figure 9. Note that these are annual employment and payroll numbers, and some of the more significant impacts of the pandemic-related closures in 2020 are not as visible—monthly employment numbers dropped by as much as 55% in the Creator sector, 26% in the Production of Content sector, 10% in the Distribution & Marketing Sector, and 59% in the Live Performance sector in April 2020 (compared to a monthly job loss of around 13% in Oregon).

- **Creator:** Jobs and wages both dropped significantly in this sector with the onset of the pandemic in 2020, and have not fully recovered in 2021.
- **Production of Content:** The employment and payroll trends were drastically different for this sector, with a large reduction in employment between 2019 and 2020 followed by a partial recovery in its employment and substantial growth in total payroll in 2021.
- **Distribution and Marketing:** After reaching a peak in 2018, the employment in this sector had been steadily decreasing from 2018 to 2021. However, the total payroll has been increasing steadily despite the drop in employment.

- Live Performance:** This sector is highly correlated with the Creator sector, and showed significant drops in employment and wages after 2019, but subsequently wages had returned to their 2018 levels while employment remained in recovery.

When compared to overall trends in employment and wages in Oregon (Figure 13) and the larger industry sectors of Leisure and hospitality (NAICS 71-72) and Arts, entertainment and recreation (NAICS 71), the commercial music industry experienced more extensive losses in employment and wages, particularly in the Creator and Live Performance sectors, due to the pandemic-related shutdowns as well as continuing public health concerns that limited attendance at live performance events even after many restrictions were lifted.

Table 8 - Descriptive statistics of employment and wages over 5 years

Category	Employment					Total Payroll				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Creator	2,621	2,677	2,710	1,718	1,729	\$88,609,220.0	\$ 96,720,263	\$ 98,097,787	\$ 69,920,650	\$ 75,642,013
Production of Content	4,354	4,300	4,228	3,661	4,098	\$ 1,914,091,701.0	\$ 1,972,497,060	\$ 2,065,797,225	\$ 2,043,722,017	\$ 2,251,342,956
Distribution & Marketing	314	332	320	284	255	\$ 231,610,227.0	\$ 259,472,195	\$ 270,302,809	\$ 276,903,155	\$ 285,415,253
Live Performance	2,817	2,946	3,223	2,075	2,363	\$ 2,856,575,006.0	\$ 3,090,693,508	\$ 3,286,186,906	\$ 2,663,930,857	\$ 3,123,415,171
Total	10,106	10,256	10,480	7,738	8,444	\$ 5,090,886,154	\$ 5,419,383,033	\$ 5,720,384,727	\$ 5,054,476,679	\$ 5,735,815,393

Figure 12 - Trends of employment and wages by industry sector

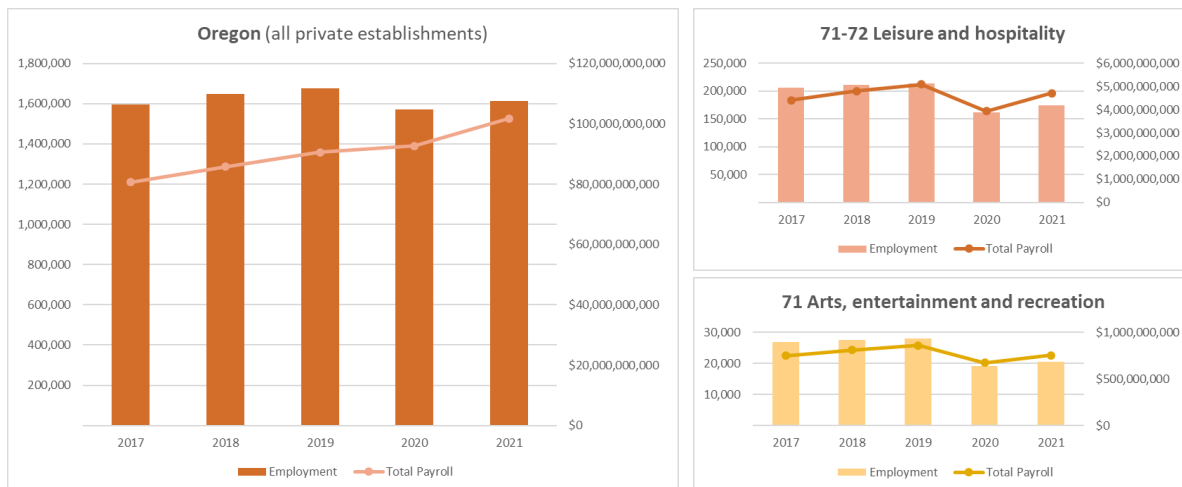


The geographic distribution of employment in each commercial industry sector is shown in Within these scaled industry sectors, we analyzed the overall growth of three economic indicators – the number of establishments, employment, and total annual payroll between 2017 and 2021. The Creator sector appears to have experienced decreases in all measures, particularly employment (-36.7%), highlighting the severe effects of the pandemic closures and economic recession on this sector. While employment decreased in all other sectors (Distribution and Marketing, Production of Content and Live Performance) during this period, there are increases in both establishment count and total payroll. The substantial

increases in the number of Distribution and Marketing establishments and its payroll (and to a certain degree, the Production of Content sector) potentially highlight the resiliency of these sectors to economic downturns, or at least are indicative of the ability of these sectors to procure assistance to maintain or even expand their operations during the past few years.

Figure 14 below, using establishment-level QCEW data processed as described in the Data Sources section (as a result, these more refined industry sectors more accurately reflect those who are a part of the commercial music industry, and contain fewer firms and jobs).³⁸ To maintain confidentiality, the data is aggregated into larger geographic areas that match Business Oregon’s twelve Regional Service Areas.³⁹ We found that the Metro area has the highest employment in all categories, while Greater Eastern South almost has the lowest employment, which is consistent with the corresponding population levels. This shows that most music and music-related employment is concentrated in Metro, South Valley, and Southern, whereas few music-related jobs show up in Greater Eastern South, Greater Eastern North, and Northeast.

Figure 13 – Oregon trends of employment and wages



Within these scaled industry sectors, we analyzed the overall growth of three economic indicators – the number of establishments, employment, and total annual payroll between 2017 and 2021. The Creator sector appears to have experienced decreases in all measures, particularly employment (-36.7%), highlighting the severe effects of the pandemic closures and economic recession on this sector. While employment decreased in all other sectors (Distribution and Marketing, Production of Content and Live Performance) during this period, there are increases in both establishment count and total payroll. The substantial increases in the number of Distribution and Marketing establishments and its payroll (and to a certain degree, the Production of Content sector) potentially highlight the resiliency of these sectors to economic downturns, or at least are indicative of the ability of these sectors to procure assistance to maintain or even expand their operations during the past few years.

³⁸ For example, we used a scaling factor of 0.77 for the 334310 (Audio and Video Equipment Manufacturing) to reflect that an estimated 77% of establishments within this NAICS code are music-related.

³⁹ Regional Service Areas are comprised of 12 areas: Central, Greater Eastern North, Greater Eastern South, Metro, Mid-Valley, North Central, North Coast, Northeast, South Central, South Coast, South Valley and Southern.

Figure 14 - Geographic distribution of employment by regional service areas

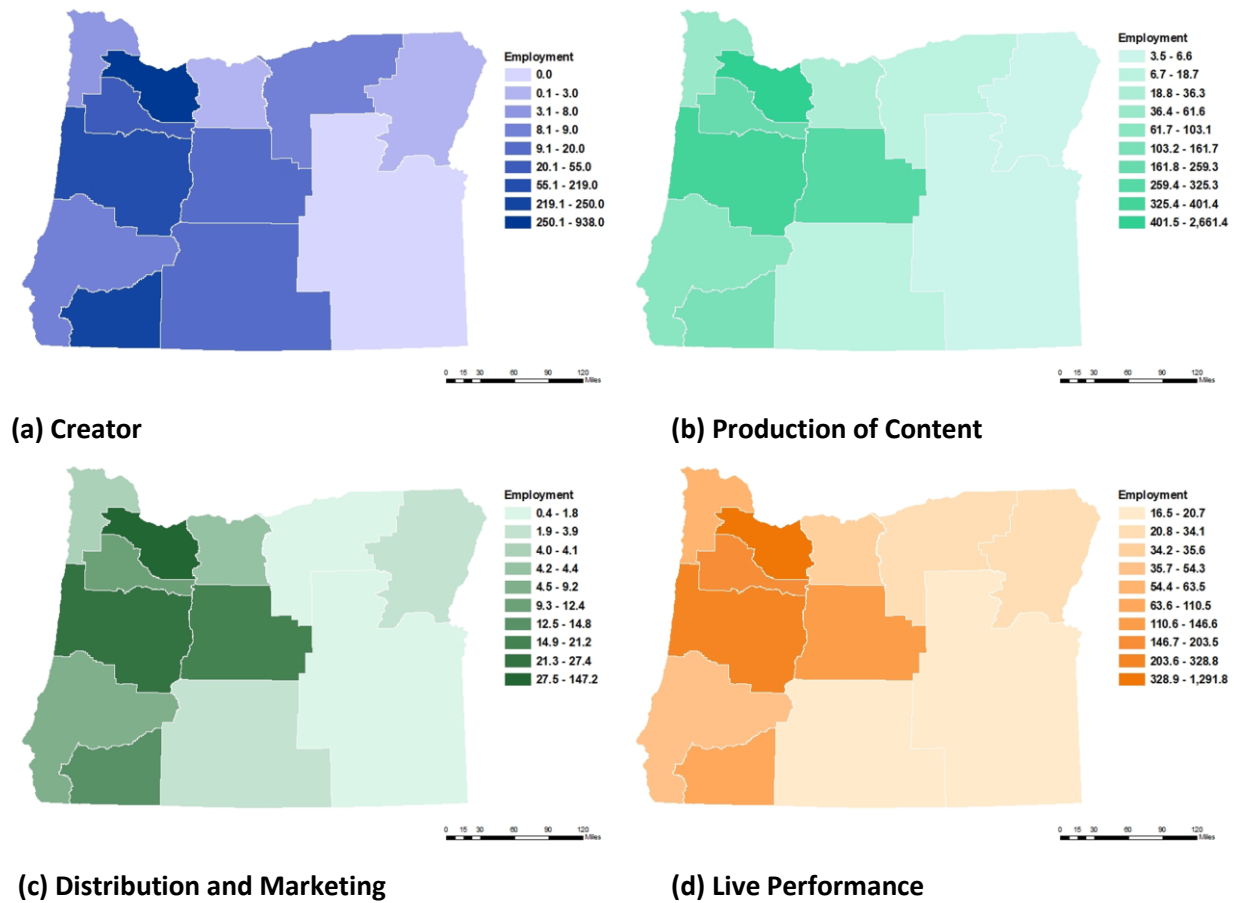
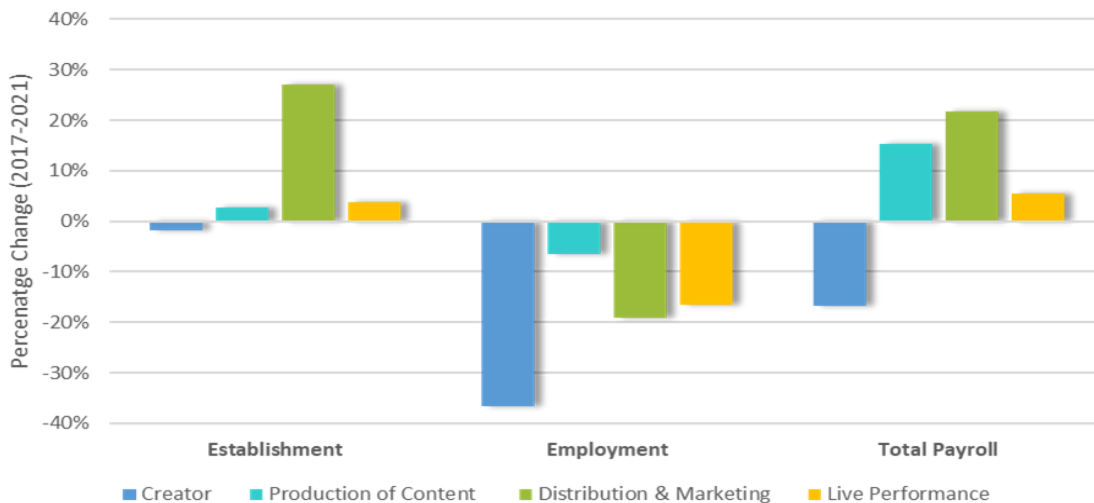


Figure 15 - Percentage changes in economic indicators by industry sector (2017-2021)



Using the Occupational Employment and Wage Survey (OEWS) data from the Oregon Department of Employment, we examined occupational statistics to understand the commercial music industry workforce. First, we categorized the associated Standard Occupational Classifications (SOCs) according to the NAICS codes that belong to each industry sector. Then, we analyzed OEWS hourly wages,

employment levels and 10-year projected growth for each occupation. A total of 36 occupations were defined as music-related occupations: 4 occupations in Creator, 14 occupations in Production of Content, 9 occupations in Distribution and Marketing, and 9 occupations in Live Performance. Compared to an Oregon overall projected growth of 27% in employment over the next ten years, commercial music-related occupations that are projected to experience the highest growth are 27-3099 (Media and Communication Workers, All Other), 27-4021 (Photographers), and 27-1014 (Special Effects Artists and Animators), which are 385%, 321%, and 316% respectively. Musicians and Singers (27-2042) and Artists and Related Workers, All Other (27-1019) lead the Creator sector with 220% and 115% projected employment growth, respectively; and Audio and Video Technicians (27-4011) and Sound Engineering Technicians (27-4014) within the Production of Content sector also have 163% and 115% projected employment growth, respectively. Granted, some portion of the projected growth can be attributed to the recovery process from pandemic-related losses, these levels of growth appear to be quite substantial. Some occupations are anticipated to experience lower growth or even a decrease in the number of employees, -23% for 27-4012 (Broadcast Technicians), 2% for 43-3031 (Bookkeeping, Accounting, and Auditing Clerks), and 7% for 27-4032 (Film and Video Editors), which may be reflecting the transition towards digital media and its related occupations.

Across commercial music occupations, there are significant gaps between the highest hourly wages, such as \$57.63 for 27-1011 (Art Directors), and the lowest hourly wages, such as \$15.83 for 39-3031 (Ushers, Lobby Attendants, and Ticket Takers). When comparing average hourly earnings by industry sector, we found that the Distribution and Marketing sector had the highest average hourly wage of \$36.43, while the Creator sector had the lowest average hourly wage of \$26.60, which is also reflected in our qualitative analysis results. A wide range of occupations have average hourly wages below the statewide hourly wage of \$29.55.

Table 9 - Occupation analysis by employment and wages

(Sources: Oregon Employment Department, Occupational Employment and Wage Survey [OEWS])

Category	SOC	Occupation Title	Employment (2021)	Projected Growth Rate (2021-2031)	Average Hourly Wage (2022)	Average Annual Wage (2022)
Statewide	00-0000	Total, All Occupations	1,825,369	27%	\$ 29.55	\$ 61,465.00
Creator	27-1019	Artists and Related Workers, All Other	146.74	115%	\$ 25.25	\$ 52,512.00
	27-2041	Music Directors and Composers	484.56	84%	\$ 23.31	\$ 48,494.00
	27-2042	Musicians and Singers	514.96	220%	\$ 34.00	-s-
	27-2099	Entertainers and Performers, Sports and Related Workers, All Other	44.22	-s-	\$ 23.82	-s-
Production of Content	27-2012	Producers and Directors	1,353.9	41%	\$ 39.16	\$ 81,443.00
	27-4011	Audio and Video Technicians	416.81	163%	\$ 23.36	\$ 48,592.00
	27-4014	Sound Engineering Technicians	147.11	115%	\$ 26.01	\$ 54,117.00
	39-3021	Motion Picture Projectionists	-s-	-s-	\$ 17.74	\$ 36,888.00
	49-2097	Audiovisual Equipment Installers and Repairers	-s-	-s-	\$ 22.50	\$ 46,802.00
	49-9063	Musical Instrument Repairers and Tuners	-s-	-s-	\$ 20.98	\$ 43,623.00
	13-1011	Agents and Business Managers of Artists, Performers, and Athletes	-s-	-s-	\$ 42.23	\$ 87,837.00
	13-2011	Accountants and Auditors	13,240.55	17%	\$ 38.49	\$ 80,069.00
	27-1021	Commercial and Industrial Designers	363.48	84%	\$ 41.71	\$ 86,761.00
	27-1024	Graphic Designers	3,002.29	41%	\$ 28.30	\$ 58,876.00
	27-4021	Photographers	431.22	321%	\$ 26.57	\$ 55,263.00
	13-1121	Meeting, Convention, and Event Planners	1,368.2	26%	\$ 28.24	\$ 58,742.00
	25-1121	Art, Drama, and Music Teachers, Postsecondary	903.6	17%	-s-	\$ 90,108.00
	25-3099	Teachers and Instructors, All Other	2,255.68	-s-	-s-	\$ 64,539.00
Distribution & Marketing	11-2032	Public Relations Managers	909.52	-s-	\$ 51.62	\$ 107,383.00
	27-1011	Art Directors	720.04	277%	\$ 57.63	\$ 119,868.00
	27-3031	Public Relations Specialists	3,322.72	7%	\$ 33.08	\$ 68,799.00
	11-2011	Advertising and Promotions Managers	322.44	7%	\$ 50.57	\$ 105,184.00
	27-4032	Film and Video Editors	301.18	78%	\$ 28.48	\$ 59,245.00
	27-3011	Broadcast Announcers and Radio Disc Jockeys	199.98	-s-	\$ 26.36	\$ 54,829.00
	27-3099	Media and Communication Workers, All Other	146.83	385%	\$ 23.84	\$ 49,579.00
	27-4012	Broadcast Technicians	181.31	-23%	\$ 28.83	\$ 59,977.00
Live Performance	27-4099	Media and Communication Equipment Workers, All Other	198.69	-s-	\$ 27.42	\$ 57,050.00
	11-9072	Entertainment and Recreation Managers, Except Gambling	239.54	-s-	\$ 33.56	\$ 69,801.00
	33-9032	Security Guards	8,914.62	28%	\$ 17.87	\$ 37,172.00
	39-1014	First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services	512.33	-s-	\$ 25.92	\$ 53,910.00
	39-3031	Ushers, Lobby Attendants, and Ticket Takers	391.46	81%	\$ 15.83	\$ 32,918.00
	39-3099	Entertainment Attendants and Related Workers, All Other	75.59	142%	\$ 20.01	\$ 41,612.00
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	22,713.51	2%	\$ 23.20	\$ 48,268.00
	27-1014	Special Effects Artists and Animators	250.59	316%	\$ 44.50	\$ 92,547.00
	27-1027	Set and Exhibit Designers	65.81	-s-	\$ 39.16	\$ 81,451.00
27-4015	Lighting Technicians	102.02	-s-	-s-	-s-	

Note: -s- means suppressed for confidentiality or insufficient data.

Growth Subsectors

Next, we identified Growth Subsectors within the commercial music industry by NAICS codes. One key component of this analysis involves location quotients (LQs), which are ratios that describe the activity and impact of a particular industry cluster in a given area, relative to the larger geography (typically the nation), in terms of employment. For example, if Oregon has a location quotient greater than one in the record production and distribution sector, then it means that the area has a proportionally higher concentration of employees in this sector compared to the rest of the nation. Based on the cluster analysis methodology developed by Barkley & Henry and utilized by Bowen, the following are the criteria to determine the commercial music industry subsectors that may be demonstrating greater growth potential or competitiveness:⁴⁰

- Employment greater than 500;
- Number of establishments greater than or equal to 5;
- Employment growth is positive over the last 5 years; and
- Location quotient (LQ) is growing over the last 5 years.⁴¹

Ten NAICS codes were identified as Growth Subsectors as shown in **Table 10**. The sectors with the highest employment growth rate were 541214 (Payroll Services) and 541219 (Other Accounting Services) at 6%, both of which are related to Artist Support-Professional services. 334310 (Audio and Video Equipment Manufacturing) had the highest LQ of 2.48, indicating that Oregon has more than two times the number of employees in this sector compared to the national level, coupled with a LQ growth rate of 19%. These numbers align with qualitative and anecdotal evidence that suggest Oregon is host to many firms and makers of high-quality audio equipment and gear. A high LQ growth rate of 20% was also observed in 711310 (Promoters of Performing Arts, Sports, and Similar Events with Facilities), which includes concert hall operators, music festivals with their own facilities, and both dedicated and mixed-use venues.

Table 10 - Identified Growth Subsectors

NAICS	NAICS Industry Name	Establishments (2021)	Employment (2021)	Employment Growth (2017-2021)	LQ (2021)	LQ Growth (2017-2021)
334310	Audio and Video Equipment Manufacturing	25	625	2%	2.48	19%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	132	726	5%	0.66	20%
532289	All Other Consumer Goods Rental	108	559	0%	0.80	10%
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	92	576	2%	0.70	18%
541110	Offices of Lawyers	2,477	10,969	0%	0.79	13%
541214	Payroll Services	151	1,021	6%	0.41	11%
541219	Other Accounting Services	1,151	4,855	6%	1.33	15%
541330	Engineering Services	1,330	13,405	4%	0.93	15%
541820	Public Relations Agencies	187	778	1%	0.96	12%
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	86	1,068	3%	1.04	21%

⁴⁰ David L Barkley and Mark S. Henry, "Targeting Industry Clusters for Regional Economic Development: An Overview of the REDRL Approach," Regional Economic Development Research Laboratory Research Report, 2005; Eric Bowen, "Greater Wheeling Regional Plan - Industrial Cluster Analysis," 2021.

⁴¹ Because LQ calculations require employment data from the regional and national levels for each NAICS code, we utilize the full employment within each analyzed 6-digit NAICS code (not scaled to more accurately capture those in the commercial music industry) for this analysis.

Economic Impact Analysis

Methodology

The standard technique for quantifying the economic impact of any industry in a particular area uses input-output modeling to capture not only the direct impacts of the industry, but also indirect impacts in other industries, and induced impacts caused by the spending associated with employment within the sector. This is attained by IMPLAN's proprietary industry matrix, which assigns values to employment and spending per sector, and the relationships between all of the sectors in a given area. The results therefore include three types of impacts (described below), and the sum total across all three types.

Direct Impacts

Any given industry supports a certain number of firms and jobs, and therefore generates both spending and federal, state, and local tax revenue. Direct impacts describe these additions to the economy. In the commercial music industry sectors, this includes North American Industry Classification System (NAICS) sectors engaged in the commercial music industry: specifically, record production and distribution, musical instrument and equipment manufacturers, live performance venues and staff, production and artist services, and many other associated firms.

Indirect Impacts

All firms purchase goods and services from other firms, in different industry sectors. Indirect impacts estimate the quantified value of these purchases, in terms of jobs, spending, and tax revenue. Examples of goods and services used by the commercial music industry sectors selected for this analysis include real estate, graphic design and advertising, printing, material purchases from manufacturers of recording mediums and advertising materials, music and recording supply stores, music equipment rental, cleaning services, catering, and event venue rental, among others. Economic impact analysis includes all of these goods and services, as well as others, in its final total outputs for indirect spending, jobs, and generated tax revenue.

ECONOMIC IMPACT MEASUREMENTS

The impact summary results are given in terms of employment, labor income, total value added, and output:

Employment represents the number of annual average full-time/part-time jobs as defined within the Bureau of Economic Analysis Regional Economic Accounts (BEA REA) and Bureau of Labor Statistics Census of Employment and Wages (BLS CEW) data. These job estimates are derived from industry wage averages.

Labor Income is made up of total employee compensation (wages and benefits) as well as proprietor income. Proprietor income is profits earned by self-employed individuals.

Total Value Added is comprised of labor income, property type income, and indirect business taxes collected on behalf of local government. This measure is comparable to familiar net measurements of output like gross domestic product.

Output is a gross measure of production. It includes the value of both intermediate and final goods. Because of this, some double counting will occur. Output is presented as a gross measure because IMPLAN is capable of analyzing custom economic zones. Producers may be creating goods that would be considered intermediate from the perspective of the greater national economy, but may leave the custom economic zone, making them a local final good.

Within this study, the businesses and sectors that primarily do their business within the commercial music industry are inputted as direct impacts, while other supporting businesses are captured within the IMPLAN model as indirect impacts.

Induced Impacts

These impacts are due to the spending that employees of the selected industry sectors engage in with the wages and salaries that they earn. Therefore, induced impacts take place across all standard consumer purchase sectors, including real estate, grocery spending, spending at bars and restaurants, the purchase of utilities, retail, and many others.

The multiplier effect, which is the basis for input-output analysis such as the above, describes the way in which one dollar entering the economy at a certain point is distributed through related industries. For example, when a band writes and records an album, they purchase goods and services from many sources: musical equipment manufacturers, time in a sound recording studio, graphic design for the album cover, advertising and licensing on online platforms, and other associated individuals and firms within the cluster. The economic effect of the album's production alone would be considered a direct effect. Purchases from the associated enterprises described above constitute the indirect effect. Finally, the induced effect is felt when industry cluster individuals spend the wages earned in the process of production— on rent, food, consumer goods, utilities, and any other standard living or recreation expenses.

While this report does offer a more granular analysis through its use of more detailed NAICS industry classifications for the commercial music industry and a combination of 2022 Oregon Music Census data with confidential establishment-level QCEW data, the available data is still insufficient to capture all facets of such a complex industry. This report offers a conceptual framework that describes the overall nature and interconnections between the core components and peripheral elements. Additionally, the judgment of which economic elements interact to a sufficient degree with music production to warrant inclusion is a complex area requiring substantial expert input. In this report, substantial qualitative results from the 2022 Oregon Music Census and expert interviews are used to build out existing gaps in the quantifiable modeling data as described in the Data Sources section. For the quantitative component, input sectors have been chosen that directly reflect the core components (which are highly inclusive, as shown in the conceptual diagram), and IMPLAN software distributes the direct, indirect, and induced impacts throughout the state economy. Additionally, because IMPLAN relies on three datasets for its estimates of employment and wage— Bureau of Labor Statistics (BLS) Census of Employment and Wages (CEW), Census Bureau County Business Patterns (CBP) and Bureau of Economic Analysis (BEA) Regional Economic Accounts (REA) data— it accounts for workers who not be accounted for within the QCEW dataset. Whenever appropriate, we utilize or augment our estimated employment and wages with the IMPLAN data.

Results

Table 11 shows the total estimated economic effects of the Commercial Music Industry in Oregon. In 2021, the commercial music industry contributed over 16,400 jobs directly in the state, and 3,665 jobs at the indirect level. When additionally accounting for the spending of the direct and indirect business employees in the local economy (induced effect), the commercial music industry contributed a total of

22,927 jobs. These 22,927 commercial music industry jobs generated just below \$1 billion in labor income and nearly \$3.8 billion in output in the state. Furthermore, **Figure 16** breaks down the top fifteen industries by employment that are impacted by the commercial music industry in Oregon. As expected, *performing arts companies, independent artists and performers* and *other education services* (which includes music education) are the largest contributors of jobs in the commercial music industry, as these are the sectors where the majority of commercial music jobs are directly located. *Other real estate, employment services, or management of companies and enterprises* are industry sectors that support and provide services to the commercial music industry, but may not be directly part of the industry.

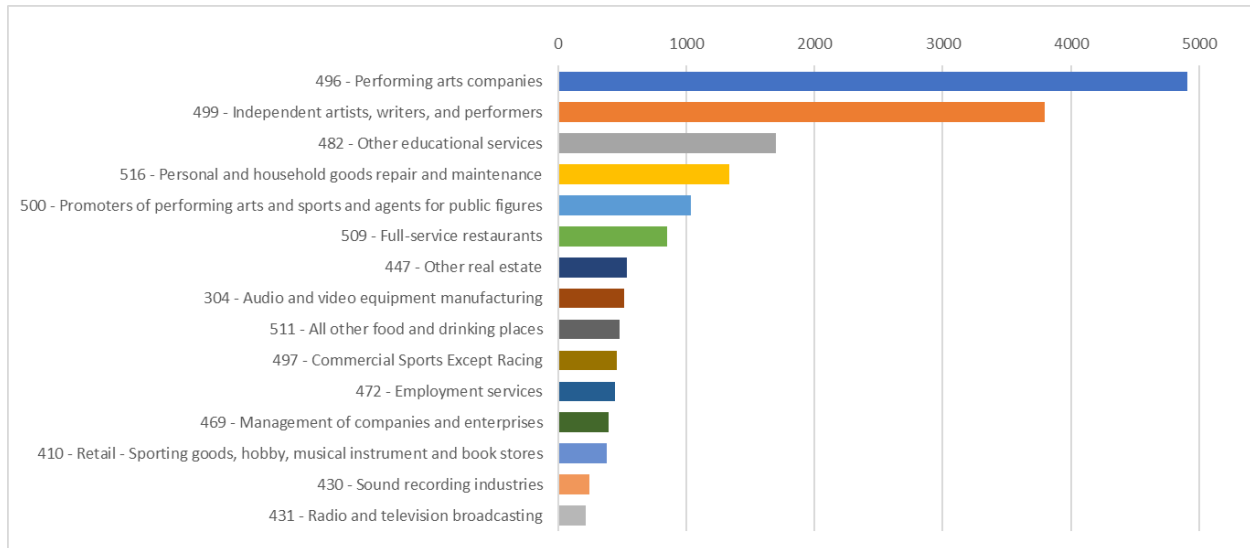
Table 11 - Oregon Commercial Music Industry Economic Impact Summary (2021 Dollars)

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	16,439	\$531,376,572	\$1,345,156,922	\$2,547,480,493
Indirect Effect	3,665	\$268,840,827	\$381,061,808	\$686,339,739
Induced Effect	2,823	\$177,126,746	\$313,318,172	\$524,120,737
Total Effect	22,927	\$977,344,145	\$ 2,039,536,902	\$3,757,940,969

Table 12 - Oregon Commercial Music Industry Economic Impacts by Industry Sector (2021 Dollars)

	Type	Employment	Labor Income	Total Value Added	Output
Creator	Direct	8,702	\$142,477,251	\$670,367,722	\$976,288,396
	Indirect	911	\$53,111,096	\$74,427,253	\$139,770,876
	Induced	696	\$43,601,191	\$77,134,098	\$129,041,084
	Total	10,308	\$239,189,538	\$821,929,073	\$1,245,100,357
Production of Content	Direct	4,934	\$273,705,593	\$485,571,127	\$1,048,910,271
	Indirect	1,585	\$144,762,587	\$207,545,025	\$365,296,392
	Induced	1,470	\$92,247,556	\$163,165,810	\$272,931,744
	Total	7,989	\$510,715,736	\$856,281,962	\$1,687,138,406
Distribution & Marketing	Direct	417	\$46,736,599	\$75,439,955	\$322,071,553
	Indirect	808	\$47,299,174	\$64,457,476	\$115,554,743
	Induced	332	\$20,851,900	\$36,885,766	\$61,704,036
	Total	1,557	\$114,887,673	\$176,783,197	\$499,330,333
Live Performance	Direct	2,361	\$67,319,023	\$110,102,046	\$194,439,711
	Indirect	355	\$23,206,248	\$33,934,007	\$64,389,623
	Induced	320	\$20,074,512	\$35,510,646	\$59,403,725
	Total	3,035	\$110,599,783	\$179,546,699	\$318,233,059
Organization	Direct	25	\$1,138,106	\$3,676,073	\$5,770,561
	Indirect	7	\$461,721	\$698,047	\$1,328,104
	Induced	6	\$351,587	\$621,851	\$1,040,149
	Total	37	\$1,951,414	\$4,995,971	\$8,138,814

Figure 16 - Top 15 Industries by Employment



The commercial music industry’s economic activity, labor income, and hiring has effects on public tax revenues. **Table 13** details the increased tax revenue at all levels of government due to the industry’s activities in 2021. Combining impacts at the local, state, and federal levels, the commercial music industry contributed to an estimated total of \$294 million in tax revenues, with more than \$68 million going towards Oregon’s state and local governments.

Table 13 - Commercial Music Industry Tax Impacts (2021 Dollars)

Oregon	
State Personal and Corporate Income Taxes	\$50,727,603
Other State Taxes, Fees, and Licenses	\$13,101,238
Total State	\$63,828,841
Local Governments	
Property Taxes	\$2,938,255
Other Local Taxes, Fees, and Licenses	\$1,849,412
Total Local	\$4,787,666
Federal Government	
Federal Personal and Corporate Income Taxes	\$118,995,903
Social Insurance and Excise Taxes	\$106,714,594
Total Federal	\$225,710,498
TOTAL	\$294,327,005

Consumers and attendees are vital to the live performance sector within the commercial music industry, contributing both through on-site spending on tickets, merchandise and activity participation, as well as off-site spending on transportation, lodging, dining and other services associated with their attendance. In the most recent Arts and Economic Prosperity 5 (2017) study conducted by Americans for the Arts,

which focused solely on nonprofit arts and culture events, nearly ten million people attended arts and cultural events in Oregon annually. Of these attendees, 86.1% were Oregonians and 13.9% were nonresidents.⁴² Nonresidents spent an average of \$111.36 on food and drinks during and after the event, souvenirs, clothing, transportation, child care and lodging (excluding the cost of admission), while Oregon residents spent \$31.52 on average. Dean Runyan Associates (2022) examined the impact of travel in Oregon in 2021, and found that travel spending totaled \$10.9 billion across food and accommodations, arts, entertainment and recreation, ground transportation, retail and air transportation industries.⁴³ This spending directly contributed to an estimated 100,000 jobs in these industries. Oregon resident visitors accounted for \$4.1 billion in visitor spending, while other U.S. visitors and international visitors accounted for \$6.5 billion and \$0.3 billion, respectively. These studies underscore the significant economic impact of the live performance industry in Oregon, boosting the economy by bringing in consumers and consumer dollars from outside of the state, and can potentially be considered a “traded sector”.

The 2022 Oregon Music Census collected data about additional on-site spending by consumers at musical performances in both dedicated and mixed-use venues, but this is not input separately as a part of the economic impact analysis because the additional consumption should already be accounted for by the employment levels and wages at these venues. Using the Oregon Music Census data, we estimate that each dedicated venue has an average audience capacity of 653 with a fill rate of approximately 70% in 2019 and 64% in 2022, 2.23 average weekly shows and an average ticket price of \$28. Dedicated venues estimated that about 17% of attendees came from outside of Oregon in 2019, and 19% in 2022. Roughly extrapolating this to our estimate of 99 dedicated venues across the state, this translates to approximately 4.79 million attendees who spent \$134,173,116 on tickets in 2022. Music festivals such as the Sisters Folk Festival, Northwest String Summit and Britt Music & Arts Festival also draw large audiences from both within and outside of Oregon, with survey respondents estimating that 33% of the attendees were out-of-state visitors in 2022, an increase from 29% in 2019. Again, on-site consumer spending at the music festivals should already be accounted for by the employment levels and wages in this sector, and are not separately input into the economic impact model.

While the spending by consumers and attendees directly at the music venues and festivals is already included in the economic impact model, the additional spending that occurs off-site is not captured. Local attendees may enjoy an additional meal before or after a live music performance, take an Uber to and from the event, and purchase retail goods from neighboring businesses; attendees who are visitors may travel further to the participate in music festivals, pay for overnight accommodation, enjoy several meals during their visit, and purchase souvenirs and gifts. Utilizing the Oregon Music Census data and expenditure data from the Arts & Economic Prosperity 5 (2017) study with very rough assumptions and extrapolations, we estimate an annual attendance of 5.41 million Oregonians and 1.66 million visitors at live music events, spending a total of \$355 million in the local economy outside of the events they attended. This additional spending within the local economy contributes to 2,940 direct jobs and 4,154 total jobs across the Oregon economy, and more than \$276 million in direct economic output and \$503 million in total economic output, mostly in the restaurant, hotel, transportation and retail industries as

⁴² Americans for the Arts, “Arts & Economic Prosperity 5 - The Economic Impact of Nonprofit Arts & Cultural Organizations & Their Audiences in the State of Oregon.”

⁴³ Dean Runyan Associates, “The Economic Impact of Travel in Oregon 2021,” 2022, https://industry.traveloregon.com/wp-content/uploads/2022/05/OR_2021_Final.pdf.

expected. These rough estimates provide a helpful starting point for understanding the economic contributions of live performance audiences. However, they cannot substitute for a more comprehensive research study that directly collects relevant data through intercept surveys and other sources.

Table 14 - Live Performance Attendee Additional Spending Economic Impact Summary (2021 Dollars)

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	2,940	\$106,565,028	\$160,511,033	\$276,229,170
Indirect Effect	551	\$40,050,385	\$60,025,050	\$110,876,624
Induced Effect	663	\$40,084,627	\$69,232,696	\$116,594,970
Total Effect	4,154	\$186,700,039	\$289,768,779	\$503,700,764

III. Understanding the Commercial Music Industry

Methodology & Limitations

The design of the qualitative aspect of this research sought to add explanatory power as well as nuance and texture to the quantitative analyses and the Music Census results. Our first task was to apply and get approval for “exempt status” from Portland State University’s Institutional Research Board (IRB). The IRB governs research ethics; IRB approval assures research participants that their rights and protections have been carefully considered by our research team, and exempt status means that our research design was not expected to be unnecessarily extractive or harmful to participants. The IRB determined our project to be exempt on December 19, 2022, and the qualitative side of our research got underway immediately thereafter.

The methods used consisted largely of interviews ($n=15$) and content analysis from an open-ended survey question (~500 responses). Interview protocols were designed to gather information from a broad array of music industry-involved subjects, ranging from performing musicians to venue operators and instrument manufacturers. The interview protocol was crafted to prompt participants to answer questions about their job titles/descriptions, their networks and communities, the challenges they faced, the resources they relied on, and the opportunities they identified in the Oregon music industry. Due to a variety of factors, interviews were conducted remotely (using Zoom). Each interview was recorded both on video and audio, and copies of the recording were kept secure on a shared drive monitored by the research team. Lastly, participants were compensated for their time with \$40 gift cards.

Interviews were conducted between late December and early February, and typically lasted between 45 minutes and one hour. Once interviews were completed and transcribed, they were uploaded to a Qualitative Data Analysis software (Atlas T.I.) and coded for findings by the research team. Codes were collated and further analyzed.

As with any research, there are limitations that must be considered. Importantly, each of the below limitations are not disqualifications; we feel confident that the data and analysis presented here is

critical to understanding the significance of and opportunities for Oregon's commercial music industry. Additionally, these limitations open the possibility of future research that can more comprehensively diagnose gaps, impediments, and possibilities for increased impact and more equitable economic development within and beyond Oregon's music communities.

First, with a relatively short time frame for obtaining ethical research approval, collecting data, and conducting analysis, the initial qualitative sample size target was set at 10-15 interview subjects. We eventually conducted 15 interviews across a relatively diverse set of music industry positions. Second, and again primarily due to time constraints, we experienced significant challenges in constructing a database to recruit potential interview subjects, as a pre-existing database of commercial music industry participant contacts was not available. Additionally, the Oregon Music Census was anonymous by design in order to collect sensitive information, and yielded very few respondents who consented to a follow up interview. This being the case, we relied heavily on MusicPortland, MusicOregon and the Industry Advisory Group for this project for potential interview subjects. Without direct control over the interviewee recruitment process, we need to acknowledge the potential for selection bias as a significant limitation.

Lastly, one of our initial goals was for our sample to be as sectorally, geographically and socially diverse as possible. While we feel confident that our sample was sectorally diverse, the logistical and practical constraints of this project affected our ability to interview a more geographically and socially diverse cross-section of the commercial music industry. This particular limitation underscores the importance of a continuing commitment to research on and with Oregon's music industry. With proper support, future research could look deeper at the challenges and opportunities for lowering barriers to entry and empowering marginalized communities within the music industry.

Results

In this section, we will describe the findings of the qualitative research we conducted. Importantly, many of the themes below intersect with the live music industry report; we attempted to organize our findings into unique but deeply interconnected analyses for each report. For the commercial music industry report, we focused on pay/compensation; music industry networks; multiple jobs within the industry; and the effects of pandemic-related closures, among other themes. Each of these themes will be explored below, followed by some ideas and opportunities as identified by research participants.

Please note that all research participants have been guaranteed anonymity and are protected under our exemption status from Portland State University's Institutional Research Board. Therefore, any names, occupational details, or other identifiers have been withheld for their protection.

Wages and Compensation

We begin here with the issue of pay and stagnant wages because it was, by a large margin, the most impactful issue amongst participants in our research. We immediately identified a tension between venues and musicians, and while not universally described as exploitative or unfair, many of the responses from musicians/performers indicated dissatisfaction with the compensation they could expect for a performance. For example, a common response by musicians that have been performing for many years on the survey was the claim that expected pay for a live performance is nearly identical to

what they could expect for a similar performance in the 1970s or 1980s. Of course, with inflation and cost of living rapidly rising, performers are feeling pinched:

“I’ve been playing live music since the 1980’s. In the 80’s you could buy a house for \$100,000, and a new car for \$5000, and the pay for a gig was \$50-\$100. Now a new car costs \$30k, and a house costs \$500k; prices have increased by five to six hundred percent, but the pay for a gig is still \$50 - \$100.”

Another exemplar quote: “I’ve been playing live music in Oregon since 1964. I made \$50 a night back then. I made \$50 the last time I played at [venue] for a night in December 2022.” Again, this type of response was quite common, and we were able to verify it in interviews with musicians. These claims seemed to be especially true in major markets such as Portland, but also appeared to be true statewide and across genres (although our evidence is not as strong for the latter).

Despite the recurrences of these kinds of claims about low and stubborn wages, we must note that some venue operators have asserted that performer pay had risen by up to 30% at the same time that audiences have declined by the same percentage. This creates a bind for venue operators, who have endured three difficult years of pandemic-related closures and rising costs. Although more research is necessary to fully comprehend the challenges that impact various market segments (as noted in our discussion about the limitations of this research above), one possibility for these competing narratives is that there may be unique sets of challenges that exist for musicians who perform at mixed-use venues as opposed to those who perform at dedicated or ticketed venues.

A number of consequences stem from this stagnation of wages. In the first place, bandleaders have to make difficult choices about how many members of a band they ask to perform alongside them, because the pay rate doesn’t change as the band size goes up. Instead of playing with a nine-piece jazz ensemble, for example, a bandleader might opt for a five-piece so as to pay each member slightly better. A handful of respondents identified such decisions as a significant source of stress for themselves, or a source of tension within the dynamics of the band/ensemble. A second consequence has to do with touring: smaller bands touring the Northwest – a large geographical area with few major metropolitan areas – must absorb the costs of traveling. This includes lodging, food, and fuel for their vehicle, not to mention investments in equipment and instruments. If bands are forced to split small sums of money for each performance, they struggle to afford these additional costs to tour. One interviewee even told us that they came home from a tour with less money than they left with. We met some enterprising individuals that do booking work and advocate for bands to have these indirect costs covered in their performance contracts with venues, but we do not have direct evidence to suggest that venues have complied.

Third, and adjacent to the last point, musicians take on a variety of costs and uncompensated activities that are necessary to perform live music. These activities include practice sessions, songwriting, promoting/advertising (especially on social media), and recording demos. Each of these activities includes satellite costs: for example, practicing requires securing space, and usually that space needs to be soundproof and large enough for the band and their equipment set up. In cities like Portland, the cost of such spaces far exceeds what the average band can spend given the compensation they receive.

Lastly, the importance for performers to be able to make a sustainable and living wage through performing is underscored by changes in the commercial side of their enterprises. Most significant are changes in technology, especially streaming platforms taking the place of physical media sales (CDs, vinyl records, etc.). Streaming services such as Spotify pay musicians under \$0.01 per stream (do we have a citation for this?), so unless performers have a rather large following, making sustainable wages via streaming platforms is very difficult. As such, performing and selling merchandise is critically important for performers.

To complicate matters, performers reported their contracting with venues to be oftentimes informal; many performers desired better transparency and communication from venues. Most respondents acknowledged that bigger venues did have more professional communication and better contracting practices, which we were able to verify in at least one interview with a venue operator. In many cases, however, we found that professional contracts with clearly agreed-upon terms were highly unstandardized and sometimes non-existent (the “handshake” deal). Revenue splitting arrangements ranged from venues taking 10% of ticket sales to 50% of ticket sales (one occurrence of 80%). Sometimes bands were guaranteed money, but oftentimes performers indicated that in order to attain such guarantees artists had to do their own promotion and “bring their audience” with them. Communication also appeared to be an issue. A few respondents spoke to the problem of haggling with venues over the course of months about holding dates and agreeing on contracting. When such negotiations unfold over many months, bands can lose the ability to book dates elsewhere. Other surprising evidence pointed to such practices as venues compensating bands with food and alcohol, venues taking portions of a band/performer’s merchandise sales, and venues breaking contracts. These last few findings are anecdotal; more research would be needed to qualify the veracity of these claims.

Evidence suggests that the threshold for more formal contracting between performers and venues is the scale at which a venue can employ a dedicated booking agent. Dedicated booking agents can address many of the issues described above – they can standardize contracts, create predictability for performers, and communicate in a timely fashion. Additionally, the problem of counting these performers in terms of their economic impact can be addressed to some degree. As things appear to occur now, the informality of contracting at the “entry levels” means that individual performances can hardly be accounted for economically. For example, there don’t appear to be 1099 forms issued as a part of the contract. From the venue’s perspective (especially smaller venues), owners/operators are equally struggling (more on this in the Live Performance Industry report) and are less likely to have the resources or capacity to standardize and formalize contracting. One rectification would be to have public sector assistance – perhaps a liaison from a newly established Office of Film, Music, and Media – in standardizing and formalizing contracts.

Music Industry Networks

While wage stagnation was a clear problem for the Oregon music industry, an advantage was the resourcefulness and creativity of its communities and networks. Many, if not most, research participants acknowledged the communities they were embedded in as welcoming and creative. These communities were typically organized by genre, but were crosscut by a number of embedded and professionally variegated networks that music industry workers used to access resources. The most obvious economic advantage to these music “scenes” – Portland’s being an outside example – is that a flourishing music

community is a significant cultural amenity that can be a source of attraction for young professionals with disposable incomes that can patronize businesses adjacent to the music industry. By all accounts, this has been the case for Portland and likely in other parts of Oregon such as Ashland and Bend (although we don't have evidence for this, unless it's in the quant data). Healthy music industry communities host strong networks that connect people to critical resources, so it is vital to steward these communities.

These assertions were verified in interviews and survey data. It was common, for example, for us to hear that commercial music industry workers and operators used their networks to access a number of resources. Performers often told us that they leaned on their networks to find venues and book performances. Additionally, having strong networks helped musicians learn better ways to hone their craft, such as finding the best settings for stage monitors or equalization for live sound. Studio musicians used networks to learn about bands looking for instrumentalists; sound engineers used networks to access equipment while they were on the road; booking agents used networks to identify and invite regionally touring acts; and music students used networks to receive help from local music businesses.

One critical advantage of having a strong network is the acceleration effect they can have on small businesses. An exemplar case is a music equipment manufacturer, who was able to start a business and get their product on stage in use by nationally touring bands due to their network of musicians:

“A big part of building [my] business was [that] I was just friends with, and bandmates with, tons of people [...] that went on to bigger things [...] and the communities are kind of connected, so I kind of knew a lot of people who were already playing on big stages. That gave my business a big boost, especially in the beginning. [...] I couldn't actually imagine having done this business without having all those connections going into it.”

Equally important are cases in which an owner/operator, manufacturer, or performer needed better networks to help with resources. For example, one musician described the challenges of funding new song recordings, which require instrumentalists, graphic design, digital distribution, video production, social media advertising, and so on. They described the process of hiring a public relations representative to help with promotion, only to have this person scam them out of a sizable amount of money. It might be an assumption to claim that a stronger network might have yielded a more trustworthy contact, but it stands to reason that networks do go far in establishing trust; if music industry folks are to see themselves as businesspeople, the importance of networks is paramount.

Another important consideration for why music industry networks are so important is the different positions many music industry actors can occupy (i.e., having multiple “jobs”). As such, the different networks those positions yield create a number of intersections that workers/operators can use for finding resources. In the block quote above, an equipment manufacturer was able to use their network of performing musicians to jumpstart their business. In another example, an instrument manufacturer used the same strategy – but with a different geographic and genre-based network – to get their product in front of audiences and grow their enterprise significantly. In a third example, a booking agent was able to use their networks of other bands to get into recording albums and develop a positive regional reputation. “Everybody depends on everybody else,” said one interviewee. “If artists aren't

making money, they're not buying instrument gear. If they're not making money, they're not hiring producers and recording studios."

As that quote makes clear, many local businesses rely on networks they develop with other local businesses. In many cases, local supply chains take shape, notably for local manufacturers and instrument builders. For example, one music industry manufacturer told us that all of the outsourcing that their products require is done locally. To complete their manufacturing process, they needed to develop relationships with upholsterers, woodworkers, metalworkers, and electronics component distributors, all of which they were able to source from companies in Oregon. This manufacturer, then, has networks that span a number of industries, both within and beyond Oregon's music industry.

The downside of holding multiple positions in the music industry is that even working a number of different "jobs," these industry actors still have trouble making a living wage. Additionally, many of these occupational positions are informal, untracked (e.g., in terms of tax ID), and do not help actors access benefits such as health care and retirement. One survey respondent said, "it is virtually impossible to pay one's living expenses making music in Oregon unless you are an instructor or you work as an employee for an organization." Another said, "most folks who work in the creative arts really work [in] many fields in order to create an aggregate 'living'." A third is perhaps even more telling:

"I've been a booking agent. A manager of bands. A music teacher. A songwriter. A performer. I've toured and played locally [and] regionally around the USA and internationally. I've engineered and produced albums and have worked for venues and ran the music portion. I have dedicated my heart to the process and the songs I write and to Portland. I work 3-4 jobs to survive. I received zero pandemic relief."

These types of exasperated responses were commonplace on the survey; the larger message seemed to be that one "job" won't be enough, especially given the intensification of inflation and the high costs of living throughout Oregon. Missing out on pandemic relief was another issue for those occupying multiple positions within the industry, because it was oftentimes challenging for these kinds of workers to demonstrate a consistent income or source.

Pandemic and Other Challenges

It would be unsurprising to say the pandemic and its related closures were challenging for Oregon's music industry, especially for venues and performers. And indeed, it was harrowing for many of them. However, one of the most surprising findings of our research was that these closures were a boon to some local music industry enterprises. A few interviewees seemed a bit sheepish about admitting this, but it was somewhat common for instrument or equipment manufacturers to say things like: "I knew COVID was actually, like, good for my business because a lot of people needed a new hobby that they could do at home." Another manufacturer said, "we saw a lot of increase in demand, especially 2020 through about midway 2021 [...] everyone's picking up the [instrument] because there's nothing else to do." And a performer told us that they got a lot of music recorded and released "because we couldn't do [expletive] else, we could be at home and record and get a lot of things done." Our data does show that the pandemic-related closure had the effect of boosting average wages, even while diminishing the overall number of jobs in the music industry. The explanation has to do with this unexpected benefit of

the closures: higher wage jobs in instrument/equipment manufacturing did quite well, whereas lower wage jobs were eliminated en masse.

It was the latter that constituted the overwhelming majority of survey and interview respondents; that is, those who were affected negatively by the pandemic. Some business operators depended on traveling to conferences and trade shows to meet and court new retailers, and travel became difficult for a lengthy period of time and conventions were mostly canceled. Other manufacturers did experience slowdowns in their supply chains, especially for the electronic components they needed from China. Furthermore, the economic ripples from COVID-19 that contributed to massive increases in prices across the global economy hurt many operators.

But by far and away the biggest effects were felt by performers and venues. Amongst our interviewees, there was a general give-and-take regarding COVID-19 – many admitted to stress from lost opportunities, but some had unemployment or other assistance and were able to attend to priorities that they otherwise would not have been able to. The survey responses, however, were significantly more pointed. Many venue owners expressed frustration about being excluded from pandemic relief grants. Many performers expressed anger about mandated closures of venues, but also lamented the slow return of audiences that are either pandemic-cautious or feeling the pinch of inflation (and cannot afford “nights out” as they did prior to the pandemic). A number of responses from business owners described deeply impacted revenue streams: many are yet to recover, and many others have closed their businesses. A number of respondents expressed frustration with the way public assistance was distributed, admitting that they were forced to take loans in order to survive, and now the loan repayments have become a source of burden. Some have had to sell their houses and/or possessions to pay off these debts.

Discussion

The commercial music industry in Oregon is a set of communities, enterprises, and networks that industry workers, performers, and operators hold dear. Most participants spoke about their communities with pride and optimism. At the same time, everyone recognized the significance of the issues the industry faces and the fragility of the ecosystems in which these industries are situated. Without attention to the issues we’ve discovered above, the industry is at risk for further attrition, which of course curtails the music industry’s direct impacts as well as the diffusion of beneficial indirect or induced impacts on adjacent industries throughout the state of Oregon.

From the analysis of the interview and survey data, we can hazard a handful of prescriptions, many of which were direct suggestions from research participants. A simple request that we heard many times in our research was the lack of a central source of information – a webpage, most likely – that was current and well organized. One way of addressing this would be the establishment of a “resource clearinghouse” of sorts to centralize information and industry knowledge as well as assist in the deployment of industry standards, efficiencies, and protections. This could take the form of the establishment of an Oregon Music office, potentially modeled after the Oregon Governor’s Office of Film and Television. Such an office can leverage the relationships that already exist in Oregon’s music ecosystem to draw new enterprises to the state, especially focusing on enterprises that would fill gaps in supply chains and strengthen the networks that we described above.

Additionally, such an office could help with funding and/or organizing events and other forms of engagement that deepen community connections, perhaps even by focusing on engagement that brings otherwise siloed music communities/networks together. As for direct business development, the office could organize information sessions and workshops, help organize travel to conferences, and develop forums for the discovery of new actors (musicians, venues, manufacturers, etc.). Lastly, the office could be a point of contact with local municipalities: this would go far in dealing with noise ordinance issues, parking regulations, grant programs, tax codes, land use issues, public safety, and other policy- or public sector-related issues.

Ongoing research is a critical need; our investigation barely scratched the surface. To begin with, a survey such as the Oregon Music Census should be annual; the qualitative data from that census has painted a picture that is at once surprising, challenging, and brimming with opportunity. The data speaks to the urgency with which attention is needed to stabilize, empower, and develop the commercial music industry. Additional qualitative research would be instrumental in discovering the gaps in networks, the interrelatedness of various segments of the music industry, and the hidden impacts and impediments that affect (or are affected by) industry actors. Additionally, more qualitative research would provide explanatory power to the quantitative data presented in this report; oftentimes we know something because we can see it in the numbers, but we do not know why until we go talk to people and ask them.

IV. Opportunities, Challenges, Strategies and Gaps

One central problem dominated the survey and interview respondents: wages. Again and again, respondents decried the compensation they could expect from a live performance. A number of responses seemed to confirm that wages have not budged since at least the 1980s; needless to say, the cost of living has risen dramatically in that period. Along those lines, performers have to absorb a variety of costs associated with performing. The indirect costs of traveling are a potent example: to tour, performers must pay for gas, lodging, transportation, equipment, and food. This is not to mention the upfront and opportunity costs performers put into recording music, practicing with bands/ensembles, or promoting their performances.

Despite the persistent issue of stagnant wages, music industry workers and owner/operators reported their networks as being a major upside. Networks tended to be cross-genre, cross-sectoral (e.g. musicians, instrument makers, booking agents, etc. oftentimes shared networks) and were used in a variety of ways. For example, networks were used effectively by new business owners to launch and accelerate their businesses – having performing artists in their networks, for an instrument manufacturer, meant getting their product in front of audiences quickly. Networks could also be used to pass along tricks of one's craft – events or meetings with other operators meant knowledge can be shared, for example. Our research showed that even amongst small business owners, the desire for community outweighed feelings of competition.

Whereas networks and the communities those networks were embedded in were reported to be an advantage, there were some respondents for whom networks could have been stronger. Weak networks and/or communities opened the door for dishonest or ill-intentioned actors to take advantage of music industry folks. Furthermore, given the aforementioned problem of wage stagnation, networks

could experience a great deal of churn as folks drop out of the music industry or move to other states looking for better opportunities. These instabilities threaten the strength of networks; more needs to be done to stabilize and strengthen such networks. Finding a solution to the need for music industry workers to occupy multiple jobs in order to cobble together a living would be an earnest step in that direction.

Lastly, COVID-19 and the related closures were experienced largely as a challenge by the music industry in Oregon. By far the most affected groups were venue operators, venue employees, and live performers. A common response in our research was for venue-affiliated workers to express frustration about being excluded from grant relief – many of them did not understand why they were excluded and the cost of that exclusion was detrimental if not catastrophic to their operations. However, not all groups experienced the pandemic-related shutdowns as a negative: many instrument and equipment manufacturers benefitted from so many folks being at home, having additional unemployment benefits, and wanting to pick up a new hobby. Our research also showed that music-related manufacturing businesses did not experience significant disruptions to their supply chains (in terms of materials). To foreshadow a central conclusion from our study: more access to grants was a major need among businesses and music industry workers in recovering from pandemic-related damages.

Overall economic conditions and disruptions, such as the pandemic or wildfires, can also affect attendance at live performance events. Local residents and visitors from both within and outside of Oregon who attend music performances, music festivals and other live performance events contribute significantly to the Oregon economy, and this live industry can potentially grow into an important “traded sector.” Comments from the Oregon Music Census and from our interviewees echoed the importance of audiences’ and attendees’ contributions to vibrant music-related communities. Additional empirical research that more comprehensively and regularly captures data about attendees through intercept surveys and/or travel diaries, similar to those used in the AEP5 (2017) and Dean Runyan Associates (2022) studies, can provide better insight into the magnitude of their economic impact.^{44,45}

Grants have proven to be an impactful intervention the public sector can make. Of the participants that did receive grants, many of them reported those grants as being helpful. Moreover, survey respondents commonly suggested more access to grants in order to cover unexpected costs, fund recording or traveling (e.g., to conferences or to showcase Oregon talent at events outside of the state), recover from disasters or misfortune such as the wildfire smoke that caused the cancellation of a number of festivals and outdoor performances. Our research shows that only 7% of all survey respondents actually received grants, which suggests one or more of the following: either there are not enough grants to make a meaningful impact, and/or musicians don’t know how to find grants, and/or musicians don’t know how to navigate the bureaucracy of grant infrastructure as it currently exists. The quantitative data also indicates that economic shocks can lead to attrition from the industry, leaving only those who are the most established and potentially exacerbating existing diversity and equity issues in the industry. In an interview, one musician described the challenges of discovering available grants as follows:

⁴⁴ Americans for the Arts, “Arts & Economic Prosperity 5 - The Economic Impact of Nonprofit Arts & Cultural Organizations & Their Audiences in the State of Oregon.”

⁴⁵ Dean Runyan Associates, “The Economic Impact of Travel in Oregon 2021.”

“I found out about [a grant] last minute from a friend who knew about it. Like literally I had the day to put the proposal together and [...] I've written grants before and so I had a little bit of a template to go off, so I was able to scramble and get it together. And miraculously get it. But yeah, so I was like, how come I didn't know about this?”

A variety of strategies to support the music industry have been implemented in states across the nation to address some of the challenges described above. The most common initiatives are grants via cultural trusts, which derive their funding from both public and private sources. However, there are many examples of additional forms of support that are potentially feasible for Oregon. These include the loosening of regulations surrounding live music performances, the creation of music task forces to ensure that policy is guided by local needs and interests and provide coordination between agencies and organizations, efforts to provide additional resources for music industry participants to learn and collaborate, and an emphasis on musical education programs in schools in order to foster an appreciation for and interest in music.

While directed support for nonprofit arts is relatively common, there is a dearth of direct policies and incentives to support commercial music and related industries.⁴⁶ This report emphasizes the broad scope of the commercial music industry and the interdependence of artists with other sectors, such as gear manufacturers, audio-visual technicians, venues, managers, agents, and others. In order to foster a thriving music scene, it is essential that interventions seek to bolster these wide-ranging components.

In Oregon, the Cultural Tax Credit created by House Bill 2923 (which offers a state tax refund for combined contributions to local nonprofits and the Oregon Cultural Trust) funds a wide variety of grant programs for local artists, with an emphasis on serving disadvantaged communities. All current organizational grants in Oregon are dedicated solely to nonprofits, and only one of the individual artist grants, the Career Opportunity Program, is available to commercial musical artists. Values awarded range from \$500 to \$2000. Local grassroots trade association and advocacy group MusicPortland offers grants to commercial artists as well, through its Echo Fund.

Most programs to support the arts take the form of grants, and with good reason— the thing that any struggling enterprise needs most is financial liquidity. Trusts and mechanisms to collect and distribute grant funding exist in many metropolitan areas, states, and on a national basis. *It is common for these programs to be restricted to nonprofit endeavors, and even more common for them to be restricted to artists and organizations to support the arts, leaving out many commercial music industry participants.* Grant programs listed below exist in Austin, Philadelphia, Cincinnati, Columbus, Sydney (AUS) within the scope of the literature reviewed for this report, and too many other cities and states to mention. Artist fellowships provide funding, with or without use restrictions, over a specified time period. Both of these interventions are publicly funded, privately funded, or a combination of the two. Special districts based on existing or developing localized industry clusters eligible for enhanced public funding are recommended to boost growth while, in some cases, supporting areas and populations that have been historically underserved. Many other policies to support the music industry, including publicly-funded performances and programs to increase synergy between subsectors, have also been implemented. In

⁴⁶ Carl Grodach, “Mapping the Arts: Industry Concentrations, Distribution, and Change in the US, 1980–2010,” *International Journal of Cultural Policy* 22, no. 3 (May 26, 2016): 353–75, <https://doi.org/10.1080/10286632.2014.987667>.

Seattle, special “Priority Loading Zones” for musicians make it easier for artists to perform at venues in crowded urban areas. Existing initiatives are summarized in the table below.

Table 15 - Additional Regional Support and Incentive Programs

Location	Incentives and Programs
Austin, TX ⁴⁷	Cultural Funding Program Creative Industries Loan Guarantee Program Creative Economy Investment Fund
Philadelphia, PA	Cultural Fund
Indianapolis, IN	Artist fellowship programs
Ohio	Cincinnati: Direct grants for artists (suspended), ArtsWave (formerly Fine Arts Fund). Columbus: hotel/motel tax funds partially distributed to arts and culture grants, unrestricted one-year individual artist fellowships. Hamilton: Musicians Fair Payment Policy: supports and endorses community awareness.
Sydney, NSW (AUS) ⁴⁸	Special Entertainment Precincts (2021/2022 pilot project) MusicWorks program: grants to support the contemporary music ecosystem.
Ontario, CAN ⁴⁹	Equity X Production Mentorship Program: workshop for production software and business training with paid travel expenses for participants outside Toronto and anti-oppression training for staff. Ottawa City Sound Program: City pays professional artists to put on free performances.
Seattle, WA	Musician Priority Loading Zones: phased program to facilitate easier access to venues. CityArtist grants.
New York	New York State Council of the Arts grants for nonprofits, Native American tribes, and municipality governments.
Nashville, TN	Institutionalization of the Grand Ole Opry: increased awareness and draw for tourists and related businesses; stimulated economy surrounding performance.
Omaha, NE	The Ford Foundation: leveraged funding mechanisms. Nebraska Cultural Endowment.

While grants through trusts are the most common policy mechanism, there are some other proposed strategies that may additionally lower barriers for the commercial music industry.

In Toronto, Ontario, consultants recommend exploring the use of city regulations in order to fund initiatives to support the “night economy,” including increased support for private-sector organizations and increased information capacity for entrants.⁵⁰ Additionally, the report suggests lowering property taxes for eligible venues, and for small businesses (beyond existing relief levels). The music industry is identified as a sector for development, and it is recommended that legislation provide increased funding to support the industry over a set period of time in order to increase growth. As the city grows, venues

⁴⁷ Iryna Lendel et al., “Remix Cleveland: The Cleveland Music Sector and Its Economic Impact - Full Report,” 2011, 224.

⁴⁸ New South Wales. Parliament. Legislative Council. Portfolio Committee No. 6 – Planning and Environment., “The Music and Arts Economy in New South Wales,” November 2018.

⁴⁹ Nordicity (Toronto), “Toronto Music Industry Strategy: 2022-2026” (Toronto Music Advisory Committee Meeting, Toronto City Council, March 2022).

⁵⁰ Nordicity (Toronto), “Toronto Music Industry Strategy: 2022-2026” (Toronto Music Advisory Committee Meeting, Toronto City Council, March 2022).

become threatened by newer residential developments, which foster noise complaints: a proposed solution to this issue is to include the requirement of a warning advisory to residents in the application for such developments. This report also describes many interventions in other areas. In Denver, Colorado, the Safe Occupancy Plan is a conditional building occupancy program for unpermitted performance venues, which includes an extended timeline for code compliance in order to facilitate an increase in live performance while simultaneously limiting displacement.

A 2015 Seattle report recommends reforming a current admissions tax to include small venues. In 2013-2014, only six small venues had been approved for exemption, and small venues subject to the tax typically pushed it on to the artists performing there. The authors suggest increasing education about application for exemption (following reform to expand eligibility), and formalizing tax deduction from musician fees in order to prevent their mistreatment. Additional recommendations include the limiting of blackout dates and non-compete clauses for musicians, promotion of standard written agreements between artists and venues.⁵¹ In Chicago, observed music clustering within African American communities spurs the potential creation of “blues districts” eligible for increased public funding.⁵² Such districts can be enhanced through the use of publicly-funded live-work spaces in historic buildings, as well as ensuring a supply of affordable housing in these districts.⁵³ It is essential to direct public funding not only to space, but also to equipment and marketing opportunities.

Nashville, a prominent music destination, seeks to support increased export by using market intelligence and improved music property rights protection, and notes that tax relief should be targeted to specific clusters and revenue gains. Additionally, the cited report encourages the increased support of creative industries that consume music industry products, which would subsequently increase revenues for that sector.⁵⁴ In New York, a 2017 report from the Mayor’s office and Boston Consulting Group offers suggestions that include the formation of a music industry task force to coordinate and support affiliated organizations and agencies, as well as a reduction in regulatory “red tape” for live performance venues and initiatives to connect and leverage the substantial existing talent base to support and educate new industry participants.⁵⁵

From the broad selection of policies and initiatives to support the industry represented above, it is clear that while grants remain the clearest and most frequently-implemented option (albeit less so for commercial musical artists), there are many other options available that can operate in parallel with simple funding.

Whether or not enough grant opportunities exist, our research makes clear the frustration performers and venue operators feel about not being able to secure grant funding. With consideration to the challenges of navigating a grant landscape as a single owner/operator, which, as our data shows, most live performers are, we can say that all of these possibilities point to the same conclusion. An Oregon State Music Office – much along the lines of Texas Music Office and New York Office of Media and

⁵¹ Megan Brown, “Seattle’s Working Musicians,” *Fair Trade Music Project of the Musicians’ Association of Seattle*, 2015, 46.

⁵² “Chicago Music City,” 2007, <https://doi.org/10.6082/uchicago.1273>.

⁵³ Ann Markusen and Greg Schrock, “The Artistic Dividend: Urban Artistic Specialization and Economic Development Implications,” *Urban Studies*, 2006, 1661–86.

⁵⁴ Richard Florida and Scott Jackson, “Sonic City: The Evolving Economic Geography of the Music Industry,” *Journal of Planning Education and Research* 29, no. 3 (March 1, 2010): 310–21, <https://doi.org/10.1177/0739456X09354453>.

⁵⁵ New York City Mayor’s Office of Media and Entertainment and The Boston Consulting Group, “Economic Impact, Trends, and Opportunities Music in New York City,” 2017.

Entertainment (who also streamlined the process of studying their music industries) – could centralize, facilitate, and simplify the grant infrastructure, and help develop and grow the industry in an equitable manner.

Keeping in mind that grants are an important source – sometimes the only source – of resilience for small businesses during economic shocks like the one presented by COVID-19 and its associated closures, it seems imperative that grant infrastructure be streamlined and strengthened. Beyond providing an important source of resilience, small businesses and sole proprietors often experience difficulty scaling; grants could be used as an accelerant for small businesses that are positioned to grow but lack the resources to do so. Specific to loud music, grants may also help venues with sound abatement, or cover the gaps in their revenue to allow more all ages performances. Lastly, on a granular scale, having a more streamlined and accessible grant structure may also get the performers themselves – rather than conventional applicants who are overwhelmingly businesses and nonprofits – to apply for grants which may then serve as a buffer for the rising costs of living and/or operating, provide financial support to access music equipment or technical training, and temporarily compensate for stagnant wages.

Future Research

The complexities of defining, quantifying and understanding the commercial music industry detailed within this report underscore the importance of ongoing research and analysis. As one of the first research studies on the emerging commercial music industry in Oregon, this study presented quantitative impacts of the industry in the state, contextualized by qualitative survey results and interviews with industry professionals. Future research can be refined (and made less complex) through facilitation and education by organizations such as Business Oregon or MusicOregon for industry participants to use the most appropriate NAICS codes and to actively participate in survey data collection efforts and other centralized databases. By continuing to invest in research and collaboration, Oregonians can develop a better understanding of the commercial music industry's economic footprint in the state, how it contributes to vibrant, connected communities, and explore and craft programs and policies to support its growth and development.

Our research inquiries revealed a number of topics that need to be further explored. Among these topics are: the issue of low and stagnant wages, especially for artists that primarily perform in mixed-use venues; the relative lack of all ages venues; the strength and resilience of music communities and industry networks; the assorted challenges venues face, especially in recovering from pandemic-related closures; the opportunities to foster diversity and inclusion across racial, gender and age groups; and the significance of economic activities associated with live performance attendees' off-site consumption.

We also propose a handful of adjustments that should yield more reliable results in future research, such as phrasing in census/survey instruments; database construction and independent management of subject recruitment; fine tuning important classifications and categories for respondents (e.g., "jobs" and/or titles); and drawing a more diverse array of participants. Lastly, future research could explore some possibilities that we are left with at the end of this phase of research, including: establishing a state-level Office of Music; developing broader regional and national coalitions of music advocacy organizations; and advocating for and developing scene-building physical spaces (e.g., music "districts").

Perhaps most importantly, future investigation should focus on identifying the factors that contribute to suppressed wages as well as the relationship(s) and forms of contracting between venues and performers. Whereas our research did find that a central issue for Oregon-based performers was low wages, we do not have strong evidence to suggest what types of venues those performers are typically booked for or how their contracts are structured and negotiated. It is possible, therefore, that wages are suppressed for performers in one type of venue and rising in others; it is also possible that there is substantial wage variation between venue or performance types. More data also needs to be collected regarding additional or indirect costs for performers. For example, our research findings indicated that a number of performers are responsible for travel costs and promotional costs. Furthermore, if one type of venue does have a higher burden in terms of meeting wage demands of performers, we were not able to collect data that suggests whether the performers receiving those wages reside in Oregon; future research could clarify these remaining questions. Additional qualitative inquiry would also be instrumental in increasing overall confidence in which types of venues/performers may need additional support or regulation and what types of nuanced considerations need to be made before determining degrees or strategies for support or regulation. Specific foci would need to be on determining which venues Oregon's performers typically perform in; what current contracting practices look like for those performers and venues; and what the additional cost burden (i.e., outside of the contracted performance) to performers and venues are.

With these issues in mind, further research and direct data collection with venue owners/operators and booking agents will be especially useful. Admittedly, and despite our best efforts, venue owners/operators were underrepresented in our sample. There is much more to be learned about the challenges venues have faced due to a variety of sources, not the least of which has been three years of uncertainty and financial tumult as a consequence of the COVID-19 pandemic and the related closures. Data in our research pointed to venue operators' confusion about exclusion from grant relief, difficulty dealing with inflation, difficulty coping with noise ordinances and sound abatement, and rapidly rising labor costs for essential positions such as security and sound engineers. Moreover, the music community more broadly expressed a collective demand for more all ages venues, but we do not yet have a complete picture as to why this deficit exists. Again, talking to venue owners/operators is critical in this case; there is a need to discuss the issue with potential hosts of all ages performances to better understand the relationship between policy (especially OLCC regulations), revenue from alcohol sales, and any other contributing factors that we simply have not been able to unveil yet.

As stated in the report, Oregon's music communities and industry networks were found to be a source of resilience and opportunity. Research can be undertaken that seeks better understanding of the geographies, boundaries, and cross-sectoral overlap of these networks. In this initial phase of research, we could only catch a glimpse of the utility – both social and economic – of Oregon's industry networks. At this point, we can assume that these networks have all kinds of impactful implications and intersections, most of which are not well understood. Gaining a clearer picture of Oregon's music industry networks would provide a number of opportunities to strengthen, organize, and better leverage these networks such that resources can be accessed more readily and individual enterprises can act more nimbly and efficiently. Lastly, a fuller and more nuanced picture of the statewide – and even regional – ecosystem would go far in understanding how Oregon's music industry understands and defines itself.

Looking farther ahead, future research could aid in implementing some of the suggestions from this report. Researchers could investigate what challenges and opportunities other public agencies have experienced in establishing a dedicated Office of Music, for example. Likewise, researchers could look beyond the state of Oregon in an attempt to understand how music “districts” – oftentimes places of enormous direct, indirect, and induced economic impacts – are developed and used by residents and tourists alike. In both cases, Oregon’s cities and towns stand to profit from having clarity on best practices and potential pitfalls. As for implementation, future research efforts can help with identifying and differentiating specific and inter-categorical needs and assets for the commercial music industry that might go unnoticed by (but should be supplemented by) quantitative economic analysis. A better understanding of these needs and assets may assist state agencies and other public actors to interface with performers and owners/operators, and to craft appropriate and relevant policies and incentives.

As important as the objectives for future research (the “what”) is the preparation and organization of that research (the “how”). A number of efficiencies can assist researchers in meeting research goals. First, additional qualitative and quantitative research could help determine the best taxonomies for an annual survey (which we feel is critically important). For example, there were challenges with survey respondents regarding identity and “job” categories that they felt did not represent them well; conducting interviews with a sample of potential survey respondents would likely provide more stable categories (e.g., job/work classifications) to use for data collection. Second, surveys are excellent tools for recruiting interview participants. Careful phrasing of recruiting questions on survey instruments could help improve response rates for follow up interviews. In our experience, survey respondents are more likely to participate in follow up interviews if the expectations are clear in the question (e.g., “would you be willing to participate in a compensated 45-minute follow up interview?”). Third, it is critical to develop an independently controlled, sectorally diverse contact database ahead of beginning qualitative fieldwork. This is essential for limiting selection bias, ensuring responsible management of the research plan, protecting anonymity and sensitive data, and gathering a diverse sample. As such, future research should prioritize contact database construction and independent control of communication between researchers and participants.

To this end, we provide a few suggestions for future rounds of data collection that can lead to better research outcomes:

- One of the greatest challenges in survey data collection is the trade-off between ensuring anonymity for the respondents and optimizing efficacy of the data the Census produces. Utilizing anonymous but unique identifiers for each respondent would allow respondents to save their progress and come back to complete the survey, leading to fewer incomplete responses and increasing the quality of the output that can be analyzed.
- A significant portion of respondents did not disclose key information on employment and revenues. This speaks more to the intention of conducting the survey rather than implementing it, but it is imperative to make clear the need for transparency of pay and expenditure information to Oregon’s music industry. This makes objectively assessing the conditions in Oregon’s music industry, and producing reliable recommendations much easier.
- Constraining response to specific types of information is also important. While open-ended input fields for questions on employment, expenditures, and revenues may provide for better specificity, better consistency may be achieved through constrained radio lists, or grouped

buckets for such inputs. Additionally, these types of response fields may encourage respondents to divulge what they perceive as sensitive information regarding their commercial operations.

- We recommend that the Oregon Music Census be conducted regularly, on an annual basis if possible. Conducting the survey in a variety of formats (in addition to the online version) and in additional languages may yield additional responses from Oregon's music industry. Likewise, the Census could also improve qualitative interview opt-ins by tailoring its phrasing to the music industry, i.e. "a compensated conversation" versus "focus group participation."
- One major challenge to reliably assessing the impact of the music industry was the mismatch between known commercial music business categories and established industry classifications (NAICS codes). Consequently, the Oregon Music Census could be a potential environment that helps reconcile the navigate the fuzzy boundaries of formal categorization and where participants in the industry actually position themselves in the industry.
- To gain a better understanding of Oregon's commercial music industry supply chain and its role as a potential "traded sector", additional information can be collected via future iterations of the Oregon Music Census or in-depth interviews with representative businesses within the Creator, Production of Content, Distribution and Marketing and Live Performance sectors. Oregon-specific production functions can be constructed and customized for economic impact analyses by identifying the goods and services required for the production of specific commercial music outputs, and by determining the proportions of those inputs that are sourced from within the state versus those sourced from out-of-state. Additionally, an assessment of the pattern of sales to understand the extent of regional consumption versus exports out of the region can provide valuable economic growth and development insights for the industry. Finally, empirical data that more comprehensively and regularly captures data about attendees at live performance events and festivals through intercept surveys and/or travel diaries can help to better quantify their significant economic impact.

V. Conclusion

Oregon has a vibrant creative presence, producing a diverse array of artists known on the national scale, in addition to independent artists mostly familiar on the local scene. The state is also home to many annual music festivals and live venues that attract large numbers of attendees, while also playing host to music businesses big and small spanning sound recording studios, mastering engineers, composers, tuners, digital streaming services, graphic designers and music educators. All of these components of the industry economically impact their communities by providing entertainment and increasing profits for performance venues, distributing wages, and creating culture that attracts both permanent residents and visitors from inside and outside the state. As such, Business Oregon and the Oregon Legislature recognized the commercial music industry as an important emerging industry sector. This study, the first of its kind in Oregon, aims to provide a framework and baseline to understand the economic significance of the commercial music industry. To define Oregon's commercial music industry, the NERC research team synthesized past academic research, regional reports, cluster analysis and expert guidance from the Industry Advisory Group to develop a Commercial Music Conceptual Diagram that visualizes the industry sectors that connect the creators to the consumers - Production of Content, Distribution & Marketing and Live Performance.

To quantify the industry, the team mapped the conceptual industry diagram to NAICS codes through several processes, consolidating data from the 2022 Oregon Music Census, QCEW, OEWS, industry lists and IMPLAN to build inputs for the economic impact analysis. An economic profile that includes longer-term industry trends as well as detailed analysis of employment and payroll trends for each industry sector, geographical distribution, occupational statistics, and growth subsectors. Economic impact analysis was conducted using IMPLAN, an input-output model that tracks economic activity through supply chain relationships within regional economies. To further provide context to our understanding of the commercial music industry ecosystem in Oregon, NERC conducted semi-structured interviews of commercial music industry professionals in our qualitative research process. Finally, based on the comprehensive quantitative and qualitative analyses, the study identifies challenges and gaps within the industry, along with potential opportunities and strategies.

Based on NERC's quantitative and qualitative research and analysis, here are some key findings in this first exploration of Oregon's commercial music industry:

- Table 11 shows that in 2021 the commercial music industry contributed over 16,400 jobs directly in the state, for a total of 22,927 jobs (direct, indirect, and induced).
- These 22,927 commercial music industry jobs generated just below \$1 billion in labor income and nearly \$3.8 billion in economic output in the state, predominantly impacting *performing arts companies, independent artists and performers* and *other education services* (which includes music education) sectors.
- The commercial music industry's economic impacts in Oregon span all four sectors (Table 12), with more than 10,000 total jobs attributed to the Creator sector, 7,989 total jobs in the Production of Content sector, 1,557 total jobs in the Distribution and Marketing sector, and 3,035 total jobs in the Live Performance sector.
- The commercial music industry's economic activity, labor income, and hiring also has effects on public tax revenues, contributing more than \$68 million towards Oregon's state and local governments (Table 13).
- Music industry workers and owner/operators highlighted Oregon's resourceful and creative communities and cross-genre and cross-sectoral networks as being major regional advantages, despite the challenges associated with stagnant wages and lingering effects of the pandemic-related closures and economic downturn.
- Additionally, we identified Audio Equipment Manufacturing (334310) as well as Promoters of Performing Arts with Facilities (711310 - music venues, festivals and concert halls) as potential growth subsectors. Some instrument and gear manufacturers reported difficulties in expanding their business due to strictures in affording the time involved in training apprentices from scratch. However, businesses, especially manufacturers, were able to rely on networks to help accelerate their businesses. The importance of networks, to this end, cannot be overstated.
- Rough estimates of additional off-site spending by attendees at live performance events suggest that it may contribute another 4,154 total jobs across the Oregon economy, and more than \$186 million in total labor income and \$503 million in total economic output, mostly distributed through the restaurant, hotel, transportation and retail industries.
- Many music venues experience challenges in providing sufficient wages/compensation to performers due to increases in various costs of operating in the form of licensing fees, rising costs of labor, having to paying for noise abatement improvements in response to residential developments changing community guidelines, and limitations in drawing enough customers due to the inability to host all-ages performances.

- The prevalence of informal contracting and “handshake agreements” may also hurt venues due to the implicit challenges of an inability to scale-up their operations in addition to being potentially ineligible for public assistance grants due to a lack of “formally employed” staff.
- The pandemic was a significant challenge, especially for venue and event operators, performers and businesses that support these activities. Mandated COVID-19 closures starting in March 2020 led to employment drops of up to 60% in these sectors, compared to an overall decrease of 13% in Oregon. However, a number of gear and instrument manufacturers saw upticks in their businesses as people began looking for new hobbies during pandemic-related closures.

The following are some recommendations that can improve the competitiveness and support the growth of the emerging Oregon commercial music industry:

- We recommend the establishment of an Oregon Music Office – much along the lines of the Texas Music Office, New York Office of Media and Entertainment, or Oregon Film – to help develop and grow the industry in an equitable manner. Such an office may also assist in interfacing with local and state-level policy makers, future researchers and data collectors, as well as within the industry itself.
- Grants or incentives may be necessary to allow small businesses and independent professionals to scale up their production in Oregon, and to bridge the gap during economic downturns, severe weather or wildfire events for creators and live performance related businesses.
- Many commercial music businesses are currently misclassified in economic databases. To more accurately capture the industry, additional outreach and educational efforts are essential to help firms input an appropriate NAICS code or to participate in databases.

The complexities of defining, quantifying and understanding the commercial music industry detailed within this report highlight the importance of ongoing research and analysis. Our analysis suggests that by continuing to invest in research and collaboration, Oregon can develop a better understanding of the commercial music industry’s economic impacts in the state. Furthermore, such investments can help the state explore and craft programs and policies to foster its growth and development, and contribute to sustaining vibrant, connected and livable communities.

VI. Appendix – 2022 Oregon Music Census Flowchart

