



**THE U.S. MUSIC
INDUSTRIES:
JOBS &
BENEFITS**

THE 2020 REPORT

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ECONOMISTS INCORPORATED

PREPARED FOR

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The U.S. Music Industries: Jobs & Benefits Report is the third report on the U.S. music industries prepared for the Recording Industry Association of America (RIAA) since 2018.

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AUTHORS' ACKNOWLEDGEMENTS

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I. EXECUTIVE SUMMARY

Music is many things—a thread that connects and unites, a touchstone that strengthens and supports, and a current that carries and uplifts. It’s one of the strongest emotional, social, and cultural forces in our world.

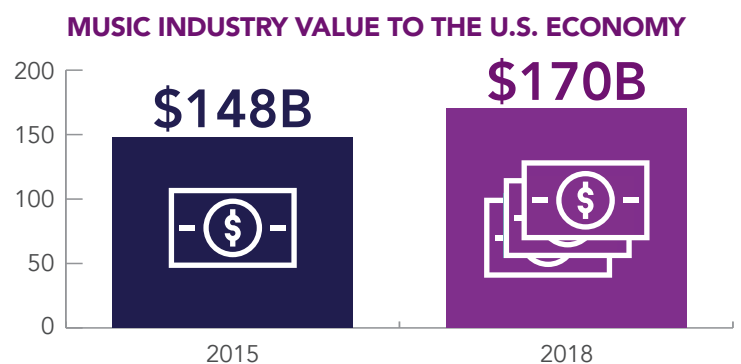
It’s also a major economic engine, boosting local communities, providing jobs and opportunity, and underpinning a wide range of related business and creative activities, from film scores to Twitch livestreams to advertising and background sound. But what is the scope of all that economic activity—how many jobs and how much revenue does music produce? This report seeks to answer these questions with regard to the U.S. music industry.

The United States is home to the world’s biggest music market. According to the IFPI, the global trade body for recorded music, the U.S. accounts for a third of the total world recorded music market¹ and 45% of its total annual growth.²

But recorded music is just one part of a much larger industry. This report examines the broader economic footprint of the United States music industry as a whole, including businesses like music publishing, Internet and radio listening platforms, instrument manufacturing, musicians and music teachers, agents, concert promoters, and many others. Moreover, this report computes the spillover effects the music industry has in generating value and supporting employment in different industries.

And that footprint is enormous and was steadily growing, prior to the global pandemic.

Our analysis found that, **in 2018, the music industry contributed \$170 billion in value to the U.S. economy**—up 14.8% over the \$148 billion for 2015. **The total to direct value-added ratio was 1.5** (i.e., for every dollar of direct revenue within the U.S. music industry, an additional 50 cents is created in an adjacent industry in the U.S. economy).



Across all fields and occupations, the **2018 music industry supported, directly or indirectly, 2.47 million American jobs**. In just the few years between 2015 and 2018, industry-connected employment rose by more than 350 thousand jobs. We also found that **U.S. music industry exports corresponded to \$9.08B in 2019**.

We also studied the music industry’s contribution to state economies, highlighting results for the biggest contributors, including California, Florida, Pennsylvania, New York, Tennessee, and Texas. In California, 2018 music activities generated over 1.5% of the state’s massive GDP. In Tennessee, music produced 1.8% of state GDP, double the national average of 0.9%.

¹ IFPI’s Global Music Report 2020, pages 56 and 87.

² IFPI’s Global Music Report 2020, page 85.

This study was conducted using Census Bureau, Bureau of Economic Analysis, and private-sector datasets covering hundreds of industries—employing a macroeconomic analysis to determine music’s direct economic and employment impacts and then a downstream RIMS II multiplier model (supplemented by an innovative new geographic breakout approach developed for this paper) to capture the full value generated by the American music industry.

There are, of course, limitations on any study of this kind due to data constraints. For example, working from national-level, aggregated datasets prevented us from examining the contributions of businesses individually. In addition, the rapid pace of business and technological change across the music sector, including the relatively sudden emergence of massive new digital platforms, introduced additional uncertainty as national data collection and classification systems work to catch up with the reality of today’s economy. We have vetted the data and made necessary estimates to ensure the report reflects the full contributions of all participants within the music ecosystem to the greatest extent possible, as described in the analysis below.

Finally, and most importantly, this report is based on pre Covid-19 pandemic data and reports findings based on the music ecosystem and industry that existed before the massive dislocations wrought by the virus and measures taken to contain its spread. While the full impact of Covid-19 related illnesses and shutdowns will not be known for years, to us the magnitude of what’s been lost is already painfully clear.

In these extraordinarily difficult times, we believe the analysis and findings contained in this report are more important than ever, providing an economic snapshot of the music industry as it stood in 2018 that can serve a number of vital purposes going forward.

Most fundamentally, it provides a necessary benchmark that will be vital to understanding the economic and human consequences of the Covid-19 period for the music sector and the people who depend on it: a “before” picture that can stand alongside the “after” we will see in coming years. At a time when the music industry has come together in extraordinary ways for mutual aid, support, and relief,³ the granular understanding and data in this report provide a vital roadmap to maximize the continuing impact of those efforts.

And looking ahead, we believe these data can serve as a lodestar showing the path we were on before the crisis hit—one of steady and expanding growth, new employment and broad, positive impacts across all fifty states, along with a growing economic pie shared by over two and a half million artists and working people nationwide. Those findings chart a course we must return to, establishing what “recovery” for the U.S. music industry and the people who depend on it, must look like to be complete.

3 See, e.g., <http://musiccovidrelief.com/>.



II. INTRODUCTION

As set forth in this report, in 2015 (the base year we consider) the U.S. music industries captured more than \$98 billion in receipts from consumers and service providers in the U.S. In the same year, employee earnings in the music industries reached \$75 billion while industry value added exceeded \$148 billion.

By 2018, these figures had increased significantly. Music industries receipts reached \$113 billion in 2018 while employee earnings surpassed \$88 billion. The value added by the music industry to the U.S. economy reached \$170 billion. In the three-year period 2015-2018, the U.S. music industry grew from \$148.0 billion to over \$170 billion, an increase of 15% (4.8% annually). Moreover, as shown in the later section of this report, the growth achieved by the music industry has continued to benefit music producers and consumers into 2019.

Employment supported by the U.S. music industries also increased substantially during the period 2015-2018. In those years, total employment supported by the music industry rose from 2,081,569 employees in 2015 to 2,466,026 employees in 2018. The average growth rate achieved by final demand employment within the music industry in the period 2015-2018 exceeded 18%.

Notwithstanding the metrics cited above, there is one industry category that remained relatively flat during the 2015-2018 period, even experiencing a slight decrease: earnings per employee. Earnings per employee for the music industries declined slightly across the NAICS groupings with an average annual decline of 0.6%. In certain NAICS groupings, however, there was some aggregate growth (NAICS 500–599), where earnings per employee increased cumulatively by 0.2%. The flat or slightly declining trend isn't a consequence of any economic retraction, but rather is simply a result of employment numbers growing faster than earnings.

The values in this report reflect the authors' view of the U.S. music industries as comprising a broad collection of input and output providers of music. Crucially, the analysis attempts to capture the total contributions made by all music industries in the U.S. In this respect, the present study rests on an expansive foundation as compared with many other published studies of the music industries in the U.S. As explained in greater detail in section VI, these "alternative" studies generally do not quantify the full impact of music production and distribution as it ripples through the economy as a whole.

Nonetheless, we review many of these alternative music industry studies in this report, using them primarily to provide background and context to our report. The alternative approaches were not employed, however, to develop music industry estimates or precise music industry metrics.

The value added by the music industry to the U.S. economy reached

\$170B

Total employment supported by the music industry rose to

2,466,026

employees in 2018

III. GLOBAL MUSIC REPORT

The International Federation of the Phonographic Industry (IFPI), representing the recording industry worldwide, “is a non-profit members’ international organization registered in Switzerland.” Its objectives are:



- 1**
To promote the **VALUE OF RECORDED MUSIC**
- 2**
To ensure that the rights of members who produce and invest in music are **PROPERLY PROTECTED AND ENFORCED**
- 3**
To expand commercial uses of recorded music through **EVERY AVAILABLE CHANNEL THROUGHOUT THE WORLD**

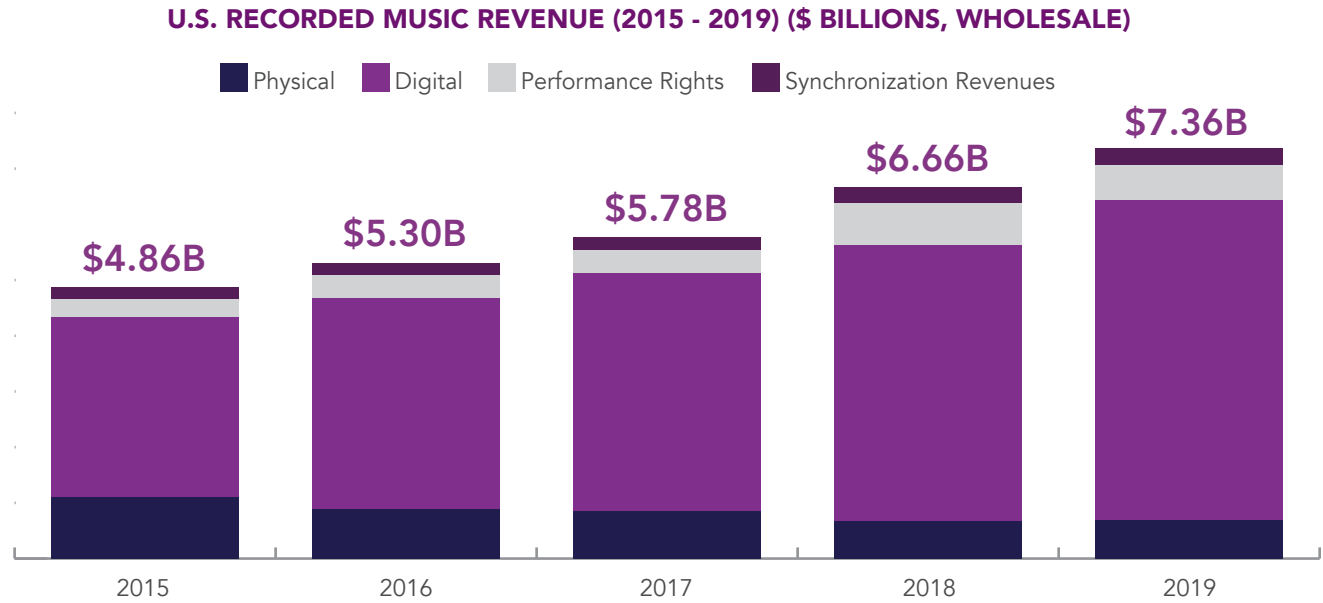
As part of its mission, IFPI develops statistics that illuminate trends in music revenues by country and by format. The IFPI’s “Global Music Report 2020” provides a good example of the data compilations that are developed and published by the IFPI.

According to the IFPI, the United States ranks first in the following music industry categories: digital music revenue, performance rights, synchronization, and subscription and ad-supported streaming. In terms of the physical music media category, the U.S. ranks second.

In the IFPI’s Global Music Report, direct music revenue in the U.S. is reported by category and by year. The figures are reproduced here in Figure 1.0. As shown in Figure 1.0, U.S. trends in music revenues differ dramatically across music industry media. For example, direct digital revenue increased from \$3.2B in 2015 to \$5.7B in 2019. By contrast, during the same period revenues of physical music declined.



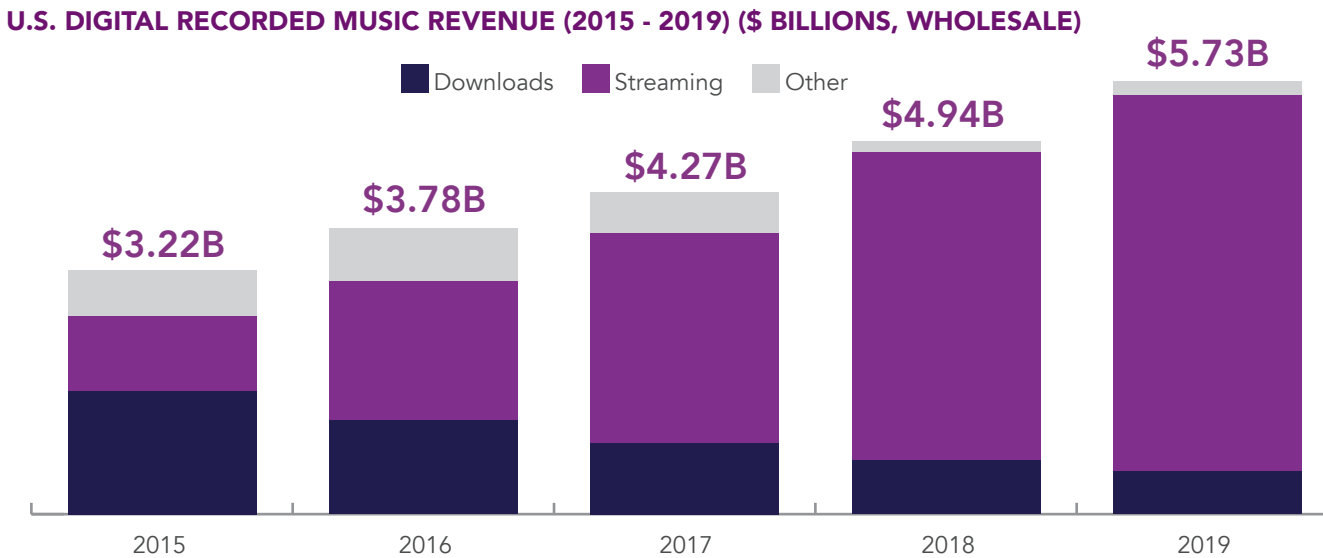
Figure 1.0



Source: IFPI

Within the digital music sub-category, the divergence of trends by medium has been, if anything, more dramatic. As shown in Figure 1.1, download revenues declined over the period 2015-2019 while streaming revenues of recorded music rose five-fold.

Figure 1.1



Source: IFPI

The data in Figures 1.0 and 1.1 serve to illustrate the critical changes experienced by the U.S. music industry in the early 21st century. In later sections of this report, efforts will be made to describe and quantify some of these changes even as they continue to fundamentally change the music industry. Ultimately the analyses in this report suggest that, in some ways, the U.S. music industry has captured benefits from new revenues and new technologies while in other ways, it has not.

The IFPI's Global Music Report presents a conservative assessment of the music industry today. Music industry revenue, as shown in the Global Music Report, excludes music receipts earned indirectly through suppliers and vendors. Moreover, the analyses in the IFPI study focus on a much narrower definition of music industry firms and activities as compared to the industry definition assumed in the present report. The complete series of music industries assumed in this analysis are described subsequently in this report.

IV. THE NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS)

In this study we give continuity to the methodology developed in the previous ones, in which industry-specific data for the music industry is generally identified on the basis of industry classifications developed in the North American Industry Classification System (NAICS).

An industrial classification system such as NAICS “facilitates the collection, tabulation, presentation, and analysis of data relating to establishments and ensures that data about the U.S. economy published by U.S. statistical agencies are uniform and comparable. NAICS ensures that such data are uniform and comparable among Canada, Mexico, and the United States.”⁴ In particular, the data classifications and industry framework developed in NAICS have been widely implemented by U.S. statistical agencies including the Census Bureau and the Bureau of Economic Analysis (BEA).

NAICS provides a production-oriented framework that groups establishments into industries according to similarity in the processes used by that industry to produce goods and services. When an industry is defined on a production-orientated concept, “producing units within the industry’s boundaries share a basic production process; they use closely similar technology.”⁵

NAICS uses a six-digit coding system “to identify particular industries and their placement in the hierarchical structure of the classification system.”⁶ “The first two digits of the code designate the sector, the third designates the subsector, the fourth digit designates the industry group, the fifth digit designates the NAICS industry and the sixth digit designates the national industry⁷. A zero as the sixth digit generally indicates that the NAICS industry and the U.S. industry are the same.

NAICS are also reviewed consistently to guarantee that the classification best reflects the industries and dynamics it is trying to portray: “[t]he dynamic nature of world economies continues to affect classification systems. The creators of NAICS agreed that the classification system should be reviewed every five years, and revised as appropriate to reflect the changing economies [...]”⁸ Hence, this report has updated NAICS codes vis-à-vis the last report.

4 Executive Office of the President–Office of Management and Budget, *North American Industry Classification System, United States, 2017*, page 77.

5 Executive Office of the President–Office of Management and Budget, *North American Industry Classification System, United States, 2017*, pages 15-16.

6 Executive Office of the President–Office of Management and Budget, *North American Industry Classification System, United States, 2017*, page 18.

7 Executive Office of the President–Office of Management and Budget, *North American Industry Classification System, United States, 2017*, page 18.

8 Executive Office of the President–Office of Management and Budget, *North American Industry Classification System, United States, 2017*, page 13.

V. NAICS GROUPINGS FOR MUSIC INDUSTRY CLASSIFICATION

In this report, NAICS industry data are typically included as part of the broader industry groups within the overall music industry. At the most aggregated level, such industry groups can provide a useful perspective from which to assess the size and scope of the U.S. recorded music industries.

Table 2.0 lists the NAICS codes used in this analysis to represent the music industry through 2019. The NAICS codes have been grouped based on the first three digits of the code.

Table 2.0

ILLUSTRATION OF INDUSTRIAL CLASSIFICATION SYSTEM

NAICS grouping	NAICS code	NAICS mapping
300 - 399: Software and CD Production	334310	Audio/video equipment mfg.
	334614	Software, other prerecorded CD, tape, record reproducing
	339992	Musical instrument mfg.
400 - 499: Retail and Wholesale Activities	423990	Misc. durable goods wholesaler*
	443142	Electronics stores*
	451140	Instrument/ music supply stores
500 - 599: Music Production and Distribution	512230	Music publishers
	512240	Sound recording studios
	512250	Record Production and Distribution ¹
	512290	Other sound recording industries
	515112	Radio stations
	515210	Cable and Other Subscription Programming*
	518210	Data processing/ hosting*
	519130	Internet publishing, broadcasting, and web search portals*
600 - 699: Music Education	532289	Other consumer goods rental*
	611610	Fine art schools*
700 - 799: Agents, Managers, Promoters	711130	Musical groups and artists
	711310	Promoters of performing arts, etc.
	711410	Agents/ managers for artists, etc.
	711510	Independent artists, etc.

* Receipts are adjusted to reflect the percentage attributable to music/audio goods and services.

¹–NAICS codes 51210 (Record Production) and 51220 (Integrated record production/distribution) were combined into this code in the 2017 update.

The first grouping of interest is software and CD production, which encompasses NAICS codes 300 - 399. Under software and CD production, this analysis considers audio and video manufacturing, software, other prerecorded CD, tape and record reproductions, and musical instrument manufacturing.

NAICS codes 400 - 499 encompass retail and wholesale activities, including miscellaneous durable goods wholesalers, electronic stores, and instrument/music supply stores. Data for the wholesaler and electronic store industries are adjusted to reflect the percentage attributable to retail and wholesale of audio goods.

Music production and distribution (NAICS 500 - 599) is the largest grouping in this analysis. The grouping includes industries ranging from sound recording studios and record production to conventional radio stations and Internet broadcasting. Data for other consumer goods rental are adjusted to reflect the percentage attributable to audio goods. Similarly, data processing/hosting and Internet publishing/broadcasting industries are adjusted to reflect the percentage attributable to audio streaming.

Music education (NAICS 600 - 699) is the smallest grouping and is represented in this analysis by a single industry—fine art schools. Data for fine art schools are adjusted to reflect the percentage attributable to music education.

The grouping covering agents, managers and promoters (NAICS 700 - 799) includes musical groups and artists, promoters, agents and managers of performing artists, and independent artists.

VI. THE RIMS II MODEL

In addition to NAICS classifications, the analyses in this report also reflect the use of industry specific “multipliers” that differ by product, year and geographic unit. In this instance, the multipliers were developed by the U.S. BEA in an input-output model known as the Regional Input-Output Modeling System (RIMS II).⁹ Models like RIMS II describe the “interconnectedness of the industries, households and government entities in an area... the output of an industry will appear as the input of other industries.”¹⁰

In RIMS II, the relevant data on industries, households and government entities are produced by BEA and purchased by model users in the form of multipliers. The multipliers themselves are both product and region specific.

One innovation in methodology contained in this report compared to previous versions is the change in estimation of the United States *final figures* by using distinct RIMS II geographic definitions for U.S. national estimates. In previous reports, total U.S. national estimates were performed as

$$US_1 = \sum_{r=1}^{51} r$$

where r is the individual region estimate, comprised of the fifty U.S. states and the District of Columbia. This has the advantage of being very tractable, and a simple sum of the individual regional effects will be estimated throughout this report. Using this metric, one can determine what percentage of *final figures* has been generated by each state/region.

⁹ The Bureau of Economic Analysis does not endorse any resulting estimates and/or conclusions in this report.

¹⁰ Economic Modeling Specialists Inc. (2006) “*Practical Input-Output Modeling for Regional Development.*”

However, this simplifying assumption underlying the summing of state figures does not account for any economic value being generated across these borders¹¹ (e.g., if a dollar is spent in Virginia, and ultimately circulates in the economy in such a way that it adds value in Maryland, this is value added to the U.S. economy, but wouldn't and shouldn't be counted in input-output models for individual states). Hence, a simple sum of state/region *final figures* is ultimately conservative for national estimates.

As a way to account for these interstate trade, the BEA allows for regions to be custom designed,¹² permitting us to generate a large region comprised of all counties within the 48 contiguous states and District of Columbia, and adding to this amount the estimates for Alaska and Hawaii.

$$US_2 = Reg_{48\ contig} + AK + HI$$

The difference between the two measures is how much value is being generated due to interstate commerce within the 48 contiguous states.

$$Interstate = US_2 - US_1$$

For the current analysis, RIMS II Multipliers (2012/2018)¹³ were implemented. For explanatory purposes, one of the NAICS industries that was used to develop RIMS II multipliers is shown in Table 3.0.

Table 3.0

RIMS II MULTIPLIERS (2012/2018) - 512200 - SOUND RECORDING INDUSTRIES (TYPE II)

State/ Region	Final Demand			Direct Effect		
	Output /1/ (dollars)	Earnings /2/ (dollars)	Employment /3/ (number of jobs)	Value-added /4/ (dollars)	Earnings /5/ (dollars)	Employment /6/ (number of jobs)
California	1.4511	0.2873	4.5761	1.1188	1.8643	2.3284
Florida	1.3973	0.2739	5.8196	1.0917	1.7731	2.1285
New York	1.3285	0.2156	3.3877	1.0504	1.672	2.0599
Pennsylvania	1.3414	0.2438	5.8268	1.0408	1.6984	1.644
Tennessee	1.4125	0.2643	4.5502	1.0907	1.7821	2.4053
Texas	1.457	0.2912	5.7215	1.1137	1.8868	2.1653
48 Contiguous states	1.6542	0.3468	6.419	1.2258	2.2398	2.8673

Source: BEA

11 One of the assumptions for RIMS II is no regional feedback. See RIMS II User Guide, BEA, Chap 2.

12 Regions can be custom designed as long as they contain one or more contiguous counties.

13 When calculating RIMS II, the BEA used 2012 national benchmark input-output data and 2018 regional data. These multipliers were first released in June 2020.

As reported in Table 3.0, a total of six multipliers are presented for the U.S. sound recording industries in total. Four of these six multipliers are “final demand” multipliers for output, earnings, employment and value added. The remaining two multipliers are “direct effect” multipliers. Each of the six sound recording multipliers are provided for all fifty states, District of Columbia, and the 48 contiguous states. In describing its application of regional multipliers, the BEA provides brief statements that describe how each of the six multipliers is applied in practice. For example, in addressing the multipliers for value added, the BEA states that “Each entry in column 4 represents the total dollar change in value added that occurs in all industries within the state for each additional dollar of output delivered to final demand by the selected industry.”¹⁴

The RIMS II framework has a number of advantages over more traditional forms of regional model making. For purposes of this analysis, RIMS II is particularly advantageous because it quantifies both the direct and indirect/induced changes in all industries that results from a single change in final demand. Quantifying the direct (and indirect) employment changes in RIMS II permits the measurement of the total effects that result from an initial change in demand. These total effects would likely be spread across many industries including those in which indirect and induced workers would be hired to meet the additional demand.

VII. OTHER STUDIES OF INDUSTRY CONTRIBUTION

In order to determine the contributions of the music industries to the U.S. economy, one must first identify the music industries to be studied. For this purpose, Economists Incorporated looked comprehensively into music industry contribution studies completed by other research firms in the recent past. These studies included the IFPI’s *Global Music Report 2020*. In addition the references consulted in this report included the, i) “Music in New York City” by NYC Media and Boston Consulting Group; ii) “PWC Global Entertainment and Media Outlook 2019-2023” by Price Waterhouse Coopers.; iii) “The 2019 Economic Impact of Music in Texas” by Texas Music Office; iv) “The Economic Impact of Music Austin–2016 Update” by TXP; v) “Nashville Music Industry: Impact, Contribution and Cluster Analysis” by Harper, Cotton, and Benefield; and vi) “2019 Otis Report on the Creative Economy” by Otis College of Art and Design. In the course of this analysis, the authors also reviewed broader studies of the economic contributions made by large industry groupings such as the U.S. “copyright” industries. In these economic contribution studies, the U.S. music industries would serve as one of a number of component industries.

VIII. MUSIC INDUSTRY METRICS BY GROUP

In order to generate the metrics for each of the industry groups described in section IV, and ultimately the metrics for the aggregate of the music industries, one starts with the individual NAICS codes and uses their respective RIMS II multipliers to estimate output, earnings, employment, value added, earnings per employee, and direct and indirect employment and earnings. In Tables 4.0 through 4.8, the value for each metric is provided by NAICS grouping. These data are presented for the years 2015 and 2018. Receipts and final demand metrics on the individual NAICS code level are presented in the Appendix. They are also organized by NAICS grouping.

¹⁴ U.S. Bureau of Economic Analysis, RIMS II Multipliers (2012/2018) Table 2.1, Total Multipliers for Output, Earnings, Employment and Value Added by State, 512200–Sound Recording Industries (Type II).

Table 4.0

U.S. TOTAL MUSIC INDUSTRY RECEIPTS BY NAICS GROUPING (\$1,000)

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	\$6,553,220	\$9,032,498	11.3%	37.8%
400 - 499	\$5,457,016	\$5,531,472	0.5%	1.4%
500 - 599	\$40,391,658	\$41,936,134	1.3%	3.8%
600 - 699	\$77,513	\$92,256	6.0%	19.0%
700 - 799	\$46,332,546	\$56,650,217	6.9%	22.3%
Total	\$98,811,954	\$113,242,577	4.6%	14.6%

Note: Estimated receipts with Census SUSB and CBP.

Table 4.0 reports the growth of U.S. music industry receipts by NAICS grouping from 2015 to 2018. Total receipts grew by 14.6% from \$98.8B in 2015 to \$113.2B in 2018, with an average annual percentage change of 4.6%. Each music industry grouping experienced growth on its own, with agents, managers and promoters (NAICS 700 - 799) experiencing the fastest growth at 22.3% (average annual percentage change of 6.9%), and retail and wholesale activities (NAICS 400 - 499) experiencing the slowest growth at 1.4% (average annual percentage change of 0.5%).

Table 4.1

U.S. TOTAL FINAL DEMAND EARNINGS BY NAICS GROUPING (\$1,000)

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	\$5,134,610	\$7,046,788	11.1%	37.2%
400 - 499	\$4,975,586	\$5,043,630	0.5%	1.4%
500 - 599	\$27,311,581	\$29,259,557	2.3%	7.1%
600 - 699	\$76,339	\$90,850	6.0%	19.0%
700 - 799	\$38,379,682	\$46,902,991	6.9%	22.2%
Total	\$75,877,798	\$88,343,815	5.2%	16.4%

Note: Estimated using receipts and RIMS II multipliers.

Final demand earnings is the sum of labor income, such as wages and salaries, contributions to insurance, pensions, social insurance, etc. Final demand earnings for the U.S. music industry, as seen in Table 4.1, grew by 16.4% from \$75.9B in 2015 to \$88.3B in 2018, an average of 5.2%.

Table 4.2

U.S. TOTAL FINAL DEMAND EMPLOYMENT BY NAICS GROUPING

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	90,682	126,868	11.8%	39.9%
400 - 499	142,228	144,217	0.5%	1.4%
500 - 599	487,323	521,163	2.3%	6.9%
600 - 699	2,300	2,737	6.0%	19.0%
700 - 799	1,358,959	1,671,041	7.1%	23.0%
Total	2,081,493	2,466,026	5.8%	18.5%

Note: Estimated using receipts and RIMS II multipliers.

Final demand employment provides an estimate of part and full-time employment resulting from activities of music industries. Table 4.2 reports that U.S. total final demand employment grew at a slightly faster rate than final demand earnings at an average of 5.8%, cumulatively growing at 18.5%, from 2.08 million jobs in 2015 to 2.47 million jobs in 2018. Final demand employment cumulative growth was strongest in the software and CD production grouping (NAICS 300 - 399) at 39.9%, and slowest in the retail and wholesale activities grouping (NAICS 400 - 499) at 1.4%.

Table 4.3

U.S. TOTAL FINAL DEMAND VALUE ADDED BY NAICS GROUPING (\$1,000)

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	\$9,473,836	\$12,974,638	11.1%	37.0%
400 - 499	\$8,673,460	\$8,790,893	0.4%	1.4%
500 - 599	\$57,931,394	\$60,643,217	1.5%	4.7%
600 - 699	\$125,672	\$149,559	6.0%	19.0%
700 - 799	\$71,875,309	\$87,860,942	6.9%	22.2%
Total	\$148,079,671	\$170,419,250	4.8%	15.1%

Note: Estimated using receipts and RIMS II multipliers.

U.S. total final demand value added experienced a 15.1% cumulative growth from \$148.1B in 2015 to \$170.4B in 2018, as reported in Table 4.3.

Table 4.4

U.S. TOTAL EARNINGS PER EMPLOYEE BY NAICS GROUPING (\$)

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	\$56,622	\$55,544	-0.6%	-1.9%
400 - 499	\$34,983	\$34,972	0.0%	0.0%
500 - 599	\$56,044	\$56,143	0.1%	0.2%
600 - 699	\$33,191	\$33,188	0.0%	0.0%
700 - 799	\$28,242	\$28,068	-0.2%	-0.6%
Total	\$36,454	\$35,824	-0.6%	-1.7%

Note: Estimated using receipts and RIMS II multipliers.

Table 4.4 reports that average earnings per employee for the U.S. music industry fell by an average of .6% yearly, falling from \$36,454 in 2015 to \$35,824 in 2018. Again, this is a consequence of employment numbers growing at a faster pace than earnings for the time period.

Table 4.5

U.S. TOTAL DIRECT EMPLOYMENT BY NAICS GROUPING

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	25,858	36,491	12.2%	41.1%
400 - 499	80,797	81,960	0.5%	1.4%
500 - 599	124,992	127,446	0.7%	2.0%
600 - 699	1,305	1,553	6.0%	19.0%
700 - 799	839,092	1,031,935	7.1%	23.0%
Total	1,072,043	1,279,386	6.1%	19.3%

Note: Estimated using receipts and RIMS II multipliers.

Table 4.6

U.S. TOTAL INDIRECT EMPLOYMENT BY NAICS GROUPING

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	64,825	90,377	11.7%	39.4%
400 - 499	61,431	62,258	0.4%	1.3%
500 - 599	362,331	393,716	2.8%	8.7%
600 - 699	995	1,184	6.0%	19.0%
700 - 799	519,867	639,105	7.1%	22.9%
Total	1,009,450	1,186,640	5.5%	17.6%

Note: Estimated using receipts and RIMS II multipliers.

Final demand employment figures presented in Table 4.2 are broken out between direct employment in Table 4.5 and indirect employment in Table 4.6. Indirect employment contributed to about 48.5% of final demand employment in 2015 with 1.01 million jobs, and 48.12% in 2018 with 1.187 million jobs. Direct employment contributed to about 1.07 million jobs in 2015 and 1.279 million jobs in 2018, representing 51.5% of final demand employment in 2015 and 52% of final demand employment in 2018. Total direct employment grew at a faster rate than indirect employment, with a growth rate of 19.3% versus 17.6%.

Table 4.7

U.S. TOTAL DIRECT EARNINGS BY NAICS GROUPING (\$1,000)

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	\$1,982,496	\$2,660,014	10.3%	34.2%
400 - 499	\$2,253,401	\$2,284,995	0.5%	1.4%
500 - 599	\$9,938,507	\$10,374,389	1.4%	4.4%
600 - 699	\$32,178	\$38,298	6.0%	19.0%
700 - 799	\$18,152,224	\$22,062,800	6.7%	21.5%
Total	\$32,358,806	\$37,420,496	5.0%	15.6%

Note: Estimated using receipts and RIMS II multipliers.

Table 4.8

U.S. TOTAL INDIRECT EARNINGS BY NAICS GROUPING (\$1,000)

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	\$3,152,114	\$4,386,774	11.6%	39.2%
400 - 499	\$2,722,185	\$2,758,634	0.4%	1.3%
500 - 599	\$17,373,074	\$18,885,168	2.8%	8.7%
600 - 699	\$44,161	\$52,552	6.0%	19.0%
700 - 799	\$20,227,458	\$24,840,191	7.1%	22.8%
Total	\$43,518,993	\$50,923,319	5.4%	17.0%

Note: Estimated using receipts and RIMS II multipliers.

Similarly, final demand earnings figures presented in Table 4.1 above are broken out between direct earnings in Table 4.7 and indirect earnings in Table 4.8. Indirect earnings contributed to about 57.3% of final demand earnings in 2015 (at \$43.5B), and contributed to about 57.6% of final demand earnings in 2018 (at \$50.9B).

Table 4.9

U.S. TOTAL MUSIC ESTABLISHMENTS BY NAICS GROUPING

NAICS	2015	2018	Average Annual Percentage Change	Cumulative Change
300 - 399	1,236	1,812	13.6%	46.6%
400 - 499	9,013	8,922	-0.3%	-1.0%
500 - 599	7,448	7,616	0.7%	2.3%
600 - 699	179	210	5.3%	16.9%
700 - 799	164,910	217,709	9.7%	32.0%
Total	182,786	236,269	8.9%	29.3%

Note: Estimated using receipts, RIMS II multipliers, and CBP data.

An estimate of music industry establishments broken down by NAICS groupings can be seen on Table 4.9. The number of overall music establishments has increased about 8.9% annually from 2015 to 2018, for a cumulative increase of 29.3%, or 53,483 new establishments. The overwhelming number of establishments come from the "Agents, Managers, Promoters" NAICS grouping (700 - 799), which had a substantial base and also an impressive increase in this time interval, with a 32% cumulative change.

Total music industry establishments in 2018

236,269

The industry groupings provided in these tables can be combined to report "all industry" figures that will be presented in the next section.

IX. U.S. ALL-INDUSTRY TABLES

Table 5.0

U.S. TOTAL ALL-INDUSTRY TABLES (2015-2018)

	2015	2016	2017	2018
Music Industry Receipts (\$ Billions)	\$98.8	\$94.5	\$98.6	\$113.2
Earnings (\$ Billions)	\$75.9	\$74.8	\$77.7	\$88.3
Employment	2,081,493	2,080,757	2,165,723	2,466,026
Value Added (\$ Billions)	\$148.1	\$143.1	\$149.1	\$170.4

Note: Estimated using receipts and RIMS II multipliers.

Table 5.0 reports U.S. totals for all NAICS groupings used in this analysis to represent the music industry. Earnings, employment and value-added figures are final demand metrics that include the multiplied effects measured by the RIMS II model (either with or without the inter-state effects). All metrics experienced positive year-to-year growth for most of the time period between 2015 and 2018, with the exception of 2015 to 2016. Much of the decline in receipts from 2015 to 2016 is due to "Record Production and Distribution" (512250), which shrunk by \$3.7 billion (33%). Part of this decline in the same time period was offset by streaming revenues (519130), which grew 18% or \$477 million, as well as the NAICS grouping 700 - 799 (Agents, Managers and Promoters), which grew by 2.7% or \$1.24 billion. The total to direct value-added ratio was 1.5 (i.e., for every dollar of direct revenue within the U.S. music industry, an additional 50 cents is created in an adjacent industry in the U.S. economy).

Total music industry value added in 2018
\$170.4B

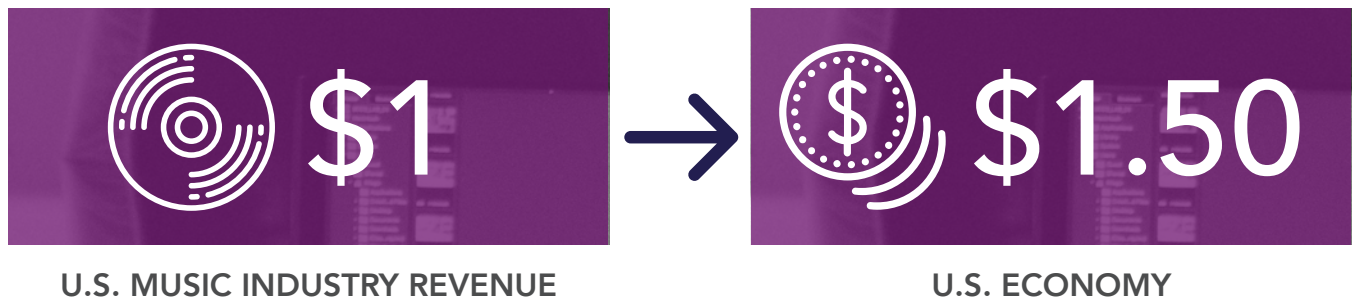


Table 5.1

U.S. TOTAL ALL-INDUSTRY TABLES (2015-2018)

	2015	2016	2017	2018
Earnings Per Employee (\$)	\$36,453.5	\$35,924.6	\$35,880.5	\$35,824.4
Direct Employment	1,072,043	1,083,758	1,126,701	1,279,386
Indirect Employment	1,009,450	996,999	1,039,022	1,186,640
Direct Earnings (\$ Billions)	\$32.4	\$31.9	\$33.1	\$37.4
Indirect Earnings (\$ Billions)	\$43.5	\$42.8	\$44.6	\$50.9

Note: Estimated using receipts and RIMS II multipliers.

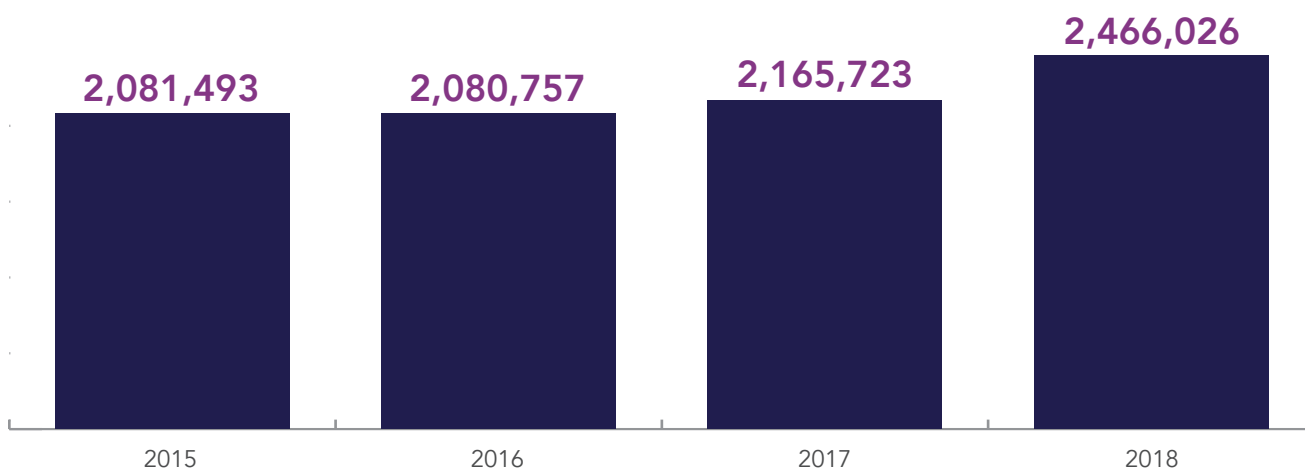
Additional U.S. total metrics for the music industry corresponding to earnings and employment are reported in Table 5.1. Earnings per employee fell for the most part between 2015 and 2018, from \$36,453 to \$35,824 as a consequence of employment growth outpacing earnings growth. Direct employment increased from 1.072 million 2015 to 1.279 million in 2018. Indirect employment grew from 1.009 million in 2015 to 1.187 million in 2018. Figure 5.2 shows total employment increased from 2.081 million in 2015 to 2.466 million in 2018.

The summary level tables presented thus far all reflect some form of aggregation by industry, by metric, or by year. Thus, in Tables 5.0 and 5.1, music industry data are presented for all NAICS codes and for all metrics. Even here however, music industry findings remain aggregated by year.

In this report we present both detailed values and broad aggregates for the NAICS codes and metrics that were aggregated. The detailed values of the NAICS codes and RIMS II multipliers developed in this report are presented in the Appendix for 2018.

Figure 5.2

TOTAL MUSIC SUPPORTED EMPLOYMENT (2015-2018)



Note: Estimated using receipts and RIMS II multipliers.

X. GROWTH IN MUSIC INDUSTRY METRICS, PROJECTED 2019

Figure 1.0 shows U.S. total revenues for alternative measures of recorded music categories in 2015 through 2019, as presented by the IFPI Global Music Report, 2020. These recorded music industries include physical, digital, performance rights, and synchronization revenue. Digital music contributed to the largest share of revenues, with \$5.73B in 2019. The performance rights sector experienced the largest average growth between 2017 and 2019 at 26.5%, while the digital sector experienced the largest growth between 2018 and 2019 at 16%. Overall, recorded music revenue grew at 10.5% from \$6.7B in 2018 to \$7.4B in 2019.

Table 6.0

GROWTH IN MUSIC INDUSTRY METRICS PROJECTED 2019

	2018	Growth	Projected 2019
Music Industry Receipts (\$ Billions)	\$113.24	1.11	\$125.14
Music Industry Earnings (\$ Billions)	\$88.34	1.11	\$97.63
Music Industry Employment	2,466,026	1.11	2,725,218
Music Industry Value Added (\$ Billions)	\$170.42	1.11	\$188.33

Note: Estimated using receipts and RIMS II multipliers. Growth comes from IFPI.

The Global Music Report's 11% growth rate in recorded music revenue in 2018 is applied to this study's metrics of the music industry to project receipts, earnings, employment and value added for 2019. As seen in Table 6.0, the projected value added of the music industry in 2019 is \$170.4B, with \$113.24B in receipts, \$88.34B in earnings, and provision of about 2.725 million jobs.

Table 7.0

MUSIC INDUSTRY VALUE ADDED SHARE OF TOTAL U.S. GDP 2015-2019 (\$ BILLIONS)

	2015	2016	2017	2018	2019 (Projected)	2015-2019 Average Annual Growth	2015-2018 Average Annual Growth
Music Industry, U.S. Estimate	\$148.1	\$143.1	\$149.1	\$170.4	\$188.3	6.2%	4.8%
Total U.S. GDP	\$17,403.8	\$17,688.9	\$18,108.1	\$18,638.2	\$19,073.1	2.3%	2.3%
Share of U.S. GDP	0.9%	0.8%	0.8%	0.9%	1.0%	--	--

Source: Estimated using receipts and RIMS II multipliers. Growth from IFPI, GDP comes from BEA.

As seen in Table 7.0, the music industry's contribution to total U.S. GDP grew from 0.9% in 2015 to 1.0% in 2019. Music industry value added has also been growing at significantly faster rates than U.S. GDP. The compound annual growth rate of music industry value added is 6.2% from 2015-2019 and 4.8% from 2015-2018, while total U.S. GDP has grown 2.3% for both time periods.

Table 7.1

MUSIC INDUSTRY VALUE ADDED SHARE OF TOTAL U.S. EMPLOYMENT 2015-2019

	2015	2016	2017	2018	2019 (Projected)	2015-2019 Average Annual Growth	2015-2018 Average Annual Growth
Music Industry, U.S. Estimate	2,081,493	2,080,757	2,165,723	2,466,026	2,725,218	7.0%	5.8%
Total U.S. Employment	137,896,660	140,400,040	142,549,250	144,733,270	146,875,480	1.6%	1.6%
Share of U.S. Employment	1.5%	1.5%	1.5%	1.7%	1.9%	--	--

Source: Estimated using receipts and RIMS II multipliers. Growth from IFPI, GDP comes from BEA.

Table 7.1 reports the music industry's contribution to total U.S. employment. Employment in the music industry accounted for 1.5% of U.S. employment in 2015 and 1.9% in 2019. Music industry employment grew 7.0% between 2015 and 2019, compared to U.S. employment growth at 1.6% for the same period.

Table 7.2

VALUE ADDED COMPARISONS BETWEEN MUSIC INDUSTRY AND OTHER SECTORS (\$ BILLIONS)

	2015	2018	Average Annual Percentage Change	Cumulative Change
Music Industry	\$148.1	\$170.4	4.8%	15.1%
Computer and Electronic Products	\$270.0	\$297.3	3.3%	10.1%
Motor Vehicles, Bodies and Parts	\$145.8	\$162.4	3.7%	11.4%
Chemical Products	\$331.9	\$378.1	4.4%	13.9%

Note: Estimated using receipts and RIMS II multipliers. Additional industries data came from BEA Value Added by Industry, Released October 29, 2019.

Value added from the music industry is comparable to other sectors of the U.S. economy. Table 7.2 compares the music industry's value added to those of the computer and electronics industry, the motor vehicles and parts industry, and the chemical products industry. Of the four industries, the music industry has the largest value added growth rate in 2018, growing by an average of 4.8% from 2015. In comparison, chemical products grew by 4.4%, computer and electronics grew by 3.3%, and motor vehicles grew by 3.7%.

XI. AUDIO AND VIDEO STREAMING, AND FUTURE TRENDS

Streaming has continued recent years' trend as a prominent driving force of growth in the music industries, not only in the United States, but worldwide, "producing an additional \$2.1 B of revenue over the year [2019] compared to 2018."¹⁵

With respect to NAICS codes, streaming technology is employed in the creation, manipulation and distribution of data in at least two significant NAICS classifications. These two NAICS codes are data processing/hosting (NAICS 518210) and Internet publishing/broadcasting (NAICS 519130).

With respect to other Internet publishing services such as Internet radio, audio streaming in this study is assumed to track the U.S. streaming traffic volumes reported in the IFPI Global Music report, 2020. In that report, streaming music volumes are published on a year-to-year basis for the years 2015-2019. It should also be noted that non-streamed forms of digital music (such as downloads) have not been included in these totals. The addition of music downloads in these totals would have resulted in a substantial increase in music receipts, particularly in 2019.

As shown in Table 8.0, research firm MRC Data published a variety of music industry highlights focusing on streaming growth during 2018 and 2019. Total on-demand streams on audio-only and audiovisual platforms increased from 887 billion streams in 2018 to 1,150 billion in 2019. On audio-only on-demand platforms, streaming music grew from 602.3 billion streams in 2018 to 745.7 billion streams in 2019. In 2019, audio streaming comprised 65% of total on-demand music streaming. These volume counts don't include hundreds of billions of additional audio streams through customized radio services like Pandora and others, which are not included by MRC Data in these metrics.

15 IFPI, Global Music Report, 2020, Page 63

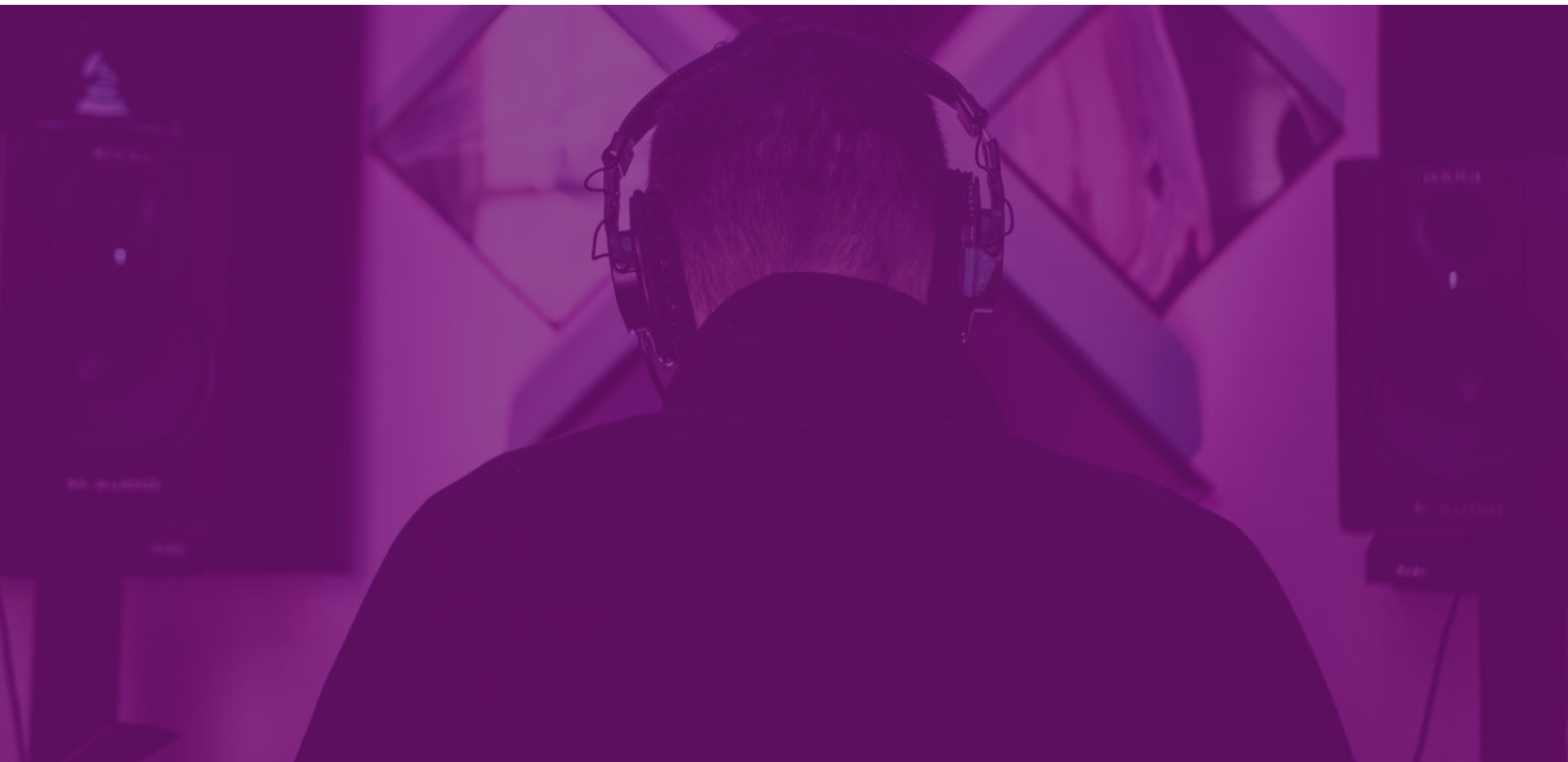


Table 8.0

YEAR-END 2019 MUSIC INDUSTRY HIGHLIGHTS (UNITS IN MILLIONS)

Category	2019	2018	% CHG
Total Consumption (Album + TEA + On-Demand Audio/Video SEA)	785.0	682.0	15.0%
Total Audio Consumption (Album + TEA + On-Demand Audio SEA)	678.0	608.5	11.4%
On-Demand Streaming (Audio + Video)	1,150,000	887,000	29.3%
Total On-Demand Streams - Audio	745,700	602,300	23.8%
Total On-Demand Streams - Video	401,200	285,100	40.7%
Audio as a Percentage of Total On-Demand Streams	65%	68%	-4.5%
Total Album and TEA Sales	142.9	178.9	-20.1%
Total Digital Music Consumption (Digital Albums + TEA + ON-Demand Audio SEA)	711.5	596.1	19.4%
Total Album Sales	112.7	138.8	-18.7%
Digital Album Sales	39.3	52.3	-23.5%
Physical Album Sales	73.5	86.4	-15.0%
Vinyl LP Sales	18.8	16.5	-14.5%
Digital Track Sales	301.1	401.4	-25.0%

Source: MRC Data

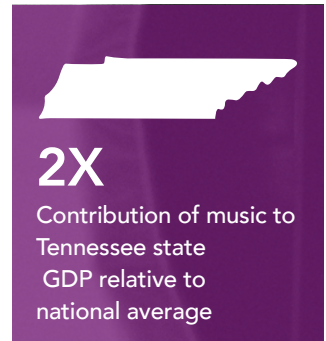
In a September 2019 survey conducted by Verto Analytics and Statista, 87.7% of mobile users accessed the YouTube app, making it the most popular mobile music and video app in the United States. Among exclusive music apps accessed by respondents of the same survey, Apple Music and Spotify had the highest rates of access, with approximately equal values of 23.8% and 23.7% respectively.

It is clear that the U.S. music industries have changed and adapted with the times, resulting in continued growth and relevance in an ever-changing economic environment. It is evident that digital technology and streaming has already become the new-normal for the industry. Generationally, this is a trend that will continue to solidify: a survey of U.S. adults conducted in March 2020 by the Pew Research Center shows that 83% of children from 5 to 11 use a voice assistant to play music.

XII. STATE BY STATE VALUES

The analyses presented thus far in this report have focused on national metrics for various music industry calculations (some built up from state values). While U.S. music industry values are obviously useful, there may be additional insights to be gained through a review of music industry metrics by state. The data presented in Appendix 2 show state-by-state analyses for each music industry variable. Data in Appendix 2 are provided for all fifty states and the District of Columbia.

Below we also present data on six states which maintain significant business in the music industries and have consistently ranked at the top in terms of various economic measures previously described. These states are California, New York, Tennessee, Florida, Pennsylvania, and Texas.



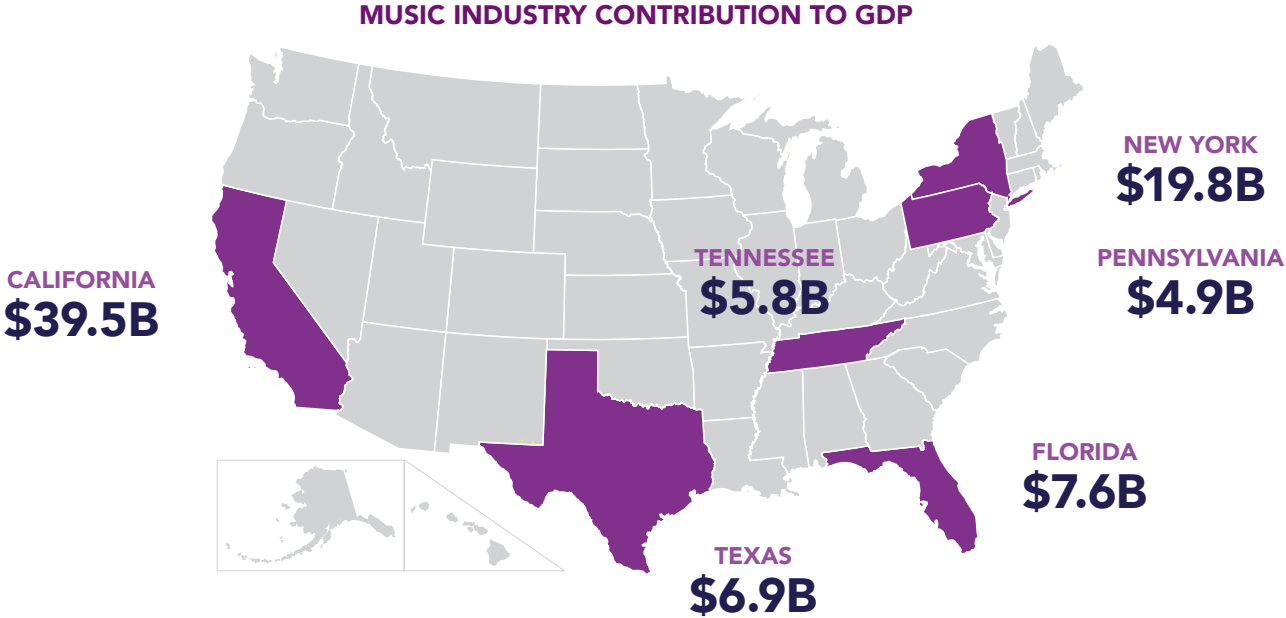
In Table 9.0 music industry value added data for each of the prominent six states (as well as the aggregate U.S. number) is compared to their respective GDP in order to assess the percentage music industry contribution. For example, the music industry in California generated \$39.5B in music industry value in 2018. In the same year, state GDP in California was \$2,721B. Dividing music industry value added by GDP results in music industry contribution in California of 1.5%. This value can then be compared with a U.S. average of $170.4/18,638 =$ or 0.9%. Thus, the music contribution to GDP of California is about one and a half the rate that music contributes to U.S. GDP. Tennessee’s music industries contribute twice as much to that state’s GDP as national music industries contribute to U.S. GDP.

Table 9.0

MUSIC INDUSTRY CONTRIBUTION TO GDP BY STATE 2018

	Music Industry GDP (\$ Billions)	GDP (\$Billions)	Music Industry Contribution to GDP
U.S.	\$170.4	\$18,638.2	0.9%
California	\$39.5	\$2,721.7	1.5%
Florida	\$7.6	\$924.9	0.8%
New York	\$19.8	\$1,435.6	1.4%
Pennsylvania	\$4.9	\$711.8	0.7%
Tennessee	\$5.8	\$323.7	1.8%
Texas	\$6.9	\$1,712.8	0.4%

Note: Estimated using receipts and RIMS II multipliers. State and U.S. GDP come from BEA.



An important picture as well is which states rank at the top of each performance metric within the United States. Table 9.1 shows the top six states' summary for each of the measures (earnings, employment, and value added), showing the prominence of the chosen six states to be represented in this section of the report.

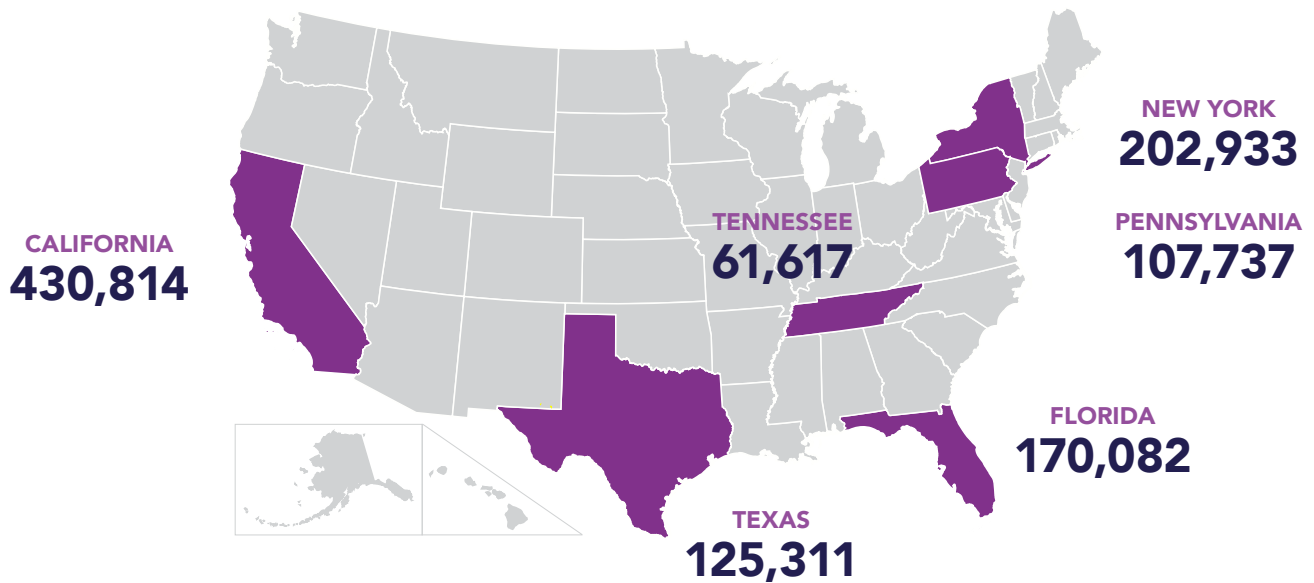
Table 9.1

MAJOR CONTRIBUTORS STATE SUMMARY 2018

	California	New York	Florida	Texas	Tennessee	Pennsylvania
Earnings (\$Millions)	\$18,918.10	\$8,266.37	\$4,085.89	\$3,675.02	\$2,396.34	\$2,544.88
Employment	430,814	202,933	170,082	125,311	61,617	107,737
Value Added (\$Millions)	\$39,515.29	\$19,832.75	\$7,629.62	\$6,912.86	\$5,786.18	\$4,912

Note: Estimated using receipts, and RIMS II multipliers.

MUSIC INDUSTRY CONTRIBUTION TO EMPLOYMENT



In Table 9.2 music industry establishments data for each of the prominent six states (as well as the aggregate U.S. number) are compared to the state’s total number of establishments in order to assess the percentage music industry contribution. For example, the music industry in California accounted for 71,905 music industry establishments in 2018. In the same year, the total number of establishments in California was 5,694,140. Dividing music industry establishments by the total results in music industry contribution in California of 1.3%. This value can then be compared with a U.S. music industry contribution of $236,269/46,083,274 =$ or 0.5%. Thus, the music industry contribution to establishments in California is about two and a half times the rate that music contributes to U.S. establishments. Similarly, New York’s music industries contribute 30% more to that state’s establishments than national music industries contribute to U.S. establishments.

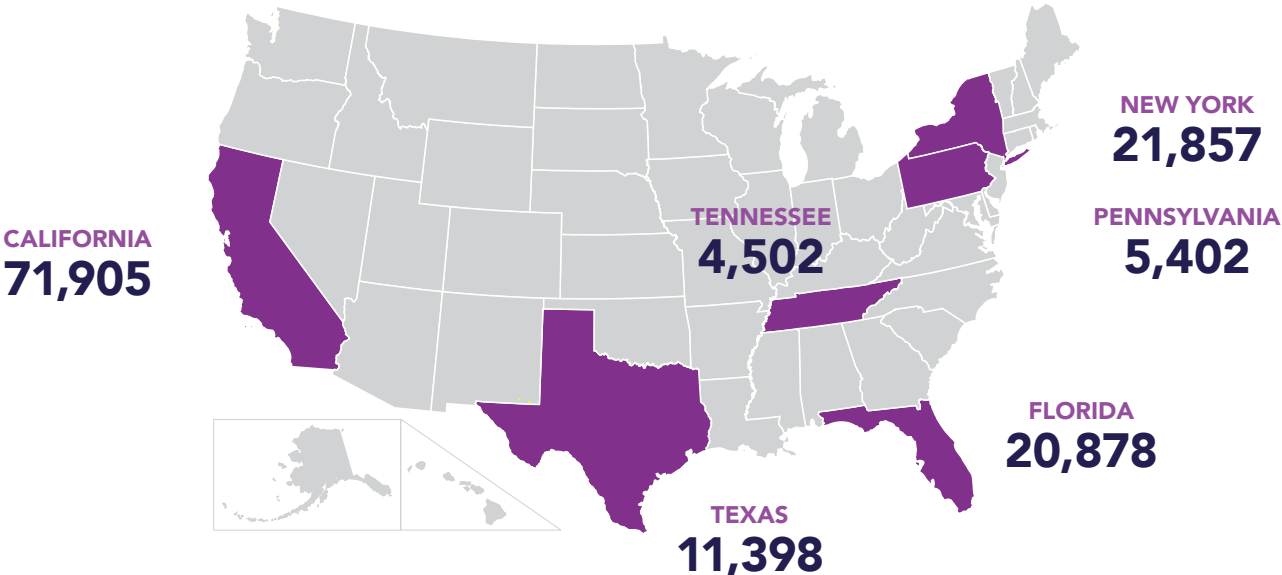
Table 9.2

MUSIC INDUSTRY CONTRIBUTION TO TOTAL ESTABLISHMENTS BY STATE 2018

	Number of Music Establishments	Total Establishments	Music Industry Contribution to Total Establishments
U.S.	236,269	46,083,274	0.5%
California	71,905	5,694,140	1.3%
New York	21,857	3,246,386	0.7%
Florida	20,878	3,368,080	0.6%
Texas	11,398	3,507,273	0.3%
Pennsylvania	5,402	1,783,987	0.3%
Tennessee	4,502	787,414	0.6%

Note: Estimated using receipts, RIMS II multipliers, and CBP data.

MUSIC INDUSTRY CONTRIBUTION TO NUMBER OF MUSIC ESTABLISHMENTS



XIII. WORLD MARKET

The United States has played a prominent role in the world in the production of music. According to the IFPI, the United States ranks first in digital music revenue, performance rights, and synchronization, while ranking second in physical music media. Ferreira & Waldfogel (2013) calculate that U.S.-originated songs occupy 32.8% of top 10 chart entries from 2003-2007,¹⁶ demonstrating the relative importance of the U.S. music industries around the world.

Below we present estimates of annual U.S. music industries exports (both goods and services) for 2015-2019. The methodology we use is as follows:

For select music *goods*, we have used the United Nations Comtrade dataset, which is a repository of official international trade statistics.¹⁷ These data are available in the industry classification *Harmonized System (HS) Codes*, which is a standardized numerical method of classifying traded products. It provides considerable richness in detail, which allows us to identify several music categories in trade across industries. Despite the richness in detail, these data nonetheless provide a conservative measure of the true value of exports of music goods, since several HS codes that would be attributable to music industries are missing data.¹⁸

For select music *services*,¹⁹ we have used BEA's International Data on U.S. Trade in Services, by Type of Service.²⁰ *Exports of Audiovisual services*, as well as *Licenses to reproduce and/or distribute audiovisual products* could be identified and are the categories we use to determine music exports, after estimating the percentage attributable to music. An estimate of the percentage attributable to music within these services was made based on the percentage attributable to music in BEA's National Data on Personal Consumption Expenditure.^{21, 22}

Figure 10.0 shows estimated U.S. music exports over 2015-2019 using this methodology. Throughout the time period, services represent the majority of the U.S. music exports, contributing \$8.11B versus \$0.96B from music goods, for a total of \$9.08B in 2019.

\$9.08B

Value of U.S. music industry exports

16 Ferreira, Fernando, and Joel Waldfogel. "Pop internationalism: has half a century of world music trade displaced local culture?." *The economic journal* 123.569 (2013): 634-664.

17 [UN Comtrade](#).

18 A comprehensive list of HS included in music goods for this study is available upon request.

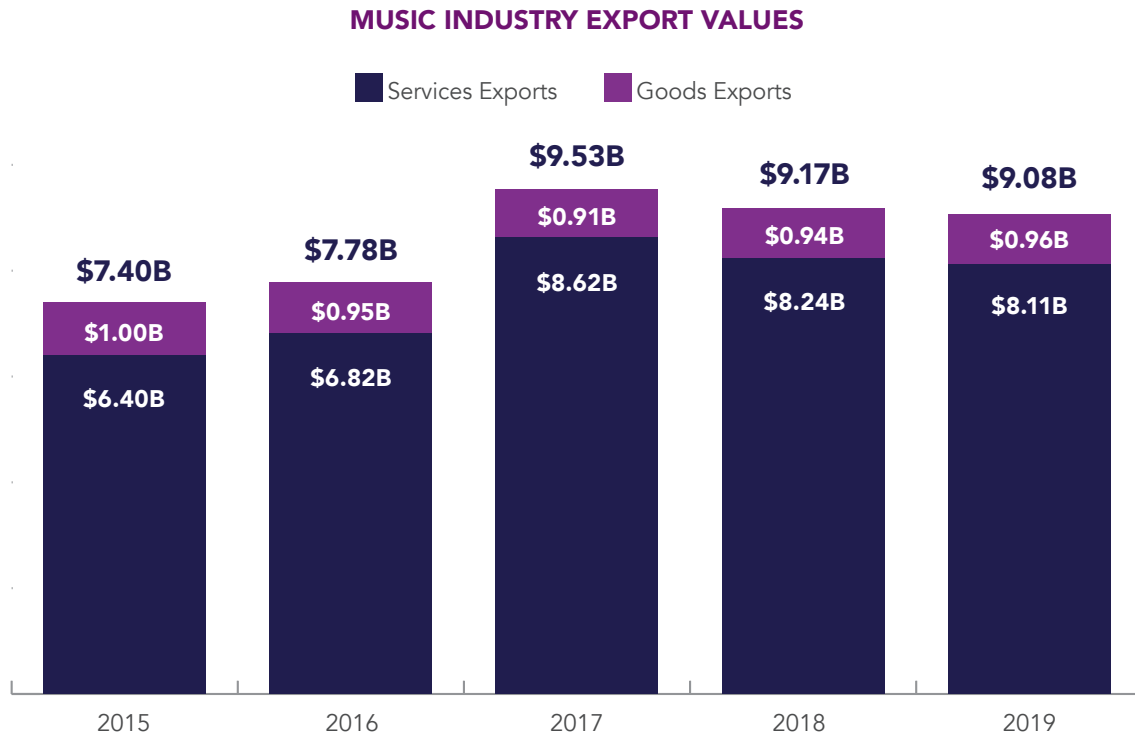
19 For music services, BMI calculates and publishes international royalties (BMI: International Royalties) as part of their annual review. While international royalties are a significant part of the value of music exports, they aren't the only source. As such, we haven't used BMI's numbers for our export services calculations below, but their data has served as an important reference for this study.

20 U.S. BEA: [Table 2.1. U.S. Trade in Services, by Type of Service](#).

21 U.S. BEA: [Table 2.4.5U. Personal Consumption Expenditures by Type of Product](#).

22 This estimate assumes that the proportion of expenditures on music within audiovisual services in the rest of the world is comparable to the United States.

Figure 10.0



Note: Estimated using UN Comtrade Good Exports, BEA International Service Trade, and BEA NIPA Consumer Expenditure.

We can see that there has been substantial growth in music exports as whole. Table 10.1, based on the same export data, shows export growth rates. From 2015-2019, total music exports have increased on average 4.2% annually. Those figures are even more impressive when compared to U.S. total service exports, which grew on average 2.7% during the same period, and U.S. total goods exports, which grew on average 1.8%. Together, our estimates conservatively show the prominent role the U.S. music industries have played in U.S. exports.

Table 10.1

MUSIC INDUSTRY TRADE EXPORT VALUE GROWTH

	2018-2019 Growth	2015-2019 Average Annual Growth	2015-2019 Cumulative Growth
Music Services	-1.5%	4.9%	26.8%
Music Goods	2.8%	-0.8%	-3.8%
Music Total	-1.1%	4.2%	22.6%
Total Service Exports	1.6%	2.7%	14.0%
Total Good Exports	-1.3%	1.8%	9.5%

Note: Estimated using UN Comtrade Good Exports, BEA International Service Trade, and BEA NIPA Consumer Expenditure.

XIV. COVID-19 DISCLAIMERS

This report is being released after a year that has no doubt been unprecedented in recent economic history due to the presence of the coronavirus. Since the data used in this study only goes through 2019, the effects of the virus on the economy cannot be seen and/or estimated at this point.

It is clear from what we have observed thus far in 2020 that the U.S. economy and employment have been hit very hard by the virus. But it is also undeniable that the music industry has played a strong supportive role during social distance and related measures as a means of promoting well-being and leisure. A survey conducted by the Pew Research Center in April 2020 has shown that 20% of U.S. adults say that have watched a livestreamed concert or play as a result of the coronavirus outbreak.²³ Input-Output models cannot measure intangible benefits, which may be very important promoters of overall economic welfare.

The likely effects on the economy as a whole and within the music industries from the pandemic can only be estimated when the pandemic is over, but what this report shows is the steady prominent role and growth of the music industries in the United States economy, which seem likely to continue in the longer run even if there are potential short run impacts from the virus.

²³ Pew Research Center: <https://www.pewresearch.org/fact-tank/2020/04/30/from-virtual-parties-to-ordering-food-how-americans-are-using-the-internet-during-covid-19/>



XV. CONCLUSIONS

Over the time frame presented in this and earlier reports, the music industries have occupied an important place as a driver of U.S. economic prosperity and growth: by sustaining growth rates above those of the U.S. economy, by fostering employment that supports over 2.4 million jobs, and by generating value for the U.S. economy through the addition of \$170B to GDP.

The U.S. music industries have been able to remain relevant, and to reinvent themselves to meet consumer needs in an increasingly digitalized world, through the rise of streaming technology and intra-industry competition which has fostered innovation—trends which will likely continue for years to come.

The report also provides an estimate of U.S. music goods and services exports, showing the worldwide impact of American music industries, and an important contribution to the U.S. balance trade.

A change in methodology in the present report has allowed us to better encompass the value of the music industries in the U.S. economy, by capturing cross-state gains of trade. Our continuing goal is to strive to improve the methodology to give the most accurate picture of the impact of the relevant music industries on the economy.

The report also provides a detailed review of the full extent of music industry activities nationally and for each state and DC. These music industries are identified across multiple NAICS codes and industry groupings, meaning the results give the widest view of the economic impact of the music industries in any summary report.

APPENDIX I

Table 11.1

NAICS 300 - 399: SOFTWARE AND CD PRODUCTION, U.S. TOTAL FINAL DEMAND 2018

NAICS Code	NAICS Mapping	Estimated Receipts (\$ Thousands)	Final Demand Output (\$ Thousands)	Final Demand Earnings (\$ Thousands)	Final Demand Employment	Final Demand Value Added (\$ Thousands)
334310	Audio and Video Equipment Manufacturing	3,786,938	10,173,610	3,370,754	55,572	5,780,761
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	1,300,210	2,936,395	833,045	13,397	1,821,724
339992	Musical Instrument Manufacturing	3,945,350	10,924,822	2,842,989	57,899	5,372,153
	Industry Total	9,032,498	24,034,826	7,046,788	126,868	12,974,638

Source: U.S. Census; County Business Patterns, Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

Table 11.2

NAICS 400 - 499: RETAIL AND WHOLESALE ACTIVITIES, U.S. TOTAL FINAL DEMAND 2018

NAICS Code	NAICS Mapping	Estimated Receipts (\$ Thousands)	Final Demand Output (\$ Thousands)	Final Demand Earnings (\$ Thousands)	Final Demand Employment	Final Demand Value Added (\$ Thousands)
423990	Other Miscellaneous Durable Goods Merchant Wholesalers (Adjusted *)	321,018	802,874	231,537	4,261	466,414
443142	Electronics Stores (Adjusted *)	470,677	1,277,419	434,776	12,644	752,135
451140	Musical Instrument and Supplies Stores	4,739,776	12,860,582	4,377,317	127,312	7,572,344
	Industry Total	5,531,472	14,940,875	5,043,630	144,217	8,790,893

Notes: *Receipts have been adjusted to reflect that the wholesale/ retail of audio goods accounts for 0.66% of total wholesale/ retail receipts.

Source: U.S. Census; County Business Patterns, Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

Table 11.3

NAICS 500 - 599: MUSIC PRODUCTION AND DISTRIBUTION, U.S. TOTAL FINAL DEMAND 2018

NAICS Code	NAICS Mapping	Estimated Receipts (\$ Thousands)	Final Demand Output (\$ Thousands)	Final Demand Earnings (\$ Thousands)	Final Demand Employment	Final Demand Value Added (\$ Thousands)
512230	Music Publishers	5,368,957	8,881,328	1,861,954	34,463	6,581,267
512240	Sound Recording Studios	1,089,934	1,801,945	377,691	6,994	1,335,447
512250	Record Production and Distribution	8,942,633	14,792,904	3,101,305	57,403	10,961,880
512290	Other Sound Recording Industries	780,059	1,290,374	270,524	5,007	956,196
515112	Radio Stations	13,288,676	42,394,914	15,056,199	258,938	23,230,792
515210	Cable and Other Subscription Programming (Adjusted *)	668,114	1,807,717	577,184	9,760	1,018,407
518210	Data Processing, Hosting, and Related Services (Adjusted **)	6,974,813	18,538,013	4,870,223	93,415	9,845,188
519130	Internet Publishing and Broadcasting and Web Search Portals (Adjusted ***)	4,785,900	12,602,826	3,111,066	54,487	6,655,773
532289	All Other Consumer Goods Rental (Adjusted ****)	37,048	103,590	33,410	695	58,266
	Industry Total	41,936,134	102,213,610	29,259,557	521,163	60,643,217

Notes: *Receipts reflect BMI data that has been adjusted to account for BMI market share.

**Receipts have been adjusted to reflect that video and audio streaming accounts for 3.84% of total data processing/hosting receipts.

***Receipts reflect streaming revenues from the IFPI Global Music Report.

****Receipts have been adjusted to reflect that the retail of audio goods accounts for 0.66% of total retail receipts.

Source: U.S. Census; County Business Patterns, Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

Table 11.4

NAICS 600 - 699: MUSIC EDUCATION, U.S. TOTAL FINAL DEMAND 2018

NAICS Code	NAICS Mapping	Estimated Receipts (\$ Thousands)	Final Demand Output (\$ Thousands)	Final Demand Earnings (\$ Thousands)	Final Demand Employment	Final Demand Value Added (\$ Thousands)
611610	Fine Arts Schools (*Adjusted)	92,256	272,207	90,850	2,737	149,559
		92,256	272,207	90,850	2,737	149,559

Note: *Receipts have been adjusted to reflect that music education accounts for 1.6% of fine arts schools.

Source: U.S. Census; County Business Patterns, Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

Table 11.5

NAICS 700 - 799: AGENTS, MANAGERS, PROMOTERS, U.S. TOTAL FINAL DEMAND 2018

NAICS Code	NAICS Mapping	Actual Receipts (\$ Thousands)	Final Demand Output (\$ Thousands)	Final Demand Earnings (\$ Thousands)	Final Demand Employment	Final Demand Value Added (\$ Thousands)
711130	Musical Groups and Artists	6,770,326	17,769,837	6,142,411	247,579	10,884,078
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	19,630,226	50,708,589	16,005,390	661,288	30,119,065
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	8,773,653	22,711,635	7,168,061	295,833	13,488,893
711510	Independent Artists, Writers, and Performers	21,476,013	46,804,570	17,587,129	466,341	33,368,906
	Industry Total	56,650,217	137,994,631	46,902,991	1,671,041	87,860,942

Source: U.S. Census; County Business Patterns, Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

APPENDIX II

Table 12.1

MUSIC INDUSTRY VALUE ADDED BY STATE IN 2018

State	Value Added (\$Millions)	State	Value Added (\$Millions)	State	Value Added (\$Millions)	State	Value Added (\$Millions)
AK	\$222.26	ID	\$282.40	MT	\$203.52	RI	\$413.45
AL	\$583.96	IL	\$4,264.05	NC	\$1,893.47	SC	\$811.29
AR	\$307.46	IN	\$1,079.30	ND	\$135.10	SD	\$250.76
AZ	\$1,648.68	KS	\$401.92	NE	\$525.70	TN	\$5,786.18
CA	\$39,515.29	KY	\$447.73	NH	\$294.60	TX	\$6,912.86
CO	\$2,368.73	LA	\$1,207.77	NJ	\$2,277.66	UT	\$1,064.93
CT	\$1,238.92	MA	\$2,854.96	NM	\$309.11	VA	\$1,601.29
DC	\$835.62	MD	\$1,427.48	NV	\$1,312.19	VT	\$220.00
DE	\$165.49	ME	\$226.80	NY	\$19,832.75	WA	\$2,520.23
FL	\$7,629.62	MI	\$2,300.18	OH	\$2,630.25	WI	\$1,608.29
GA	\$2,538.71	MN	\$2,136.79	OK	\$515.85	WV	\$148.07
HI	\$274.80	MO	\$1,622.84	OR	\$1,493.06	WY	\$59.04
IA	\$381.80	MS	\$108.02	PA	\$4,912.15		

Table 12.2

MUSIC INDUSTRY EMPLOYMENT BY STATE IN 2018

State	Value Added (\$Millions)	State	Value Added (\$Millions)	State	Value Added (\$Millions)	State	Value Added (\$Millions)
AK	5,529	ID	6,940	MT	3,478	RI	9,771
AL	12,863	IL	64,438	NC	39,018	SC	18,594
AR	6,825	IN	17,430	ND	2,021	SD	7,312
AZ	30,425	KS	6,240	NE	11,458	TN	61,617
CA	430,814	KY	8,526	NH	3,110	TX	125,311
CO	49,497	LA	30,049	NJ	40,831	UT	21,630
CT	16,821	MA	44,616	NM	7,182	VA	29,167
DC	4,336	MD	22,272	NV	21,693	VT	4,035
DE	2,590	ME	3,828	NY	202,933	WA	44,253
FL	170,082	MI	45,344	OH	50,252	WI	27,754
GA	45,122	MN	37,644	OK	10,468	WV	3,470
HI	4,017	MO	35,310	OR	27,138	WY	955
IA	6,782	MS	1,737	PA	107,737		

Table 12.3

TOTAL NUMBER OF MUSIC ESTABLISHMENTS BY STATE IN 2018

State	Establishments	State	Establishments	State	Establishments	State	Establishments
AK	534	IL	7,520	ND	158	TN	4,502
AL	803	IN	1,373	NE	840	TX	11,398
AR	558	KS	601	NH	322	UT	3,869
AZ	3,929	KY	1,341	NJ	5,908	VA	3,205
CA	71,905	LA	1,691	NM	1,336	VT	439
CO	8,268	MA	3,154	NV	3,161	WA	6,407
CT	1,254	MD	2,401	NY	21,857	WI	1,530
DC	250	ME	616	OH	2,554	WV	98
DE	843	MI	2,432	OK	1,323	WY	249
FL	20,878	MN	2,762	OR	4,431		
GA	9,613	MO	3,175	PA	5,402		
HI	564	MS	265	RI	537		
IA	605	MT	607	SC	1,443		
ID	1,004	NC	5,648	SD	705		





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