



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

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I. EXECUTIVE SUMMARY

The U.S. Music Industries: Jobs and Benefits

Music plays an outsized role in the United States' cultural landscape. We listen to music to share joy or sorrow, attend concerts with friends and family, and rely on it to create a cultural language. From Elvis to Kendrick Lamar, from Barbra Streisand to Bruno Mars, musical artists known the world over have helped define the United States' image. But what about the more comprehensive impact on the country? How many people have jobs in the music industry? How much economic activity is created? In this study we set out to measure, directly and indirectly, the music industry's economic impact in the United States.

The United States is home to the world's biggest music market. According to the IFPI, the global trade body for recorded music, the value of recorded music in the United States accounts for one-third of the total world market.¹ But recorded music is of course only one part of a much larger industry. This report examines the 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.

This analysis finds that the music industry contributed \$143 billion annually in value to the U.S. economy in 2016. The music industry created, directly or indirectly, 1.9 million U.S. jobs across a very wide variety of fields. These numbers come from a detailed analysis of government data from the U.S. Census Bureau, the Bureau of Economic Analysis, and other third-party sources. Using data from hundreds of industries that are regularly tracked, a macroeconomic analysis was performed to determine music's direct economic impact and employment. Then, in order to take into consideration the downstream impact – economic activity supported by the music industry but not directly related to music – the standard RIMS II multiplier model was applied to the data to determine its overall economic impact.

There have been a variety of reports and studies that look at the impact of music on specific locations of particular interest, but this study measures fully the economic impact nationally. There are regions where the music industry has particularly concentrated effects, and this report measured its impact at the state level for California, Florida, New York, Tennessee, and Texas – all of which had a greater music industry relative economic contribution than the national average.

There are of course limitations due to data availability on what can be analyzed at this scale. As a national level study it was not possible to examine the contributions of individual businesses. Another hurdle in the analysis comes from the rapid change that the industry has experienced in recent years. Because digital platforms like Spotify or Apple Music are new, they may not be fully captured in the national data's standard music related categories. The analysis therefore required additional estimates. While this made the analysis more difficult, these challenges are indicative of the complex and significant ways the music industry intersects the internet economy.

We have taken a conservative and reproducible approach in this analysis. This report is not the endpoint – it is a point of analysis as music rapidly evolves both for fans and for those that bring it to life. We hope this report highlights the many people and businesses whose livelihood is positively impacted by the music industry.

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&

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¹IFPI Global Music Report 2017

II. INTRODUCTION

As set forth in this report, in 2012, the U.S. music industries captured more than \$79.8 billion in receipts from consumers and service providers in the US. In the same year, employee earnings in the music industries reached \$49.9 billion while industry value added exceeded \$97.0 billion.

By 2015, these figures had increased significantly. Music industries receipts reached \$110.7 billion in 2015 while employee earnings surpassed \$67.3 billion. The value added by the music industry to the U.S. economy reached \$133.2 billion. In the three year period 2012 – 2015, the U.S. music industry grew from \$97.0 billion to \$133.2 billion, an increase of more than 37%. 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 2016 and into 2017.

Employment in the U.S. music industries also increased significantly during the period 2012 – 2015. In those years, total music industry employment rose from 1,246,653 employees in 2012 to 1,758,930 employees in 2015. The simple average growth rate achieved by the music industry in the period 2012-2015 exceeded 41%.

Notwithstanding the metrics cited above, there is one industry category that remained relatively flat during the 2012 – 2015 period; earnings per employee. Earnings per employee for music declined slightly across the NAICS groupings with an average decline of 0.9%. However, in certain NAICS groupings, most notably the retail and wholesale categories, earnings per employee declined by only 0.2%.

The values in this report reflect the author's view of the US 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 US. In this respect, the present study rests on an expansive foundation as compared with at least some other published studies of the music industries in the US. As explained in greater detail in section VI, these other studies generally do not quantify the full impact of music production and distribution as it ripples through the economy as a whole.

The other music industry studies reviewed in this report include the following:

- “Music in New York City” by NYC Media and Boston Consulting Group;
- “PWC Global Entertainment and Media Outlook 2017-2021” by Price Waterhouse Coopers.
- “Global Music Report 2017” by IFPI.

These targeted music industry reports were used primarily to provide background and context to the basic report. The alternative approaches were not employed however to develop music industry estimates or precise music industry metrics.

EMPLOYEE EARNINGS IN THE MUSIC INDUSTRIES REACHED \$72.5 BILLION WHILE INDUSTRY VALUE ADDED EXCEEDED

\$143B

IN THE THREE YEAR PERIOD 2012 – 2015, THE U.S. MUSIC INDUSTRY GREW FROM \$97.0 BILLION TO \$133.2 BILLION, AN INCREASE OF MORE THAN

37%

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 medium. The IFPI’s “Global Music Report 2017” provides a good example of the data compilations that are developed and published by the IFPI.

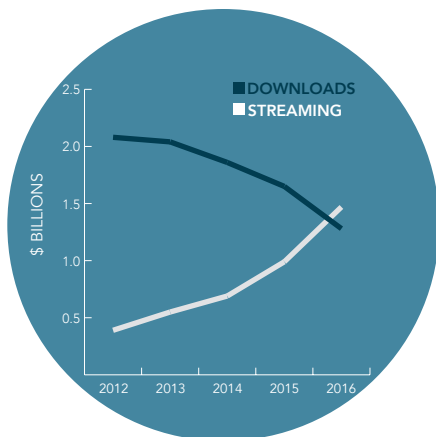
According to the IFPI, the United States ranks 1st in the following music industry categories: digital music revenue, performance rights, and synchronization. In terms of the physical music media category, the U.S. ranks second.

In the IFPI’s Global Music Report, direct music revenue in the U.S. is reported by category and by year.² The figures are reproduced here in Table 1.0. As shown in Table 1.0, U.S. trends in music revenues differ dramatically across music industry media. For example, direct digital revenue increased from \$2.9B in 2012 to \$3.7B in 2016. By contrast, during the same period revenues of physical music actually declined.

TABLE 1.0 | U.S. RECORDED MUSIC REVENUE 2012 - 2016
(\$ BILLIONS)

YEAR	PHYSICAL	DIGITAL	PERFORMANCE RIGHTS	SYNCHRONIZATION REVENUES	TOTAL
2016	0.96	3.74	0.41	0.20	5.32
2015	1.17	3.24	0.33	0.20	4.94
2014	1.29	3.13	0.29	0.19	4.90
2013	1.44	3.07	0.26	0.19	4.95
2012	1.50	2.87	0.21	0.19	4.78

²Note: The revenue figures cited in the Global Music report reflect wholesale rather than retail values for music.



Within the digital music category, the divergence of trends by medium has been, if anything, more dramatic. As shown in Table 1.1, download revenues declined over the period 2012 – 2016 while streaming revenues of recorded music rose significantly.

TABLE 1.1 | U.S. DIGITAL RECORDED MUSIC REVENUE 2012 - 2016 (\$ BILLIONS)

YEAR	DOWNLOADS	STREAMING	OTHER	TOTAL
2016	1.28	1.47	0.68	3.44
2015	1.65	0.99	0.61	3.24
2014	1.86	0.69	0.58	3.13
2013	2.04	0.55	0.47	3.07
2012	2.08	0.39	0.40	2.87

The figures in Tables 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 engulf the music industry. Ultimately the analyses in this report suggest that the U.S. music industry has captured substantial benefits from new revenues and new technologies.

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 industry definitions assumed by other researchers.” See Report at pages 9-10. 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, 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.”³ 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.”⁴

NAICS uses a six-digit coding system “to identify particular industries and their placement in the hierarchical structure of the classification system.”⁵ “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 industry.⁶ A zero as the sixth digit generally indicates that the NAICS industry and the U.S. industry are the same.

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 2016. The NAICS codes have been grouped based on the first three digits of the code.

³ Executive Office of the President – Office of Management and Budget, *North American Industry Classification System*, United States, 2007, page 99.

⁴ Executive Office of the President – Office of Management and Budget, *North American Industry Classification System*, United States, 2007, page pages 18-19.

⁵ Id. Page 18-19.

⁶ Id. Page 18-19.

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	512210	Record production
	512220	Integrated record production/ distribution
	512230	Music publishers
	512240	Sound recording studios
	512290	Other sound recording industries
	515112	Radio stations
	518210	Data processing/ hosting*
	519130	Internet publishing, broadcasting*
600- 699: Music Education	532299	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.

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 reproducing, and musical instrument manufacturing.

NAICS codes 400- 499 encompass retail and wholesale activities, including miscellaneous durable goods wholesaler, 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 the 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 state. In this instance, the multipliers were developed by the U.S. BEA in an input-output model known as RIMS II. 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.”⁷

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 state specific. In this analysis, one of the NAICS industries that was used to develop RIMS II multipliers is shown in Table 2.1.

**TABLE 2.1 | RIMS II MULTIPLIERS (2007/ 2015)
512200 - SOUND RECORDING INDUSTRIES (TYPE II)**

STATE	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	2.046	0.462	8.381	1.140	3.034	4.023
Florida	1.927	0.433	10.303	1.082	2.837	3.383
New York	1.863	0.349	6.103	1.038	2.745	3.506
Tennessee	1.932	0.406	8.105	1.062	2.759	4.023
Texas	2.018	0.455	9.037	1.123	2.991	3.772

As reported in Table 2.1, 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. In describing its application of state-by-state 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.”⁸

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 beneficial 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 analyst to measure 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.

⁷ Economic Modeling Specialists Inc. (2006) “Practical Input-Output Modeling for Regional Development.”

⁸ U.S. Bureau of Economic Analysis, RIMS II Multipliers (2007/2015) Table 3.5, Total Multipliers for Output, Earnings, Employment and Value Added by State, 512200 – Sound Recording Industries (Type II).

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 to music industry contribution studies completed by other research firms in the recent past. As noted above, these studies included the IFPI's *Global Music Report 2017*. In addition the references consulted in this report included the *PWC Global Entertainment and Media Outlook*⁹ and an earlier report entitled *Music in New York City*. The New York City report was prepared by NYC Media and Entertainment and the Boston Consulting Group.

These more localized studies were of interest primarily because they often included the development of categories by which the music industries could be studied in groups. For example, in the New York City report, the authors stated that "To zero in on the dynamics, trends and impact of music in New York City, this report is framed around four key sectors, or pillars, of the music ecosystem.¹⁰ The four pillars used in the New York City report were; "local artist communities, mass music consumption, global record business and infrastructure and support services."¹¹

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 contribution studies, the U.S. music industries would serve as one of a number of component industries.

Studies that considered the economic contributions of multiple industries have also been published by the U.S. Federal Government. In 2012, and subsequently in 2016, the Economics & Statistics Administration ("ESA") and the U.S. Patent & Trademark Office ("USPTO") jointly published detailed reports that sought to qualify the economic contributions of all major forms of Intellectual Property ("IP") in the U.S. In this effort, Mr. Siwek advised the government researchers on issues relating to copyright industry contribution studies generally.

Even with all these categories included and additional data provided by the RIMS II multipliers it must be acknowledged that there still may be other areas where music adds value that are not explicitly factored into this analysis. The national level NAICS data does not allow us to examine data on a company by company basis, and given the rapidly changing nature of the digital economy there are bound to be activities that do not fall precisely into the government set categories.

⁹ PriceWaterhouseCoopers, *PWC Global Entertainment and Media Outlook*

¹⁰ NYC and Boston Consulting Group, *Music in New York City*, pages 10-11.

¹¹ *Id.*, pages 10-11.

VIII. MUSIC INDUSTRY METRICS BY GROUP

The groupings described below are used to identify NAICS codes that are components of the music industry as a whole. With the industry groupings in hand, one can use RIMS II multipliers to estimate music industry output, receipts, earnings, employment, value added, earnings per employee, and direct and indirect employment and earnings.

In Tables 3.0 through 3.6B, the value for each metric is provided by NAICS grouping. These data are presented for the years 2012 and 2015.

Receipts and final demand metrics on the individual NAICS code level are presented in Appendices 1.0 through 1.4. They are also organized by NAICS grouping.

**TABLE 3.0 | U.S. TOTAL MUSIC INDUSTRY RECEIPTS BY NAICS GROUPING
(In \$ Thousands)**

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	\$7,449,823	\$9,445,301	26.8%
400 - 499	\$5,698,492	\$6,926,862	21.6%
500 - 599	\$30,698,737	\$39,595,543	29.0%
600 - 699	\$61,578	\$75,883	23.2%
700 - 799	\$35,920,860	\$54,643,280	52.1%
Total	\$79,829,490	\$110,686,869	38.7%

Table 3.0 reports the growth of U.S. music industry receipts by NAICS grouping from 2012 to 2015. Total receipts grew by 38.7% from \$79.8B in 2012 to \$110.7B in 2015. Each music industry grouping experienced growth on its own, with agents, managers and promoters (NAICS 700- 799) experiencing the fastest growth at 52.1%, and retail and wholesale activities (NAICS 400- 499) experiencing the slowest growth at 21.6%.

**TABLE 3.1 | FINAL DEMAND EARNINGS BY NAICS GROUPING
(In \$ Thousands)**

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	\$3,449,590	\$4,289,859	24.4%
400 - 499	\$3,635,542	\$4,432,805	21.9%
500 - 599	\$20,032,100	\$24,146,324	20.5%
600 - 699	\$42,337	\$51,973	22.8%
700 - 799	\$22,727,857	\$34,406,525	51.4%
Total	\$49,887,425	\$67,327,486	35.0%

Final demand earnings for the U.S. music industry, as seen in Table 3.1, grew by 35.0% from \$49.9B in 2012 to \$67.3B in 2015. All NAICS groupings experienced growth rates higher than 20.0%.

TABLE 3.2 | U.S. TOTAL FINAL DEMAND EMPLOYMENT BY NAICS GROUPING

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	53,593	67,025	25.1%
400 - 499	107,420	131,266	22.2%
500 - 599	351,366	430,503	22.5%
600 - 699	1,665	2,053	23.3%
700 - 799	732,609	1,128,083	54.0%
Total	1,246,653	1,758,930	41.1%

Table 3.2 reports that U.S. total final demand employment grew at a slightly faster rate than final demand earnings at 41.1%, growing from 1.2 million jobs in 2012 to 1.8 million jobs in 2015. Final demand employment growth was strongest in the agents, managers and promoters grouping (NAICS 700- 799) at 54.0%, and slowest in the retail and wholesale activities grouping (NAICS 400- 499) at 22.2%.

TABLE 3.3 | U.S. TOTAL FINAL DEMAND VALUE ADDED BY NAICS GROUPING (In \$ Thousands)

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	\$7,991,736	\$9,991,032	25.0%
400 - 499	\$7,119,702	\$8,670,660	21.8%
500 - 599	\$37,857,136	\$47,767,783	26.2%
600 - 699	\$77,685	\$95,563	23.0%
700 - 799	\$43,960,718	\$66,631,656	51.6%
Total	\$97,006,978	\$133,156,694	37.3%

U.S. total final demand value added experienced a 37.3% growth from \$97.0B in 2012 to \$133.2B in 2015, as reported in Table 3.3. A large contributor to this growth rate is the 51.6% growth in the music production and distribution grouping (NAICS 500- 599), growing from \$97.0B in 2012 to \$133.2B in 2015.

TABLE 3.4 | U.S. TOTAL EARNINGS PER EMPLOYEE BY NAICS GROUPING (\$)

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	\$64,366	\$64,004	-0.6%
400 - 499	\$33,844	\$33,770	-0.2%
500 - 599	\$57,012	\$56,089	-1.6%
600 - 699	\$25,421	\$25,313	-0.4%
700 - 799	\$31,023	\$30,500	-1.7%
Total	\$42,333	\$41,935	-0.9%

Table 3.4 reports that average earnings per employee for the U.S music industry fell by 0.9%, falling from \$42,333 in 2012 to \$41,935 in 2015. Average earnings per employee fell by 1.6% in the music production and distribution grouping (NAICS 500- 599) and 1.7% in the agents, managers and promoters grouping (NAICS 700- 799). In all other groupings, average earnings per employee fell by less than 1.0%.

TABLE 3.5A | U.S. TOTAL DIRECT EMPLOYMENT BY NAICS GROUPING

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	13,931	17,432	25.1%
400 - 499	66,255	80,783	21.9%
500 - 599	118,470	138,783	17.1%
600 - 699	1,136	1,405	23.6%
700 - 799	403,364	625,024	55.0%
Total	603,157	863,427	43.2%

TABLE 3.5B | U.S. TOTAL INDIRECT EMPLOYMENT BY NAICS GROUPING

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	39,662	49,594	25.0%
400 - 499	41,164	50,483	22.6%
500 - 599	232,896	291,720	25.3%
600 - 699	529	648	22.5%
700 - 799	329,246	503,059	52.8%
Total	643,496	895,504	39.2%

Final demand employment figures presented in Table 3.2 are broken out between direct employment in Table 3.5A and indirect employment in Table 3.5B. Indirect employment contributed about 51.6% of final demand employment in 2012 with 643,000 jobs, and 50.9% in 2015 with 896,000. Direct employment contributed to about 603,000 in 2012 and 863,000 in 2015. Total indirect employment grew at a faster rate than direct employment, with a growth rate of 43.2% versus 39.2%.

**TABLE 3.6A | U.S. TOTAL DIRECT EARNINGS BY NAICS GROUPING
(In \$ Thousands)**

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	\$1,528,988	\$1,891,430	23.7%
400 - 499	\$1,938,558	\$2,358,589	21.7%
500 - 599	\$9,395,364	\$10,898,365	16.0%
600 - 699	\$20,863	\$25,655	23.0%
700 - 799	\$9,658,086	\$14,560,970	50.8%
Total	\$22,541,859	\$29,735,009	31.9%

**TABLE 3.6B | U.S. TOTAL INDIRECT EARNINGS BY NAICS GROUPING
(In \$ Thousands)**

NAICS	2012	2015	PERCENTAGE CHANGE
300 - 399	\$1,920,601	\$2,398,429	24.9%
400 - 499	\$1,696,984	\$2,074,217	22.2%
500 - 599	\$10,636,735	\$13,247,959	24.5%
600 - 699	\$21,474	\$26,317	22.6%
700 - 799	\$13,069,771	\$19,845,556	51.8%
Total	\$27,345,566	\$37,592,477	37.5%

Similarly, final demand earnings figures presented in Table 3.1 are broken out between direct earnings in Table 3.6A and indirect earnings in Table 3.6B. Indirect earnings contributed about 54.8% of final demand earnings in 2012 at \$27.3B, while direct earnings contributed to 45.2% at \$22.5B.

The industry groupings provided in these tables can also be combined to report “all industry” figures.

IX. U.S. ALL INDUSTRY TABLES

TABLE 4.0 | U.S. TOTAL ALL-INDUSTRY TABLES (2012 - 2015)

	2012	2013	2014	2015
Music Industry Receipts (\$ Billions)	\$79.8	\$79.2	\$85.4	\$110.7
Earnings (\$ Billions)	\$49.9	\$49.1	\$52.1	\$67.3
Employment	1,246,653	1,236,259	1,311,111	1,758,930
Value Added (\$Billions)	\$97.0	\$96.0	\$103.0	\$133.2

Table 4.0 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. All metrics experienced positive year-to-year growth between 2012 and 2015.

TABLE 4.1 | U.S. TOTAL ALL-INDUSTRY TABLES (2012 - 2015)

	2012	2013	2014	2015
Earnings Per Employee (\$)	\$40,017	\$39,715	\$39,704	\$38,278
Direct Employment	603,157	600,976	632,712	863,427
Indirect Employment	643,496	635,283	678,399	895,504
Direct Earnings (\$ Billions)	\$22.5	\$22.1	\$23.2	\$29.7
Indirect Earnings (\$ Billions)	\$27.3	\$27.0	\$28.9	\$37.6

Additional U.S. total metrics for the music industry corresponding to earnings and employment are reported in Table 4.1. Earnings per employee fell between 2012 and 2015, from \$40,017 to \$38,278. Direct employment increased from 603,000 in 2012 to 863,000 in 2015. Indirect employment grew from 643,000 in 2012 to 896,000 in 2015, with a 32.0% increase from 2014 to 2015 alone. Direct and indirect earnings also saw sharp increases from 2014 to 2015, with direct earnings growing by 28.2% and indirect earnings by 30.3%.

X. GROWTH IN MUSIC INDUSTRY METRICS, PROJECTED 2016

**TABLE 5.0 | U.S. RECORDED MUSIC REVENUE 2016
GLOBAL MUSIC REPORT
(\$ BILLIONS)**

	2015	2016	GROWTH RATE
Physical	\$1.2	\$1.0	-17.5%
Digital	\$3.2	\$3.7	15.4%
Performance Rights	\$0.3	\$0.4	23.4%
Synchronization Revenue	\$0.2	\$0.2	0.7%
Total	\$4.9	\$5.3	7.6%

Note: The revenue figures cited in the Global Music report reflect wholesale rather than retail values for music.

Table 5.0 shows U.S. total revenues for “other” measures of recorded music categories in 2015 and 2016. These data were compiled in the IFPI Global Music Report. The music industry categories considered here include physical, digital, performance rights, and synchronization revenue. Digital music contributed to the largest share of revenues, with \$3.7B in 2016. The performance rights sector experienced the largest growth between 2015 and 2015 at 23.4%. Overall, recorded music revenue grew at 7.6% from \$4.9B in 2015 to \$5.3B in 2016. The Global

TABLE 5.1 | GROWTH IN MUSIC INDUSTRY METRICS PROJECTED 2016

	2015	GROWTH	PROJECTED 2016
Music Industry Receipts (\$ Billions)	\$110.7	1.076	\$119.1
Music Industry Earnings (\$ Billions)	\$67.3	1.076	\$72.4
Music Industry Employment	1,758,930	1.076	1,892,609
Music Industry Value Added (\$ Billions)	\$133.2	1.076	\$143.3

Music Report's 7.6% growth rate in recorded music revenue in 2015 is applied to this study's metrics of the music industry to project receipts, earnings, employment and value added for 2016. As seen in Table 5.1, the projected value added of the music industry in 2016 is \$143.3B, with \$119.1B in receipts, \$72.4B in earnings, and providing about 1.9 million jobs.

THE PROJECTED VALUE ADDED OF THE MUSIC INDUSTRY IN 2016

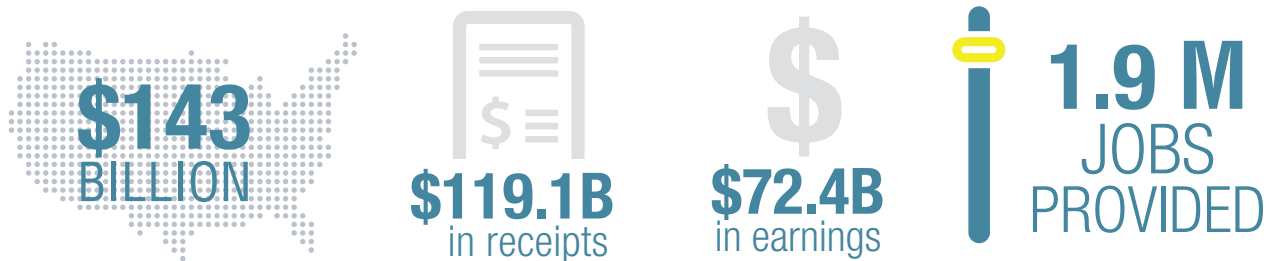


TABLE 6.0 | MUSIC INDUSTRY VALUE ADDED SHARE OF TOTAL U.S. GDP 2012 - 2016 (\$ BILLIONS)

	2012	2013	2014	2015	2016 (Projected)	2012 - 2016 COMPOUND ANNUAL GROWTH	2012 - 2015 COMPOUND ANNUAL GROWTH
Music Industry	\$97.0	\$96.0	\$103.0	\$133.2	\$143.3	10.2%	11.1%
Total U.S. GDP	\$16,155.3	\$16,691.5	\$17,427.6	\$18,120.7	\$18,624.5	3.6%	3.9%
Share of U.S. GDP	0.6%	0.6%	0.6%	0.7%	0.8%	--	--

Source: BEA National Data

As seen in Table 6.0, the music industry's contribution to total U.S. GDP grew from 0.6% in 2012 to 0.8% in 2016. Music industry value added has also been growing at significantly faster rate than U.S. GDP. The compound annual growth rate of music industry value added is 10.2% from 2012–2016 and 11.1% from 2012-2015, while total U.S. GDP has grown 3.6% and 3.9% respectively.

TABLE 6.1 | MUSIC INDUSTRY EMPLOYMENT SHARE OF TOTAL U.S. EMPLOYMENT 2012 - 2016

	2012	2013	2014	2015	2016 (Projected)	2012 - 2016 COMPOUND ANNUAL GROWTH	2012 - 2015 COMPOUND ANNUAL GROWTH
Music Industry	1,246,653	1,236,259	1,311,111	1,758,930	1,892,609	11.0%	12.2%
Total U.S. Employment	130,287,700	132,588,810	135,128,260	137,896,660	140,400,040	1.9%	1.9%
Share of U.S. Employment	1.0%	0.9%	1.0%	1.3%	1.3%	--	--

Source: Bureau of Labor Statistics Occupational Employment Statistics

Table 6.1 reports the music industry's contribution to total U.S. employment. Employment in the music industry accounted for 1.0% of U.S. employment in 2012 and 1.3% in 2016. Music industry employment grew 11.0% between 2012 and 2016, compared to U.S. employment growth at 1.9% for the same period.

XI. DETAILED MUSIC INDUSTRY METRICS BY YEAR

The summary level tables presented thus far all reflect some form of aggregation by industry, by metric, or by year. Thus in Tables 4.0 and 4.1, 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 Appendix 1.0 through 1.4.

Appendix 1.0 presents detailed values for NAICS codes that fall within NAICS 300 – 399: Software and CD Production. Appendix 1.1 presents values for NAICS 400- 499: Retail and Wholesale Activities and Appendix 1.2 presents values for NAICS 500- 599: Music Production and Distribution. Appendix 1.3 reports values for NAICS 600- 699: Music Education and Appendix 1.4 for NAICS 700- 799: Agents, Managers and Promoters. Values are provided for 2012- 2015 in all appendices.

XII. AUDIO AND VIDEO STREAMING

As regards streaming sales in 2015 and 2016, direct revenue in the U.S. increased "from U.S \$2.84 B in 2015 to U.S \$ 4.56 B in 2016." IFPI found that streaming generated more revenue for the music industries in 2016 "than digital downloads managed even during that format's most lucrative year."¹²

The rise of streaming technology has particularly affected 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).

**STREAMING
GENERATED
MORE REVENUE
FOR THE MUSIC
INDUSTRY IN 2016
THAN DIGITAL
DOWNLOAD**

In NAICS 518210, receipts from video and audio streaming are divided by total hosting receipts in order to derive an annual estimate for streaming receipts through 2015. This estimate (in the amount of 3.85%) is then applied to the broader measure of total hosting revenue per year. Other, more recent divisions between audio and video streaming quantities have also confirmed the growing importance of audio streaming through 2017.

As shown in Table 7.0, research firm Nielsen Music published a variety of music industry highlights focusing on streaming growth during 2016 and 2017. In Table 7.0, total on-demand streams on audiovisual platforms like YouTube and Vevo increased from 180.0 billion streams in 2016 to 217.7 billion in 2017. On audio only on-demand platforms streaming music grew even faster, from

¹² IFPI, Global Music Report, 2017, Page 51

252.3 billion streams in 2016 to 400.4 billion streams in 2017. In 2017, audio streaming comprised 64.8% of total on-demand music streaming. These figures don't include hundreds of billions of additional audio streams through customized radio services like Pandora.

Furthermore, as noted above, streaming on services like Pandora is not reflected in the volume counts generally reported, because Pandora does not provide data to services like SoundScan.

**TABLE 7.0 | YEAR-END 2017 MUSIC INDUSTRY HIGHLIGHTS
(ALL UNITS IN MILLIONS)**

Category	2017	2016	% CHG
Total Consumption (Total Album + TEA + On-Demand Audio/Video SEA)	636.6	566.1	12.5%
Total Audio Consumption (Album + TEA + On-Demand Audio SEA)	491.5	446.1	10.2%
On-Demand Streaming (Audio/Video)	618,000	432,200	43.0%
Total On-Demand Streams - Audio	400,400	252,300	58.7%
Total On-Demand Streams - Video	217,700	180,000	20.9%
Audio as a Percentage of Total On-Demand Streams	64.8%	58.4%	
Total Album and TEA Sales	224.6	277.9	-19.2%
Total Digital Music Consumption (Digital Albums + TEA + On-Demand Audio SEA)	533.7	442.9	20.5%
Total Album Sales	169.1	205.5	-17.7%
Digital Album Sales	66.2	82.3	-19.6%
Physical Album Sales	102.9	123.2	-16.5%
Vinyl LP Sales	14.3	13.1	9.0%
Digital Track Sales	554.8	724.0	-23.4%

Source: Nielsen Music 2017 Year-End Music Report U.S.

Note: TEA refers to Track Equivalent Albums, calculated as a ratio of 10 tracks to 1 album.

SEA refers to Streaming Equivalent Albums, calculated as a ratio of 1500 streams to 1 album.

XIII. FUTURE TRENDS IN STREAMING SERVICES

As noted above, music consumers have begun to adopt streaming technology in significant numbers particularly since 2015. Clearly the industry's acceptance of streaming technology has greatly influenced music industry product offerings for both established providers and new entrants as well.

To meet the music industries' emerging demand for music products, market participants have begun to develop competitive pricing plans and features that are specific to their streaming – based services. Such innovations have already helped the music industries experience substantial growth in U.S. revenue. Nevertheless it also seems evident that researchers who follow streaming markets will continue to project new industry combinations and structural changes as the streaming market is itself transformed. Indeed such changes may be increasingly likely for the largest and best capitalized streaming providers.

XIV. STATE BY STATE VALUES

The analyses presented thus far in this report have focused on national metrics for various music industry calculations. While U.S. music industry values are obviously useful, there may be additional insights to be gained through a review of music industry metrics per state. The data presented in Appendix 2 shows state-by-state analyses.

The data are provided for five states which maintain significant business in the music industries. These states are California, Florida, New York, Tennessee, and Texas. These data match the music industry values provided in Appendix 1 with the significant exception of using state data rather than national values.

In Table 8.0 music industry data (state by state) is compared to average GDPs (by state) in order to assess the music industry contribution.

For example, as shown in Table 8.0, the music industry in California generated \$38 billion in music industry value in 2015. In the same year, average state GDP in California was 2,506 billion.



CALIFORNIA



NEW YORK



FLORIDA



TENNESSEE



TEXAS

TABLE 8.0 | MUSIC INDUSTRY CONTRIBUTION TO GDP BY STATE 2015

	MUSIC INDUSTRY GDP (\$ BILLIONS)	GDP (\$ BILLIONS)	MUSIC INDUSTRY CONTRIBUTION TO GDP
U.S.	133	18,007	0.7%
California	38	2,506	1.5%
Florida	7	889	0.8%
New York	21	1,459	1.4%
Tennessee	6	317	1.9%
Texas	6	1,608	0.4%

Value added from the music industry is comparable to other sectors of the U.S. economy. Table 8.1 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 one of the larger value added growth rates in 2016, growing by 7.6% from the previous year. In comparison, chemical products grew by 2.7%, computer and electronics grew by 1.5%, and motor vehicles grew by 7.8%.

TABLE 8.1 | VALUE ADDED COMPARISONS BETWEEN MUSIC INDUSTRY AND OTHER SECTORS (\$ BILLIONS)

	2012	2015	2016
Music Industry	\$97.0	\$133.2	\$143.3
Computer and Electronic Products	\$256.8	\$278.2	\$282.3
Motor Vehicles, Bodies and Parts	\$125.7	\$163.1	\$175.9
Chemical Products	\$341.9	\$377.3	\$387.6

Source: U.S. Bureau of Economic Analysis, *Value Added by Industry*, Released April 21, 2017.

XV. CONCLUSIONS

The U.S. Music Industries have clearly begun to achieve growth rates that compare favorably with the growth trends experienced by these industries in the early to mid-1990s. As described here, much of this recent growth has been driven by the rise of streaming technology. Intra-industry competition also provided new models for music industry growth and innovation. These issues are analyzed at length in this study.

The report also provides a detailed review as to the full extent of music industry activities in many parts of the U.S. economy as a whole. In this study, these music industries are identified across multiple NAICS codes and industry groupings as per NAICS hierarchies. In future studies, we hope these industry categories can be reviewed and analyzed in more detail.

APPENDIX 1.0

NAICS 300- 399: SOFTWARE AND CD PRODUCTION | US TOTAL FINAL DEMAND 2012 - 2015

2012						
NAICS CODE	NAICS MAPPING	ACTUAL RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
334310	Audio/video equipment mfg.	3,039,424	5,639,168	1,287,276	20,095	3,050,236
339992	Musical instrument mfg.	1,832,787	3,405,768	777,381	12,162	1,842,091
334614	Software, other prerecorded CD, tape, record reproducing	2,577,612	4,814,781	1,384,933	21,336	3,099,410
INDUSTRY TOTAL		7,449,823	13,859,717	3,449,590	53,593	7,991,736
2013						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
334310	Audio/video equipment mfg.	2,647,734	4,904,648	1,118,892	17,517	2,652,801
339992	Musical instrument mfg.	1,960,064	3,639,998	830,127	12,993	1,968,717
334614	Software, other prerecorded CD, tape, record reproducing	2,424,895	4,523,269	1,303,497	20,224	2,911,911
INDUSTRY TOTAL		7,032,693	13,067,915	3,252,516	50,734	7,533,429
2014						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
334310	Audio/video equipment mfg.	3,261,735	6,026,686	1,371,834	21,417	3,259,211
339992	Musical instrument mfg.	1,021,397	1,904,629	433,874	6,839	1,029,938
334614	Software, other prerecorded CD, tape, record reproducing	1,926,502	3,610,749	1,041,210	15,908	2,325,928
INDUSTRY TOTAL		6,209,634	11,542,063	2,846,918	44,164	6,615,077
2015						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
334310	Audio/video equipment mfg.	4,495,619	8,271,495	1,876,238	29,364	4,473,005
339992	Musical instrument mfg.	2,141,964	3,971,291	904,417	14,152	2,147,829
334614	Software, other prerecorded CD, tape, record reproducing	2,807,719	5,235,698	1,509,203	23,509	3,370,198
INDUSTRY TOTAL		9,445,301	17,478,484	4,289,859	67,025	9,991,032

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

APPENDIX 1.1

NAICS 400- 499: RETAIL AND WHOLESALE ACTIVITIES | US TOTAL FINAL DEMAND 2012 - 2015

2012						
NAICS CODE	NAICS MAPPING	ACTUAL RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
423990	Misc. durable goods wholesaler (Adjusted*)	287,503	556,109	172,041	3,210	354,132
443142	Electronics stores (Adjusted*)	570,430	1,160,550	366,782	11,077	715,172
451140	Instrument/ music supply stores	4,840,558	9,823,020	3,096,718	93,133	6,050,398
INDUSTRY TOTAL		5,698,492	11,539,679	3,635,542	107,420	7,119,702
2013						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
423990	Misc. durable goods wholesaler (Adjusted*)	281,229	542,369	167,568	3,118	345,489
443142	Electronics stores (Adjusted*)	580,489	1,180,724	373,310	11,273	727,563
451140	Instrument/ music supply stores	4,979,315	10,097,129	3,181,594	95,651	6,219,451
INDUSTRY TOTAL		5,841,034	11,820,221	3,722,472	110,041	7,292,503
2014						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
423990	Misc. durable goods wholesaler (Adjusted*)	284,616	549,909	170,096	3,157	350,175
443142	Electronics stores (Adjusted*)	612,445	1,245,418	393,682	11,907	767,560
451140	Instrument/ music supply stores	4,918,799	9,978,943	3,147,081	94,903	6,147,600
INDUSTRY TOTAL		5,815,860	11,774,270	3,710,859	109,967	7,265,335
2015						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
423990	Misc. durable goods wholesaler (Adjusted*)	351,426	681,321	210,915	3,925	433,639
443142	Electronics stores (Adjusted*)	713,187	1,450,007	458,207	13,871	893,558
451140	Instrument/ music supply stores	5,862,248	11,925,033	3,763,683	113,470	7,343,464
INDUSTRY TOTAL		6,926,862	14,056,361	4,432,805	131,266	8,670,660

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

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

APPENDIX 1.2

NAICS 500- 599: MUSIC PRODUCTION AND DISTRIBUTION | US TOTAL FINAL DEMAND 2012 - 2015

2012						
NAICS CODE	NAICS MAPPING	ACTUAL RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
512210	Record production	213,966	428,071	93,355	1,713	238,575
512220	Integrated record production/distribution	5,408,250	10,544,525	2,183,216	39,374	5,867,511
512230	Music publishers	4,176,142	8,070,903	1,656,531	30,662	4,479,213
512240	Sound recording studios	912,544	1,812,018	389,568	7,139	1,009,026
512290	Other sound recording industries	501,195	974,930	201,183	3,644	542,401
515112	Radio stations	12,842,102	30,269,950	11,832,244	204,503	18,013,164
518210	Data processing/ hosting (Adjusted**)	4,146,980	8,833,098	2,427,063	45,209	4,815,657
519130	Internet publishing, broadcasting (Adjusted***)	2,472,000	4,699,526	1,232,267	18,620	2,859,277
519130	Other consumer goods rental (Adjusted*)	25,559	52,523	16,671	502	32,313
INDUSTRY TOTAL		30,698,737	65,685,546	20,032,100	351,366	37,857,136

2013						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
512210	Record production	193,918	384,725	82,703	1,519	214,429
512220	Integrated record production/distribution	5,241,404	10,209,616	2,111,169	38,135	5,679,704
512230	Music publishers	4,298,490	8,312,223	1,705,013	31,387	4,613,607
512240	Sound recording studios	979,237	1,940,123	416,327	7,677	1,080,441
512290	Other sound recording industries	564,413	1,111,859	234,926	4,254	618,888
515112	Radio stations	11,717,953	27,598,018	10,777,921	186,250	16,423,122
518210	Data processing/ hosting (Adjusted**)	4,622,416	9,864,649	2,710,352	50,584	5,376,783
519130	Internet publishing, broadcasting (Adjusted***)	2,595,100	4,941,550	1,298,986	19,595	3,006,225
519130	Other consumer goods rental (Adjusted*)	20,569	42,381	13,460	404	26,062
INDUSTRY TOTAL		30,233,500	64,405,144	19,350,856	339,805	37,039,260

APPENDIX 1.2 CONTINUED

NAICS 500- 599: MUSIC PRODUCTION AND DISTRIBUTION | US TOTAL FINAL DEMAND 2012 - 2015

2014						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
512210	Record production	174,599	339,168	70,122	1,287	189,049
512220	Integrated record production/distribution	9,398,310	18,107,987	3,670,973	66,519	10,077,339
512230	Music publishers	4,962,664	9,629,922	1,995,736	37,169	5,342,263
512240	Sound recording studios	830,671	1,639,093	347,520	6,308	912,435
512290	Other sound recording industries	406,620	809,195	174,078	3,153	450,806
515112	Radio stations	11,651,053	27,454,908	10,730,069	185,711	16,338,043
518210	Data processing/ hosting (Adjusted**)	4,872,768	10,429,653	2,873,582	53,643	5,686,364
519130	Internet publishing, broadcasting (Adjusted***)	2,550,400	4,860,272	1,278,976	19,212	2,956,879
519130	Other consumer goods rental (Adjusted*)	21,026	43,256	13,735	413	26,611
INDUSTRY TOTAL		34,868,111	73,313,454	21,154,791	373,415	41,979,789

2015						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
512210	Record production	285,045	555,603	116,080	2,160	308,875
512220	Integrated record production/distribution	10,581,491	20,487,373	4,195,865	76,234	11,399,175
512230	Music publishers	5,525,465	10,780,352	2,259,895	42,256	5,982,257
512240	Sound recording studios	1,072,805	2,115,021	452,056	8,467	1,178,205
512290	Other sound recording industries	665,563	1,324,044	288,125	5,423	738,155
515112	Radio stations	12,760,234	30,154,894	11,860,607	207,706	17,958,561
518210	Data processing/ hosting (Adjusted**)	6,039,380	12,946,221	3,576,457	66,894	7,061,020
519130	Internet publishing, broadcasting (Adjusted***)	2,638,600	5,113,997	1,379,689	20,833	3,107,497
519130	Other consumer goods rental (Adjusted*)	26,960	55,296	17,550	530	34,037
INDUSTRY TOTAL		39,595,543	83,532,801	24,146,324	430,503	47,767,783

Note:

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

**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.

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

APPENDIX 1.3

NAICS 600- 699: MUSIC EDUCATION | US TOTAL FINAL DEMAND 2012 - 2015

2012						
NAICS CODE	NAICS MAPPING	ACTUAL RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
611610	Fine art schools (*Adjusted)	61,578	135,282	42,337	1,665	77,685
INDUSTRY TOTAL		61,578	135,282	42,337	1,665	77,685
2013						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
611610	Fine art schools (*Adjusted)	64,097	140,583	43,935	1,742	80,731
INDUSTRY TOTAL		64,097	140,583	43,935	1,742	80,731
2014						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
611610	Fine art schools (*Adjusted)	66,470	145,834	45,559	1,793	83,747
INDUSTRY TOTAL		66,470	145,834	45,559	1,793	83,747
2015						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
611610	Fine art schools (*Adjusted)	75,883	166,415	51,973	2,053	95,563
INDUSTRY TOTAL		75,883	166,415	51,973	2,053	95,563

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

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

APPENDIX 1.4

NAICS 700- 799: AGENTS, MANAGERS, PROMOTERS | US TOTAL FINAL DEMAND 2012 - 2015

2012						
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	5,054,403	11,245,676	3,556,317	137,719	6,443,508
711310	Promoters of performing arts, etc.	10,074,391	22,635,383	6,325,461	244,724	12,067,309
711410	Agents/ managers for artists, etc.	5,832,382	13,302,431	3,722,567	131,759	7,078,611
711510	Independent artists, etc.	14,959,684	31,671,118	9,123,512	218,406	18,371,290
INDUSTRY TOTAL		35,920,860	78,854,609	22,727,857	732,609	43,960,718

2013						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
711130	Musical groups and artists	4,913,165	10,928,208	3,447,756	132,346	6,260,947
711310	Promoters of performing arts, etc.	10,888,103	24,393,485	6,788,573	262,744	13,004,011
711410	Agents/ managers for artists, etc.	5,721,855	13,026,818	3,640,122	129,216	6,932,157
711510	Independent artists, etc.	14,509,158	30,754,053	8,851,500	209,631	17,832,138
INDUSTRY TOTAL		36,032,282	79,102,563	22,727,857	733,936	44,029,253

2014						
NAICS CODE	NAICS MAPPING	PROJECTED RECEIPTS (\$ Thousands)	FINAL DEMAND OUTPUT (\$ Thousands)	FINAL DEMAND EARNINGS (\$ Thousands)	FINAL DEMAND EMPLOYMENT	FINAL DEMAND VALUE ADDED (\$ Thousands)
711130	Musical groups and artists	5,168,749	11,509,884	3,639,243	140,619	6,591,942
711310	Promoters of performing arts, etc.	11,127,712	24,978,625	6,971,657	270,917	13,317,377
711410	Agents/ managers for artists, etc.	6,413,904	14,664,347	4,105,410	143,811	7,800,498
711510	Independent artists, etc.	15,761,104	33,351,314	9,581,309	226,425	19,342,500
INDUSTRY TOTAL		38,471,469	84,504,169	24,297,619	781,772	47,052,316

APPENDIX 1.4 CONTINUED

NAICS 700- 799: AGENTS, MANAGERS, PROMOTERS | US TOTAL FINAL DEMAND 2012 - 2015

2015						
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	6,449,731	14,311,289	4,514,207	175,278	8,200,728
711310	Promoters of performing arts, etc.	19,119,404	43,001,674	11,998,313	459,671	22,922,740
711410	Agents/ managers for artists, etc.	7,841,123	17,862,683	5,002,000	178,248	9,506,595
711510	Independent artists, etc.	21,233,021	44,806,421	12,892,006	314,885	26,001,593
INDUSTRY TOTAL		54,643,280	119,982,067	34,406,525	1,128,083	66,631,656

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

APPENDIX 2.0

STATE BY STATE MUSIC INDUSTRY METRICS

2012				
STATE	OUTPUT (\$ Billions)	EARNINGS (\$ Billions)	EMPLOYMENT	VALUE ADDED (\$ Billions)
California	54.9	15.6	361,237	31.2
Florida	7.9	2.6	84,351	4.6
New York	28.0	7.0	166,774	15.8
Tennessee	7.4	2.0	51,513	4.2
Texas	8.9	2.9	89,582	5.1

2013				
STATE	OUTPUT (\$ Billions)	EARNINGS (\$ Billions)	EMPLOYMENT	VALUE ADDED (\$ Billions)
California	51.9	14.8	343,490	29.5
Florida	7.1	2.3	76,933	4.0
New York	28.3	7.0	171,501	15.9
Tennessee	7.6	2.0	51,920	4.2
Texas	8.8	2.8	88,434	5.0

2014				
STATE	OUTPUT (\$ Billions)	EARNINGS (\$ Billions)	EMPLOYMENT	VALUE ADDED (\$ Billions)
California	55.7	15.9	374,508	31.6
Florida	8.0	2.6	83,176	4.6
New York	34.6	8.3	194,527	19.4
Tennessee	8.9	2.3	59,510	4.9
Texas	9.1	2.9	92,344	5.1

2015				
STATE	OUTPUT (\$ Billions)	EARNINGS (\$ Billions)	EMPLOYMENT	VALUE ADDED (\$ Billions)
California	67.8	19.0	442,488	38.3
Florida	12.7	4.0	129,471	7.3
New York	37.7	9.0	222,019	21.1
Tennessee	10.7	2.8	70,434	6.0
Texas	11.0	3.5	112,679	6.2

