



Making Noise Investigating the Economic
Significance of Oregon's
Commercial Music Sector

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PNREC @ Bend

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# **Oregon's Emerging Industries**

- 2022 Oregon Legislature authorized funding for Business Oregon to conduct analyses of emerging industries
  - Organic Agriculture and Organic Food Products
  - Cannabis
  - Commercial Music
  - Ocean Resources and the Blue Economy
  - Live Performance

## **Team**

## O NERC Research Team:

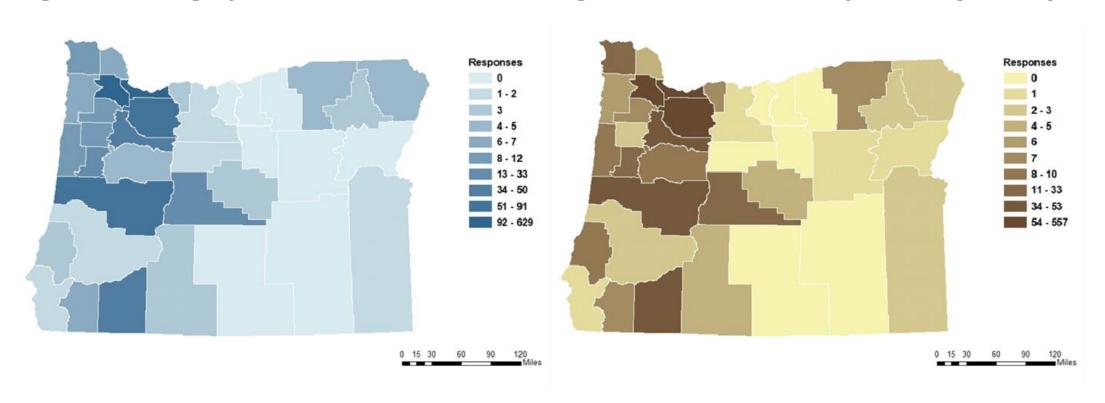
- Jenny Liu, Ph.D.
- Stephen Marotta, Ph.D.
- Emma Brophy
- Rohan Khanvilkar
- Hyeoncheol Kim
- Business Oregon
- Industry Advisory Groups







Figure 1 - Geographic distribution of 2022 Oregon Music Census responses by county

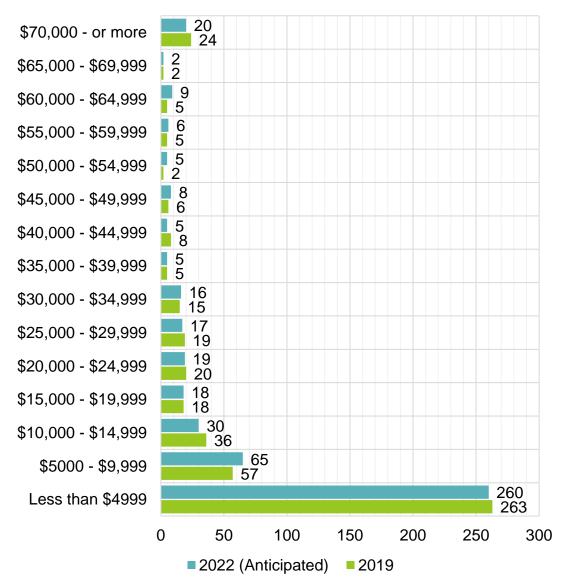


(a) Response as a musician

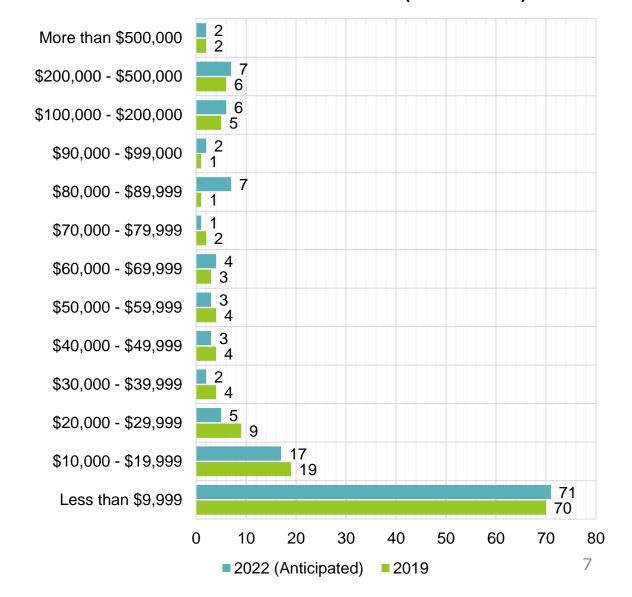
(b) Response as a music business manager



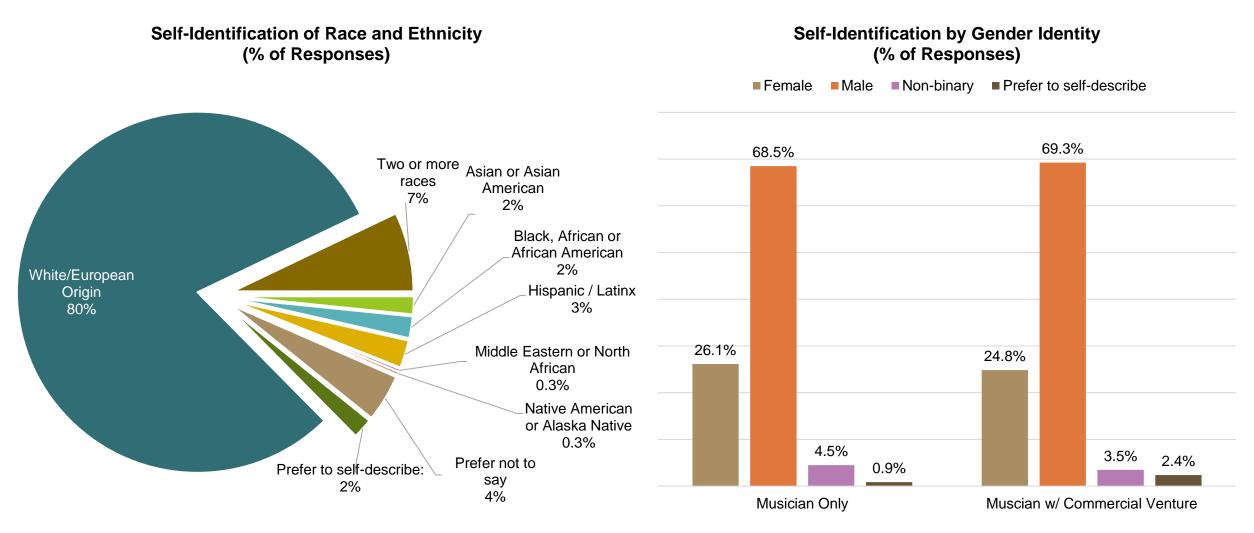
#### **Artist Estimated Gross Income (Personal)**



#### **Artist Estimated Gross Income (Whole Band)**













# **Commercial Music Industry** Conceptual **Diagram**

## **Commercial Music Industry**

## Creator



#### **Professional** Musicians

- Composers
- Performers
- Lvricists
- Vocalists
- Instrumentalists
- Other creators



#### **Music production**

- Sound recording
- Producing
- Audio engineers Mixing/Mastering
- Music arranging

## **Production of Content**

#### Instruments and Gear

- Manufacturing
- Retail
- Repair / Rental
- Music creation technology

#### **Professional** Services

- Artist
- Accounting

#### **Artist Support**

#### Creative Services

- management

- Design Video
- Screenprinting

**Conference & Trade Show** 

#### **Education**

- Music instruction
- Music camp Conservatory

Photography



### **Distribution & Marketing**

#### Distribution/Licensing

- Record label
- Publishing
- Licensing (Sync, mastering, etc.)

#### **Distribution/Monetization**

- Manufacturing
- · Merchandise (CDs, vinyl, downloads, creator's goods)
- Advertisers and promoters
- Digital service providers [DSP] (Spotify, YouTube, TIDAL, etc.)

#### Music Media

- Broadcast
- Radio
- Social media
- Digital media
- Other platforms (video, websites, etc.)





#### Live Performance

#### **Live Music**

- · Venue-related setting (venue operation, ticketing, security, etc.)
- Music venue (mixed or dedicated venue)

#### **Live Event Production**

- · Stage engineers Sound and lighting
- Promoters
- · Other production support (rehearsal, design, booking, instrument, wardrobe, etc.)



#### Miscellaneous

- Retail
- Tourism
- Transportation
- Lodging



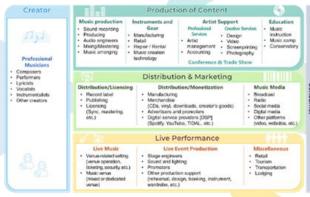
# Commercial Music Industry Conceptual Diagram to NAICS Conversion

#### **Production of Content**

Music production	lusic production Instruments and Gear		Α	rtist Support	Education	
512240 Sound Recording Studios	339992	Musical Instrument Manu.		Agents and Managers for Artists, Athletes,	611610 Fine Arts Schools	
512250 Record Production and Distribution	451140	Musical Instrument and Supplies Stores	711410	Entertainers, and Other Public Figures		
Other Sound 512290 Recording	Other Sound Electrical Apparatus and 2290 Recording 423610 Equipment, Wiring Supplies, and Related Equipment		541219	Other Accounting		
Industries		Wholesalers	541214	Payroll Services	į	
512110 Motion Picture and Video Production	453310	Used Merchandise Retailers	561499	All Other Business Support Services		
	811490	Other Personal and HH Goods	541430	Graphic Design Services		
		Repair and Maintenance	541922	Commercial Photography	1	
	532289	All Other Consumer Goods	341322	Commercial Photography		
	332203	Rental		Convention and Trade		
334310	Audio and Video Equipment Manufacturing	561920	Show Organizers			

#### Commercial Music Industry





## Distribution & Marketing Distribution/Licensing Distribution/Monetization

DIJUI	Judon, Licensing		Distribution, monetization
512230	Music Publishers	512120	Motion Picture and Video Distribution
512250	Record Production and Distribution	334610	Manufacturing and Reproducing Magnetic and Optical Media
		44-45	Retail Trade
		443142	Electronics Stores
		423990	Other Miscellaneous Durable Goods Merchant Wholesalers
	1	5418	Advertising, Public Relations, and Related Services

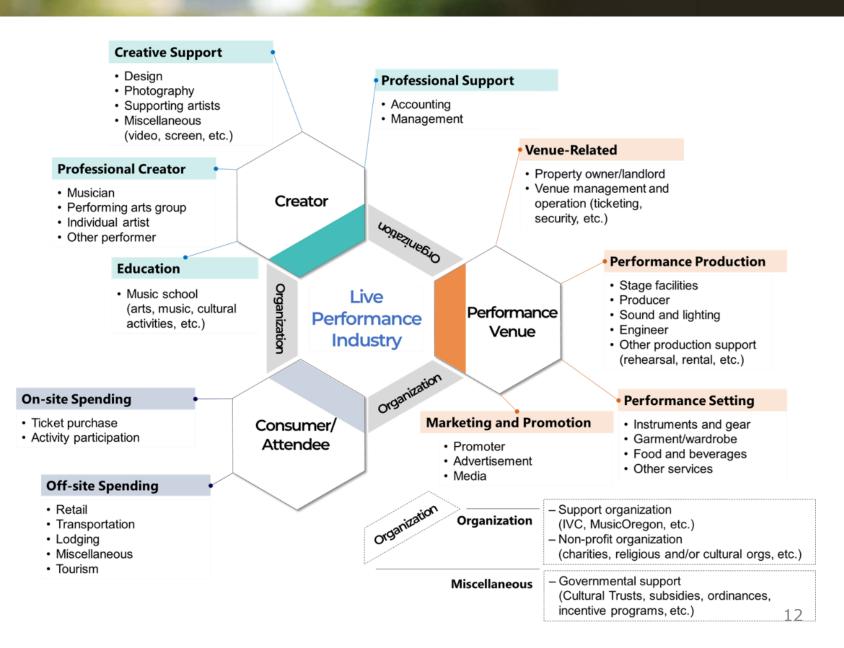
	Music Media
516110	Radio Broadcasting Stations
516120	Television Broadcasting Stations
515210	Specialty television (e.g., music) cable networks
519130	Internet Publishing and Broadcasting and Web Search Portals

#### Live Performance

Live Music		<b>Live Event Production</b>		
711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities		532490	Other Commercial and Industrial Machinery and Equipment Rental and	
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	541330	Leasing Engineering Services	
722410	Drinking Places (Alcoholic Beverages)	541490	Other Specialized Design Services	
72251	Restaurants and Other Eating Places			



## Live Performance Industry Conceptual Diagram



## Dortland State

M@RC

## Live Performance Industry Conceptual Diagram to NAICS Conversion

· Photography

Performing arts group

Individual artist.

**On-site Spending** 

Activity participation

Lodging
 Miscellaneous

Off-site Spending

Ticket purchase

Supporting artists

Music school

activities, etc.)

(arts, music, cultural

(video, screen, etc.)

Creato

Consumer

Attendee

Accounting

Performance

Industry

#### **Professional Creator**

711110 Theater Companies and Dinner Theaters

711120 Dance Companies

711130 Musical Groups and Artists

711190 Other Performing Arts Companies

711510 Independent Artists, Writers, and Performers

## Creative & Professional Support

541219 Other Accounting Services

541214 Payroll Services

541430 Graphic Design Services

541922 Commercial Photography541820 Public Relations Agencies

561499 All Other Business Support Services

561920 Convention and Trade Show Organizers

711410 Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures

#### Education

Creator

611610 Fine Arts Schools

## Performance Venue

#### **Venue & Production**

711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities

711320 Promoters of Performing Arts, Sports, and Similar Events without Facilities

722410 Drinking Places (Alcoholic Beverages)

72251 Restaurants and Other Eating Places

## Marketing & Promotion

5418 Advertising, Public Relations, and Related Services

711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities

711320 Promoters of Performing Arts, Sports, and Similar Events without Facilities

#### **Production & Performance Support**

339992 Musical Instrument Manufacturing

334310 Audio and Video Equipment Manufacturing

334613 Blank Magnetic and Optical Recording Media Manufacturing[3]

334614 Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing and Reproducing Magnetic and Optical Media

423610 Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers

423990 Other Miscellaneous Durable Goods Merchant Wholesalers

443142 Electronics Stores

451140 Musical Instrument and Supplies Stores

453310 Used Merchandise Retailers

532289 All Other Consumer Goods Rental

532490 Other Commercial and Industrial Machinery and Equipment Rental and Leasing

541330 Engineering Services

541490 Other Specialized Design Services

811490 Other Personal and Household Goods Repair and Maintenance

Property owner/landlord

Venue management and

Stage facilities

Sound and lighting

· Other production support

Instruments and near

Garment/wardrobe

Food and beverages

(charities, religious and/or cultural orgs, etc.)

(Cultural Trusts, subsidies, ordinance)

· Other services

(IVC, MusicOregon, etc.)

Non-profit organization

security, etc.)



# **Data Processing**

1. QCEW establishment level data (2017-2021)

2. MusicOregon industry ecosystem → Industry Conceptual Diagram → NAICS industry codes

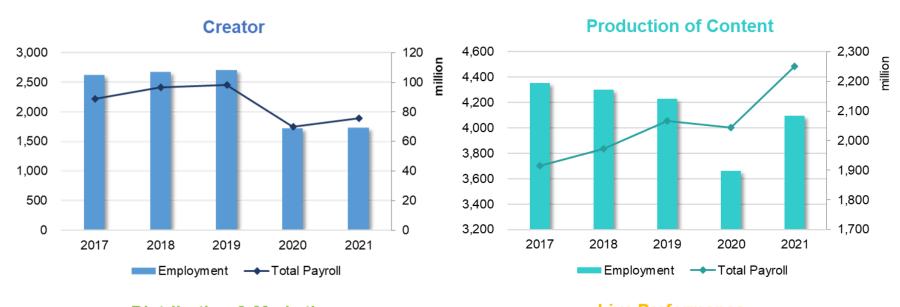
3. Match MusicOregon and IVC database with QCEW establishment list

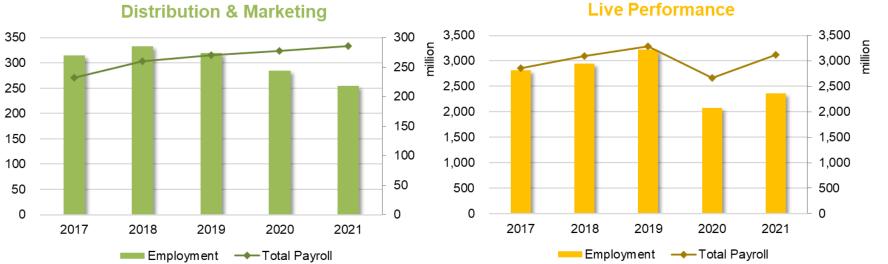
4. Categorize NAICS sectors that fully or partially belong to Commercial Music or Live Performance Industries

5. Manual filtering of major NAICS sectors



## Commercial Music – Trends of Employment and Wages by Sector





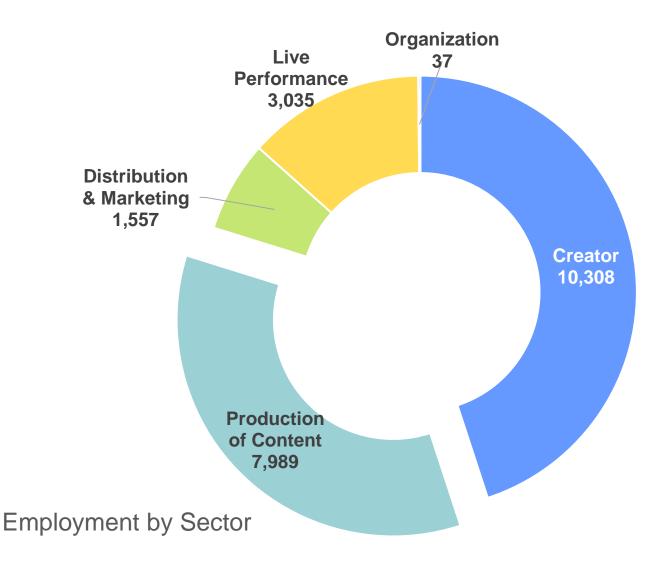


## **Commercial Music Industry – Economic Impact Analysis**

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

#### Attendee off-site spending rough estimates

	Impact Type	Employment	Labor Income	Total Value Added	Output
cial	Direct	2,940	\$106,565,028	\$160,511,033	\$276,229,170
ierci 7e man	Indirect	551	\$40,050,385	\$60,025,050	\$110,876,624
Commerc Live Performal	Induced	663	\$40,084,627	\$69,232,696	\$116,594,970
ပို့ မြ	Total	4,154	\$186,700,039	\$289,768,779	\$503,700,764
<b>=</b> _	Direct	3,532	\$128,233,457	\$191,410,003	\$329,227,014
orofit and ture	Indirect	654	\$47,714,795	\$71,581,038	\$132,287,638
Non-F Arts Cult	Induced	796	\$48,112,786	\$83,098,794	\$139,947,099
Z	Total	4,981	\$224,061,038	\$346,089,834	\$601,461,750





# **Qualitative Research Findings**

- Music communities/networks are the primary strength
  - E.g., networks can accelerate businesses
- Pay/wages (esp. for performers) is the primary challenge
  - Wages stagnant since 1980s
  - Performers absorb costs (e.g. travel)
- Venue-related challenges
  - All ages venues; rising costs; licensing; noise ordinances/abatements; contracting; parking
- COVID-19-related closures
  - Many challenges (performers/venues), some opportunities (manufacturers)

# **Key Takeaways**





## **Opportunities and Strategies**

- Establishment of an Oregon Music Office
  - Interface with policy makers at local and state levels
  - Coordinate with future researchers and data collectors
  - Foster community building within industry
  - Facilitate grant or permit applications
  - Assist in ordinance compliance or contracting
- Grants and incentives may be necessary
- Ongoing research in both qualitative and quantitative fronts to build on this baseline study



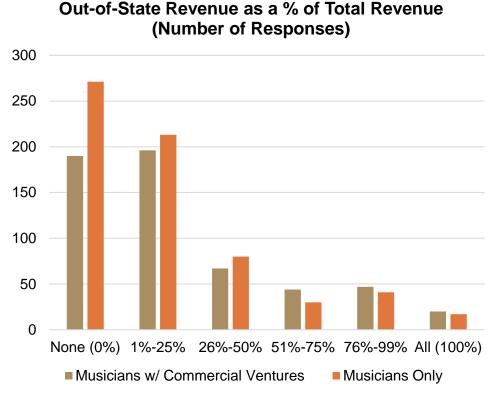


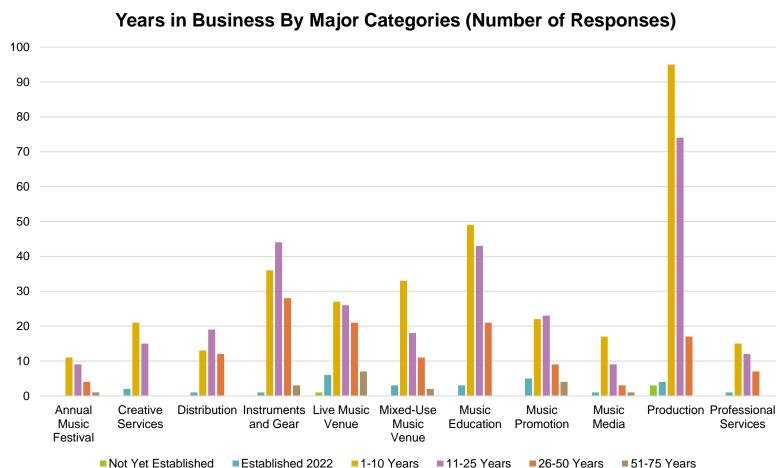
Thank you! Jenny H. Liu, Ph.D. jenny.liu@pdx.edu

Figure 4 - Distribution of Gross Personal Income by Gender Identity (for 2022)











## Commercial Music – Growth Subsector Identification & Occupational Analysis

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

Statewide   00-0000   Total, All Occupations   1,825,369   27%   \$29.56	\$ 52,512.00 \$ 48,494.00 -s- \$ -s- \$ \$ 81,443.00 \$ 48,592.00 \$ 54,117.00 \$ 36,888.00
27-2041   Music Directors and Composers   484.56   84%   \$23.31	\$ 48,494.00 -s- -s- \$ 81,443.00 \$ 48,592.00 \$ 54,117.00 \$ 36,888.00
27-2042 Musicians and Singers 514.96 220% \$34.00 27-2099 Entertainers and Performers, Sports and Related Workers, All Other 44.22 -s-\$23.82 27-2012 Producers and Directors 1,353.9 41% \$39.16 27-4011 Audio and Video Technicians 416.81 163% \$23.36 27-4014 Sound Engineering Technicians 147.11 115% \$26.01 39-3021 Motion Picture Projectionists -s-\$25.01 49-2097 Audiovisual Equipment Installers and Repairers -s-\$22.56	-s- -s- -s- -s- -s- -s- -s- -s- -s- -s-
27-2099     Entertainers and Performers, Sports and Related Workers, All Other     44.22     -s-     \$ 23.82       27-2012     Producers and Directors     1,353.9     41%     \$ 39.16       27-4011     Audio and Video Technicians     416.81     163%     \$ 23.36       27-4014     Sound Engineering Technicians     147.11     115%     \$ 26.01       39-3021     Motion Picture Projectionists     -s-     -s-     \$ 17.74       49-2097     Audiovisual Equipment Installers and Repairers     -s-     -s-     \$ 22.56	\$ 1,443.00 \$ 48,592.00 \$ 54,117.00 \$ 36,888.00
27-2099     Entertainers and Performers, Sports and Related Workers, All Other     44.22     -s-     \$ 23.82       27-2012     Producers and Directors     1,353.9     41%     \$ 39.16       27-4011     Audio and Video Technicians     416.81     163%     \$ 23.36       27-4014     Sound Engineering Technicians     147.11     115%     \$ 26.01       39-3021     Motion Picture Projectionists     -s-     -s-     \$ 17.74       49-2097     Audiovisual Equipment Installers and Repairers     -s-     -s-     \$ 22.56	\$ \$81,443.00 \$ \$48,592.00 \$ 54,117.00 \$ 36,888.00
27-4011       Audio and Video Technicians       416.81       163%       \$ 23.36         27-4014       Sound Engineering Technicians       147.11       115%       \$ 26.01         39-3021       Motion Picture Projectionists       -s-       -s-       \$ 17.74         49-2097       Audiovisual Equipment Installers and Repairers       -s-       -s-       \$ 22.50	\$ 48,592.00 \$ 54,117.00 \$ 36,888.00
27-4014       Sound Engineering Technicians       147.11       115%       \$ 26.01         39-3021       Motion Picture Projectionists       -s-       -s-       \$ 17.74         49-2097       Audiovisual Equipment Installers and Repairers       -s-       \$ 22.50	\$ 54,117.00 \$ 36,888.00
39-3021 Motion Picture Projectionists -s- \$ 17.74 49-2097 Audiovisual Equipment Installers and Repairers -s- \$ 22.50	\$ 36,888.00
49-2097 Audiovisual Equipment Installers and Repairers -s- \$22.50	
	\$ 46,802.00
49-9063 Musical Instrument Repairers and Tuners -ss- \$ 20.90  13-1011 Agents and Business Managers of Artists, Performers, and Athletes -ss- \$ 42.23	
Agents and Business Managers of Artists, Performers, and Athletes -s- \$42.23	\$ 43,623.00
3 0 10011 1 1011	\$ 87,837.00
7 13-2011 Accountants and Auditors 13,240.55 17% \$38.49	\$ 80,069.00
27-1021 Commercial and Industrial Designers 363.48 84% \$41.71	\$ 86,761.00
27-1024 Graphic Designers 3,002.29 41% \$28.30	\$ 58,876.00
27-4021 Photographers 431.22 321% \$ 26.57	\$ 55,263.00
13-1121 Meeting, Convention, and Event Planners 1,368.2 26% \$28.24	\$ 58,742.00
25-1121 Art, Drama, and Music Teachers, Postsecondary 903.6 17% -s-	\$ 90,108.00
25-3099 Teachers and Instructors, All Other 2,255.68 -ss-	\$ 64,539.00
11-2032 Public Relations Managers 909.52 -s- \$51.62	\$ 107,383.00
27-1011 Art Directors 720.04 277% \$57.63	\$ 119,868.00
27-3031 Public Relations Specialists 3,322.72 7% \$ 33.08	\$ 68,799.00
50 11-2011 Advertising and Promotions Managers 322.44 7% \$50.57	\$ 105,184.00
27-4032 Film and Video Editors 301.18 78% \$ 28.48	\$ 59,245.00
27-3011 Broadcast Announcers and Radio Disc Jockeys 199.98 -s- \$ 26.36	\$ 54,829.00
11-2011   Advertising and Promotions Managers   3,322.12   7%   \$33.00	\$ 49,579.00
27-4012 Broadcast Technicians 181.31 -23% \$ 28.83	\$ 59,977.00
27-4099 Media and Communication Equipment Workers, All 198.69 -s- \$27.42	\$ 57,050.00
11-9072 Entertainment and Recreation Managers, Except Gambling 239.54 -s- \$ 33.56	\$ 69,801.00
33-9032 Security Guards 8,914.62 28% \$17.87	\$ 37,172.00
39-1014 First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services 512.33 -s- \$25.92	\$ 53,910.00
39-3031 Ushers, Lobby Attendants, and Ticket Takers 391.46 81% \$15.80	\$ 32,918.00
Recreation Workers, Except Gambling Services  39-3031 Ushers, Lobby Attendants, and Ticket Takers  39-3099 Entertainment Attendants and Related Workers, All 75.59 142% \$20.00 Other	\$ 41,612.00
43-3031 Bookkeeping, Accounting, and Auditing Clerks 22,713.51 2% \$23.20	\$ 48,268.00
27-1014 Special Effects Artists and Animators 250.59 316% \$44.50	\$ 92,547.00
27-1027 Set and Exhibit Designers 65.81 -s- \$ 39.16	\$)85,451.00
27-4015 Lighting Technicians 102.02 -ss-	25 -s-

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