# Gender Representation on Country Format Radio: 

## A Study of Spins Across Dayparts (2002-2018)

By Jada E. Watson

in consultation with WOMAN Nashville

In April 2019, SongData published a study on radio airplay. Prepared in consultation with WOMAN Nashville, the report examined gender representation on country format radio, evaluating the airplay received by men, women and male-female ensembles on the yearend (2000-2018) and weekly (2002-2018) reports. This was the first study to evaluate gender representation by spin data, and it offered a new perspective on how women factor into programming decisions.

The key findings for the report include:

- An average of $18.4 \%$ of songs across the yearend country airplay reports from 2000 to 2018 were by women;
- Women have been gradually filtered out of the top positions of the yearend reports, with $10 \%$ in the Top $20,7 \%$ in the Top 10 and no \#1 songs;
- Total annual spins for male artists in the Top 150 of the yearend reports increases from 5.8 million in 2000 to 10.3 million in 2018, while spins for women decrease from 2.8 to 1.1 million resulting in a 9.7 to 1 ratio by 2018;
- An average of $19.6 \%$ of songs across the weekly airplay report from 2002 to 2018 were by women, this number includes $8.8 \%$ current songs and $10.7 \%$ recurrent songs;
- Like the yearend reports, women are filtered out of the top spots of the weekly reports, with an $8.8 \%$ average of songs in the Top 10 between 2014 and 2018.

In this study, the last five years (and in some cases 2018, specifically) emerged as particularly alarming years for women on country radio. Despite heightened awareness to inequality on radio since 2015, the results show that the number of women and male-female ensembles - and the number of songs by them - declined to drastic points. Songs by women received such an incredibly small percentage of radio airplay that they did not accumulate enough spins to tank in the top positions of the weekly charts or even make the Top 10 of the yearend reports.

While these statistics were troubling, to be sure, many questions remain about how women factor into daily programming decisions. One of the looming questions surrounds the daily distribution of spins. Part 1 revealed a significant decline in the number of overall spins for songs by women between 2000 and 2018, but how does this play out on a weekly basis and throughout the 24 hour day cycle? How many times a day does a song by a female artist actually get heard by the listening audience? At what time of day is an audience most likely to hear a woman's voice? These questions are critical to this discussion, not just because they give us a sense of how often and when songs by women are programmed are on country radio, but because they also tell us about the experiences of listeners. Radio plays an important role in introducing new songs and artists, but in this role they also contribute to the development of the genre's culture and the listening audience's perception of who is participating in country music. With so few songs by women included in daily programming, audiences are becoming increasingly unfamiliar with women's voices and stories. This is damaging to the genre, to the artists trying to build careers from the exposure radio provides, and to the audience that looks to radio as a guide for what constitutes current country music. It also sends a harmful message about how women are valued in society.

Using the same dataset that formed the basis of the analysis of Part 2 of the April 2019 report, this new study released today evaluates representation of spins for songs by men, women and male-female ensembles on the weekly reports as played across the five dayparts. These results show disheartening inequity. Women are not receiving anywhere near the same amount of spins in any daypart as their male colleagues and the difference has grown significantly. The last five years emerge as problematic here, too, showing a significant lack of diversity and that women are not afforded the same opportunities as men. The results presented here provide a clearer perspective of the gravity of the imbalance on terrestrial radio and further underscore the growing inequality in country music culture.

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#### Abstract

At the November 2019 Country Music Association Awards, Jennifer Nettles walked the red carpet in bold fashion statement in support of women in the genre. Wearing a stunning Christian Siriano pantsuit and cape with the words "Play our F*@\#in records please and thank you" written on the inside by street artist Alice Mizrachi with "Equal Play" across the back, Nettles made sure that the issues facing women at country radio were a topic of discussion before the ceremony even began. This year's event, hosted by three iconic women, centered around celebrating the significant contributions of female artists in the genre. In her interviews on the carpet, Nettles took the opportunity to speak openly about inequality on country radio, stating "women are important in country music and women need to be represented and played equally on country radio and on country playlists. We've all seen the numbers. We know the studies that have been done showing 16\% from 2014 to 2018. Sixteen percent was the representation of women on the charts. That is not nearly close enough to what it needs to be. ${ }^{11}$ She used this platform to speak of the need to understand the dangers of basing programming decisions on data from the past and for the need to change current programming practices.

Perhaps most critically, Nettles drew attention to the concept of the "bias of familiarity" and the role of repetition in country radio. Repetition is a core element to the development of a format's sound and culture, but it also shapes an audience's familiarity with a genre's artists. Research by Philip A. Russell has argued that there is a significant correlation between repetition and increased presence of a song within a genre's culture (in the form of repeated airplay, tenure and height on popularity charts) and audience familiarity. ${ }^{2}$ The repetition of a song or multiple songs by a particular artist allows that song to be heard, to be known, and to become familiar. Current practices, which focus heavily on repetition of songs by male voices, creates increased familiarity specifically for those male artists and results over time in a more homogenous sound overall. In this context, female artists and voices, which receive limited and infrequent airplay, have become increasingly unfamiliar to country radio audiences. ${ }^{3}$


Repetition is also a key factor to success in the music industry. The repetition of a song on radio (and streaming services) pushes it onto and up popularity charts - charts that are linked to opportunities and access to resources. Given the documented decline of women on country radio (which remains an integral platform for exposure and audience-building), it is often harder for female artists to achieve significant growth in the area of chart performance, album sales, performance opportunities, and more without this exposure. This is crucial at the launch of an artist's career, as it can significantly impact artists throughout the duration of their career. Why does this matter? Programming decisions provide opportunities for artists to increase audience familiarity. Perhaps more critically for an artist, it is linked to various other opportunities, including label/publishing deals, touring and festivals, fan clubs, award nominations, merchandising and more.

With an interest in better understanding the impact of repetition on representation on country radio, this study drills deeper into the weekly report to examine the distribution of spins to songs by men, women and male-female ensembles over the 24hour cycle. According to a Nielsen study, $42 \%$ of most radio listening occurs during the morning and afternoon drive times ( $21 \%$ in each daypart) and that $26 \%$ occurs in the midday period - but these are often the times of day with the fewest songs played. ${ }^{4}$ How many spins do songs by men, women and male-female ensembles receive? How has the allotment of spins changed over time? What is the distribution of spins for songs in current and recurrent status? What time of day do songs receive the most spins? What can we learn about the audience experience and which artists are heard on a daily basis? These are just a few of the questions that guide this study.

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## Study dataset

Building on SongData's April 2019 study of gender representation on country format radio, the present study uses the dataset analysed in Part 2 of that report. The dataset is curated from the weekly charting activity of Mediabase's Published Panel covering the years 2002 to $2018 .{ }^{5}$ This dataset captures the weekly ranking positions for the 302,287 records across this 17year period, and includes the total spins for each songs by time of day. The $24-\mathrm{hr}$ period at Mediabase reporting stations is divided into 5 dayparts, outlined in Table 1.1. ${ }^{6}$

Table 1.1 Coding of five dayparts for Mediabase reporting stations

* Graphing that considers daypart alone, follows this colour coding scheme

| Code | Daypart | Total Hours |
| ---: | :--- | :--- |
| AMD | 6:00 a.m. to 10:00 a.m. | 4 hrs |
| MID | 10:00 a.m. to 3:00 p.m. | 5 hrs |
| PMD | 3:00 p.m. to 7:00 p.m. | 4 hrs |
| EVE | 7:00 p.m. to 12:00 a.m. | 5 hrs |
| OVN | 12:00 a.m. to 6:00 a.m. | 6 hrs |

As with SongData's previous projects, ${ }^{7}$ this study maintained a coding practice of separating male-female ensembles and female artists into two categories in an effort to better understand the impact of gender-based programming on country radio. As a result, three codes were used to define artists by their biological and sociological status: M for men, W for women, and M-F for male-female ensembles (i.e., groups comprised of artists of artists of both sexes). With regards to collaborations, the song was coded by the gender of the lead artist. Table 1.2 ( pg .3 ) outlines the study's coding system as it relates to the yearend dataset. In the following graphs, the following colour coding scheme is observed:

Female artists
Male artists
Male-female artists
We recognize that these codes articulate a gender binary narrative and that further research needs to be done to address broader issues of identity and sexuality. Future SongData studies aim to include variables of race and ethnicity and sexuality and identity, to investigate how these practices have been structured to establish the white, male, heteronormative discourse that pervades country music culture.

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## Part I: Representation by dayparts

Between 1 January 2002 and 31 December 2018, 302,287 songs appeared on the Published Panel weekly reports. As reported in the April 2019 study, regardless of how the data are examined, the number of songs by male artists exceeds those by female artists and male-female ensembles. This disparity is not just in terms of the number of unique songs receiving airplay, but also the number of weeks spent on the reports and of individual artists afforded opportunities at radio overall, annually and at every level of charting.

Table 1.2a outlines the details of the coding system for the weekly airplay dataset for the April 2019 and current SongData study. This list shows how songs were coded in the dataset, but also provides a breakdown of the full complex of the dataset according to the number of records by men and women and male-female ensembles, and their various ensemble combinations. Table 1.2b then provides a higher-level summary of the Table 1.2a coding to group the songs coded by M, F and M-F into three categories. This Table includes both the full representation of the weekly representation (i.e., repetition of songs on the weekly reports) and of the number of individual songs played on radio. The current study uses this coding system to investigate when during the 24 hour cycle songs by men, women and male-female ensembles receive airplay.

Table 1.2a Study's coding system for the weekly country airplay reports (2002-2018)

| Code | Artist/Ensemble Type | \# of songs | \% of songs |
| ---: | :--- | :---: | :---: |
| M | Male solo artist | 217,543 | $72 \%$ |
| M | Male solo artist feat. male solo | 4,807 | $1.6 \%$ |
| M | Male solo artist feat. female solo | 4,772 | $1.6 \%$ |
| M | Male solo artist feat. male group | 993 | $0.3 \%$ |
| M | Male solo artist feat. female group | 21 | $0.0 \%$ |
| M | Male solo artist feat. male-female ensemble | 172 | $0.1 \%$ |
| F | Female solo artist | 51,724 | $17.1 \%$ |
| F | Female group | 5,163 | $1.7 \%$ |
| F | Female solo artist feat. male solo | 1,123 | $0.4 \%$ |
| F | Female solo artist feat. female solo | 438 | $0.1 \%$ |
| F | Female solo artist feat. male group | 578 | $0.2 \%$ |
| F | Female solo artist feat. female group | 27 | $0.0 \%$ |
| F | Female solo artist feat. male-female ensemble | 52 | $0.0 \%$ |
| M-F | Male-female ensemble | 14,797 | $4.9 \%$ |
| M-F | Male-female ensemble feat. male solo | 31 | $0.0 \%$ |
| M-F | Male-female ensemble feat. female solo | 44 | $0.0 \%$ |
| M-F | Male-female ensemble feat. male group | 2 | $0.0 \%$ |
|  | Total songs | $\mathbf{3 0 2 , 2 8 7}$ | $\mathbf{1 0 0 \%}$ |

Table 1.2b Gender representation for all songs and of unique songs on the weekly airplay reports (2002-2018)

|  | \# of songs <br> overall | \% of songs <br> overall | \# of unique <br> songs | \% of unique <br> songs |
| ---: | :---: | :---: | :---: | :---: |
| Men (solo/group) | 228,308 | $75.5 \%$ | 6,769 | $71.1 \%$ |
| Women (solo/group) | 59,105 | $19.6 \%$ | 2,300 | $24.2 \%$ |
| Male-female ensembles | 14,874 | $4.9 \%$ | 450 | $4.7 \%$ |
| Total songs | $\mathbf{3 0 2 , 2 8 7}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{9 , 5 1 9}$ | $\mathbf{1 0 0 \%}$ |

The April 2019 study reported a significant decrease in the number of women and male-female ensembles and the number of songs by them appearing on radio according to these weekly reports between 2002 and 2018 . Figure 1.1 maps the weekly distribution of current singles (columns) and recurrent tracks (lines) on country format radio between 2002 and 2018. Figure 1.1 shows us that, overall, songs by men represent an average of $75.5 \%$ of the weekly charts, with songs by women comprising $19.6 \%$ and those by male-female ensembles just $4.9 \%$. The period begins with a gap of $43.4 \%$ percentage points in the number of songs by men and women in 2002, increasing to $55.4 \%$ in 2008, and ending with an average $67.6 \%$ gap from 2015-2018. Women have their strongest showing in 2010, when 101 women (29.5\%) had songs on the radio.

The roughly 75/20 split between songs by men and women can be better explained by parsing current and recurrent tracks, as in Figure 1.1. This detail reveals that male artists are programmed at a much higher rate with both current and recurrent songs. In fact, recurrent songs by men outnumber their current songs in every year of this study period - up to a period high of $45 \%$ in 2009 . While it might seem odd that there is such a significant amount of songs by men in recurrent status, it is imperative to note that the dataset categorizes songs that are no longer in the top charting positions alongside older and "gold" catalogues as "recurrent". The dataset does not differentiate between these two categories. When compared to the distribution by women, though, the results are startling. Between 2002 and 2011, there are also more recurrent songs in weekly rotation than current songs. But starting in 2013, the number of current songs begin to outnumber the recurrent songs, suggesting that songs that fall out of current rotation and old ("gold") catalogues are dropped from and/or reduced in programming at a greater rate than for their male colleagues. In this context, songs by women are seemingly cast away at a quicker rate. More critically, this impacts the overall sound of country music: with drastically smaller numbers of both current and recurrent songs by women, their voice is virtually erased from the catalogue of country music that is heard on most stations. These figures revealed that women are disadvantaged in programming with both their current songs and the repetition of their older catalogue of songs. ${ }^{8}$

Figure 1.1 Distribution of current (columns) and recurrent (lines) songs by men, women and male-female ensembles on weekly airplay reports (2002-2018).


## Distribution of spins overall

Over the course of this 17-year period, the 302,287 songs appearing on the weekly airplay reports amassed a total of $173,424,436$ spins. As summarized in Table 1.3, the largest percentage of spins ( $27.4 \%$ ) occur in the overnight (OVN), with the lowest percentages appearing in the morning (AMD) (13.0\%) and afternoon (PMD) (16.4\%) periods. The fact that the lowest percentages of spins occurs in these two dayparts makes sense - they are periods of the day in which most of the regular programming occurs. In addition to programming, these dayparts also tend to have more ads, as advertisers recognize that the AMD and PMD dayparts reach the most listeners and spend their money at a time of day that is valuable to their revenue. But they are also two dayparts in which the majority of radio's listeners are tuned-in to programming (their morning and end-

[^2]of-day commutes), as reported by Nielsen's study. ${ }^{9}$ But these are also incredibly valuable dayparts for artists - especially new artists, who (like advertisers), hope to expand their audience-base.

Table 1.3 Total spins for songs by men, women and male-female ensembles by daypart (2002-2018)

| Daypart | \# of spins | \% of spins |
| ---: | :---: | :---: |
| AMD | $22,569,386$ | $13.0 \%$ |
| MID | $36,354,186$ | $21.0 \%$ |
| PMD | $28,424,754$ | $16.4 \%$ |
| EVE | $38,488,007$ | $22.2 \%$ |
| OVN | $47,588,103$ | $27.4 \%$ |
| Total Spins | $\mathbf{1 7 3 , 4 2 4 , 4 3 6}$ | $\mathbf{1 0 0 \%}$ |

How these spins are parsed for men, women and male-female ensembles is where we start to understand the gravity of the impact of gender-based programming. First, Table 1.4a offers a high-level summary of the percentage of spins for men, women, and male-female ensembles throughout the five dayparts. In this way, it shows us how spins are distributed for these categories individually (i.e., the individual columns consider distribution percentages just for men, just for women, and just for male-female ensembles). This table shows that, for these three categories of artists, the majority of spins occur in the OVN. In fact, men, women and male-female ensembles have similar percentages throughout every daypart, with the exception of the evening and overnights, where the percentage of spins for songs by women is just 2.2 percentage points higher.

Table 1.4a Percentage of spins for songs by men, women and male-female ensembles by daypart (2002-2018)

| Daypart | \% songs by <br> Men | \% songs by <br> Women | \% songs by Male- <br> female ensembles |
| ---: | :---: | :---: | :---: |
| AMD | $13.1 \%$ | $12.4 \%$ | $13.1 \%$ |
| MID | $21.1 \%$ | $20.1 \%$ | $20.8 \%$ |
| PMD | $16.5 \%$ | $15.6 \%$ | $16.3 \%$ |
| EVE | $21.1 \%$ | $22.6 \%$ | $22.3 \%$ |
| OVN | $27.1 \%$ | $29.3 \%$ | $27.5 \%$ |
| Total songs | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ |

Table 1.4b then drills into the data further to show the exact percentage of spins for men, women and male-female ensembles over the 24 -hour cycle. This differs from Table 1.4a because it shows how songs by men, women and male-female artists fit into the daily schedule, rather than looking at the percentages for men, women and male-female artists individually. This Table shows that songs by men receive $81.3 \%$ of the total spins between 2002 and 2018 , while those by women receive $13.5 \%$ and by male-female ensembles receive just $5.2 \%$. Thus, even though songs by women receive the majority of their spins in the OVN (Table 1.4a), their songs are so underplayed within the 24 -hour cycle that their OVN airplay represents just $4.0 \%$ of daily spins (Table 1.4b).

Table 1.4b Percentage of spins for men, women and male-female ensembles by daypart over 24-hour period (2002-2018)

| Daypart | \% songs by <br> Men | \% songs by <br> Women | \% songs by Male- <br> female ensembles |
| ---: | :---: | :---: | :---: |
| AMD | $10.7 \%$ | $1.7 \%$ | $1.4 \%$ |
| MID | $17.2 \%$ | $2.7 \%$ | $1.2 \%$ |
| PMD | $13.4 \%$ | $2.1 \%$ | $0.8 \%$ |
| EVE | $18.0 \%$ | $3.1 \%$ | $1.1 \%$ |
| OVN | $22.1 \%$ | $4.0 \%$ | $0.7 \%$ |
| Total songs | $\mathbf{8 1 . 3 \%}$ | $\mathbf{1 3 . 5 \%}$ | $\mathbf{5 . 2 \%}$ |

[^3]Evaluating the space that women occupy in this manner shows how alarmingly underrepresented women are in daily programming overall, as well as within each daypart. For example, songs by women make up just $1.7 \%$ of the AMD daypart; given this statistic and that the morning daypart is 4 hours in length, it would be possible for a listener to tune-in to a station on their morning drive and not hear a single song by a women. When looking at the AMD, MID and PMD combined, songs by women make up $6.5 \%$ of this 13 -hour daytime period. Women - all women, whether new or established artist or those with songs in recurrent/gold status - are relegated to just $6.5 \%$ of the daytime spins. This, against $41.3 \%$ for songs by men. In fact, songs by women register the same percentage of spins overall (13.5\%) as those by men have in just the PMD daypart across this 17 -year period ( $13.4 \%$ ). Male-female ensembles ( $5.2 \%$ ) have about half the percentage as men do in the AMD daypart alone (10.7\%). Combined, women and male-female ensembles have $18.7 \%$ of the overall spins, which is about the same percentage as men have in the EVE daypart (18.0\%). When entire groups of people register overall the same percentage of spins as the privileged group do in one daypart, we are dealing with levels of inequity that are culturally damaging.

Figures 1.2a and 1.2b map the percentage and distribution of total annual spins over the course of this 17-year period. For the most part, as Figure 1.2a shows, the percentage of spins in the AMD, MID and PMD dayparts remain relatively stable; there are slight decreases and increases, but fluctuate just 2-3 percent throughout the period. Where the biggest change occurs across this period is in the EVE and OVN dayparts. In the EVE, the percentage of spins initially increases from $24.6 \%$ to $27.0 \%$ by 2006 , then declines $5 \%$ to $22 \%$ by 2018 . The reverse happens in the OVN daypart: the percentage initially dips to $25.5 \%$ in 2003, then increases to by the same percentage of the EVE daypart loss to 29.0\% by 2018.

Figure 1.2a Percentage of spins overall by daypart (2002-2018)


Figure 1.2 b shows a $29.4 \%$ increase in spins overall from 9,671,144 overall in 2002 to $13,695,941$ by 2018. The first 3 years in this period show a decline of an average of $28.8 \%$ between, followed by a significant increase in the 14 years that follow - and again, across all dayparts: $51.0 \%$ in the AMD, $46.7 \%$ in the MID, $48.4 \%$ in the PMD, $49.8 \%$ in the EVE, and the highest percentage in the OVN to $52.2 \%$. How these changes to the increase in spins over this period impact women and male-female ensembles is imperative to understand. Although the percentages for women and male-female ensembles are highest in the EVE/OVN, and may help to improve chart standing, it does little for increasing familiarity and fan-building.

Figure 1.2b Total annual spins by daypart (2002-2018)


## Distribution of spins by daypart

Parsing this data by the spins for each daypart radically changes the picture of representation illustrated in Figure 1.2 with the mapping of songs on the airplay reports. Figures 1.3a-e map the distribution of spins across each daypart by current (bars) and recurrent (lines) status. The Figures reveal a nearly identical distribution of spins over the course of this period through each daypart for both current and recurrent songs, with the exception being the change in scale - which reflects the distribution patterns over the $24-\mathrm{hr}$ cycle. These graphs reveal the gravity of inequality in the genre.

## AMD Daypart (6:00-10:00 a.m.)

The AMD daypart (Fig. 1.3a) shows a $41.6 \%$ increase in the number of spins for male artists, from 940,883 spins ( $75.9 \%$ ) overall in 2002 to $1,609,756$ spins ( $90.1 \%$ ) by 2018. The reverse is true for female artists, where there is a decline of $58.6 \%$ from 277,201 spins ( $22.4 \%$ ) overall in 2002 to a low of 114,773 ( $7.1 \%$ ) by 2014. Despite an increase to 146,501 spins by 2018 , this amounts to songs by women receiving just $8.2 \%$ of the total annual spins that year - and a 17-year average of 162,124 spins. The number of spins allotted to songs by male-female across this period increase from $21,891(1.8 \%)$ in 2002 to a high of $152,918(11.5 \%)$ in 2011 and then decline to just 30,033 (1.6\%) by 2018. Between 2011 to 2013, male-female ensembles and female artists occupy roughly the same space in radio airplay. How might these changes impact the listener? In 2002, the ratio of spins for songs by men to women is 3.4 to 1 , increasing to 11.0 to 1.0 by 2018.

What is critical to observe here is how spins are allotted for songs in current and recurrent status. These details are summarized in the table below Figure 1.3a for clarity. What we see in this Figure and the details of the table is a significant difference in the number of spins for songs by men and women over this course of this period, increasing from a difference of $71.4 \%$ in 2002 to $88.7 \%$ by 2018 for songs in current status, and from $69.5 \%$ in 2002 to $93.0 \%$ for those in recurrent status. What is most disheartening is the rate at which songs by men become "classic", as represented by the significantly higher numbers for songs in recurrent status. Songs by women are essentially "thrown away" once they exit the chart, many having mostly been heard during dayparts with lesser audience reach.

Figure 1.3a Distribution of spins for current (bars) and recurrent (lines) songs by men, women and male-female ensembles in the AMD (2002-2018)


|  | Current Singles |  | Recurrent Tracks |  |
| ---: | :---: | :---: | :---: | :---: |
| Men (solo/group) | $517,443(76.5 \%)$ | $778,887(87.6 \%)$ | $423,440(75.1 \%)$ | $820,869(92.7 \%)$ |
| Women (solo/group) | $148,205(21.9 \%)$ | $89,361(9.9 \%)$ | $128,996(22.9 \%)$ | $57,140(6.5 \%)$ |
| Male-female ensembles | $10,816(1.6 \%)$ | $22,156(2.5 \%)$ | $11,075(2.0 \%)$ | $7,877(0.9 \%)$ |
|  | $\mathbf{6 7 6 , 4 6 4 ( 1 0 0 \% )}$ | $\mathbf{9 0 0 , 4 0 4}(\mathbf{1 0 0 \%})$ | $\mathbf{5 6 3 , 5 1 1}(\mathbf{1 0 0 \% )}$ | $\mathbf{8 8 5 , 8 8 6 ( 1 0 0 \% )}$ |

## MID Daypart (10:00-3:00 p.m.)

Spins across the MID daypart (Fig. 1.2b) tell a similar story to the AMD except that the scale has increased because there are more spins allotted to songs in midday than in the morning period. Here, too, there is a $37.9 \%$ increase in spins for songs by men from 1,569,801 (76.0\%) spins overall in 2002 to $2,528,294$ ( $90.5 \%$ ) spins by 2018, and a $52.5 \%$ decrease for women from $459,589(22.3 \%)$ spins overall in 2002 to 219,589 ( $7.9 \%$ ) spins by 2018. The ratio increases from 3.4 songs by male artists to 1 by female artists at the start of this study period to 11.5 to 1 by 2018. Just as it had in the AMD, the number of spins for songs by male-female ensembles increases from $35,738(1.7 \%)$ in 2002 to a high of 237,607 (11.5\%) by 2014 to decrease to 45,282 (1.6\%) by 2018.

As in the AMD, the percentage of songs in current and recurrent status remains approximately the same throughout the MID daypart: a decline from $53.6 \%$ to $52 \%$ of the spins for songs in current status, with a slight increase from $46.4 \%$ to $48 \%$ for songs in recurrent status. The table below Figure 1.3b summarizes the distribution of spins for current and recurrent songs for men, women and male-female ensembles. This shows an increase in the gap between the number of songs for men and women, from $71.4 \%$ in 2002 to $89.4 \%$ by 2018 for songs in current status, and an increase from $70.0 \%$ to $83.3 \%$ for those in recurrent status. The MID daypart has the highest percentage of listeners at $26 \%$, but has by 2018 the highest ratio of spins for songs by men to women. How are any women - let alone new female artists - to build new audiences when their songs are so under-represented in this daypart? ${ }^{10}$

Figure 1.3b Distribution of spins for current (bars) and recurrent (lines) songs by men, women and male-female ensembles in the MID (2002-2018)


|  | Current Singles |  | Recurrent Tracks |  |
| ---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 8}$ |
| Men (solo/group) | $847,152(76.5 \%)$ | $1,283,205(88.3 \%)$ | $722,649(75.5 \%)$ | $1,256,089(92.9 \%)$ |
| Women (solo/group) | $242,528(21.9 \%)$ | $136,388(9.4 \%)$ | $217,041(22.7 \%)$ | $83,201(6.2 \%)$ |
| Male-female ensembles | $17,662(1.6 \%)$ | $33,505(2.3 \%)$ | $18,065(1.9 \%)$ | $11,777(0.9 \%)$ |
|  | $\mathbf{1 , 1 0 7 , 3 6 3 ( 1 0 0 \% )}$ | $\mathbf{1 , 4 5 3 , 0 9 8 ( 1 0 0 \% )}$ | $\mathbf{9 5 7 , 7 5 5 ( 1 0 0 \% )}$ | $\mathbf{1 , 3 4 0 , 0 6 7 ( 1 0 0 \% )}$ |

[^4]
## PMD Daypart (3:00-7:00 p.m.)

The number of songs included in playlists during the PMD daypart (Fig. 1.3c) lies in between the number of songs in the AMD and MID. But here, too, the distribution of spins for songs by men increases $39.1 \%$ from 1,215,761 ( $76.0 \%$ ) overall in 2002 to $1,995,632$ ( $90.4 \%$ ) spins by 2018, and a $47.8 \%$ decrease of spins for songs by women from $335,096(22.2 \%)$ in 2002 to 174,880 ( $8.4 \%$ ) by 2018. Spins for songs by male-female ensembles initially rose from 28,592 (1.8\%) in 2002 to 186,069 (11.4\%) in 2011, but then continue the trends from other dayparts by decreasing back to 36,357 (1.6\%) by 2018. The ratio, too, remains similar to the midday, increasing from 3.4 to 1 in 2002 to 11.4 to 1 by 2018.

When parsing this data into spins for current and recurrent songs, the percentages remain approximately the same as well. The percentage of songs in current rotation declines one percentage point from $53.8 \%$ in 2002 to $52.8 \%$, and increases by one percentage point from $46.2 \%$ to $47.2 \%$ by 2018 for those in recurrent status. The table below Figure 1.3 c captures the distribution of spins for songs in current and recurrent status. What this data shows is an increase in the gap in spins for songs by men and women from $71.2 \%$ in 2002 to $89.2 \%$ in 2018 for songs in current rotation, and a difference of $70.3 \%$ in 2002 to $93.4 \%$ by 2018 for songs in recurrent rotation. The PMD daypart, like the AMD daypart, has $21 \%$ of the listening audience. ${ }^{11}$ Again, as with the MID and AMD dayparts, female artists are heard by listeners in very small numbers.

Figure 1.3c Distribution of spins for current (bars) and recurrent (lines) songs by men, women and male-female ensembles in the PMD (2002-2018)


[^5]
## EVE Daypart (3:00-12:00 p.m.)

The scale for songs distributed through the 24 hour cycle increases in both the EVE and OVN dayparts - with more spins for songs in both of these periods. The percentages change slightly for men, women, and male-female ensembles throughout these dayparts. Focusing on the EVE daypart, songs by male artists receive 1,608,775 (74.9\%) of the annual spins in 2002, increasing $40.7 \%$ to $2,711,903(88.2 \%)$ by 2018 . The number of spins for songs by female artists decreases $43.4 \%$ from $495,768(23.1 \%)$ in 2002 to 280,842 ( $9.2 \%$ ) and 2018. Distribution for male-female ensembles has the same inverted U-shape increasing from 42,626 ( $2.0 \%$ ) spins in 2002 to 249,721 (11.4\%) by 2011 and then dropping to 66,060 (2.2\%) by 2018. What starts to change in the EVE - again, only slightly - is the ratio: there is a ratio of 3.2 spins for male artists to 1 by female artists in 2002, increasing to 9.7 to 1 by 2018. We start to see here that in the EVE daypart, when the audience drops to about $8 \%$, audiences are presented with a few more songs by women by 2018. ${ }^{12}$

What also changes in the EVE daypart (Fig. 1.3d) is the percentage of spins for songs in current and recurrent rotation. Between 2002 and 2018, there is a higher percentage of spins for songs in current rotation, increasing from $58.1 \%$ in 2002 to $61.4 \%$ by 2018, against a decrease of spins for those in recurrent status from $41.9 \%$ in 2002 to $38.6 \%$ in 2018. The table below Figure 1.3d summarizes the distribution of spins for songs in current and recurrent status for the EVE daypart. Comparing this table back to the AMD, MID and PMD dayparts shows a higher number of spins for currents in 2018 in the EVE daypart, but a similar percentage (because the number of spins increases for all artists in the EVE daypart). What we also see here is a change in the difference of spins between men and women; there is a difference of $69.3 \%$ in 2002 , increasing to $87.2 \%$ in 2018 for songs in current rotation, and from $69.0 \%$ to $93.3 \%$ for songs in recurrent status.

Figure 1.3d Distribution of spins for current (bars) and recurrent (lines) songs by men, women and male-female ensembles in the EVE (2002-2018)


|  | Current Singles |  | Recurrent Tracks |  |
| ---: | :---: | :---: | :---: | :---: |
| Men (solo/group) | $936,483(75.0 \%)$ | $1,614,146(86.0 \%)$ | $672,272(75.0 \%)$ | $1,097,317(92.9 \%)$ |
| Women (solo/group) | $287,589(23.0 \%)$ | $206,786(11.0 \%)$ | $208,179(23.2 \%)$ | $74,055(6.3 \%)$ |
| Male-female ensembles | $24,407(2.0 \%)$ | $55,894(3.0 \%)$ | $18,219(2.0 \%)$ | $10,166(0.9 \%)$ |
|  | $\mathbf{1 , 2 4 8 , 4 7 9 ( 1 0 0 \% )}$ | $\mathbf{1 , 8 7 7 , 2 7 6 ( 1 0 0 \% )}$ | $\mathbf{8 9 8 , 6 7 0 ( 1 0 0 \% )}$ | $\mathbf{1 , 1 8 1 , 5 3 8 ( 1 0 0 \% )}$ |

[^6]
## OVN Daypart (12:00-6:00 a.m.)

The OVN daypart is similar to the EVE, except that the scale increases by 450,000 spins. As revealed in Figure 1.3 e, the number of spins for songs by male artists increases $42.0 \%$ from 1,950,176 ( $74.4 \%$ ) in 2002 to $3,362,135$ ( $87.3 \%$ ) by 2018, while those for female artists decrease $36.1 \%$ from 618,775 (23.6\%) in 2002 to 395,104 (10.3\%) by 2018. Again, spins for malefemale artists are distributed in an inverted U-shape, increasing from 50,502 (1.9\%) in 2002 to 317,174 (11.6\%) by 2011, and drops to $93,564(2.4 \%)$ by the end of the period. As with the EVE, the ratio of spins tightens slightly in the OVN, too, increasing from 3.2 to 1 in 2002 to 8.5 to 1 by 2018.

As in the EVE daypart, there is a higher percentage of spins for songs in current rotation in the OVN, increasing from $60.4 \%$ in 2002 to $65.8 \%$ in 2018, against a decrease of spins for those in recurrent status from $39.6 \%$ in 2002 to $34.2 \%$ in 2018. Again, the table below Figure 1.3 e summarizes the distribution of spins for songs in current and recurrent status for men, women and male-female ensembles, showing a similar picture to the EVE daypart but again a higher number of spins. The gap between the number of spins for songs by men and women in the OVN, as in the EVE daypart, increases from 69.4\% in 2002 to $86.1 \%$ in 2018 for songs in current rotation, and decreases from $39.6 \%$ to $34.2 \%$ for those in recurrent status. While the picture is bleak across all five dayparts for women, to be sure, the EVE and OVN dayparts show a slight improvement for female artists in the EVE and OVN. What is, of course, most disconcerting about the placement of this "improvement" is that it is happening in the dayparts that receive just $8 \%$ and $4 \%$ of the listening audience (respectively). ${ }^{13}$

It is also important to draw attention to the significant increase in the percentage of currents played in the OVN. While daytime periods had just over $50 \%$ representation of current singles, the OVN has had over $60 \%$ for the last five years increasing spins for new artists and chart-climbing songs between the hours of midnight and 6:00 a.m.

Figure 1.3e Distribution of spins for current (bars) and recurrent (lines) songs by men, women and male-female ensembles in the OVN (2002-2018)


[^7]
## Discussion on daypart trends

There are a few trends across the five dayparts that are worthy of note. The year 2014 is the worst year across all dayparts for female artists, with just $7.1 \%$ of the overall spins in the AMD, MID and PMD, $7.8 \%$ in the EVE, and $9.4 \%$ in the OVN. Interestingly, this was the last year before the gender disparity on country radio became a national conversation. ${ }^{14}$ From this point, there is an increase in about 2 percentage points to 2015 and 1.5 percentage points to 2016, where in the AMD, MID, and PMD the percentage begins to drop again - first by 2 percentage points and then by 0.5 percentage points. This general trend holds true for the EVE and OVN as well, except that the percentage of spins in the OVN increases by 0.5 percentage points in 2018 instead of decreasing. Why might differences this small be worth discussing? It shows us that during a period of heightened awareness surrounding the imbalance on country format radio, that there has been no real improvement for women and despite a slight increase in spins for songs by women in 2016, the situation does not really change for female artists overall and across all five dayparts between 2015 and 2018.

What is most disconcerting about graphing spins according to daypart is when in the 24 hour cycle songs by women receive the majority of their spins. The AMD, MID and PMD are the most important dayparts for all artists: they represent the morning and evening commutes for the majority of the listening audience, and times of the day when a higher percentage of listeners are tuning in. They are also the time of day when the fewest number of songs are played. It is also in these periods when the ratio of spins between men and women is at its highest by 2018: 11.0 to 1 in the AMD, 11.5 to 1 in the MID and 11.4 to 1 in the PMD. Thus, when the bulk of radio's listening audience (68\%) is tuning in, not only do they hear fewer songs (in general), but they also hear few women (specifically). In fact, in light of the $11+$ to 1 ratio of spins, it would be entirely possible that a station's listeners could commute to or from work and not hear a single song by a women. While the ratio is still quite large, audiences are more likely to hear songs by women in the EVE daypart and especially in the OVN daypart... when many are busy with family and friends or sleeping.

Tables 1.5a and 1.5b offer a representation of what a typical 24-hr cycle would look like in 2002 and in 2018 to show the change across this 17 -year period. The dataset for this study shows an increase from approximately 316 in a 24 -hr rotation in 2002 to 339 songs in 2018. Using those two figures as an average for these years and then mapping them against the percentages of men, women, and male-female ensembles in the 24 -hour cycle and distributing them by their percentage in each daypart provides one perspective for viewing the distribution of songs by artists across the five dayparts, and the change in ratio from 3.4 to 1 in 2002 to a day-time average of 10 to 1 by 2018.

Table 1.5a Distribution of spins for men, women and male-female ensembles across all five dayparts in 2002

| Daypart | \# songs by <br> Men | \# songs by <br> Women | \# songs by Male- <br> female ensembles |
| ---: | :---: | :---: | :---: |
| AMD (6:00-10:00 am) | 31 | 9 | 1 |
| MID (10:00-3:00 am-pm) | 48 | 14 | 1 |
| PMD (3:00-7:00 pm) | 38 | 11 | 1 |
| EVE (7:00-10:00 pm) | 59 | 17 | 1 |
| OVN (12:00-6:00 am) | 62 | 19 | 2 |
| Total 24 hr cycle | $\mathbf{2 3 8}$ | $\mathbf{7 1}$ | $\mathbf{6}$ |
|  | $\mathbf{( 7 5 . 3 \% )}$ | $\mathbf{( 2 2 . 8 \% )}$ | $\mathbf{( 1 . 9 \% )}$ |

Table 1.5b Distribution of spins for men, women and male-female ensembles across all five dayparts in 2018

| Daypart | \# songs by <br> Men | \# songs by <br> Women | \# songs by Male- <br> female ensembles |
| ---: | :---: | :---: | :---: |
| AMD (6:00-10:00 am) | 43 | 4 | 1 |
| MID (10:00-3:00 am-pm) | 59 | 6 | 1 |
| PMD (3:00-7:00 pm) | 46 | 5 | 1 |
| EVE (7:00-10:00 pm) | 67 | 7 | 1 |
| OVN (12:00-6:00 am) | 88 | 9 | 2 |
| Total 24 hr cycle | $\mathbf{3 0 3}$ | $\mathbf{3 0}$ | $\mathbf{6}$ |
|  | $\mathbf{8 9 . 3 \% )}$ | $\mathbf{( 8 . 9 \% )}$ | $\mathbf{( 1 . 7 \% )}$ |

[^8]It is imperative to note that the figures in these two tables include both current and recurrent singles. As such, where Table 1.5 b indicates 4 songs by women spun in the AMD daypart, this is a combination of currents and recurrents in that daypart. The same holds true for all other dayparts. This does not leave much room for a female artist (or male-female ensembles, for that matter), to get a station add when there are so few spots available for a song by a women in each daypart. One can imagine that it is even more challenging for newer artists to break into a playlist with such limited space for female artists. While 2002 was by no means equal, there was certainly better representation of women across the dayparts than in 2018. There is room for improvement, of course, and the solution is simple: gradually increasing the number of songs by women across each daypart on all stations would begin to repair the damage done by nearly two decades of gender-based programming.

## Summary

The findings for Part 1 of this study offer an overview of the distribution of spins for songs on the weekly airplay reports. Male artists do not merely have more songs on the reports than female artists (as reported in April 2019), but their songs also receive drastically more spins than those by women and male-female ensembles. These findings show just how severe the imbalance is on country radio:

1. Songs by male artists are programmed more than those by women in every year of this period by approximately $76.0 \%$ in 2002 and $90.0 \%$ by 2018;
2. This disparity in spins holds true for the AMD, MID and PMD dayparts, but closes slightly in the EVE and OVN;
3. Songs by women receive the same percentage of spins overall ( $13.5 \%$ ) as men do in the PMD daypart across this $17-$ year period;
4. The ratio of spins by songs for men and women likewise increases from about 3-4 spins to 1 in 2002 to 11 to 1 in the AMD, MID and PMD, and 8 or 9 to 1 in the EVE and OVN;
5. Male-female ensembles are so significantly underrepresented throughout out this entire period and across every daypart that their total spins (5.2\%) are less than half those granted to songs by men in the AMD.

Overall, these results point to the preference for songs by male artists on country format radio, and a prevalence for programming women and male-female ensembles (combined) at 13-15\% of the daily spins. All women - whether solo in a group or in a male-female ensembles - are so overwhelmingly underrepresented in this culture that by 2018 it is possible for someone listening to the radio to tune-in for over an hour (possibly even two hours) and not hear a single song by a women depending on the time of day. And while there is slight improvement in spins for songs by women the evening and overnight dayparts, these are times of day with the smallest listening audience and fewer opportunities for new and established artists to expand their reach with listeners.

## Part II: Spins, dayparts and the charts

Part I provided a general sense of how men, women and male-female ensembles are programmed throughout the dayparts. This discussion involved every song played by country radio between 2002 and 2018, including currents and recurrents, and revealed significant disparity across each daypart for every year in this period. This is true not just overall, but according to rotation status as well. Most startlingly, where the gap in the number of spins by songs between men and women decreases is in the EVE and OVN dayparts - times of the day when audiences are perhaps less likely to be tuned in.

Part II considers how spins impact chart activity, focusing on the 50 positions published in the weekly chart. As with Part I, the graphs for the Top 50, Top 20, Top 10 and \#1 position show a nearly identical distribution of spins over the course of this period through each daypart for songs by men, women and male-female ensembles, with the exception being the change in scale - which reflects the distribution patterns over the 24-hr cycle.

Spins are an important part of any discussion surrounding chart contention and activity because there is a direct relationship between the amount of times a song is spun every day and week and its ability to break into the Top 50 positions of the weekly ranking. What is fascinating over the course of this period is a trend toward an overall increase in how many spins songs that break into the Top 50 positions of the weekly chart over the course of this period. Between 2002 and 2005 songs ranked at position 50 have an average of 176 weekly spins, increasing to an average of 222 weekly spins between 2006 and 2012, and to 513 weekly spins between 2014 and 2018. The year 2013 stands out as a marker of change in the last five years, as the lone year with an average of spins in the 300-range. Between 2002 and 2018, the number of spins needed to enter the chart has increased $65.7 \%$ - presenting a significant barrier for songs by women, which receive about 30 spins a day in 2018.

## Distribution of spins for songs in the Top 50 chart positions

Charts based on Mediabase-tabulated airplay data consist of 50 positions each week. Table 2.1 summarizes the total number of songs that chart between 2002 and 2018, which is also graphed in Figure 2.1a-b. as with the overall figures presented above, songs by men make up $73.1 \%$ of the chart, with songs by women making up $21.5 \%$ and those by male-female ensembles 5.4\%.

Table 2.1 Number of unique songs by men, women and male-female ensembles on weekly airplay charts (2002-2018)

|  | \# of unique <br> Songs | \% of unique <br> Songs |
| ---: | :---: | :---: |
| Men (solo/group) | 1,699 | $73.1 \%$ |
| Women (solo/group) | 499 | $21.5 \%$ |
| Male-female ensembles (solo/group) | 125 | $5.4 \%$ |
| Total 24 hr cycle | $\mathbf{2 , 3 2 3}$ | $\mathbf{( 1 0 0 \% )}$ |

Figure 2.1a maps the distribution of unique charting songs across this 17-year period. Not surprisingly, as with all other studies, there is not one year in in which women are programmed at the same rate or even come close to the same rate as male artists. While the number of unique songs by men declines $26.7 \%$ from 165 to 121 (as represented in 2.1 a), the number of weeks those songs spend on the chart increases throughout this period (as represented in Figure 2.1b), showing that songs by men occupy increasingly more space on the chart and, by extension, radio playlists. Through this graph, we can see three periods of decline for female artists, from an average of 54 individual songs a year between 2002 and 2008, to 35 songs annually between 2009 and 2012, and to a low of 23 songs annually between 2013 and 2018. This amounts to a $57.4 \%$ decline in the number of individual songs by women entering the chart over a 17-year period.

Figure 2.1b maps the distribution of those individual songs on the weekly reports, showing how much space songs by men occupy on the weekly charts. The gap in the number of songs on the weekly reports (Figure 2.1b) increases from 66.1\% percentage points in 2002 to $85.0 \%$ by 2018; and that same gap applies when looking at the number of individual songs (Figure 2.1a), with an increase from $66.7 \%$ to $81.0 \%$.

Figure 2.1a Distribution of unique songs by men, women and male-female ensembles on the weekly airplay charts (20022018)


Figure 2.1b Distribution of weekly activity of songs by men, women and male-female ensembles on the weekly airplay charts (2002-2018)


Between January 2002 and December 2018, the 44,117 songs appearing on the weekly airplay reports registered $96,321,659$ spins, this is $55.5 \%$ of the overall spins for songs in this dataset. Table 2.2 summarizes the distribution of spins across the five dayparts, showing that the largest percentage of spins (29.1\%) occur in the overnight, with the lowest percentages appearing in the morning (12.3\%) and afternoon (15.6\%) periods. As with the overall picture presented in Part I, the lowest periods for the chart-toppings hits remain the dayparts in which audiences are tuned-in to regular programming.

Table 2.2 Total spins for songs by men, women and male-female ensembles in the Top 50 by daypart (2002-2018)

| Daypart | \# of spins | \% of spins |
| ---: | :---: | :---: |
| AMD | $11,845,472$ | $12.3 \%$ |
| MID | $19,191,444$ | $19.9 \%$ |
| PMD | $15,052,182$ | $15.6 \%$ |
| EVE | $22,160,900$ | $23.0 \%$ |
| OVN | $28,071,661$ | $29.1 \%$ |
| Total Spins | $\mathbf{9 6 , 3 2 1 , 6 5 9}$ | $\mathbf{1 0 0 \%}$ |

The distribution of spins for men, women and male-female ensembles remains fairly similar throughout the five dayparts as above. As Table 2.3a shows, the AMD and PMD dayparts have the lowest percentage of spins, while the EVE and OVN have the highest percentage. Again, this table looks at distribution for men, women and male-female ensembles individually, offering a perspective of representation for each category overall.

Table 2.3a Percentage of spins for songs by men, women and male-female ensembles in the Top 50 by daypart (2002-2018)

| Daypart | \# songs by <br> Men | \# songs by <br> Women | \# songs by Male- <br> female ensembles |
| ---: | :---: | :---: | :---: |
| AMD | $12.4 \%$ | $11.8 \%$ | $12.4 \%$ |
| MID | $20.0 \%$ | $19.3 \%$ | $19.9 \%$ |
| PMD | $15.7 \%$ | $15.1 \%$ | $15.6 \%$ |
| EVE | $22.9 \%$ | $23.4 \%$ | $23.1 \%$ |
| OVN | $28.9 \%$ | $30.0 \%$ | $29.0 \%$ |
| Total songs | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ |

Table 2.3b drills deeper into the daypart data for the Top 50 weekly songs, showing how songs by men, women and malefemale ensembles factor into the full 24 -hour picture. As with the overall picture, songs by men receive $80.1 \%$ of the total spins, while those by women receive $14.6 \%$ and by male-female ensembles receive just $5.3 \%$. In the Top 50 , songs by women register the a slightly smaller percentage of spins overall as those by men in the MID daypart across this 17-year period. Malefemale ensembles have just over half the percentage as men do in the AMD. Combined, women and male-female ensembles have $19.8 \%$ (slightly higher than the overall above of $18.7 \%$ ), which is just over the percentage of spins for songs by men in the EVE. Songs by women and male-female ensembles register the same percentage of spins overall as men do in one single daypart. In this context, these songs have little opportunity to climb the chart.

Table 2.3b Percentage of spins for songs by men, women and male-female ensembles in the Top 50 by daypart over 24-hour period (2002-2018)

| Daypart | \# songs by <br> Men | \# songs by <br> Women | \# songs by Male- <br> female ensembles |
| ---: | :---: | :---: | :---: |
| AMD | $9.9 \%$ | $1.7 \%$ | $0.7 \%$ |
| MID | $16.1 \%$ | $2.8 \%$ | $1.0 \%$ |
| PMD | $12.6 \%$ | $2.2 \%$ | $0.8 \%$ |
| EVE | $18.4 \%$ | $3.4 \%$ | $1.2 \%$ |
| OVN | $23.2 \%$ | $4.4 \%$ | $1.5 \%$ |
| Total songs | $\mathbf{8 0 . 1 \%}$ | $\mathbf{1 4 . 6 \%}$ | $\mathbf{5 . 3 \%}$ |

Figure 2.2a outlines the percentage of spins across the five dayparts. The percentage of spins remains relatively unchanged in the AMD, hovering around $10 \%$ of the spins for songs in the Top 50 positions of the charts between 2002 and 2018. The percentage of spins for the MID and PMD decline slightly over this period. The percentage of spins in the EVE and OVN start to change around 2010: the EVE initially declines from 24.5 to $23.1 \%$ by 2016, then begins to increase back to $24.5 \%$ by 2018 . The percentage of spins in the OVN increases over this period from $31.7 \%$ in 2002 to $36.9 \%$ in 2018.

Figure 2.2a Percentage of spins for songs in the Top 50 by daypart


Figure 2.2b maps this distribution by total annual spins for the Top 50 songs, and shows the same general decline of $42.0 \%$ between 2002 and 2004 as in the overall picture, followed by a steady 35\% increase across all dayparts 2004 and 2016 before a slight decline by 2018. Over the course of this period, there has been a $29.3 \%$ increase in the total number of annual spins, from 5,297,537 in 2002 to $7,492,989$ in 2018 for songs breaking into the Top 50 positions of the weekly chart. When looking at the number of spins across the 24 -hour cycle, we see the same distribution in the percentage of spins for songs by men, women and male-female ensembles.

Figure 2.2a Distribution of spins by daypart for songs in the Top 50


How do spins for the Top 50 songs by by men, women and male-female ensembles look in this period? Figure 2.3 maps the distribution of spins over the 24 -hour cycle for songs, combines spins in all five dayparts, as the overall shape of the rise for men, decline for women and rise and fall for male-female ensembles is similar. The percentages for the five dayparts are summarized in Table 2.3 below. As outlined in Figure 2.3, the percentage of spins for songs by men increases $38.6 \%$ overall, from 4,019,322 ( $75.9 \%$ ) in 2002 to $6,549,137$ ( $87.4 \%$ ) by 2018, while the percentage of spins for those by women decreases $61.3 \%$ from $1,188,985(22.4 \%)$ to $737,000(9.8 \%)$ by 2018. Again, as before, activity for male-female ensembles is distributed in an inverted-U shape, with an increase from $89,230(1.7 \%)$ in 2002 to a high of $621,510(11.5 \%)$ in 2011, and a decline to $206,852(2.8 \%)$ by the end of the period. The gap between the number of spins for songs by men and women increases $51 \%$ over this 17 -year period, from a difference of $2,830,337$ spins ( $70.4 \%$ ) in 2002 to $5,812,137$ spins ( $88.7 \%$ ) in 2018.

Figure 2.3 Distribution of spins over 24 -hour cycle for songs by men, women and male-female ensembles in the Top 50 positions of the weekly reports (2002-2018)


Table 2.3 summarizes the percentage of spins across each daypart, showing the same percentage increase from in spins for songs by men between 2002 to 2018 as the overall reports, against the same decrease for songs by women and male-female ensembles. Here, too, there is a similar pattern in the increasing ratio for songs in the Top 50 positions of the weekly reports: from 3.5 to 1 in 2002 to 9.7 to 1 in 2018 in the AMD, MID and PMD dayparts, and from 3.3 to 1 to 8.6 to 1 in the EVE and 3.3 to 1 to 8.1 to 1 in the OVN. Thus, as with the dayparts, the ratio in spins for men and women decreases in the evening and overnight periods.

Table 2.3 Percentage of spins by daypart for songs by men, women and male-female ensembles in the Top 50 positions of the weekly reports in 2002 and 2018

|  |  | 2002 |  | 2018 |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% Songs <br> by Men | \% Songs by <br> Women | \% Songs by <br> M-F ens. | \% Songs <br> by Men | \% Songs by <br> Women | \% Songs by <br> M-F ens. |
| AMD | $76.6 \%$ | $21.8 \%$ | $1.5 \%$ | $88.2 \%$ | $9.3 \%$ | $2.5 \%$ |
| MID | $76.6 \%$ | $21.8 \%$ | $1.5 \%$ | $88.7 \%$ | $9.0 \%$ | $2.3 \%$ |
| PMD | $76.5 \%$ | $22.0 \%$ | $1.6 \%$ | $88.6 \%$ | $9.1 \%$ | $2.4 \%$ |
| EVE | $75.2 \%$ | $22.9 \%$ | $1.9 \%$ | $86.9 \%$ | $10.1 \%$ | $3.0 \%$ |
| OVN | $75.2 \%$ | $23.0 \%$ | $1.8 \%$ | $86.2 \%$ | $10.7 \%$ | $3.1 \%$ |
| Total 24 hr average | $\mathbf{( 7 6 . 0 \% )}$ | $\mathbf{( 2 2 . 3 \% )}$ | $\mathbf{( 1 . 7 \% )}$ | $\mathbf{( 8 7 . 7 \% )}$ | $\mathbf{( 9 . 6 \% )}$ | $\mathbf{( 2 . 7 \% )}$ |

## Distribution of spins for songs in the Top 20 chart positions

Moving into the Top 20 of the weekly chart requires a significant number of weekly spins. Songs that enter the Top 20 have an average of 2,050 in 2002 and 2003, dropping to 1,725 weekly spins between 2003 and 2008, then increase to an average of 2,300 between 2009 and 2013, and to up again to 3,110 in the final five years of this study period. Again, when considering how under-programmed women have become in the final five years of the study, an incredibly small number of songs by women have enough spins to break this barrier and enter the Top 20. In this culture, only a select few can make it through.

Drilling into the Top 20 shows a relatively similar picture as the Top 50 and overall weekly reports. The highest percentage of spins continues to occur in the OVN, with the lowest in the AMD. In fact, the percentage of spins remains relatively unchanged throughout the period, with slight decreases in the EVE and OVN between 2009 and 2016, and slight increases in the AMD, MID and PMD in the same period. By 2018, $12.2 \%$ of the spins occurred in the AMD, with $20.4 \%$ in the MID, $16.1 \%$ in the PMD, $23.1 \%$ in the EVE and $28.2 \%$ in the OVN.

As mapped in Figure 2.4, there is a $25.5 \%$ increase in the total number of annual spins for songs in the Top 20 chart positions, from $3,998,491$ in 2002 to $5,365,446$ in 2018. Across the 24 -hour daily cycle, the number of spins for songs by men that peak in the Top 20 increases $34.3 \%$ from $79.5 \%$ in 2002 to $90.2 \%$, while the percentage of spins for women decrease $89.4 \%$ from $19.3 \%$ to $7.6 \%$. As we move from the full 50 position chart to the Top 20 , the number of spins by songs for women decreases, showing that they are in a process of being filtered out of the top positions through a decline in the number of spins allotted to their songs. Here, as in every other level of analysis, activity for male-female ensembles is distributed in an inverted-U shape, with an increase from $1.2 \%$ in 2002 to a high of $11.0 \%$ in 2013 , and a decline back to $2.2 \%$ by the end of the period. The gap between the number of spins for songs by men and women in the Top 20 increases $46 \%$, from a difference of 2,405,784 spins (75.7\%) in 2002 to 4,431,306 spins (91.6\%) in 2018.

Figure 2.4 Distribution of spins over 24 -hour cycle for songs by men, women and male-female ensembles in the Top 20 positions of the weekly reports (2002-2018)


The 24-hour distribution (in Figure 2.4) has a nearly identical shape to the individual dayparts, with the exception of a change in scale. Table 2.4 summarizes the percentage of spins across each daypart, showing a similar percentage increase from in spins for songs by men between 2002 to 2018 as the overall reports, against the same decrease for songs by women and male-female ensembles. Here, too, there is a similar pattern in the increasing ratio for songs in the Top 50 positions of the weekly reports: from 4.3 to 1 in 2002 to 12.3 to 1 in 2018 in the AMD, MID and PMD dayparts, and from 4.0 to 11.5 in the EVE and the OVN. Thus, as with the dayparts, the ratio in spins for men and women decreases in the evening and overnights even if just slightly - for songs in the Top 20.

Table 2.4 Percentage of spins by daypart for songs by men, women and male-female ensembles in the Top 20 positions of the weekly reports in 2002 and 2018

|  | 2002 |  |  | 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Daypart | \% songs by Men | \% songs by Women | \% songs by M-F ens. | \% songs by Men | \% songs by Women | \% songs by M-F ens. |
| AMD | 80.1\% | 18.8\% | 1.1\% | 90.5\% | 7.5\% | 1.9\% |
| MID | 79.7\% | 19.2\% | 1.1\% | 90.7\% | 7.4\% | 1.9\% |
| PMD | 79.8\% | 19.1\% | 1.1\% | 90.7\% | 7.4\% | 2.0\% |
| EVE | 79.1\% | 19.6\% | 1.3\% | 90.0\% | 7.7\% | 2.4\% |
| OVN | 79.1\% | 19.7\% | 1.2\% | 89.6\% | 7.9\% | 2.5\% |
| Total 24 hr average | (79.6\%) | (19.3\%) | (1.2\%) | (90.3\%) | (7.6\%) | (2.1\%) |

## Distribution of spins for songs in the Top 10 chart positions

Breaking into the Top 10 requires nearly $40 \%$ more spins than the Top 20. Songs that enter the Top 10 average 33,500 in 2002-2003, then decrease to 2,870 weekly spins between 2002 and 2007, and increase to 3,361 between 2008 and 2011, to 4,463 between 2012 and 2014 and up to 5,081 weekly spins between 2015 and 2018. With spins in this realm, it is no wonder why only 61 songs by women (versus 462 by men) entered the Top 10 between 2002 and 2018 (as reported in April 2019). ${ }^{15}$ The odds are completely stacked against women and male-female ensembles for attempting to climb to these highest chart positions.

The highest percentage occurs in the OVN, with the lowest percentage in the AMD and PMD, but here we see the greatest overlap in the MID and EVE dayparts. The period begins and ends with $13.3 \%$ of the spins in the AMD, $21.4 \%$ in the MID, and $15.6 \%$ in the PMD. The EVE begins at $21.2 \%$ of the total daytime spins, but ends one percentage point higher at $22.2 \%$, while the OVN begins at $27.2 \%$ and declines to $26.5 \%$ by 2018.

Figure 2.5 shows that over the course of this period, there has been a $25.6 \%$ increase in the total number of annual spins, from 2,531,519 in 2002 to $3,402,895$ in 2018. Looking at the top of the chart, male artists occupy an increasingly larger percentage of the Top 10 positions, from $83.5 \%$ in 2002 to $92.3 \%$ by 2018. Spins for songs by men increases. As a result, the percentage of spins for songs by women entering the Top 10 is smaller in the Top 20, and declines from 416, $923(16.5 \%)$ in 2002 to $260,908(7.7 \%)$ by 2018. The percentage of spins allotted to songs by male-female ensembles continues to follow the inverted-U shape trends, from 0 spins ( $0.0 \%$ ) in 2002 to a period high of 298,729(11.8\%) in 2011, and a 0 ( $0.0 \%$ ) by the end of the period. While the decline in the number of spins for songs by female artists is certainly disheartening, the disappearance of male-female artists from the Top 10 positions of the weekly charts in 2018 is perhaps most shocking. There are five years in this period in which there is no song by a male-female ensemble in the Top 10, including 2016 and 2018 - a period in which a handful of ensembles have become prominent voices in the industry.

[^9]Figure 2.5 Distribution of spins for songs by men, women and male-female ensembles in the Top 10 positions of the weekly reports (2002-2018)


Table 2.5 summarizes the percentage of spins across each daypart in 2002 and 2018. Again, the graph in Figure 2.5 has a nearidentical distribution pattern across each daypart, with the exception of changes in scale. When comparing these years for the Top 50 (Tab. 2.3), Top 20 (Tab. 2.4) and Top 10 (Tab. 2.5), it becomes clear that women are not receiving enough weekly spins to enter the Top positions of the chart. The ratio of spins for songs by men and women increases in the Top 10, expanding from 4.2 to 1 in 2002 to 12.2 to 1 by 2018 for the AMD, MID and PMD dayparts. As with other levels of analysis, the ratio closes slightly for songs entering the Top 10 in 2018, from 4.0 to 1 in 2002 to 11.5 to 1 in the EVE and OVN dayparts of 2018.

Table 2.5 Percentage of spins by daypart for songs by men, women and male-female ensembles in the Top 10 positions of the weekly reports in 2002 and 2018

|  |  | 2002 |  | 2018 |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Daypart | \% songs <br> by Men | \% songs by <br> Women | \% songs by <br> M-F ens. | \% songs <br> by Men | \% songs by <br> Women | \% songs by <br> M-F ens. |
| AMD | $83.9 \%$ | $16.1 \%$ | $0.0 \%$ | $92.3 \%$ | $7.7 \%$ | $0.0 \%$ |
| MID | $83.6 \%$ | $16.4 \%$ | $0.0 \%$ | $92.5 \%$ | $7.5 \%$ | $0.0 \%$ |
| PMD | $83.8 \%$ | $16.2 \%$ | $0.0 \%$ | $92.5 \%$ | $7.5 \%$ | $0.0 \%$ |
| EVE | $83.3 \%$ | $16.7 \%$ | $0.0 \%$ | $92.2 \%$ | $7.8 \%$ | $0.0 \%$ |
| OVN | $83.3 \%$ | $16.7 \%$ | $0.0 \%$ | $92.2 \%$ | $7.8 \%$ | $0.0 \%$ |
| Total $\mathbf{2 4}$ hr average | $\mathbf{( 8 3 . 6 \% )}$ | $\mathbf{( 1 6 . 4 \% )}$ | $\mathbf{( 0 . 0 \% )}$ | $\mathbf{( 9 2 . 3 \% )}$ | $\mathbf{( 7 . 7 \% )}$ | $\mathbf{( 0 . 0 \% )}$ |

## Distribution of spins for songs in the \#1 position of the chart

As reported in the April 2019 study, 550 songs reached the \#1 position of the chart in this 17-year period, 462 songs ( $84 \%$ ) by men, 51 songs ( $11.1 \%$ ) by women, and 27 songs ( $4.9 \%$ ) by male-female ensembles. The number of \#1 songs by men increases steadily throughout this period, from 18 in 2002 to a high of 45 in 2015, then declining to 36 in 2018. As with the other benchmark chart positions, the data shows a trend toward a staggering increase in the average number of weekly spins to reach the top of the chart. The period begins with a two-year average of 5,850 spins, then drops to a five-year average of 4,680 between 2004 and 2008, before increasing to 5,407 between 2009 and 2011, to 6,900 between 2012 and 2014, and to 8,500 in the final four years of this period. This puts in greater context the 8 -year average of three \#1 songs by women between 2011 and 2018 reported in April 2019. ${ }^{16}$ At the same time, this final 5-year period saw an incredible turn over in the number of \#1 songs by male artists, showing quick replacement at the top of the chart and a drastic loss in spins after hitting the top of the chart for a new song to rise and be replaced all over again. In the 2018 context, a song needs 7 to 8 spins a day across each of the 156 reporting stations to reach the \#1 position. By these measures the process is completely inorganic.

Figure 2.5 maps the distribution of spins for \#1 songs across this study period. The percentage of spins allotted to \#1 songs increases $28.3 \%$ over the course of this period, from 302,628 in 2002 to 421,862 in 2018. Interestingly, despite a 17-year average of four songs in the \#1 position for female artists, the percentage of spins for \#1 songs by women increases $55.6 \%$ over this period, from 11,415 in 2002 to 25,681 in 2018. The number of spins for songs at \#1 peaks at 57,835 in 2010, corresponding to the increase to 7 songs reaching the top of the chart that year. While an increase in the number of spins is certainly noteworthy, this increase occurs as the number of songs topping the chart decreases and against staggering increase in the number of spins for songs by men (and the new benchmark of 7-8 daily spins for \#1 songs in general). The gap in spins between \#1 songs by men and women in this period is more than $90 \%$ in eight years of this period (2002, 2003, and 20132018). The gap is smallest in 2006 and 2009 to $63.9 \%$ and $69.6 \%$ respectively - but even at its smallest, this is a gap of at least 113,000 spins.

Figure 2.5 Distribution of spins for songs by men, women and male-female ensembles in the \#1 position of the weekly reports (2002-2018)


[^10]The percentage of spins across the five dayparts is summarized in Table 2.6, showing that men begin and end this period with more than $90 \%$ of the spins. But $90 \%$ means something very different at the start and end of this period, as the number of spins overall has increased. The ratio changes significantly, too and this time we see drastic decreases between 2002 and 2018 - but drastic inequity remains. The ratio of spins for \#1 songs by men and women can be summarized as follows:

- $\quad 27.4$ to 1 in 2002 to 16.5 to 1 in 2018 in the AMD
- $\quad 26.6$ to 1 in 2002 to 16.7 to 1 in 2018 in the MID
- $\quad 24.5$ to 1 in 2002 to 16.8 to 1 in 2018 in the PMD
- $\quad 26.2$ to 1 in 2002 to 16.1 to 1 in 2018 in the EVE
- $\quad 26.4$ to 1 in 2002 to 16.2 to 1 in 2018 in the OVN

Despite minute increases for women in terms of spins and a significant change in the ratio, the overall picture has worsened. Women severely under-represented in this context, with fewer songs and artists granted opportunities in any daypart to achieve success on the charts.

Table 2.6 Percentage of spins by daypart for songs by men, women and male-female ensembles in the \#1 position of the weekly reports in 2002 and 2018

|  |  | 2002 | $\mathbf{2 0 1 8}$ |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Daypart | \% songs <br> by Men | \% songs by <br> Women | \% songs by <br> M-F ens. | \% songs <br> by Men | \% songs by <br> Women | \% songs by <br> M-F ens. |
| AMD | $96.5 \%$ | $3.5 \%$ | $0.0 \%$ | $94.3 \%$ | $5.7 \%$ | $0.0 \%$ |
| MID | $96.4 \%$ | $3.6 \%$ | $0.0 \%$ | $94.4 \%$ | $5.6 \%$ | $0.0 \%$ |
| PMD | $96.3 \%$ | $3.7 \%$ | $0.0 \%$ | $94.4 \%$ | $5.6 \%$ | $0.0 \%$ |
| EVE | $96.3 \%$ | $3.7 \%$ | $0.0 \%$ | $94.1 \%$ | $5.9 \%$ | $0.0 \%$ |
| OVN | $96.3 \%$ | $3.7 \%$ | $0.0 \%$ | $94.2 \%$ | $5.8 \%$ | $0.0 \%$ |
| Total $\mathbf{2 4} \mathbf{h r}$ average | $\mathbf{( 9 6 . 3 \% )}$ | $\mathbf{( 3 . 7 \% )}$ | $\mathbf{( 0 . 0 \% )}$ | $\mathbf{( 9 4 . 3 \% )}$ | $\mathbf{( 5 . 7 \% )}$ | $\mathbf{( 0 . 0 \% )}$ |

## Frequency by peak position

With so few spins allotted to their songs, where do songs by women peak within the 50-position chart? Figure 2.7 graphs the distribution of songs by men, women and male-female ensembles according to their peak position between January 2002 and December 2018. Graphing songs in this manner offers greater perspective on where the 1,702 songs (73.2\%) by men, 499 songs (21.5\%) by women and 125 songs (5.4\%) by male-female ensembles peak within the weekly reports. Interestingly, the majority of charting songs by all artists ( $33.9 \%$ ) peak within the Top 5 , with $28.0 \%$ of the songs by men, $4.2 \%$ of the songs by women and $1.7 \%$ of those by male-female ensembles. Outside of the Top 5, the largest percentage of songs by female artists peak between \#41-45 and \#46-50 (2.6\% and 3.1\%, respectively) over a 17-year period.

Despite the fact that the highest percentage of songs occur in the Top 5 positions of the chart, the disparity in these positions is striking. This graph clearly shows that male artists have more songs in the Top 5 positions $-85.0 \%$ more - as women do in total, and 16 times ( $94.0 \%$ ) more than male-female ensembles. In fact, there are more songs by men in every 5 position segment of the chart history between 2002 and 2018. The gap between songs by men and women closes between \#26-30 to $24.0 \%$, but otherwise remains above $58.0 \%$.

This graph reveals the results of the distribution of spins throughout the 24 -hour cycle: songs by women and male-female ensembles are not granted enough spins by country radio programmers in any daypart to push them into chart contention. For those that do enter the weekly charts, a significant number peak within the back 10 positions of the chart. Given the trend toward decline that the April 2019 study revealed, it is not surprising to note that fewer of these top songs were charted in the last five years.

Figure 2.7 Frequency of songs by their peak position within the Top 50 positions of the weekly reports (2002-2018)


If the bar is so high for entering the 50-position chart, and women are not receiving the amount of spins throughout the five dayparts needed to be in contention, where do the remaining songs peak? What space do they occupy within radio programming reports? Figure 2.8 maps the distribution of the 9,519 individual songs that received airplay in this 17-year period, displaying where songs by men, women and male-female ensembles peak on the weekly reports. Graphing the frequency of songs in this manner reveals that the majority of songs for all artists occur outside of chart contention. Only $24.3 \%$ of the songs that receive radio airplay between 2002 and 2018 peak within the charting positions (\#1-50), with 72.3\% of the songs peaking outside of the chart. This graph also shows us that $3.4 \%$ of the songs ( $2.9 \%$ by men, $0.9 \%$ by women, $0.1 \%$ by male-female ensembles) that receive airplay peak within the recurrent position; these songs are those with gold catalogue status - songs that were released and charted before 2002.

Figure 2.8 Frequency of songs by their peak position on the weekly reports (2002-2018)


This histogram reveals that the highest percentage of songs by men, women and male-female ensembles peak between \#8190 on the weekly reports - with $8.4 \%, 3.1 \%$ and $0.6 \%$ of the overall songs, respectively. But even at this peak point, men have $62.6 \%$ more songs than women. Perhaps most shockingly, there are nearly as many songs by men that peak in the Top 10 positions ( 781 songs) as between \#81-90 ( 800 songs), with 2,537 songs peaking between these high points. Women, on the
other hand, have less than half the number of songs (132 songs) peaking in the Top 10 positions as they do between \#81-90 (299 songs), and just 977 songs in between these peaks.

Reflecting on this graph in relation to the amount of weekly spins needed for songs to enter the chart over this period offers a sense of the results of programming and the space that songs by men, women and male-female ensembles occupy within radio culture. While it is true that a significant number of songs by male artists also peak outside of the chart positions, this is not a sign of equality but of women being underrepresented in staggering numbers at every level of analysis and across every single daypart. This Figure shows us that women and male-female ensembles are so marginalized that their songs are outnumbered even in the very back end of the airplay reports. This is the picture of a culture that privileges male voices - old and new - at the expense of all other artists.

In this context, which artists succeed? Table 2.7 lists the top 10 men, women and male-female ensembles of this period. The men listed in the table are the Top 10 artists overall by total spins accumulated between 2002 and 2018. This list is remarkably similar to the Top 10 list produced in the April 2019 report based on the yearend reports between 2000 and 2018. Carrie Underwood, who came in $11^{\text {th }}$ overall on that list, is $11^{\text {th }}$ overall on this list as well. Like the April 2019 report, the remaining Top 10 women appear later in the global list of top artists: Miranda Lambert comes in at 21, Taylor Swift at 25, Sara Evans at 44, Martina McBride at 46, Kelsea Ballerini at 52, Reba McEntire at 57, Faith Hill at 70, Maren Morris at 73, and Gretchen Wilson at 77. Here, as in that report, male artists that emerged in the last 5 years have more spins than women that have been active since the early 2000s (and earlier, in the case of those in the Top 10). This includes Florida Georgia Line (with $2,714,686$ spins at 14 ), Billy Currington (with $2,710,439$ spins at 15 ), Thomas Rhett (with $2,550,236$ spins at 16 ), Sam Hunt (with $1,579,804$ spins at 33 ), Cole Swindell ( $1,574,804$ spins at 34 ), and Luke Combs (with 898,834 spins at 55 ) to name but a few. ${ }^{17}$

If Underwood - the top female artist - has just over half the spins of the top male artist, and industry veterans like McBride, McEntire and Hill have fewer spins than new male artists, how are new female artists to find a space and succeed in this culture? New male artists seem to be able to leap on to and up the chart in unprecedented ways, while songs by new female artists linger outside of the chart and only a handful of women seem to be able to enter and climb the chart.

When considering how spins impacts chart contention of female artists, no matter which way the data is examined, Underwood emerges at the top of the list with 30 charting songs, 25 of which enter the Top 20, 24 of which enter the Top 10, and 21 of which have reached \#1. Through every lens, Swift and Lambert alternate coming in 2nd and 3rd, with McBride, McEntire and Evans following behind in the Top 50, 20 and 10. Ballerini jumps ahead of these artists for the 4th most \#1 songs by a female artist - an incredible feat given that she's a newer artist. But this is put in stark relief when compared to the fourth ranked male artist - Jason Aldean, who has had 21 \#1 over the same period.

Table 2.7 Top 10 men, women and male-female ensembles based on total overall spins (2002-2018)

|  | Men | \# Spins <br> Overall | Women | \# Spins <br> Overall | Male-female <br> ensembles | \# Spins <br> Overall |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Kenny Chesney | $6,053,827$ | Carrie Underwood | $3,507,890$ | Lady Antebellum | $2,503,755$ |
| 2 | Keith Urban | $5,235,361$ | Miranda Lambert | $2,036,921$ | Sugarland | $1,705,646$ |
| 3 | Blake Shelton | $4,933,768$ | Taylor Swift | $1,906,183$ | Little Big Town | $1,471,922$ |
| 4 | Jason Aldean | $4,865,790$ | Sara Evans | $1,214,648$ | The Band Perry | $1,205,061$ |
| 5 | Brad Paisley | $4,508,122$ | Martina McBride | $1,170,216$ | Thompson Square | 713,907 |
| 6 | Luke Bryan | $4,250,997$ | Kelsea Ballerini | 990,565 | Gloriana | 441,511 |
| 7 | Tim McGraw | $4,243,805$ | Reba McEntire | 874,463 | Trick Pony | 270,310 |
| 8 | Rascal Flatts | $4,227,866$ | Faith Hill | 673,927 | Steel Magnolia | 169,523 |
| 9 | Dierks Bentley | $3,670,892$ | Maren Morris | 626,866 | Heartland | 149,151 |
| 10 | Toby Keith | $3,570,774$ | Gretchen Wilson | 596,451 | Edens Edge | 83,367 |

[^11]
## Summary

Part II dove into the songs that have received enough spins to enter and climb the weekly airplay chart. The findings regarding spins help us to better understand the barriers that songs by women face when vying for spins to enter and climb the chart in light of how increasingly under-represented they are within the 24 -hour programming cycle.

1. Over the course of this 17-year period, the amount of spins needed to break into the Top 50,20 and 10 of the weekly chart has increased so drastically that songs by women have been squeezed out of these positions - especially in the last five years of this period;
2. The amount of spins needed to reach the top of the chart is so high by the last eight years that an average of just 3 songs by women have climbed to the top.

The findings serve to underscore just how critical this situation has become for female artists. Beyond questions of capacity with audience-building, the lack of spins for songs by women - especially those in current status - has a significant impact on how songs by female artists chart. For fans or industry representatives that may use the weekly chart as a tool to finding or supporting new artists, it certainly doesn't accurately reflect the number of talented women making country music today.

# On repetition 

> "I hate it when people say that [audiences] turn the channel when they hear a woman. No they don't, they turn the channel when they don't hear something they recognize. And [audiences] don't recognize women because they don't play women. The fans don't know: they just want to hear music. But women aren't getting to hear their own stories. It's not that impact isn't being made; it's just there is not enough." ${ }^{18}$
~Jennifer Nettles (November 2019)

The results of this study further underscore the gender imbalance in country music culture. By focusing on the distribution of spins for artists across the 24 hour cycle, the impact of gender-based programming becomes clearer. Over the years, women have been given a variety of unsubstantiated reasons for the lack of women on radio, including a perceived "lack" of female talent, impact on station ratings, audience preferences, avoiding similar sounding music, and more. What is critical to understand is not just that none of the reasons are based on hard statistics or evidence, but that this practice has become such a damaging issue for country radio culture. These practices are systemic to the industry and are so ingrained in the culture that those in positions of power do not see the sexism and discrimination in their actions.

SongData has written and spoken several times about the negative impact of using weekly reporting and chart data as a decision-making tool. ${ }^{19}$ Cathy O'Neill and Safiya Umoja Noble speak of the ways in which industry data directly and indirectly use criteria like gender, sexuality and ethnicity to make assessments or recommendations. This is called digital redlining, and it is a culturally damaging system. Data from airplay charts/reports that are used in the industry every day to make decisions in programming tell us only about the past and not about the present or the future. These data define their own reality, as O'Neill says, and justify their own results. Using these reports as a tool to make decisions is not forward-thinking or changemaking; it is self-perpetuating, increases inequalities and is ultimately highly destructive. ${ }^{20}$

What we see in the results of this study is a feedback loop that has slowly eliminated opportunities (in the form of spins) for female artists, and gradually erases them from the genre's ecosystem. Beyond the impact that this data has on the livelihood of female artists, the broader impact is culturally damaging. Based on these reports, radio's listeners would presume that there are only a handful of women participating in the genre. This type of exclusion completely alters the public's perception of who is contributing to country music culture and contributes to the broader crisis of homogeneity.

The results presented here show the increasing disparity in the spins allotted to men, women and male-female ensembles, as documented by the weekly airplay reports between 2002 and 2018. Graphs throughout this study reinforce the deteriorating picture of the position of women in country music culture that we presented in the April 2019 report. But these results are worse: they do not just show the declining number of songs by women and male-female ensembles played on country radio, they also show just how infrequently these songs are spun throughout the day.

Over the course of this 17-year study period, the number of spins allotted to songs by women and male-female ensembles has declined overall, and through each of the five dayparts. The lowest percentage of spins at every level of study - overall, the Top 50, 20, 10 and \#1 position of the reports - occur in the AMD and PMD dayparts. For most stations, these are the two periods in a 24 -hour cycle where audiences are most likely to be listening to radio - on their morning and evening commutes. The highest percentage of spins occurs in the OVN daypart, when audiences are most likely to be tuned-out/sleeping.

[^12]Beyond discussion of chart contention, the distribution of spins for songs in recurrent status is also alarming. The majority of the graphs in the first part of this study display the figures for songs in recurrent status and show significant increase in spins for songs by men in recurrent rotation. This suggests that songs by men hang around longer on playlists once making their peak in the top positions of the chart, and become "classic" at a greater rate, while songs by women are essentially cast off once they exist the chart. In the context of repetition and familiarity, this is incredibly damaging for female artists and audiences alike. If, as programmers often suggest, there are not enough songs by women available to them for daily programming, there are certainly enough gold catalogue songs by women that could be worked into the 24 -hour cycle to increase the representation of female artists in the same manner that is done for men (whose recurrent songs outnumber current songs by a significant margin). Indeed, reintroducing gold catalog songs by women would be one way to revitalize the sound of country music and work toward re-building familiarity for listeners. Otherwise, for the audience, this means women are filtered out of their concepts of what country music is - both past and present.

There are three critical issues that emerge through the studies released about programming trends since 2000:

- The number of individual female artists that receive airplay has drastically reduced;
- The number of songs by women included in radio playlists has drastically reduced;
- The number of spins for songs by women has drastically reduced.

To work toward measurable change, these issues will have to be addressed through an "all-in" approach by leaders from every facet of the industry, including labels, management and touring agencies, publicists, and professional organizations. These entities share a responsibility to reflect on the results presented here, understand that the current practice of genderbased programming wherein men are preferred at alarming rates has serious and long-term consequences for female artists and male-female ensembles. The suggested actions that can be taken toward making meaningful changes include:

- Radio: include more women and more songs by women in programming and reach out to labels to request more diverse content. Use your position in the industry to encourage change and ask labels specifically to hear new content by women.
- Streaming services: while not addressed in this report, streaming services have similar issues of representation and should work toward curating more diverse playlists and remedying the gender bias in the recommender algorithm so that users are offered a more diverse representation of artists that includes women. ${ }^{21}$
- Labels: sign and promote women with the same commitment, intensity and resources as male artists.
- Industry associations (CMA, ACM): set a standard for inclusion and representation throughout your mandate: update eligibility requirements for awards and honours to exclude ingrained bias regarding airplay and work with participating sponsors to develop diverse programming for all events and functions.
- Industry service organizations (CRB): as an organization with an educational mission, should continue to bring these issues into your programming at Country Radio Seminar to facilitate discussion among leaders in the industry. ${ }^{22}$
- Promoters and Presenters: create and book diverse and inclusive tours, festivals, and experiences, and lean on local partners to support more diverse choices in programming.
- Management and Agencies: take the lead from Stacy L. Smith and her recommendations for the film industry: work with your artists to develop inclusion riders that build in benchmarks for developing more diverse and inclusive studio-work, tours, and festivals. ${ }^{23}$
- Male artists: play an active part in this discussion and with the inclusion rider! Demand that your female colleagues have equal opportunity on radio, tours, festivals, and more!
- Businesses and Organizations: request more diverse and inclusive programming when looking for venues to promote products and services via radio or who sponsor events.
- Audiences and Advocates: hold the above businesses accountable for their choices and offerings.

These solutions are not hard, but they do require significant change. They require industry leaders to make public acknowledgements and commitments, develop action plans and set benchmarks for accountability. The industry's decisions moving forward should reflect and represent its diverse and growing audience. The future of country music can be one of inclusion and opportunity for all.

[^13]
[^0]:    ${ }^{1}$ Tennessean, "2019 CMA Awards: Jennifer Nettles of Sugarland made more than a fashion statement on red carpet," YouTube video, 13 November 2019.
    ${ }^{2}$ Philip A. Russell, "Effects of Repetition on Familiarity and Likeability of Popular Music Recordings," Psychology of Music 15 (1987): 187-97.
    ${ }^{3}$ Jada E. Watson, "New Report: Gender Representation on Billboard's Country Airplay Chart," SongData.ca Keepers of the Flame blog, 2 August 2019.
    ${ }^{4}$ Study reported on in Pierre Bouvard, "Perception vs. Reality: Drive Time isn't the Only Time for AM/FM Radio," WestwoodOne, 19 February 2019. "Share of the Ear" study details can be accessed online.

[^1]:    ${ }^{5}$ The Published Panel refers to the charts that are tabulated based on the programming of stations that report to Mediabase. Reporting stations are weighted based on their Average Quarter Hour (AQH) Arbitron Number and market size on a scale of 0-10. The AQH refers to the average number of individuals that listen to a particular station for at least 5 minutes in a 15 -minute period. (See AHQ definition on Arbitron website.)
    ${ }^{6}$ There are currently 321 country format stations monitored, with 156 of them reporting on the Published Panel. Mediabase's daypart coding system can be retrieved from their website.
    ${ }^{7}$ Jada Watson, "Gender on the Billboard Hot Country Songs Chart, 1996-2016," Popular Music \& Society 42, no. 5 (2019), 538-60. See also SongData's studies, "Gender Representation on Country Format Radio: A Study of Published Reports from 2000-2018," prepared in consultation with WOMAN Nashville (April 2019); "Gender Representation on Billboard's Country Airplay Chart: A Study of Weekly Charts from January 2018 to July 2019," prepared in consultation with WOMAN Nashville (August 2019); and "Gender Representation on Canadian Country Format Radio: A Study of Published Reports from 2005-2018" (September 2019).

[^2]:    ${ }^{8}$ This data was originally presented in "Gender Representation on Country Format Radio," 14-16.

[^3]:    ${ }^{9}$ Bouvard, "Perception vs. Reality."

[^4]:    ${ }^{10}$ Bouvard, "Perception vs. Reality."

[^5]:    ${ }^{11}$ Bouvard, "Perception vs. Reality."

[^6]:    ${ }^{12}$ Bouvard, "Perception vs. Reality."

[^7]:    ${ }^{13}$ Bouvard, "Perception vs. Reality."

[^8]:    ${ }^{14}$ Beverly Keel, "'Tomato-Gate Unites Women in Country," The Tennessean, 21 June 2015.

[^9]:    ${ }^{15}$ Watson, "Gender Representation on Country Format Radio," in consultation with WOMAN Nashville: 18-19.

[^10]:    ${ }^{16}$ Watson, "Gender Representation on Country Format Radio," in consultation with WOMAN Nashville: 18-21.

[^11]:    ${ }^{17}$ Watson, "Gender Representation on Country Format Radio," in consultation with WOMAN Nashville: 10.

[^12]:    ${ }^{18}$ Marissa Moss, "Jennifer Nettles on her CMA Fashion Statement: 'Where I See a Truth, I'm Going to Say It'," Rolling Stone Country, 15 November 2019.
    ${ }^{19}$ Jada E. Watson, "Reflecting on Spotify's Recommender System," SongData.ca Keepers of the Flame blog, 1 October 2019. The concept of digital redlining was also the central issue discussed at my talk at a Change the Conversation event held at BMI on 17 October 2019, entitled, "'The stars might lie, but the numbers never do': What Big Data Tells Us About Inequalities in Genre Cultures."
    ${ }^{20}$ Cathy O'Neill, Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy (New York: Broadway Books, 2017), 7.

[^13]:    ${ }^{21}$ While not addressed in this study, SongData has begun work to better understand Spotify's recommender system. Preliminary results can be read in Watson, "Reflecting on Spotify's Recommender System."
    ${ }^{22}$ CRS hosted a two-part webinar called "A Discussion of Gender Imbalance at Country Radio" in May and June 2019. Those interested in viewing the webinars can do so through the CRS360 Webinar page.
    ${ }^{23}$ Smith first shared the idea at her 2016 TED talk on "The Data Behind Hollywood's Sexism," but it picked up significant speed after Frances McDormand finished her Oscar speech with the following: "I have two words for you: inclusion rider." (See Martin Belam and Sam Levin, "Woman Behind 'Inclusion Rider' Explains Frances McDormand's Oscar Speech," The Guardian 5 March 2016.)

