

# Inclusion in the Recording Studio?

Gender and Race/Ethnicity of  
Artists, Songwriters & Producers  
across 1,000 Popular Songs  
from 2012-2021

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**USC** Annenberg  
*Inclusion Initiative*



# INCLUSION IN THE RECORDING STUDIO?

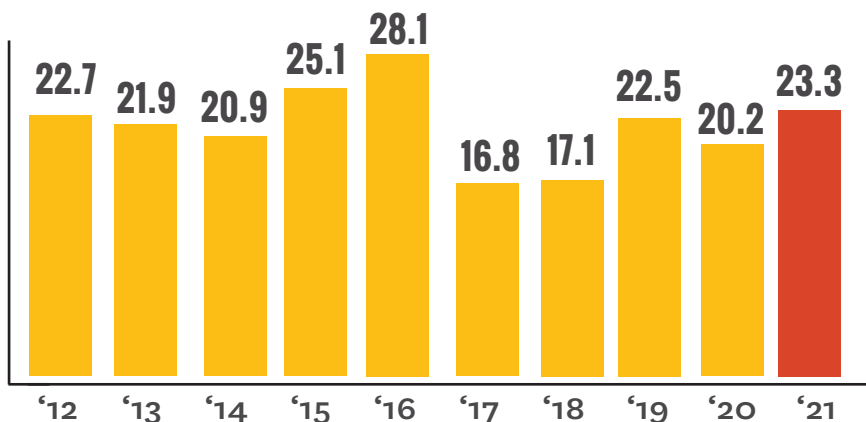
## EXAMINING 1,000 POPULAR SONGS FROM 2012 TO 2021

USC ANNEBERG INCLUSION INITIATIVE



### WOMEN ARE MISSING IN POPULAR MUSIC

Percentage of women out of all artists across 1,000 songs



TOTAL NUMBER OF SONGS **1,000**

TOTAL NUMBER OF ARTISTS **1,977**

RATIO OF MEN TO WOMEN

**3.6:1**



### FOR WOMEN, MUSIC IS A SOLO ACTIVITY

Across 1,000 songs, percentage of women out of...



ALL ARTISTS

(n=430)



INDIVIDUAL ARTISTS

(n=381)



DUOS

(n=9)



BANDS

(n=40)

### WOMEN ARE PUSHED ASIDE AS PRODUCERS



THE RATIO OF MEN TO WOMEN PRODUCERS  
ACROSS 700 POPULAR SONGS WAS

**35 to 1**

The prevalence of women producers was evaluated out of 700 songs reflecting the Billboard Hot 100 Year-End Charts from 2012, 2015 & 2017-2021.

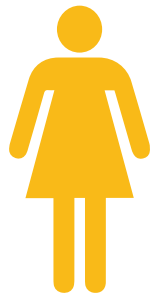
## WRITTEN OFF: FEW WOMEN WORK AS SONGWRITERS

Songwriter gender by year...

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
	11%	11.7%	12.7%	13.7%	13.3%	11.5%	11.6%	14.4%	12.9%	14.4%	12.7%
	89%	88.3%	87.3%	86.3%	86.7%	88.5%	88.4%	85.6%	87.1%	85.6%	87.3%

## WOMEN ARE MISSING IN THE MUSIC INDUSTRY

Percentage of women across three creative roles...



**21.8%**  
ARE  
ARTISTS



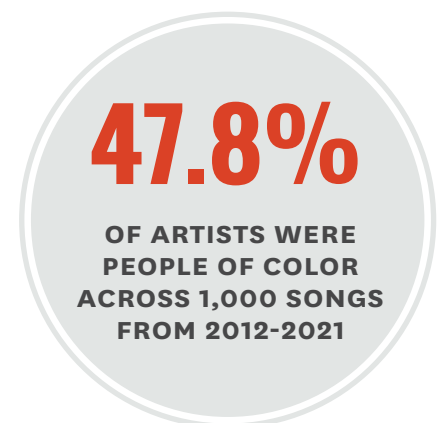
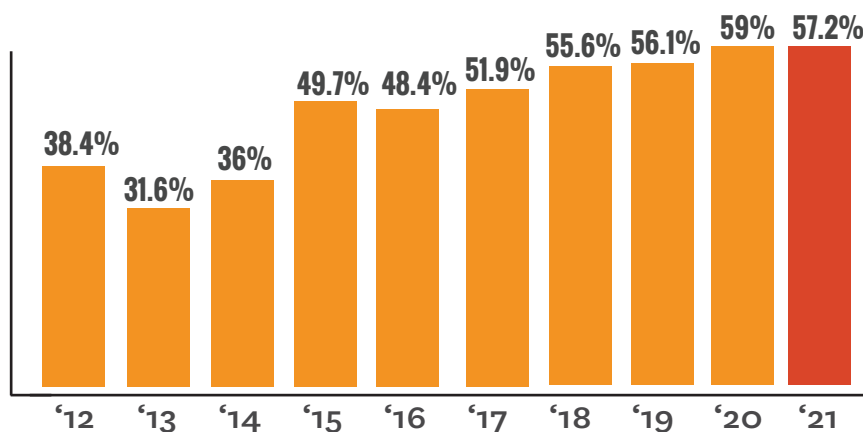
**12.7%**  
ARE  
SONGWRITERS



**2.8%**  
ARE  
PRODUCERS



## VOICES HEARD: ARTISTS OF COLOR ACROSS 1,000 SONGS

Percentage of artists of color by year...



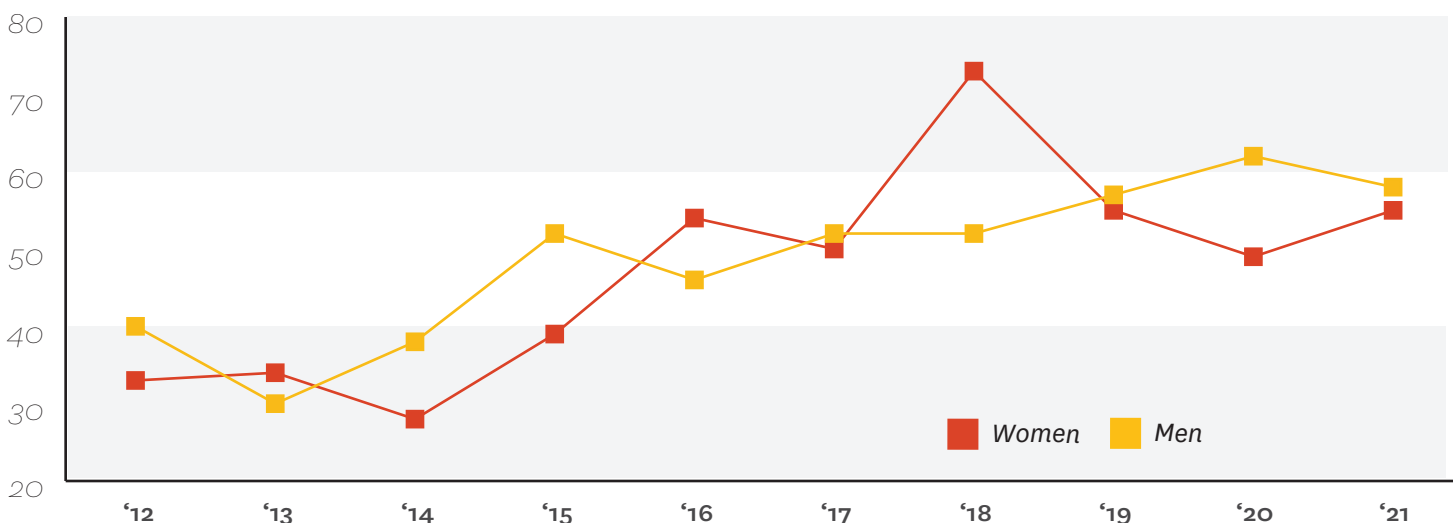
## CREATIVE CONSTRAINTS: FEW WOMEN PRODUCERS WORK IN MUSIC

Percentage of men and women producers by year...

	2012	2015	2017	2018	2019	2020	2021	TOTAL
	97.6%	98.2%	98.2%	97.7%	95%	98%	96.1%	97.2%
	2.4%	1.8%	1.8%	2.3%	5%	2%	3.9%	2.8%

## MEN AND WOMEN OF COLOR CLIMB THE CHARTS

Percentage of underrepresented men and women artists by year...



## WOMEN OF COLOR ARE INVISIBLE AS PRODUCERS

**10** OUT OF **1,567** PRODUCING CREDITS WENT TO WOMEN OF COLOR

The prevalence of women producers was evaluated out of 700 songs reflecting the Billboard Hot 100 Year-End Charts from 2012, 2015 & 2017-2021.

# CREDITS & DEFICITS: MEN OUTPACE WOMEN IN SONGWRITING

Leading men and women songwriters by number of credits...

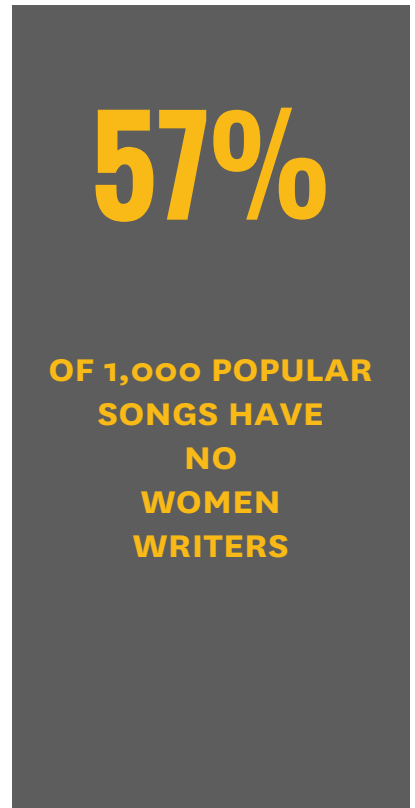
THE TOP MALE WRITER HAS  
**47**  
CREDITS  
THE TOP WOMAN WRITER HAS  
**19**  
CREDITS  
ACROSS 1,000 POPULAR SONGS FROM 2012-2021

Top Men Songwriters	# of credits	Top Women Songwriters	# of credits
Aubrey Graham (Drake)	47	Onika Maraj (Nicki Minaj)	19
Martin Sandberg (Max Martin)	46	Taylor Swift	16
Lukasz Gottwald (Dr. Luke)	28	Ariana Grande	16
Benjamin Levin (Benny Blanco)	26	Robyn Fenty (Rihanna)	14
Savan Kotecha	24	Belcalis Almanzar (Cardi B)	14
Henry Walter (Cirkut)	24	Katheryn Hudson (Katy Perry)	9
Justin Bieber	24	Selena Gomez	9
Johan Schuster (Shellback)	21	Megan Pete (Megan Thee Stallion)	9
Dijon McFarlane (DJ Mustard)	19		
Jacob Hindlin (JKash)	18		

The top 10 male songwriters are responsible for 22.4% of the 1,000 most popular songs from 2012 to 2021.

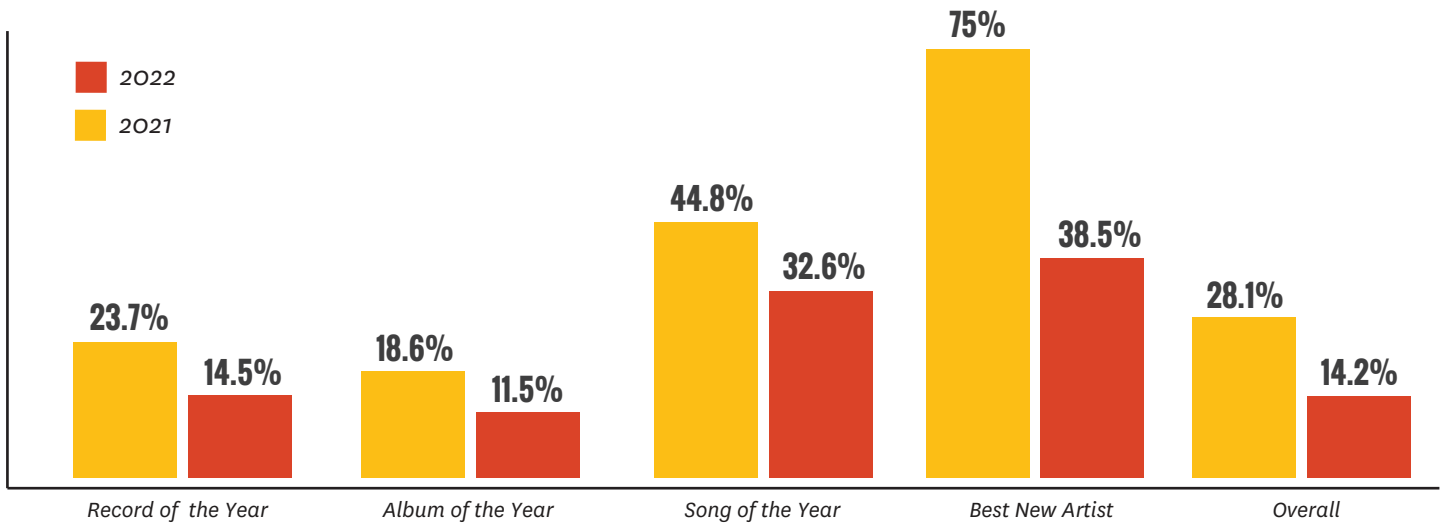
## LINER NOTES LACK WOMEN SONGWRITERS

Women songwriters across 1,000 popular songs...



## WOMEN SLUMP IN KEY CATEGORIES

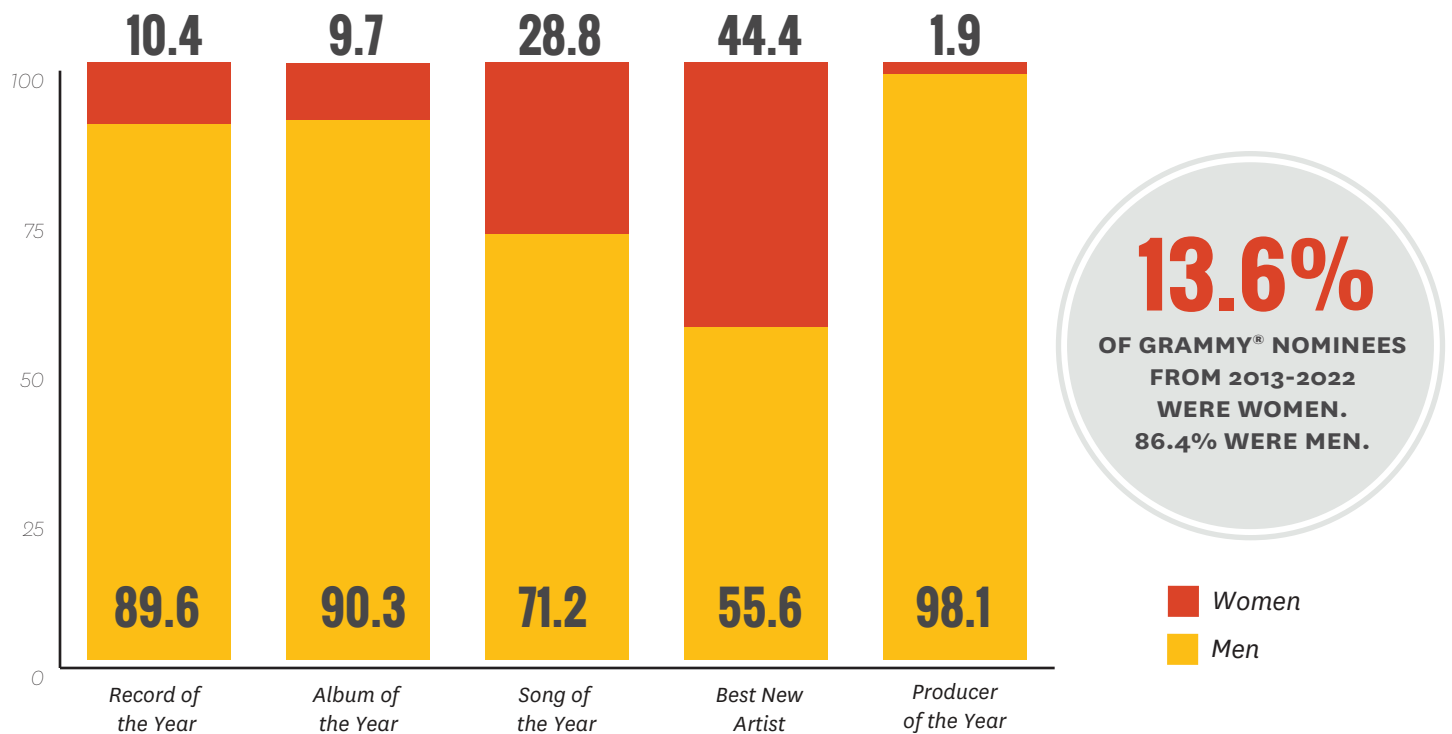
Compared to 2021, the percentage of women nominees in 2022...



Producer of the Year nominations are included in the overall total. There were no women nominated for Producer of the Year in 2021 or 2022.

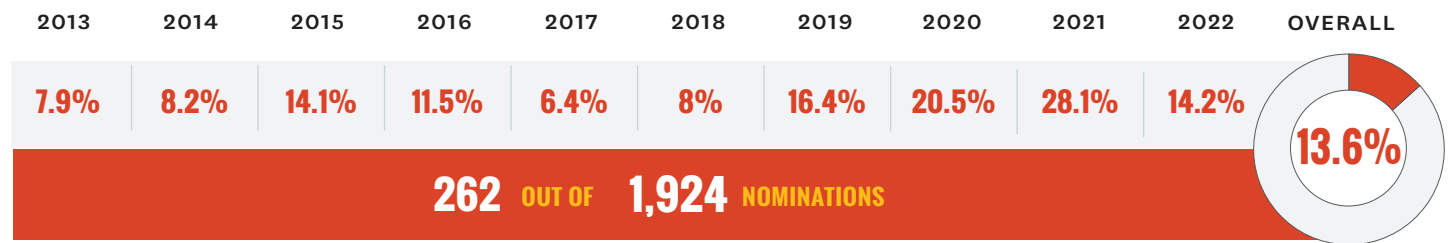
## THE GENDER GAP AT THE GRAMMYS® IS REAL

Percentage of Women Nominees by Category, 2013-2022



# WOMEN GRAMMY® NOMINEES OVER TIME

Women Grammy® Nominees by Year, 2013-2022



## ARE WOMEN PRODUCERS & ENGINEERS IN THE MIX?

Evaluating women producers & engineers on popular songs in 2021

4

WOMEN IN THE MIX PLEDGE-TAKERS WORKED WITH A WOMAN **PRODUCER** IN 2022 ON A BILLBOARD HOT 100 YEAR-END SONG

5

WOMEN IN THE MIX PLEDGE-TAKERS WORKED WITH A WOMAN **ENGINEER** IN 2022 ON A BILLBOARD HOT 100 YEAR-END SONG

THE WOMEN IN THE MIX PLEDGE HAS HAD LITTLE IMPACT FOR WOMEN PRODUCERS AND ENGINEERS ON THE YEAR'S MOST POPULAR SONGS.

**Inclusion in the Recording Studio?  
Gender & Race/Ethnicity of Artists, Songwriters, & Producers across 1,000 Popular Songs  
from 2012 to 2021**

Annenberg Inclusion Initiative  
USC

**Key Findings**

This is the fifth annual report from the Annenberg Inclusion Initiative to examine industry inclusion across the Billboard Hot 100 Year-End Chart. This study examines gender and race/ethnicity of artists, songwriters, and producers credited across 1,000 songs on this popular chart from 2012 to 2021. We also evaluate demographic characteristics of Grammy nominees receiving recognition in the categories of Record of the Year, Album of the Year, Song of the Year, Best New Artist, and Producer of the Year. Further, we assess the efficacy of the Women in the Mix pledge for women producers and engineers on the Billboard Hot 100 Year-End Charts. Throughout the report, only differences of 5 percentage points or greater are noted.

**Artist Gender.** There were 180 artists on the Billboard Hot 100 Year-End Chart in 2021; 76.7% were men and 23.3% were women. No artists identified as gender non-conforming or non-binary in 2021. Across all ten years evaluated, 78.2% of artists were men and 21.8% were women.

There was no significant difference between 2020 (20.2%) and 2021 (23.3%) in the percentage of women artists. Additionally, the percentage of women artists on the chart in 2021 was not significantly different from 2012 (22.7%). The peak for women artists was in 2016, when 28.1% of all artists on the charts were women.

The **genre** of all 1,000 songs was evaluated. Pop music was most likely to feature women artists (32%) over the last 10 years. Women were least likely to appear on the chart in hip-hop/rap (12.3%), where 7.1 male artists charted for every 1 female artist.

**Artist type** was also evaluated: solo artists; duos; and bands. Of the *solo artists* across 1,000 songs and 10 years, 30% were women. In 2021, women comprised 30.6% of solo artists, up from 22.5% in 2020 but still less than the high of 35.8% in 2012.

There were few women sample-wide who were part of a *duo* (6.7%), and in 2021, there were no women duo members. Women were also scarce as band members. Fewer than 10% of artists in *bands* were women across the 10-year sample (7%), and 2.6% of band members in 2021 were women.

The majority of men (54.4%) and women solo artists (52.8%) charted for a single song over the last decade. Overall, two-thirds of all artists, regardless of gender identity, released two or fewer songs that appeared on the Billboard Hot 100 Year-End Chart in the past decade.

**Artist Race/Ethnicity.** In 2021 57.2% of artists were from an underrepresented racial/ethnic group and 42.7% were white. The percentage of underrepresented artists in 2021 dropped 1.8 percentage points from the 10-year high in 2020 (59%), and reflects an 18.8 percentage point increase from 2012 (38.4%). Overall, 47.8% of artists in the 10-year sample were from an underrepresented racial/ethnic group and 52.2% were white.



Across 10 years, 37.9% of artists were underrepresented men and 10% of artists were underrepresented women. Over time, underrepresented men artists saw a slight decrease of 4 percentage points from 62% of men artists in 2020 to 58% in 2021. For underrepresented women, 2021 saw a 6-percentage point increase from 49% of women artists in 2020 to 55% in 2021. In other words, 48% of men artists were underrepresented, while 46% of women artists were underrepresented.

Underrepresented artists were more likely than white artists to be on the charts under R&B/Soul (91.4%) and Hip-Hop/Rap (88.1%).

A majority of underrepresented artists were solo performers (61.2%), followed by duos (29.1%) and bands (22.6%). Similar to previous years, underrepresented solo artists (49.8%) were still less likely to have a singular song on the charts compared to their white counterparts (59.6%). However, there were no differences across any other category, including at the top: 13.7% of underrepresented artists had more than six songs on the chart, while 12.9% of white artists charted the same number of times.

**Songwriters & Producers.** 4,796 songwriters were credited across all 10 years. In 2021, 85.6% of songwriters were men compared to 14.4% who were women. Men outpaced women in this role overall, as women comprised only of 12.7% of the songwriter population across the 10 years studied, a ratio of 6.8 men to every 1 woman songwriter.

More women of color than white women wrote songs that appeared on the Billboard Hot 100 Year-End Chart in 2021, which reverses a drop for underrepresented women observed in 2020. However, 2021 is still below the 10-year-high of 44 women of color witnessed in 2019. For white women, the previous three years have shown little change.

Women were more likely to appear as songwriters on Dance/Electronic songs (20.5%) and Pop songs (19.1%) and least likely to work on Hip-Hop/Rap (6.4%) and R&B/Soul (9.4%) songs.

Both men and women were equally as likely to release one song that appeared on the Billboard Hot 100 Year-End Charts and were just as likely to have 6 or more songs throughout the sampled time frame. However, the top 10 men songwriters are responsible for writing 22.4% of the songs in the 10-year sample.

The sample was divided into two categories: songs that included women and songs that did not. In 2021 more than half of the songs across the Billboard Hot 100 Year-End Chart had no women songwriters (53%). Across the 10-year sample, only 4 songs omitted men entirely (<1%) while 516 songs had no women songwriters (57%).

Producers were collected and analyzed for 2012, 2015, and 2017-2021. In 2021, there were 231 producers across the sample. Of those, 3.9% were women and 96.1% were men.

Overall, across a total of 1,523 producing credits in the 7-year sample, 97.2% went to men and 2.8% to women. This is a ratio of 35.2 men to every 1 woman producer.

Forty-two women were credited as producers across the 7-year sample, and only 10 were women of color. Of these women, only 1 was credited in 2021 as a producer: Mariah Carey, whose 1994 hit song *All I Want for Christmas is You* remained on the Billboard Hot 100 Year-End Chart in 2021 after charting

in 2020, 26 years after its original release. Thus, not one woman of color was credited as a producer on a song released in 2021 that made the Hot 100 Year End Chart in the same year.

Over the 7-year period evaluated, 34 songs had at least one woman producer, reflecting 5.2% of songs in the sample. This means that 94.8% of songs reaching the Billboard Hot 100 Year-End Charts across 7 years had no women producers credited.

At the individual level, 24 women received at least one producing credit across the full sample. Only 7 of the 24 individual women producers were women of color. The ratio of men producers to underrepresented women producers across the 7-year time frame is 148.1 to 1.

**Women in the Mix Pledge.** There were 25 individuals across the 2021 Billboard Hot 100 Year-End Chart who took the Women in the Mix pledge to work with a woman producer or engineer. Of these 25, only 4 were credited for working with a female producer. The Weeknd and Max Martin worked alongside fellow pledge-taker Ariana Grande, who produced her own song, *Save Your Tears*. Ron Perry worked alongside producer Jenna Andrews on *Butter*.

Of the 25 pledge takers in the 2021 sample, 5 worked with a woman engineer on a *song* included in the Billboard Hot 100 Year-End Chart. One of the women engineers was a pledge taker (Ariana Grande). In addition to Ariana Grande, the other four pledge-takers who worked with a woman engineer were Justin Bieber, Dave Cobb, Max Martin and The Weeknd. Of these men, two worked with Ariana Grande (Max Martin, The Weeknd). Justin Bieber was a featuring artist on The Kid Laroi's, *Stay*, which was engineered by Heidi Wang. Dave Cobb worked with Gena Johnson on the song *Starting Over*.

From these results, it is difficult to see how the Women in the Mix pledge has impacted the ranks of women producers or engineers on some of the most profitable songs in the industry. While the pledge may facilitate women's involvement in less popular songs, women still are not reaching the top of the industry as producers and engineers.

**Grammy® Awards.** In total 1,924 individuals were nominated for a Grammy® Award between 2013 and 2022 in the categories of Record of the Year, Album of the Year, Song of the Year, Best New Artist, and Producer of the Year.

85.8% of the 2022 nominees in these five categories were men and 14.2% were women. This is a ratio of 6.1 men nominated to every 1 woman nominee. 2022 saw a significant dip in the number of women nominated across these 5 major categories compared to 2021, though it is still significantly higher than 2013. Overall, women represent 13.6% of nominees across 5 major Grammy® categories over the past 10 years.

Women were more likely to be nominated for Best New Artist (44.4%) and Song of the Year (28.8%). On the other hand, they comprised the lowest percentage of nominees in the Producer of the Year (1.9%) and Album of the Year (9.7%) categories.

Of the 262 women nominated in these five categories over the past decade, 55.7% were white and 44.3% were from an underrepresented racial/ethnic group.

Of all the categories examined, women of color were least likely to be nominated for Song of the Year; in this category white women (66.2%) were almost twice as likely to be nominated as women of color

(33.8%). There was no difference by race/ethnicity in the Best New Artist category, in which there was a 50/50 split between white and underrepresented women nominees.

The disparity between men and women in the number of nominations received over the past decade was evaluated by assessing individual or unique nominees. The sample size for this analysis dropped to 1,058 unique nominees. Of these 86.8% were men and 13.2% were women. This is a ratio of 6.6 men to every one woman nominated.

Men were more likely than women to receive at least one nomination in the last 10 years. On the other hand, women were more likely (36.4%) than men (30.6%) to receive more than one nomination. That said, there is a disparity in the range of nominations going to men versus women. The most frequently nominated man (Serban Ghenea) was nominated a total of 21 times across all 10 years, while the highest nominated woman (Taylor Swift) had a total of 11 nominations in the same time frame.

Of the 140 individual women nominated for a Grammy®, 54.3% (were white and 45.7% were underrepresented. Overall, underrepresented women made up 37.5% of nominees with 2 or more nominations, on par with their white counterparts (35.5%). The most frequently nominated white woman was Taylor Swift, who earned the most nominations for women regardless of race (11) while the highest nominated woman of color was H.E.R. (8).

**Inclusion in the Recording Studio?  
Gender & Race/Ethnicity of Artists, Songwriters, & Producers across 1,000 Popular Songs  
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Each year, the Annenberg Inclusion Initiative assesses industry inclusion across the Billboard Hot 100 Year-End Chart.<sup>1</sup> Longitudinally, this investigation has examined gender and race/ethnicity of artists, songwriters, and producers credited across 1,000 songs on this popular chart from 2012 to 2021.<sup>2</sup> During the same time frame, we evaluated demographic characteristics of Grammy® nominees receiving recognition in the following categories: Record of the Year, Album of the Year, Song of the Year, Best New Artist, and Producer of the Year.<sup>3</sup>

Additionally, it has been important to also evaluate the efficacy of inclusion initiatives in the music business. Similar to previous reports in 2019 and 2020, we focus here on evaluating the Women in the Mix initiative by the Recording Academy and whether pledges made by those in the music industry to work with women producers and engineers converted to actual employment opportunities. In the past years, this Initiative has been completely ineffective.

There are five sections in this report. The first covers gender and underrepresented racial/ethnic status (yes/no) for artists, focusing overall on inclusion by genre and credit type (i.e., solo, duo, band). Second, we present demographic results on songwriters and producers. Third, we focus on the Women in the Mix initiative. Fourth, we recap findings of the Grammy® analysis. Ultimately, we offer study conclusions and a set of recommendations to create change.

Throughout the report, as with all Initiative investigations, we note only differences of 5 percentage points or greater. This emphasizes meaningful deviations rather than trivial percentage point fluctuations (1-2%). Comparisons first focus on differences between 2021 and 2020, then on select measures we look at over time trends between 2021 and 2012. The footnotes provide additional details on the methods and procedures used in this investigation.<sup>4</sup>

### **Artists**

**Gender.** There were 180 artists on the Billboard Hot 100 Year-End Chart in 2021. A total of 76.7% ( $n=138$ ) of artists were men and 23.3% ( $n=42$ ) were women. No artists identified as gender non-conforming or non-binary in 2021.

Table 1 displays how artist gender varied over time. There was no significant difference between 2020 (20.2%) and 2021 (23.3%) in the percentage of women artists. Additionally, the percentage of women artists on the chart in 2021 was not significantly different from 2012 (22.7%). The peak for women artists was in 2016, when 28.1% of all artists on the charts were women. 2021 was 4.9 percentage points below this point statistic. Across all 10 years, the percentage of women artists did not approach the percentage of women in the U.S population (51%).<sup>5</sup>

**Table 1**  
**Artist Gender by Year**

Year	Men	Women	Ratio
2012	77.3% (n=153)	22.7% (n=45)	3.4 to 1
2013	78.1% (n=168)	21.9% (n=47)	3.6 to 1
2014	79.1% (n=178)	20.9% (n=47)	3.8 to 1
2015	74.9% (n=146)	25.1% (n=49)	3 to 1
2016	71.9% (n=138)	28.1% (n=54)	2.6 to 1
2017	83.2% (n=178)	16.8% (n=36)	4.9 to 1
2018	82.9% (n=179)	17.1% (n=37)	4.8 to 1
2019	77.5% (n=131)	22.5% (n=38)	3.4 to 1
2020	79.8% (n=138)	20.2% (n=35)	3.9 to 1
2021	76.7% (n=138)	23.3% (n=42)	3.3 to 1
<b>Total</b>	<b>78.2% (n=1,547)</b>	<b>21.8% (n=430)</b>	<b>3.6 to 1</b>

We also assessed whether artist gender varied by song *genre*. We used iTunes designations to determine song genre and collapsed categories with very small sample sizes into one of the classifications in Table 2.<sup>6</sup> Across all 1,000 songs, pop music was most likely to feature women artists (32%) over the last 10 years. Women were least likely to appear on the chart in hip-hop/rap (12.3%), where 7.1 male artists charted for every 1 female artist.

**Table 2**  
**Song Genre by Artist Gender**

Genre	Men	Women	Gender Ratio
Pop	68% (n=526)	32% (n=247)	2.1 to 1
Hip-Hop	87.7% (n=491)	12.3% (n=69)	7.1 to 1
Alternative	85.8% (n=200)	14.2% (n=33)	6.1 to 1
Country	80.7% (n=142)	19.3% (n=34)	4.2 to 1
R&B/Soul	81.9% (n=86)	18.1% (n=19)	4.5 to 1
Dance/Electronic	78.5% (n=102)	21.5% (n=28)	3.6 to 1

*Artist type* was also evaluated using three categories for credited artists: those who headlined or featured on a song as a solo artist; those who were members of a duo; and those in a band.<sup>7</sup> Of the solo artists across 1,000 songs and 10 years, under one-third were women (30%). In 2021, women comprised 30.6% of solo artists, up from 22.5% in 2020 but still less than the high of 35.8% in 2012.

**Table 3**  
**Percentage of Women Artists by Performer Type**

Year	Individual Artist	Duo	Band
2012	35.8% (n=39)	16.7% (n=1)	6% (n=5)
2013	33.3% (n=37)	10% (n=2)	9.5% (n=8)
2014	35.8% (n=43)	0	4.6% (n=4)
2015	30.8% (n=41)	10% (n=1)	13.5% (n=7)
2016	35.3% (n=43)	0	22.9% (n=11)
2017	25.6% (n=34)	4.5% (n=1)	1.7% (n=1)
2018	26.2% (n=37)	0	0
2019	27.3% (n=35)	16.7% (n=2)	3.5% (n=1)
2020	22.5% (n=31)	33.3% (n=2)	6.9% (n=2)
2021	30.6% (n=41)	0	2.6% (n=1)
<b>Total</b>	<b>30% (n=381)</b>	<b>6.7% (n=9)</b>	<b>7% (n=40)</b>

*Note:* Groups with 3 or more artists were considered a band provided that they were under a single moniker, save 1. The percentage of male individual performers, members of duos, or bands can be found by subtracting a specific cell from 100%. Featuring credits were included in all analyses. Columns nor rows add to 100%.

Shifting over to duos, there were few women sample-wide who filled this type of role (6.7%). In 2021, however, there were no women duo members. This is a decrease from 2020 (33.3%) and 2012 (16.7%), which reflects the omission of women as duos across the sample. However, given the small sample sizes, minor numerical deviations are creating what appear to be large swings in the percentages. As such, these figures should be interpreted with caution. Previously, no women were credited as part of a duo in 2014, 2016 and 2018. This means that there were no women duos in nearly half of the sampled years.

Women were also scarce as band members. Fewer than 10% of artists in bands were women across the 10-year sample (7%), and 2.6% of band members in 2021 were women. This percentage is significantly less than 2020 (6.9%) and 2012 (6%) but on par with 2017 (1.7%) and 2019 (3.5%), where only one woman was credited in a band. These findings reflect the sad reality that women performing in groups are still excluded from the popular charts.

We further examined unique or *individual* artists to determine if there were gender differences in how often specific artists appeared across the 10-year sample. Across the sample we had 95 duplicate songs that appeared more than once on the Billboard Hot 100 Year-End Charts. We included these songs only once for this analysis, bringing our new sample size to 905 songs. A total of 664 artists worked on these 905 songs, earning a total of 1,770 credits. We then reduced this total to 404 individual solo artists who appeared once across the sample.

Table 4 demonstrates the breakdown for solo artists. There were no differences by gender. The majority of men (54.4%) and women solo artists (52.8%) charted for a single song over the last decade. There were also no differences between men and women when it came to charting with 2 to 5 songs. Overall, two-thirds of all artists, regardless of gender identity, released two or fewer songs that appeared on the Billboard Hot 100 Year-End Chart in the past decade.

**Table 4**  
**Number of Song Credits by Solo Artists' Gender**

# of Songs	Men Artists		Women Artists		Total	
	# of Artists	%	# of Artists	%	# of Artists	%
1	162	54.4%	56	52.8%	218	54%
2	44	14.8%	14	13.2%	58	14.4%
3	28	9.4%	9	8.5%	37	9.2%
4	16	5.4%	4	3.8%	20	5%
5	11	3.7%	6	5.7%	17	4.2%
≥6	37	12.4%	17	16%	54	13.4%
Total	298	100%	106	100%	404	100%

*Note:* Range was grouped for presentational purposes with 6 or greater credits in one category. Similar to other years, the credits for individual artists were determined using both artists' names and/or pseudonyms.

At the highest level, 12.4% of men and 16% of women artists charted for 6 or more songs in the sample time frame. Table 5 demonstrates the top performers on the Billboard Hot 100 Year-End Chart across the last decade. The top performing artist overall was Drake, with 46 songs. In contrast, Ariana Grande topped the list for women with 22 songs. Eleven (68.7%) of the top 16 artists that appear in Table 5 are from underrepresented racial/ethnic groups.

**Table 5**  
**Top Performing Solo Artists by Gender**

Top Men	# of Songs	Top Women	# of Songs
Drake	46	Ariana Grande	22
Justin Bieber	24	Nicki Minaj	21
Chris Brown	15	Rihanna	21
The Weeknd	15	Taylor Swift	15
Lil Baby	12	Cardi B	14
Calvin Harris	11	Selena Gomez	11
Bruno Mars	11		
Future	11		
Kendrick Lamar	11		
Ed Sheeran	11		

Thirty duos appeared on the Billboard chart across the decade studied. Of those, 10% ( $n=3$ ) were made up of only women, while 10% ( $n=3$ ) had both men and women members. The remaining 80% ( $n=24$ ) of duos featured only male artists. As in prior years, the top-performing duos across the sample were *Florida Georgia Line* (10 songs), *The Chainsmokers* and *Macklemore & Ryan Lewis*, and for the first time this year, *Dan + Shay* each had 5 songs in the sample.

There were 55 bands (performing groups with 3 or more members) across the 10-year sample. Two were all-women bands (3.6%), 25.5% or 14 were mixed-gender, and 70.9% or 39 were all-men. The

bands continuing to lead the charts in terms of appearances were *Maroon 5* (15 song), *Migos* (9 songs) and *Imagine Dragons* (8 songs).

This section reveals how little has changed for women artists in the past 10 years. Despite an increase in the percentage of women solo artists since 2020, exclusion in popular music is still the norm. Very few women charted with hip-hop songs, and women are a minority as duo or band members. The next section continues by exploring how race/ethnicity of artists varies over time and across different indicators.

**Race/Ethnicity.** Each artist appearing on the charts ( $n=1,977$ ) was coded as either white or as part of an underrepresented racial/ethnic group.<sup>8</sup> In 2021 57.2% ( $n=103$ ) of artists identified as underrepresented and 42.7% ( $n=77$ ) identified as white. The percentage of underrepresented artists in 2021 dropped 1.8 percentage points from the 10-year high in 2020 (59%), and reflects an 18.8 percentage point increase from 2012 (38.4%). Compared to the national average of underrepresented people in the U.S Population (39.9%), 2021 falls 17.6 percentage points *above* the U.S. Census.<sup>9</sup>

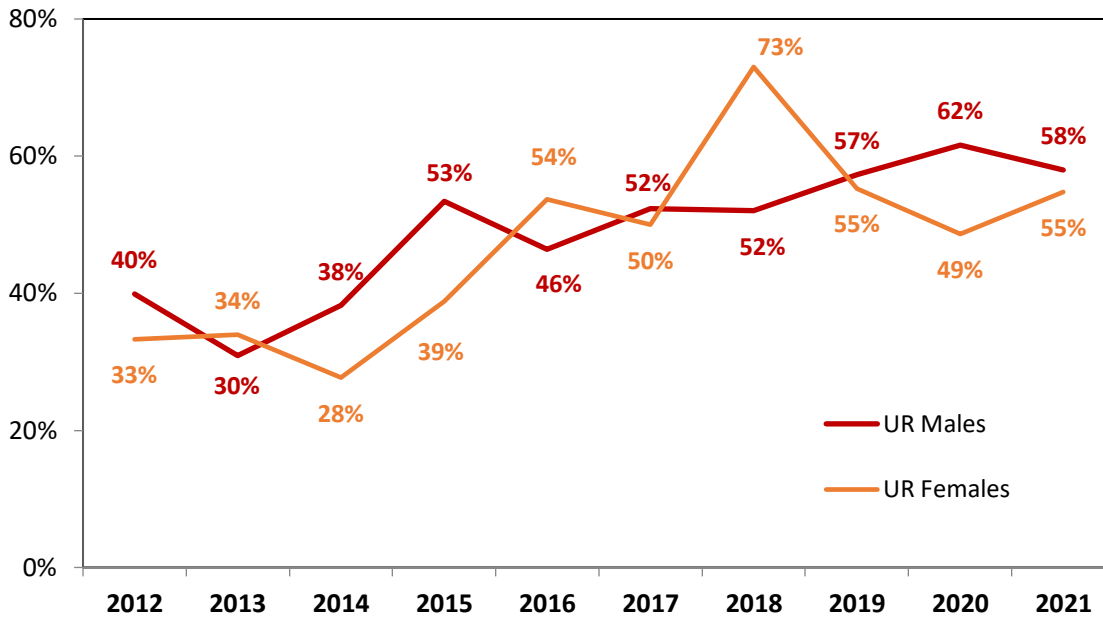
**Table 6**  
**Artist Underrepresented Status by Year**

Year	White	UR	Ratio
2012	61.6% ( $n=122$ )	38.4% ( $n=76$ )	1.6 to 1
2013	68.4% ( $n=147$ )	31.6% ( $n=68$ )	2.2 to 1
2014	64% ( $n=144$ )	36% ( $n=81$ )	1.8 to 1
2015	50.3% ( $n=98$ )	49.7% ( $n=97$ )	1 to 1
2016	51.6% ( $n=99$ )	48.4% ( $n=93$ )	1.1 to 1
2017	48.1% ( $n=103$ )	51.9% ( $n=111$ )	.93 to 1
2018	44.4% ( $n=96$ )	55.6% ( $n=120$ )	.8 to 1
2019	43.9% ( $n=75$ )	56.1% ( $n=96$ )	.8 to 1
2020	41% ( $n=71$ )	59% ( $n=102$ )	.7 to 1
2021	42.8% ( $n=77$ )	57.2% ( $n=103$ )	.7 to 1
<b>Total</b>	52.2% ( $n=1032$ )	47.8% ( $n=947$ )	1.1 to 1

Differences in **gender**, **genre** and **performer type** for underrepresented artists were also of interest. Overall, 37.9% of artists were underrepresented men and 10% of artists were underrepresented women. Over time, underrepresented men artists saw a slight decrease of 4 percentage points from 62% in 2020 to 58% in 2021. For underrepresented women, 2021 saw a 6-percentage point increase from 49% in 2020 to 55% in 2021. See Figure 1 for over time data. In other words, 48% of men artists were underrepresented, while 46% of women artists were underrepresented.



**Figure 1**  
**Underrepresented Men & Women Artists Over time**



We analyzed song *genre* for white and underrepresented artists within each category. Underrepresented artists were more likely than white artists to be on the charts under R&B/Soul (91.4%) and Hip-Hop/Rap (88.1%). See Table 7.

**Table 7**  
**Song Genre by Underrepresented Status of Artists**

Genre	Underrepresented Artists	White Artists
Pop	37.7% (n=292)	62.3% (n=483)
Hip-Hop/Rap	88% (n=493)	12% (n=67)
Alternative	7.7% (n=18)	92.3% (n=215)
Country	5.7% (n=10)	94.3% (n=166)
R&B/Soul	91.4% (n=96)	8.6% (n=9)
Dance/Electronic	29.2% (n=38)	70.8% (n=92)

*Note:* Songs were collapsed into a total of 6 genres using iTunes designations. Each artist was analyzed for race/ethnicity and genre.

We examined underrepresented performers by type. A majority of underrepresented artists were solo performers (61.2%), followed by duos (29.1%) and bands (22.6%). As shown in Table 8, 2021 (64.2%) was not significantly different from 2020 (65.2%) for individual artists. However, the percentage of solo

artists is 10.1 percentage points higher than that of 2012 (54.1%). 2021 also saw an uptick in duos compared to their complete omission in 2020. As noted in our previous reports and above, the small sample size of underrepresented artists in duos and bands results in percentages that fluctuate from year to year. Differences should be interpreted with caution, focusing on the small numerical deviations rather than large percentage gaps.

**Table 8**  
**Percentage of Underrepresented Artists by Performer Type**

<b>Race</b>	<b>Individual</b>	<b>Duo</b>	<b>Band</b>
<b>2012</b>	54.1% (n=59)	66.7% (n=4)	15.7% (n=13)
<b>2013</b>	52.2% (n=58)	15% (n=3)	8.3% (n=7)
<b>2014</b>	54.2% (n=65)	38.9% (n=7)	10.3% (n=9)
<b>2015</b>	56.4% (n=75)	70% (n=7)	28.8% (n=15)
<b>2016</b>	60.7% (n=74)	18.2% (n=4)	31.2% (n=15)
<b>2017</b>	65.4% (n=87)	27.3% (n=6)	30.5% (n=18)
<b>2018</b>	70.2% (n=99)	20% (n=2)	29.2% (n=19)
<b>2019</b>	65.4% (n=85)	33.3% (n=4)	24.1% (n=7)
<b>2020</b>	65.2% (n=90)	0	41.4% (n=12)
<b>2021</b>	64.2% (n=86)	25% (n=2)	39.5% (n=15)
<b>Total</b>	61.2% (n=779)	29.1% (n=39)	22.6% (n=130)

*Note:* Groups with 3 or more artists were considered a band provided that they were under a single moniker, save 1. The percentage of white individual performers and members of duos or bands can be found by subtracting a specific cell from 100%. Featuring credits were included in all analyses. Columns nor rows add to 100%.

Once again, we reduced the overall sample to unique or individual artists to examine how frequently solo artists appeared on the popular charts by race/ethnicity. Similar to previous years, underrepresented artists (49.8%) were still less likely to have a singular song on the charts compared to their white counterparts (59.6%). There were no differences across any other category, including at the top: 13.7% of underrepresented artists had more than six songs on the chart, while 12.9% of white artists charted the same number of times.

**Table 9**  
**Number of Songs by Underrepresented Status of Artists with Solo Credits**

# of Songs	UR Artists		White Artists		Total	
	# of Artists	%	# of Artists	%	# of Artists	%
1	116	49.8%	102	59.6%	218	54%
2	36	15.4%	22	12.9%	58	14.4%
3	23	9.9%	14	8.2%	37	9.2%
4	15	6.4%	5	2.9%	20	5%
5	11	4.7%	6	3.5%	17	4.2%
>6	32	13.7%	22	12.9%	54	13.4%
Total	233	100%	171	100%	404	100%

*Note:* Range was grouped for presentational purposes with 6 or more credits amassed in one category. Similar to other years, the credits for individual artists were determined using credits with both their name and/or any pseudonyms.

Of the top-performing artists *Drake* (46) had nearly double the amount of songs than that of his white counterpart, *Justin Bieber* (24). For underrepresented women, *Rihanna* and *Nicki Minaj* were supplanted in the top spot (21) by *Ariana Grande* (22), who now has the highest number of charting songs of women performers across 10 years. See Table 10.

**Table 10**  
**Top Performing Solo Artists by Underrepresented Status**

Top UR Artists	# of Songs	Top White Artists	# of Songs
Drake	46	Justin Bieber	24
Rihanna	21	Ariana Grande	22
Nicki Minaj	21	Taylor Swift	15
Chris Brown	15	Calvin Harris	11
The Weeknd	15	Ed Sheeran	11
Cardi B	14	Post Malone	10
Lil Baby	12	Katy Perry	9
Bruno Mars	11	Luke Bryan	9
Selena Gomez	11	Luke Combs	9
Future	11		
Kendrick Lamar	11		

Forty percent ( $n=12$ ) of all duos in the 10-year sample consisted of underrepresented twosomes, while an additional 10% ( $n=3$ ) are comprised of both white and underrepresented individuals. This is compared to the 50% ( $n=15$ ) of all duos in the sample that are comprised of white members. The three duos that continue to make the most appearances on the charts are *Florida Georgia Line* (10), *Dan + Shay* (5), *Macklemore & Ryan Lewis* (5), and *The Chainsmokers* (5). All of these duos were white.

When looking at bands, 14.6% ( $n=8$ ) were solely underrepresented bands, 23.6% ( $n=13$ ) consist of both white and underrepresented members, and 61.8% ( $n=34$ ) had only white members. Continuing to lead the bands in number of appearances are *Maroon 5* (15), *Migos* (9) and *Imagine Dragons* (8).

Underrepresented artists comprised a majority of the performers on the Billboard Hot 100 Year-End Chart. They were also more prevalent in the study as individual artists (solo) compared to duos and bands. The highest performing artist across the decade-long sample was also an underrepresented man whose appearances nearly doubled that of the most-appearing white solo artists. Next, we look at how gender and race/ethnicity vary for those working as songwriters and producers.

### Songwriting and Producing

The gender of every songwriter and producer was evaluated. Race/ethnicity was examined solely for women across both positions.

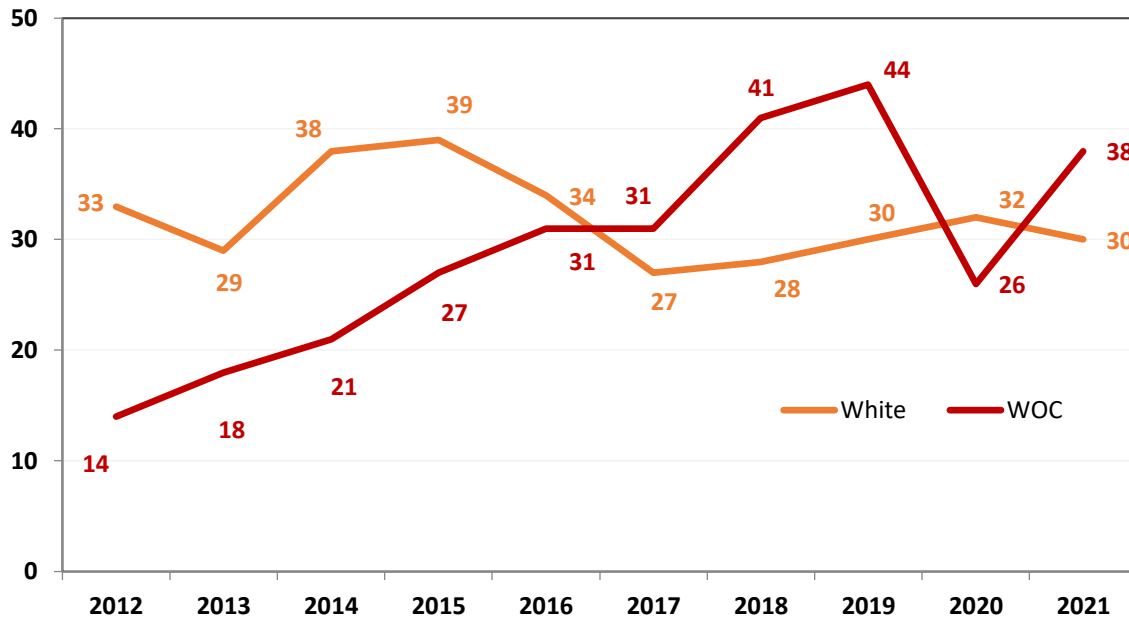
**Songwriters.** 4,796 songwriters were credited across all 10 years.<sup>10</sup> In 2021, 85.6% of songwriters were men compared to 14.4% who were women. This number rebounds slightly from the 12.9% of songwriters who were women in 2020 to just under the 10 year high of 14.4% in 2019. Regardless, men still outpaced women in this role, as women comprised only of 12.7% of the songwriter population across the 10 years studied, a ratio of 6.8 men to every 1 woman songwriter.

**Table 11**  
**Songwriter Gender by Year**

Gender	Men	Women	Ratio
<b>2012</b>	89% ( $n=380$ )	11% ( $n=47$ )	8.1 to 1
<b>2013</b>	88.3% ( $n=355$ )	11.7% ( $n=47$ )	7.6 to 1
<b>2014</b>	87.3% ( $n=404$ )	12.7% ( $n=59$ )	6.8 to 1
<b>2015</b>	86.3% ( $n=415$ )	13.7% ( $n=66$ )	6.3 to 1
<b>2016</b>	86.7% ( $n=424$ )	13.3% ( $n=65$ )	6.5 to 1
<b>2017</b>	88.5% ( $n=445$ )	11.5% ( $n=58$ )	7.7 to 1
<b>2018</b>	88.4% ( $n=526$ )	11.6% ( $n=69$ )	7.6 to 1
<b>2019</b>	85.6% ( $n=439$ )	14.4% ( $n=74$ )	5.9 to 1
<b>2020</b>	87.1% ( $n=391$ )	12.9% ( $n=58$ )	6.7 to 1
<b>2021</b>	85.6% ( $n=406$ )	14.4% ( $n=68$ )	6 to 1
<b>Total</b>	87.3% ( $n=4185$ )	12.7% ( $n=611$ )	6.8 to 1

When looking at race/ethnicity for women songwriters, we see a significant jump for underrepresented women in 2021. More women of color than white women wrote songs that appeared on the Billboard Hot 100 Year-End Chart in 2021, which reverses a drop for underrepresented women observed in 2020. However, 2021 is still below the 10-year-high of 44 women of color witnessed in 2019. For white women, the previous three years have shown little change.

**Figure 2**  
**Number of Women Songwriters by Underrepresented Status Per Year**



Genre was another angle of which women’s participation as songwriters was analyzed. Women were more likely to appear as songwriters on Dance/Electronic songs (20.5%) and Pop songs (19.1%) and least likely to work on Hip-Hop/Rap (6.4%) and R&B/Soul (9.4%) songs.

**Table 12**  
**Song Genre by Songwriter Gender**

Genre	Men Songwriters	Women Songwriters
Pop	80.9% (n=1,441)	19.1% (n=341)
Hip-Hop/Rap	93.6% (n=1,545)	6.4% (n=105)
Alternative	88.3% (n=303)	11.7% (n=40)
Country	89% (n=339)	11% (n=42)
R&B/Soul	90.6% (n=394)	9.4% (n=41)
Dance/Electronic	79.5% (n=163)	20.5% (n=42)

We further explored differences by gender for individual, or unique songwriters across 10 years. Each songwriter was individually examined (by name and/or pseudonym), and songs appearing more than once across the sample were omitted. There were no noticeable differences in the amount of songwriting credits per gender. Both men and women were equally as likely to release one song that

appeared on the Billboard Hot 100 Year-End Charts and were just as likely to have 6 or more songs throughout the sampled time frame.

**Table 13**  
**Number of Songs by Songwriter Gender**

# of Songs	Men Songwriters		Women Songwriters		Total	
	# of Writers	%	# of Writers	%	# of Writers	%
1	1,187	66.7%	180	69.5%	1,367	67.1%
2	252	14.2%	27	10.4%	279	13.7%
3	113	6.4%	14	5.4%	127	6.2%
4	57	3.2%	11	4.2%	68	3.3%
5	41	2.3%	7	2.7%	48	2.4%
>6	129	7.2%	20	7.7%	149	7.3%
Total	1,779	100%	259	100%	2,038	100%

*Note:* Range was grouped for presentational purposes with 6 and/or greater credits in one category. Similar to other years, the credits for individual songwriters were determined using songwriters' names and/or pseudonyms.

Where we did see a difference was among the top songwriters by gender. The top two male songwriters had more than double the credits compared to the top woman songwriter. All but one of the remaining men on the list outpace the top women songwriters in the number of songs included in the sample. In fact, the top 10 men songwriters listed in Table 14 are responsible for writing 22.4% of the songs in the 905-song sample.

**Table 14**  
**Top Individual Songwriters by Gender**

Top Men	# of Songs	Top Women	# of Songs
Drake	47	Nicki Minaj	19
Max Martin	46	Taylor Swift	16
Dr Luke	28	Ariana Grande	16
Benny Blanco	26	Rihanna	14
Savan Kotecha	24	Cardi B	14
Cirkut	24	Katy Perry	9
Justin Bieber	24	Selena Gomez	9
Shellback	21	Megan Thee Stallion	9
DJ Mustard	19		
JKash	18		

We were also curious how many songs in the sample were completely missing women songwriters. The sample was divided into two categories: songs that included women and songs that did not. As shown in Table 15, in 2021 more than half of the songs across the Billboard Hot 100 Year-End Chart had no women songwriters (53%). This represents a decrease of 12 percentage points from 2020 and 5

percentage points from 2012. In contrast to these findings, across the 10-year sample, only 4 songs omitted men entirely (<1%) while 516 songs had no women songwriters (57%).

**Table 15**  
**Presence vs Absence of Women Songwriters across Sample**

Year	0 Women Songwriters	1+ Women Songwriters
2012	58%	42%
2013	62%	38%
2014	60%	40%
2015	52%	48%
2016	47%	53%
2017	59%	41%
2018	59%	41%
2019	53%	47%
2020	65%	35%
2021	53%	47%
<b>Total</b>	57%	43%

*Note:* Songs that reappeared from previous years were counted once, and each song was evaluated for the presence of a woman songwriter.

Overall, 2021 remained consistent with previous years, as men outnumbered women as songwriters. While men and women did have similar credit distributions among the sample, the top two men songwriter credits were double that of the top women songwriters. 2021 did see an increase in women of color credited as songwriters, reversing the decrease in 2020. When narrowing in on the exclusion of women songwriters we then see that just over half of the songs in the 2021 sample (54%) had 0 women as songwriters. Next, we look at another behind the scenes position: producers.

**Producers.** Producers were collected and analyzed for 2012, 2015, and 2017-2021.<sup>11</sup> Every individual who received a producing credit was included in the study, with those who received multiple producing credits on the same song only counted once for that work ( $n=36$ ). In 2021, there were 231 producers across the sample. Of those, 3.9% were women and 96.1% were men.

**Table 16**  
**Number and Percentage of Women Producers by Year**

Year	% Women Producers	# of Women Producers
2012	2.4%	5
2015	1.8%	4
2017	1.8%	4
2018	2.3%	5
2019	5%	11
2020	2%	4
2021	3.9%	9
<b>Total</b>	<b>2.8%</b>	<b>42</b>

*Note:* The percentage of men producers can be found by subtracting the percentages in each cell from 100%.

As shown in Table 16, the percentage of women producers in 2021 increased non-significantly from 2020 and 2012 but did not surpass the 7-year high point of 5% in 2019. Overall, across a total of 1,523 producing credits in the 7-year sample, 97.2% were men and 2.8% were women. This is a ratio of 35.2 men to every 1 woman producer.

***Race/Ethnicity.*** As with our songwriter analysis, we also assessed how race/ethnicity comes into play for women producers. Forty-two women were credited as producers across the 7-year sample, and only 10 were women of color. Of these women, only 1 was credited in 2021 as a producer. That woman of color was Mariah Carey, whose 1994 hit song *All I Want for Christmas is You* remained on the Billboard Hot 100 Year-End Chart in 2021 after charting in 2020, 26 years after its original release. ***Thus, not one woman of color was credited as a producer on a song released in 2021 that made the Hot 100 Year End Chart in the same year.***

We further analyzed credits to understand how many individual women worked across the sample. After removing duplicate songs ( $n=42$ ), over the 7-year period evaluated, we found that 34 songs had at least one woman producer, reflecting 5.2% of songs in the sample. This means that 94.8% of songs reaching the Billboard Hot 100 Year-End Charts across 7 years had no women producers credited.

At the individual level, 24 women received at least one producing credit across the full sample. Of the 24 women, Ariana Grande was credited as a producer 7 times, Taylor Swift 3 times, and 5 women were credited with 2 songs each. Only 7 of the 24 individual women producers were women of color. Three of these women worked on two different songs across the sample that made the Billboard Hot 100 Year-End Chart. **The ratio of men producers to underrepresented women producers is 148.1 to 1.**

The results in this section demonstrate the ongoing exclusion of women as producers and even more so women of color. Among the most popular songs, women remain a fraction of producers and few work more than once over 7 years.



## Evaluating Industry Programs: Women in the Mix

As in previous years, we evaluated one industry solution associated with producers: the Recording Academy's Women in the Mix pledge. This pledge was launched in 2019 and as of November 2021 476<sup>12</sup> individuals had committed to work with a woman producer or engineer on a song. While the pledge itself is an important way to ensure more access and opportunity for women in the industry, we were curious about its success. In particular, we were interested in whether pledge-takers worked with women on the year's popular songs. This would indicate that the Women in the Mix pledge was impacting the highest level of the industry and improving not only the number of women working in these roles but the nature of the opportunities they received.

To undertake this analysis, we proceeded by collecting the names of pledge takers from the Women in the Mix website. We next examined whether these individuals worked on any *songs* appearing on the 2021 Billboard Hot 100 Year-End Chart that featured women producers or engineers.

There were 25 pledge-takers across the 2021 sample. Of these 25, only 4 of were credited for working with a female producer. The Weeknd and Max Martin worked alongside fellow pledge-taker Ariana Grande, who produced her own song, *Save Your Tears*. Ron Perry worked alongside producer Jenna Andrews on *Butter*.

Thus, across the Hot 100 Year-End Songs in 2021, there were two women producers whose work could be potentially attributed to the Women in the Mix pledge. One, Ariana Grande, produced her own songs alongside two other pledge-takers. The second, Jenna Andrews, worked with BTS for a second time on a song that included a pledge-taker.

The Women in the Mix pledge focuses on women engineers as well as women producers. To understand whether the pledge has been effective for women engineers, we conducted a similar analysis. We did not look at album producers as a whole, but specifically focused on the engineer(s) responsible for the *song* that appeared on the Billboard Hot 100 Year-End Charts. We did so by identifying credits associated with engineers (e.g., Engineer, Recording Engineer, Recorded by, Mixed by, Mixer and Mix Engineer, etc).<sup>13</sup>

Of the 25 pledge takers in the 2021 sample, 5 worked with a woman engineer on a song included in the Billboard Hot 100 Year-End Chart. One of the women engineers was a pledge taker (Ariana Grande). In addition to Ariana Grande, the other four pledge-takers who worked with a woman engineer were Justin Bieber, Dave Cobb, Max Martin and The Weeknd. Of these men, two worked with Ariana Grande (Max Martin, The Weeknd). Justin Bieber was a featuring artist on The Kid Laroi's, *Stay*, which was engineered by Heidi Wang. Dave Cobb worked with Gena Johnson on the song *Starting Over*.

From these results, it is difficult to see how the Women in the Mix pledge has impacted the ranks of women producers or engineers on some of the most profitable songs in the industry. While the pledge may facilitate women's involvement in less popular songs, women still are not reaching the top of the industry as producers and engineers. Given the time since the pledge was announced, there is clearly work to be done to remind those who made a commitment to work with women of this pledge and to find ways to ensure this happens throughout the industry. Next, we turn to the recognition women and people of color might receive for their work by scrutinizing Grammy® nominations over the past 10 years.

**Grammy® Awards: 2013 to 2022**

Grammy® Award Nominees for Record of the Year, Album of the Year, Song of the Year, Best New Artist, and Producer of the Year were analyzed to further explore the potential differences between genders. Across 10 years, individual nominees were assessed, including individual members of nominated groups.<sup>14</sup> In total 1,924 individuals were nominated for a Grammy® Award between 2013 and 2022. The 2022 nominees consisted of 85.8% (*n*=485) men and 14.2% (*n*=80) women. This is a ratio of 6.1 men nominated to every 1 woman nominee. 2022 saw a significant dip in the number of women nominated across these 5 major categories compared to 2021, though it is still significantly higher than 2013. See Table 17. Overall, women represent 13.6% of nominees across major Grammy® categories over the past 10 years.

**Table 17**  
**Grammy® Nominations by Gender and Year**

Year	Men	Women
2013	92.1% ( <i>n</i> =105)	7.9% ( <i>n</i> =9)
2014	91.8% ( <i>n</i> =156)	8.2% ( <i>n</i> =14)
2015	85.9% ( <i>n</i> =134)	14.1% ( <i>n</i> =22)
2016	88.5% ( <i>n</i> =138)	11.5% ( <i>n</i> =18)
2017	93.6% ( <i>n</i> =190)	6.4% ( <i>n</i> =13)
2018	92% ( <i>n</i> =92)	8% ( <i>n</i> =8)
2019	83.6% ( <i>n</i> =138)	16.4% ( <i>n</i> =27)
2020	79.5% ( <i>n</i> =124)	20.5% ( <i>n</i> =32)
2021	71.9% ( <i>n</i> =100)	28.1% ( <i>n</i> =39)
2022	85.8% ( <i>n</i> =485)	14.2% ( <i>n</i> =80)
<b>Total</b>	<b>86.4% (<i>n</i>=1662)</b>	<b>13.6% (<i>n</i>=262)</b>

When breaking down gender by each of the 5 categories we find that women were more likely to be nominated for Best New Artist (44.4%) and Song of the Year (28.8%). On the other hand, they comprised the lowest percentage of nominees in the Producer of the Year (1.9%) and Album of the Year (9.7%) categories.

**Table 18**  
**Grammy® Nominations by Gender and Category**

	Record of the Year	Album of the Year	Song of the Year	Best New Artist	Producer of the Year	Total
<b>Men</b>	89.6% ( <i>n</i> =395)	90.3% ( <i>n</i> =997)	71.2% ( <i>n</i> =168)	55.6% ( <i>n</i> =50)	98.1% ( <i>n</i> =52)	86.4% ( <i>n</i> =1,662)
<b>Women</b>	10.4% ( <i>n</i> =46)	9.7% ( <i>n</i> =107)	28.8% ( <i>n</i> =68)	44.4% ( <i>n</i> =40)	1.9% ( <i>n</i> =1)	13.6% ( <i>n</i> =262)

Table 19 demonstrates the breakdown of women nominees in each category over the past decade. In contrast to 2021, 2022 saw a decrease in women across 4 categories. As in 2021 and 7 additional years, women were omitted as nominees for Producer of the Year.

**Table 19**  
**Women Grammy® Nominations by Category over Time**

	<b>Record of the Year</b>	<b>Album of the Year</b>	<b>Song of the year</b>	<b>Best New Artist</b>	<b>Producer of the Year</b>
<b>2013</b>	11.8%	2%	15.4%	16.7%	0
<b>2014</b>	2.8%	6.5%	31.2%	16.7%	0
<b>2015</b>	18.8%	8.2%	27.3%	50%	0
<b>2016</b>	6.7%	8.1%	33.3%	60%	0
<b>2017</b>	7.5%	4.4%	14.3%	33.3%	0
<b>2018</b>	0	6.1%	12%	60%	0
<b>2019</b>	9.1%	13.3%	18.9%	58.3%	20%
<b>2020</b>	8.5%	17.3%	44.4%	46.2%	0
<b>2021</b>	23.70%	18.60%	44.80%	75%	0
<b>2022</b>	14.5%	11.5%	32.60%	38.50%	0

*Note:* Cells contain the percentage of women nominated per category to obtain the percentage of men nominated, subtract the cell percentage from 100%. Totals for 2022 will not add to 100% because there is a gender non-conforming nominee.

Pivoting to breakdowns by race/ethnicity we see that of the 262 women nominated over the past decade, 55.7% (n=146) were white and 44.3% (n=116) were from an underrepresented racial/ethnic group. Of all the categories examined, women of color were least likely to be nominated for Song of the Year; in this category white women were almost twice as likely to be nominated as women of color. We saw no difference by race/ethnicity in the Best New Artist category where there was a 50/50 split between white and underrepresented women nominees.

**Table 20**  
**Women Grammy® Nominations by Underrepresented Status and Category**

	<b>Record of the Year</b>	<b>Album of the Year</b>	<b>Song of the Year</b>	<b>Best New Artist</b>	<b>Producer of the Year</b>	<b>Total</b>
<b>UR</b>	43.5% (n=20)	48.6% (n=52)	33.8% (n=23)	50% (n=20)	100% (n=1)	44.3% (n=116)
<b>White</b>	56.5% (n=26)	51.4% (n=55)	66.2% (n=45)	50% (n=20)	0	55.7% (n=146)

To conclude this section, we evaluated the disparity between men and women in the number of nominations received over the past decade. To do this, we assessed individual or unique nominees. The sample size for this analysis dropped to 1,058 unique nominees. Of these 86.8% were men and 13.2% were women. This is a ratio of 6.6 men to every one woman nominated.

We then examined the number of nominations each individual received across the time frame. Men were more likely than women to receive at least one nomination. On the other hand, women were more likely (36.4%) than men (30.6%) to receive more than one nomination. That said, while this appears to be a positive finding, it is important to highlight the disparity in the range of nominations going to men versus women. The most frequently nominated man (Serban Ghenea) was nominated a total of 21 times across all 10 years, while the highest nominated woman (Taylor Swift) had a total of 11 nominations in the same time frame.

**Table 21**  
**Number of Grammy® Nominations by Gender**

No. of Nominations	Men	Women
<b>1</b>	69.4% ( <i>n</i> =637)	63.6% ( <i>n</i> =89)
<b>2</b>	14.8% ( <i>n</i> =136)	17.1% ( <i>n</i> =24)
<b>3</b>	6.6% ( <i>n</i> =61)	9.3% ( <i>n</i> =13)
<b>4</b>	3.2% ( <i>n</i> =29)	2.9% ( <i>n</i> =4)
<b>≥5</b>	6% ( <i>n</i> =55)	7.1% ( <i>n</i> =10)
<b>Total</b>	918	140

We also examined individual nominations by race/ethnicity for women. Of the 140 individual women nominated for a Grammy®, 54.3% (*n*=76) were white and 45.7% (*n*=64) were underrepresented. There was some difference in the frequency of nominations given to white and underrepresented women across the 10 years studied. Underrepresented women were more likely to be nominated twice, while white women were more likely to be nominated three times. Overall, underrepresented women made up 37.5% of nominees with 2 or more nominations, on par with their white counterparts (35.5%). The most frequently nominated white woman was Taylor Swift, who earned the most nominations for women regardless of race (11) while the highest nominated woman of color was H.E.R. (8).

**Table 22**  
**Frequency of Nominations for Women by Race/Ethnicity**

No. of Nominations	UR Women	White Women
<b>1</b>	62.5% ( <i>n</i> =40)	64.5% ( <i>n</i> =49)
<b>2</b>	20.3% ( <i>n</i> =13)	14.5% ( <i>n</i> =11)
<b>3</b>	6.2% ( <i>n</i> =4)	11.8% ( <i>n</i> =9)
<b>4</b>	4.7% ( <i>n</i> =3)	1.3% ( <i>n</i> =1)
<b>≥5</b>	6.2% ( <i>n</i> =4)	7.9% ( <i>n</i> =6)
<b>Total</b>	<b>64</b>	<b>76</b>

Despite progress for Grammy® nominees in major categories in the past few years, in 2021 the percentage of women nominees declined. White women are also still more likely to be nominated than their underrepresented counterparts. Despite the Academy's efforts to increase representation, the gap for women nominees persists. Moreover, women of color are still largely excluded from recognition in the major categories that can expand career opportunities for nominees.

## Conclusion

The purpose of this investigation was to assess the gender and race/ethnicity of artists, songwriters, and producers across songs on the Billboard Hot 100 Year-End Charts, updating findings from 2012 to 2020 with new data on 2021. Additionally, the study examines Grammy® nominations in major categories over the past 10 years. There are three major findings from the study, reviewed below, along with a set of solutions to improve access and opportunity for women and women of color in the industry.

### *No Progress in Popular Songs for Women*

For women artists overall, there has been no significant change in the percentage of women reaching the Billboard Hot 100 Year-End Charts since 2012. Though women solo artists have seen an uptick from 2020 to 2021, this reflects a rebound after a dip following 2019 and does not reach the 10-year high point achieved in 2016. Although women were more likely to chart with a pop song than any other genre, the year-end popular charts are still not a place where women artists find recognition for their work.

This is also true for women songwriters and producers. Women songwriters in 2021 were still outnumbered at a ratio of 6 to 1 compared to men songwriters on the year's most popular songs. Nearly two-thirds of the 100 most popular songs of 2021 did not have any women songwriters. The percentage of women producers has also remained stubbornly low—less than 5% of credited producers in 2021 and only 2.8% of producers over 7 years were women.

The reasons for the lack of women on the charts as artists and in songwriting and producing roles are no mystery. In 2019, we published results from a set of interviews with 75 women-identified songwriters and producers. The findings speak to the career barriers that women face in the music industry. Notably, the web of obstacles that women must navigate to find career sustainability and success has little to do with the training and aptitude of women themselves, but are the result of the stereotypes surrounding women and their abilities as well as the situations in which they must work.<sup>15</sup> In an industry where women's skills are discounted and they are sexualized or fearful for their safety, the popular charts reflect the reality that women's contributions are minimized and they continue to be sexualized and stereotyped by their colleagues.

### *Challenges Persist for Women of Color in Music*

The reality for women of color in the music industry is dependent on their role. As artists, women of color saw an increase such that over half of women artists were women of color in 2021. Women comprise less than one-third of artists and given that underrepresented women are more than half of this population they only make up 10% of artists overall. Popular music is still far from representing the voices of women of color in proportion to the U.S. population (20%).

As songwriters, women of color outpaced white women in 2021, but remained below the 10-year high point. Yet only 1 woman of color was credited as a producer in 2021, with only 10 women of color receiving producing credits across the 7 years evaluated. Thus, as the significance of a role increases, women of color are less likely to fill the position.

Our previous study<sup>16</sup> also indicated that women of color face unique impediments in the music industry as songwriters and producers. In addition to experiencing the barriers that arise for women overall,

women of color suggested that their race/ethnicity contributed to additional obstacles. This could include not being considered for projects, feeling like their identity had to be linked to the genres in which they worked, and that they only received praise or respect from other members of their in-group. Particularly for women of color working as producers, these barriers limit opportunities throughout careers but especially at high-profile or lucrative levels, such as those for popular songs.

### *Downturn for Diversity in Grammy® Nominations*

Whether *because of* or *in spite of* changes to the Grammy® voting process taking place for the 2022 show, the percentage of women nominees in major categories fell for the first time since 2019. Only 13.6% of the nominees in five major categories were women, and slightly more than half of the women nominees were white. Some of the notable changes that may have impacted the data include expanding the major categories to 10 nominees each, including featuring artists, and altering the voting process.

Why do Grammy® nominations matter? For women, whose contributions are dismissed or discounted, the peer recognition that can be a consequence of a nomination or win may propel their career or change the way colleagues interact with them. Additionally, the financial impact of having a Grammy®-nominated song or album may be important for women who note that financial barriers still hamper their careers. Finally, the impact that seeing women celebrated for their work might have on the next generation of music creatives is unmeasurable but not unimportant. Ensuring that women receive recognition for their creative talents is essential. As the Recording Academy continues to navigate changing rules among nominations and voting, it must consider the potential impact such an action might have on its stated goals of improving diversity and inclusion.

### *Solutions for Change*

This is the fifth annual report on the popular music charts put out by the Annenberg Inclusion Initiative. Since that first investigation, we have seen little change in the overall representation of women and women of color as artists, songwriters or producers on the popular charts from year to year. Our work has moved beyond simply tallying inclusion on the charts to evaluating specific genres (e.g., country music, Latin music), interviewing 75 women-identified songwriters and producers on the career barriers they face, and assessing the executive ranks across six sectors of the recording industry, as well as agents, managers and publicists associated with top artists.

The results across these studies point to the places in the industry where women and people of color remain marginalized and prevented from reaching the highest echelons of the business. Pipeline programs, mentorship activities, and a variety of other industry organizations have taken aim at addressing the problem. While these efforts are important and merit support, additional solutions and work are required to see true change that reaches across the industry.

- *Individual Songs are Vehicles for Change.* Nearly two-thirds of the top 100 songs in 2021 did not have a woman songwriter, and 95% of songs did not have a woman producer. Either women's contributions to these tracks have been erased, or they were not included at all in the writing and production process. While the Women in The Mix Pledge has attempted to address the lack of women producers and engineers through an industry pledge, these efforts have not reached the most popular songs of the year. Ensuring that at least one woman works on every song as a songwriter or producer across an entire album is not a difficult goal to reach—as artists like Selena Gomez and others have demonstrated.

- *Demolish the Barriers that Prevent Progress.* As our previous work demonstrates, significant career obstacles face women in the music industry working as songwriters and producers. A variety of these result from the nature of music production, which can be informal, take place in contexts where women's safety or security might be threatened, or make attribution of creative ideas difficult. Ensuring that women are welcome in studio spaces, that their work is properly credited, and that their colleagues advocate for them when needed are all ways to increase women's representation. These practices can be implemented through policy at the company or studio level, or they can take the form of a code of conduct adopted by a team, for example.
- *Continue to Support Organizations that Address Inequities.* Groups such as She Is The Music and Women's Audio Mission bring the voices and talents of women-identified songwriters and producers to the forefront of the industry. These groups provide real experience, networking opportunities, and support for women to change the makeup of the industry. These organizations and others like them are a critical way to create inroads to the top of the industry for new voices and to ensure that the women whose work has already gained notice can accelerate to the forefront of the field.

### *Limitations*

Every research investigation has limitations. Annually, we note that this report is intentionally focused on the Billboard Hot 100 Year-End Charts as a source of information about women's progress in specific sectors. The sample metric was chosen to reflect how many women are working as artists, songwriters, and producers across the record industry's most prestigious, profitable, and recognizable songs. Might a different sample reflect a different percentage of women in these roles? Absolutely. But would such a sample provide an indication of how often women are at one of the highest levels of the industry? Possibly not. For that reason, this study serves as a progress report not on how many women work in the industry broadly, but whether women's access and opportunities have changed to improve the most popular content created each year.

A second limitation involves two aspects of data collection. First, we account for individuals who identify their gender outside of the gender binary when that occurs across the sample, but due to small sample sizes of non-binary individuals, data is not always presented in tables within the report. Second, data on specific racial ethnic groups is not included in the report. Future or additional research should include this aspect of analysis.

This annual study offers insights on progress—and the lack of it-- for women and people of color across the popular charts. Despite activism and advocacy, little has changed across the music industry's most popular songs in 2021. As the music business looks to 2022, it must ensure that the actions it takes to create change do so across all levels of the industry.

## Footnotes

1. Billboard's Hot 100 chart was collected from <https://www.billboard.com/charts/year-end/hot-100-songs/>. Each year we see a number of songs carry over from a previous year. We leave the repeated song in per year when running overall yearly analyses. However, they are removed when analyzing the number of credits per individual artists. This is done so that we do not count the same credits more than once when examining access and opportunities by gender and race/ethnicity. A total of 95 songs repeated across the 10-year time frame.
2. Smith, S.L., Pieper, K., Choueiti, M., Hernandez, K. & Yao, K. (2021). *Inclusion in the Recording Studio? Gender and Race/Ethnicity of Artists, Songwriters & Producers across 900 Popular Songs from 2012-2020*. Annenberg Inclusion Initiative. <http://assets.uscannenberg.org/docs/aii-inclusion-recording-studio2021.pdf>
3. Grammy® nominations were compiled from the nominee list on the Recording Academy website: <https://www.grammy.com/news/2022-grammys-complete-winners-nominees-nominations-list>. The 2022 nominees were analyzed alongside the combined list of Grammy® nominees from 2013 to 2021. The category of Producer of the Year is the Producer of the Year, Non-Classical category.
4. Our approach to variable coding and unitizing can be found in our original report by S. Smith, M. Choueiti, K. Pieper, and others (2018). (<http://bit.ly/2GhiUgi>) Artist information was collected directly from Billboard's website and gender was assigned by examining online information, industry databases, pronoun usage and online interviews. No information was missing for gender judgements of artists.
5. U.S. Census Bureau (n.d.). Quick Facts. Retrieved March 29, 2022 from: <https://www.census.gov/quickfacts/fact/table/US/PST045218>.
6. There were a total of 6 songs that with genres that fell outside of our parameters. They were Holiday, Urbano Latino, Latin, K-pop, Rock and Worldwide. These genres were then collapsed into Pop, Hip-Hop/Rap, Alternative and R&B/Soul.
7. Artist credits were taken from Billboard Hot 100 Year-End charts. Each Artist was given their own line of data. Only artists explicitly credited as "Featuring" were counted as featuring artists. Songs that were credited with "&," "with," or "and" in the artist lines were not counted as features but as individual artists unless the two consistently performed as a duo. Each Band and Duo was looked up to identify current members. Each member was given a line of data in the sample. Only one band appearing on the Billboard Hot 100 Year-End Charts across the sample time frame had fewer than 3 members. This band was determined to fit the definition of a band based on how they were credited.
8. Race/Ethnicity was assessed for every solo artist as well as individuals in a band or duo. Judgments were made for every artist in the sample. All's approach for measuring race/ethnicity can be found in our original report, *Inclusion in the Recording Studio*. No apparent race/ethnicity judgements were made for the 2021 sample. In other words, all information was available from outside sources or prior reports.
9. U.S. Census Bureau (n.d.). Quick Facts. Retrieved March 29, 2022 from: <https://www.census.gov/quickfacts/fact/table/US/PST045218>.
10. Songwriting credits were gathered from three online sources: American Society of Composers, Authors and Publishers (ASCAP, <https://www.ascap.com/repertory>), Broadcast Music Inc. (BMI, <http://repertoire.bmi.com/StartPage.aspx>) and/or Society of European Stage Authors and Composers (SESAC, <https://www.sesac.com/#!/repertory/search>). Two songs were unable to be located on the databases and had their songwriting credits taken straight from the album booklet and Genius/Spotify. Gender and race/ethnicity of songwriters was collected from various online sources such as Variety



Insight and Studio System. When information was unavailable on these databases, other sources were used to gather information. When explicit information was missing, senior research team members judged apparent race/ethnicity using photographs and other details. The gender of 9 songwriters could not be determined. No judgements for apparent race/ethnicity were needed for women songwriters.

11. Information on producers was identified by using album liner notes and Genius/Spotify information. Using Recording Academy guidelines, producers, co-producers, and vocal producers were included in the study. Consistent with our previous analyses, producers who received multiple credits on the same song were only included once. Over the 10-year sample, one producer's gender could not be identified while one producing group was not included in the analysis as its members are unknown. No apparent race/ethnicity judgments were made for women producers in 2021.
12. Women in the Mix pledge takers were collected from the Recording Academy website on November 30, 2021. (<https://recordingacademy.com/recording-academy/women-mix-producer-engineering-inclusion-initiative>) There were a total of 394 pledge takers listed on the site. This number was expanded when we collected information regarding individual members of pledging bands. We were unable to find concrete information regarding current members of Arrolladora Banda El Limón. However, none of the songs on the Billboard Hot 100 Year-End Chart in 2021 were performed by this band.
13. Engineer credits were collected from 3 different sources: Genius (genius.com), Jaxsta (jaxsta.com) and album liner notes. Guidelines for which type of engineer to analyze were based on the eligibility definitions set by the Recording Academy for Grammy® Award Eligibility: [https://www2.grammy.com/PDFs/Recording\\_Academy/Producers\\_And\\_Engineers/Engineer\\_Definitions.pdf](https://www2.grammy.com/PDFs/Recording_Academy/Producers_And_Engineers/Engineer_Definitions.pdf). The following titles were used to gather engineering credits: Engineer, Recording Engineer, Recorded by, Mixed by, Mixer, Mix Engineer, Remix Engineer, Remixed by, Mastering Engineer, Vocals Recorded by/Engineered by, Balance Engineer/Engineered by.
14. Grammy® nominations were collected from the Grammy® website when nominations were released. (<https://www.grammy.com/news/2022-grammys-complete-winners-nominees-nominations-list>) Each nominee was given their own line of data as credited in the nominations and were then expanded upon to include individual members of duos and bands. Each duo and group was looked up to include the most current members. There were three exceptions. The members of three groups could not be identified and thus these groups were excluded from analysis. Each of these groups was a featuring artist receiving a single Record of the Year nomination (as a group) for their contributions. One Grammy® nominee in 2021 identified as gender non-binary. Due to small sample sizes, this data is not presented in the text.
15. Smith, S.L., Pieper, K., Choueiti, M., Clark, H., Case, A., & Villanueva, S. (2019) *Gender and Race/Ethnicity of Artists, Songwriters & Producers across 900 Popular Songs from 2012-2018*. Annenberg Inclusion Initiative. <http://assets.uscannenberg.org/docs/aai-inclusion-recording-studio-2019.pdf>
16. Smith et al. (2019).

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