



# Diversity in Ad Creative

Gender, Age, Race & Ethnicity Benchmarks

January 2019 ————— October 2022



# Contents

Introduction	3
Executive Summary	4
Methodology	10
Gender Detail	14
Age Detail	19
Race & Ethnicity Detail	21
What's Next	28

# Introduction

Marketers wield enormous power in effecting cultural norms by how they portray people and situations in brand stories. Since the dawn of advertising, who is cast to “play” consumers and who we hear speaking sets standards around beauty, gender roles, who makes purchase decisions, and more.

An analysis of 1 million video creative assets deployed in North America provide the first-ever, large-scale diversity and accessibility benchmarks for the advertising industry. This public study grew out of the expanding proprietary work we are doing with our individual clients.

To establish this essential baseline, we leveraged proven artificial intelligence and machine learning models to analyze brand stories. In addition, for sample validation and especially for data returned by technology with low confidence levels, we employed human review.

Our goal is twofold. First, to provide the industry at large with evolving benchmark tracking that is robust in scale to ensure data integrity. But the real power of benchmarks plays out at the marketer level, enabling each unique business to set goals and understand their specific efforts in the area of representation and adoption of accessibility practices within brand stories.

This is just the beginning. We will begin rolling out benchmarks for more regions in the coming months. In addition, our 2023 roadmap includes exploration of new areas such as analyzing diversity of principal actors vs. extras and accurately reporting on additional characteristics, such as body type and the presence of people with disabilities.

Marketing is the art of persuasion and resonance. The magic of storytelling is far from formulaic. But part of the magic embraces the wonders of diversity and the opportunities it presents. What do consumers see and hear today? How has that changed over the last 4 years? How do your unique brand stories look and sound against this baseline data?

We present this data for the industry to interpret with regard to setting future goals. We are proud to move marketing forward in this critical area.

**We welcome outreach, always, and look forward to speaking.**



**Melinda McLaughlin**

Chief Marketing Officer

[melinda.mclaughlin@extremereach.com](mailto:melinda.mclaughlin@extremereach.com)



**Andrew Blake**

Product Director, Analytics & AI

[andrew.blake@extremereach.com](mailto:andrew.blake@extremereach.com)



# Executive Summary

This analysis of **1 million creative assets across 4 years** (January 2019 through October 2022) shines a light on the complexion of brand stories in North America today and with the perspective of year-over-year trends. It should be recognized that this analysis only reports on the visual and audio detection of identifiable characteristics.

We acknowledge that we cannot analyze, and therefore do not attempt to report on, how an individual may identify in ways that differ from visual and audio detection.

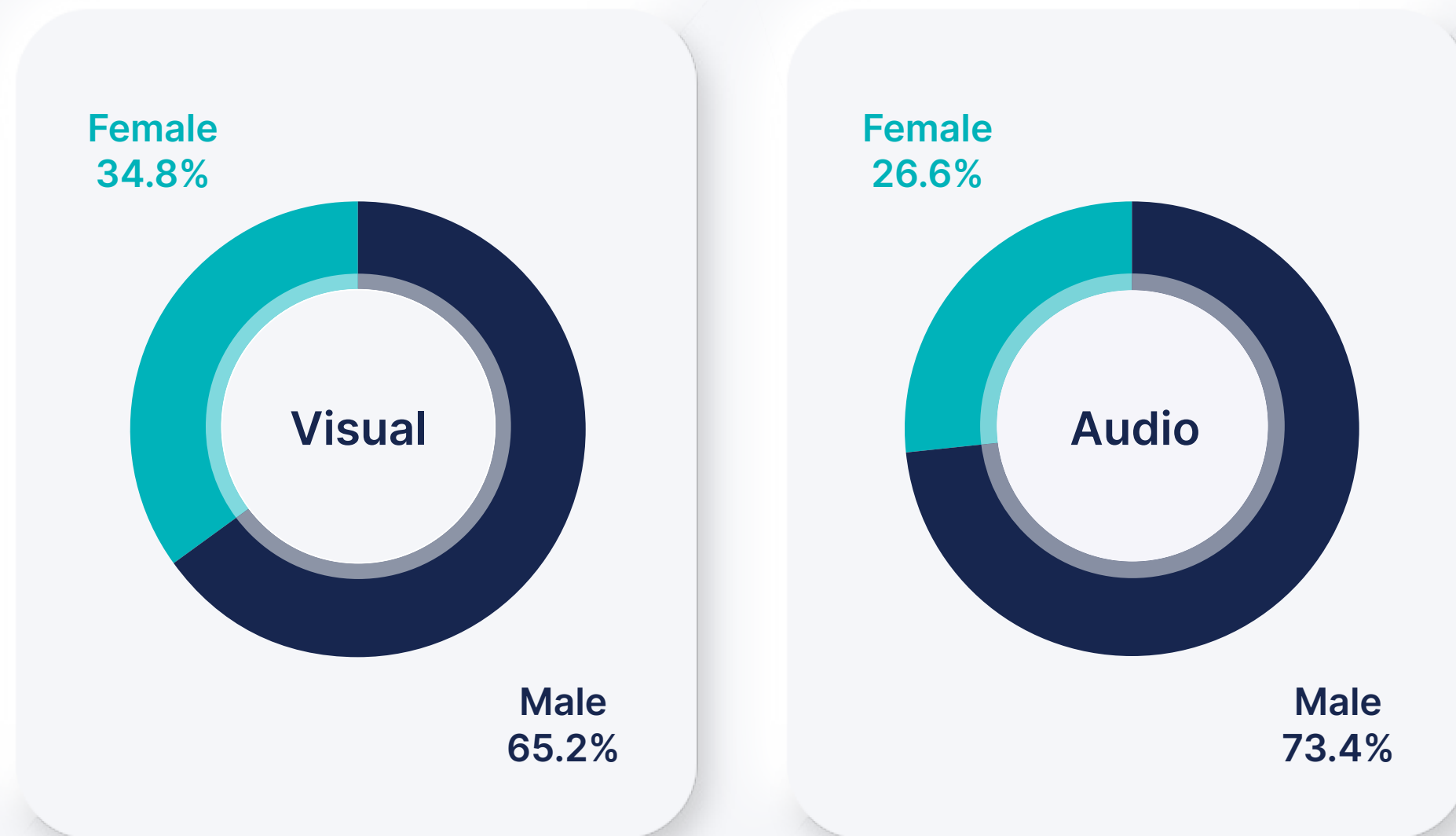
**Here is what we see.**





# Gender

Male/Female Composition of Who We See and Who We Hear in Advertising: 2022 Year-to-date



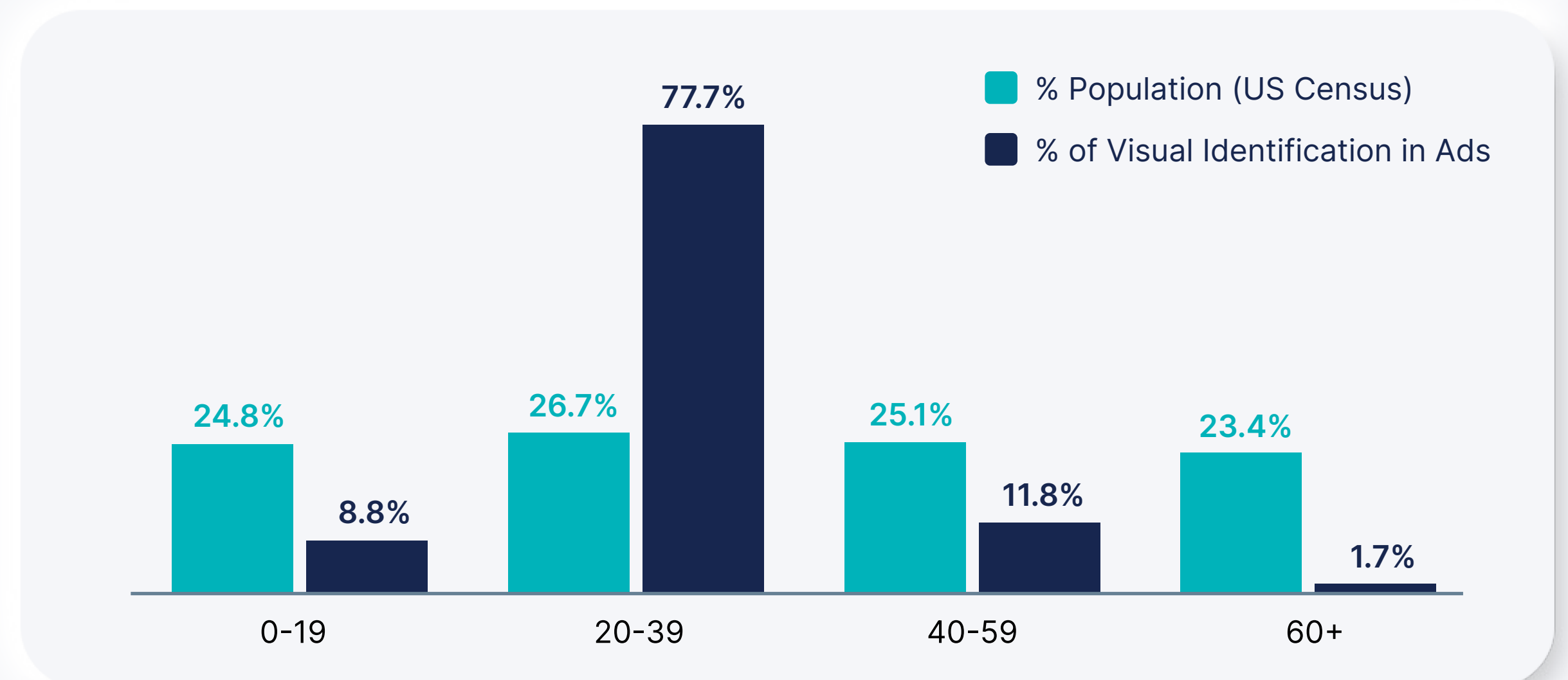
The population is 50.5% female/49.5% male.

In 2022, **male cast members outnumber females** visually.

The **male skew is more pronounced when analyzing the voices we hear** in advertising.

# Age

Composition of On-screen Cast Member Age Ranges: 2022 Year-to-date



In 2022, the **composition of the 20-39 age segment in ads is nearly 3X's that of the US population.**



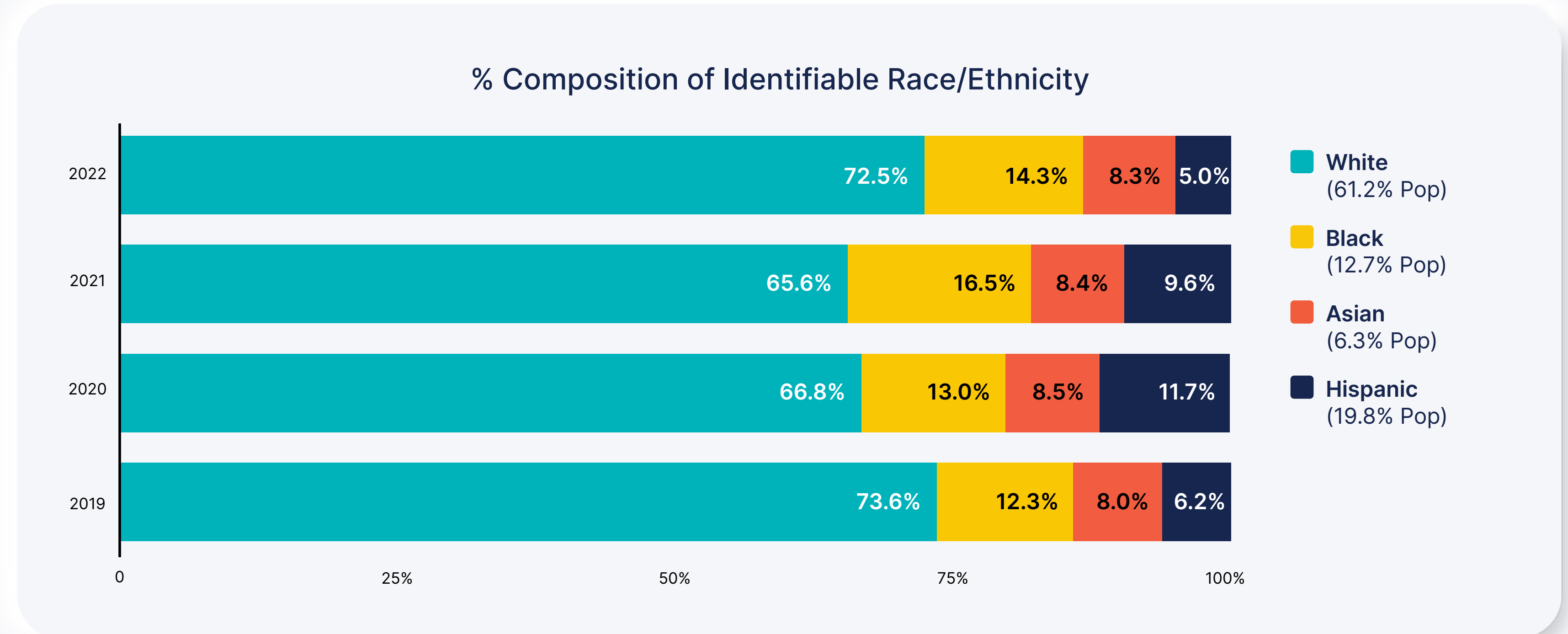
# Race & Ethnicity

In 2022, advertising in North America was more white than the previous year. While the final % may change slightly when Nov/Dec data is tallied for the full year analysis, it will most likely still hold true. The composition of white performers in ads in 2022 is 72.5% of all identifiable faces, which is 18% higher than the white population based on the US Census (61.2%).

The % of Black cast members dropped from 2021, though at 14.3%, the prevalence of this segment is higher than the population (12.7%)

Hispanic or Latino composition dropped nearly in half from 2021 to 2022 and is underrepresented in ad creative vs. this segment's % population

The composition of Asian cast members has held fairly constant over the past 4 years at 8.0-8.5%, over indexing their incidence in the overall population.



Note: In order to provide context for the complexion of advertising vs. the population, we are matching the data we are able to report with data from the US Census Bureau.

While the Census includes additional segments listed below, we are not including them here as, unfortunately, AI technology cannot yet detect these nuances in visual information with high enough confidence. These Census segments, are "American Indian & Alaskan Native," "Native Hawaiian or Other Pacific Islander," "2+ Races," and "Other Race."

We are reporting only the measurable race/ethnicity segments and re-expressing the percentages to reflect this, and total 100%. See additional detail on page 21.

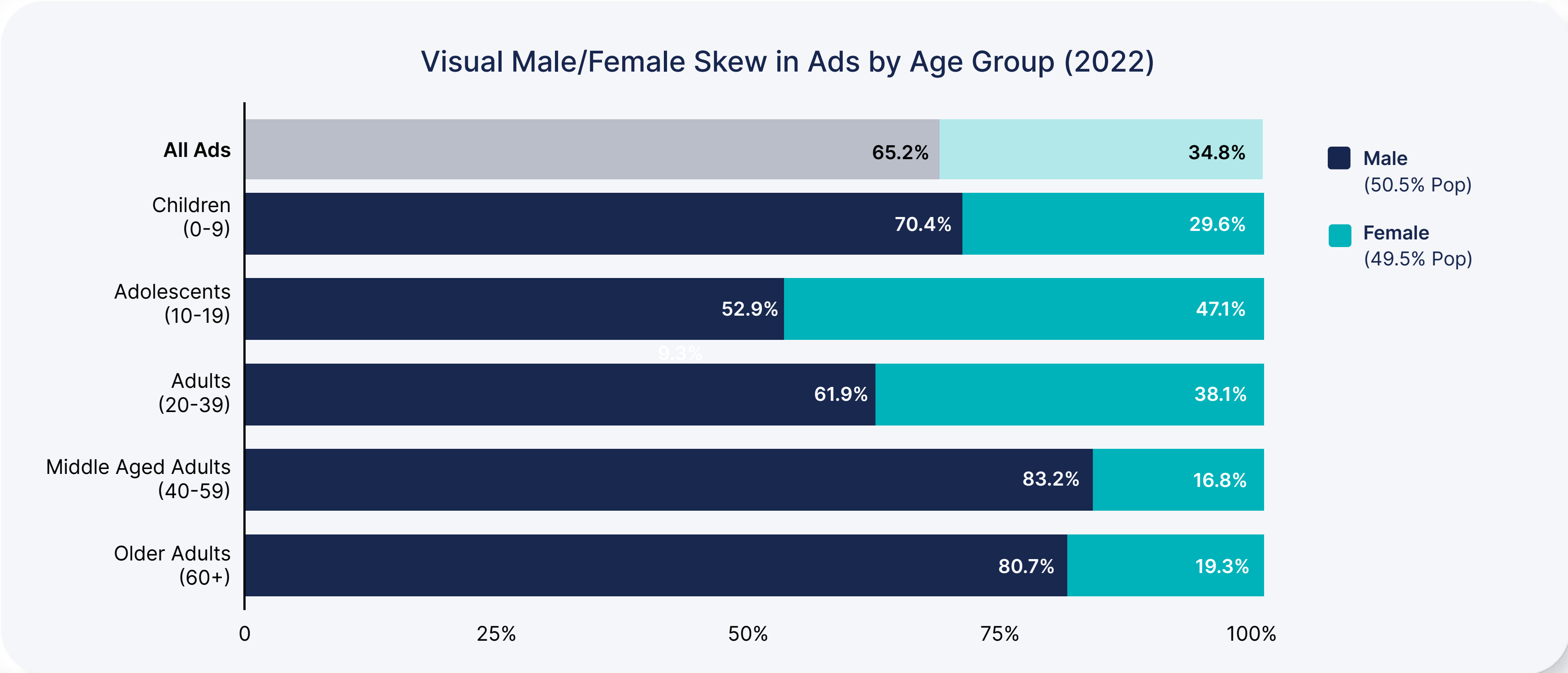


# Findings by Age Group

In 2022, the gender mix and the % composition of race/ethnicity differed meaningfully by age group.

Older age segments skewed much more male than ads overall.

Conversely, the highest female skews occur in the 10-19 and 20-39 segments.





# Findings by Age Group (cont'd)

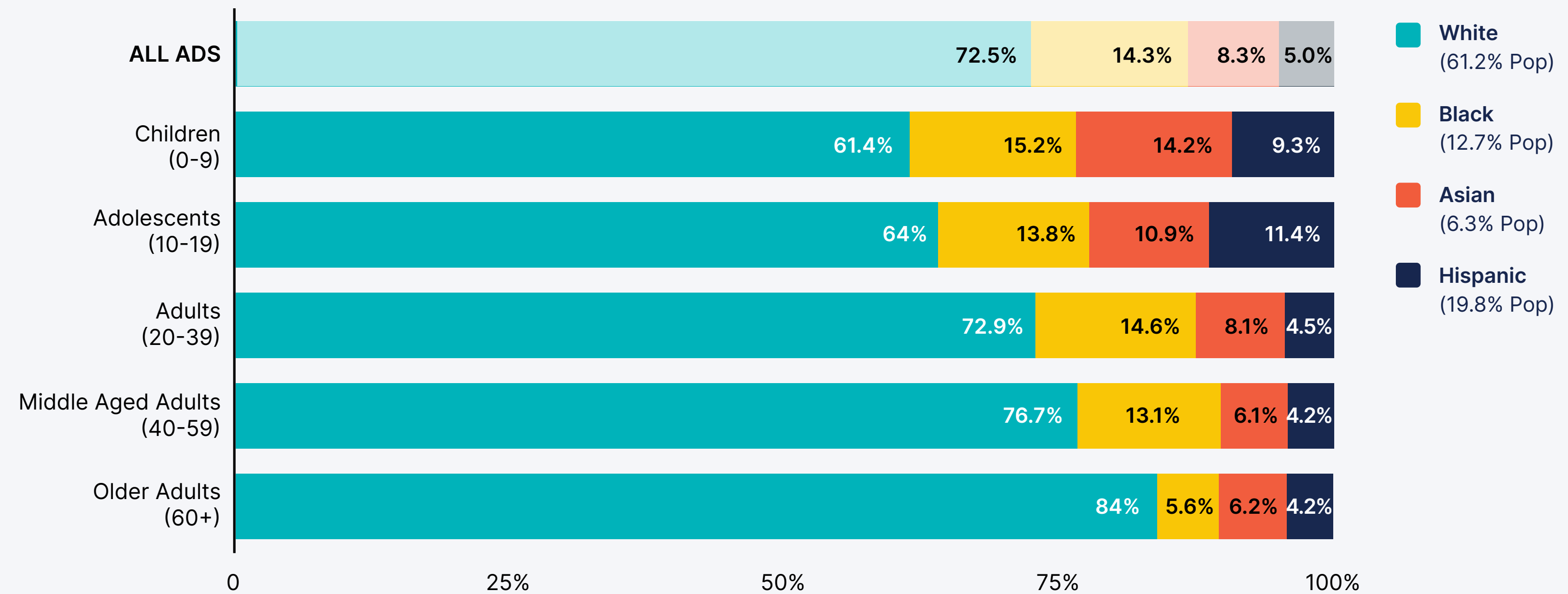
In 2022, the gender mix and the % composition of race/ethnicity differed meaningfully by age group.

The composition of **white cast members increases steadily from the youngest to the oldest** age groups.

**Children 0-9 are more likely to be Black or Asian** vs. other race/ethnicity segments.

**Hispanic/Latino composition is highest in the 10-19 range.**

% Composition of Race/Ethnicity by Age Group (2022)





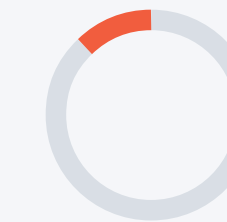
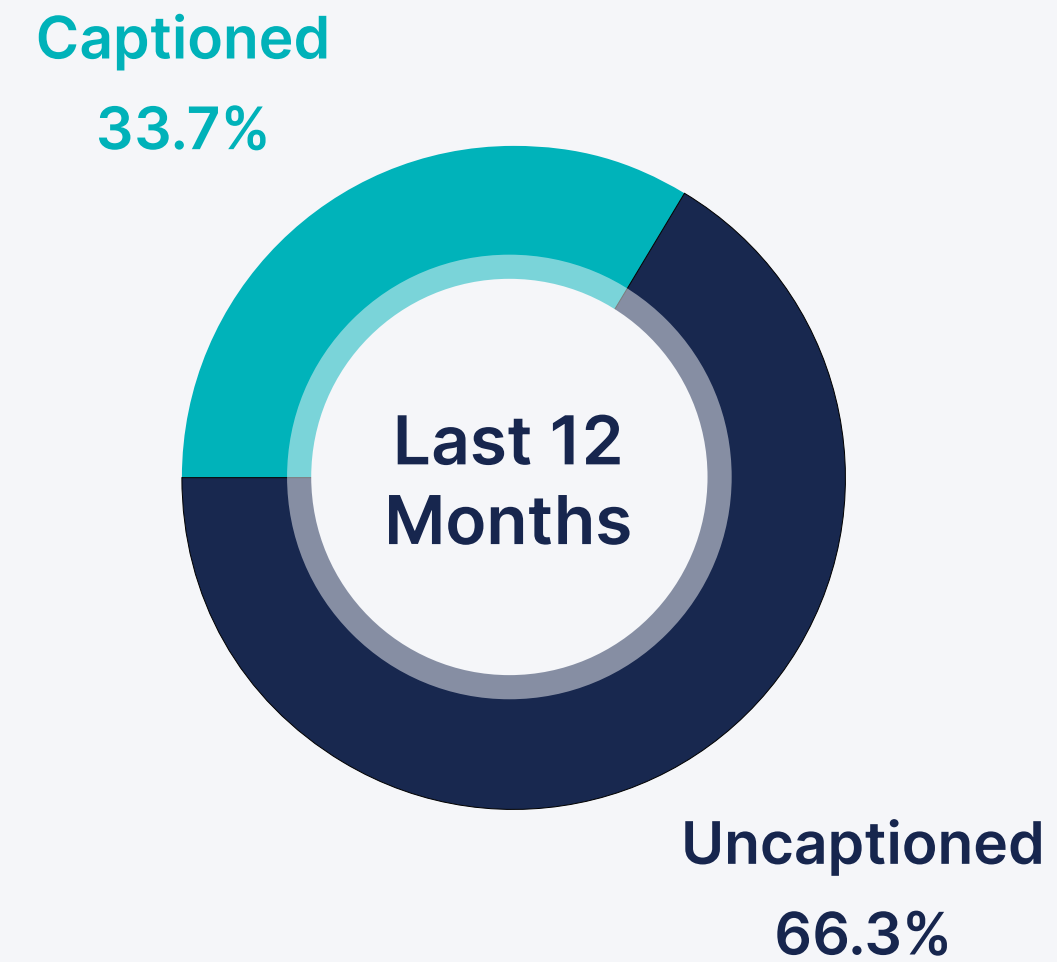
# Accessibility Practices

Last 12 Months: November 2021 – October 2022

11 Million people in the US alone are hard of hearing or functionally deaf.<sup>1</sup>

In 2022, only 1 in 3 creative assets includes captions.

Captioned ads include both closed captions, which can be turned on/off, and open captions, which are always on-screen.



12 Million people are blind or have low vision.<sup>2</sup>



In 2022, a fraction of a percent of all ads include audio description.

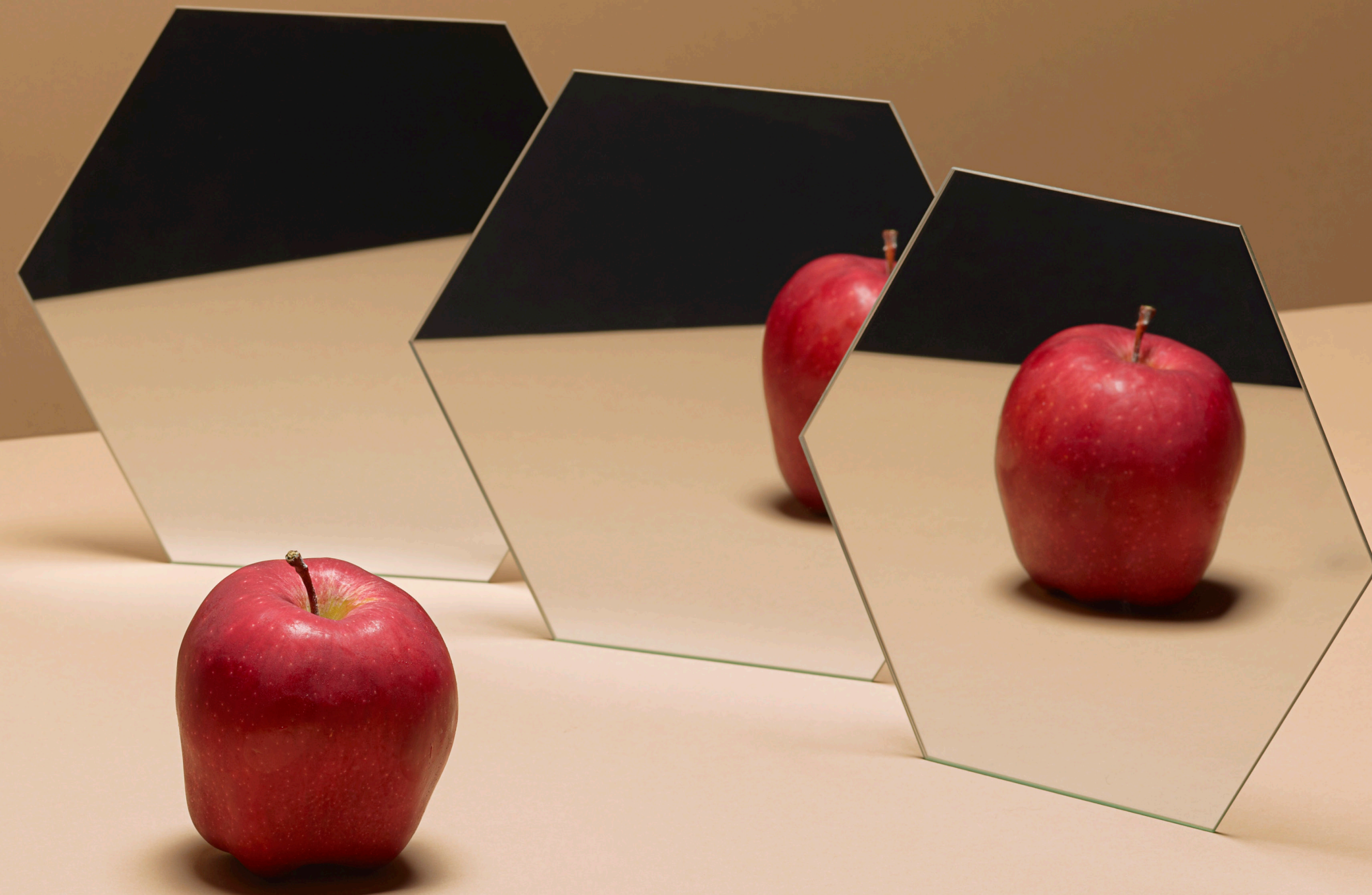
Audio description can be turned on/off, and is the narration of key visual elements in an ad.

<sup>1</sup> Survey of Income and Program Participation (SIPP)

<sup>2</sup> Centers for Disease Control & Prevention (CDC)



# Methodology





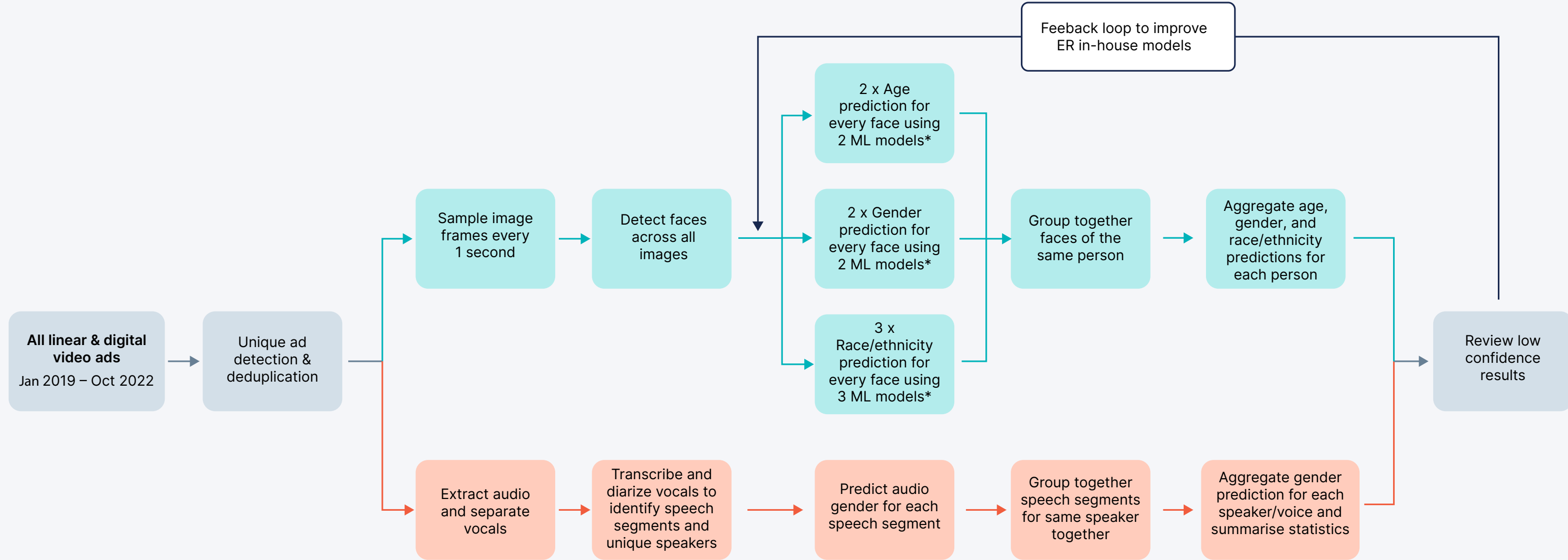
# Methodology

With over half a billion brand creative assets under management, Extreme Reach has ready access to the master source files for this analysis.

This enables us to provide large-scale industry benchmarks, but it should be noted that we will not provide data or detail below the aggregate ad vertical level as our work with our individual clients is proprietary.

This study analyzes all video ads deployed to linear and digital destinations in the US and Canada in 2019, 2020, 2021, and 2022 through October.

## Analysis Process



Note: For optimal accuracy, ER use an ensemble of multiple ML models from DeepFace, FairFace and ER's own in-house AI models and aggregate the results from each of these models and the multiple observations of each face across every frame of the video



## Data Validation

ER manually reviews low confidence data returned after passing assets through multiple solutions. This approach of developing a balanced dataset across each of the different diversity categories aims to correct some of the bias seen in historic, single AI models in this area.

In a recent study for a large advertiser, the accuracy was validated as 96.5%. Manual tagging of the race/ethnicity of each cast member was performed by their team for 350 assets. ER then ran the AI analysis and machine learning models on the same set of assets. ER's use of multiple existing solutions combined with proprietary in-house modelling far exceeds the average accuracy of any individual solution (70-80% accuracy vs. manual review).

## Average Number of Cast Members per Ad

For this study, we analyze each distinct facet independently — gender, age, race/ethnicity.

We only report data for each segment that is identifiable by the AI and machine learning models with high confidence.

This results in slightly different findings for cast size since the base for each calculation is specific to that data segment.

For example, for the genders that we see on screen, we look at the total people where visual gender is identifiable by AI with confidence, and then calculate the average number of cast members. And so on, for age and race/ethnicity.

## Pandemic Context

As expected, we see fewer cast members in ads during 2020-2021 due to limits on live commercial productions. That said, we saw many brands renew rights and reuse/adapt

previously produced assets, and also use other creative approaches during this time (stock footage, B-roll from previous shoots, celebrity self-recording in homes, etc.).

### When Gender is Identifiable

	Year	Avg Faces Per Asset
	2022	6.5
Covid Yrs Fewer Cast Members	2021	5.4
	2020	5.0
	2019	5.6
	4 Yr Avg	5.5

### When Age is Identifiable

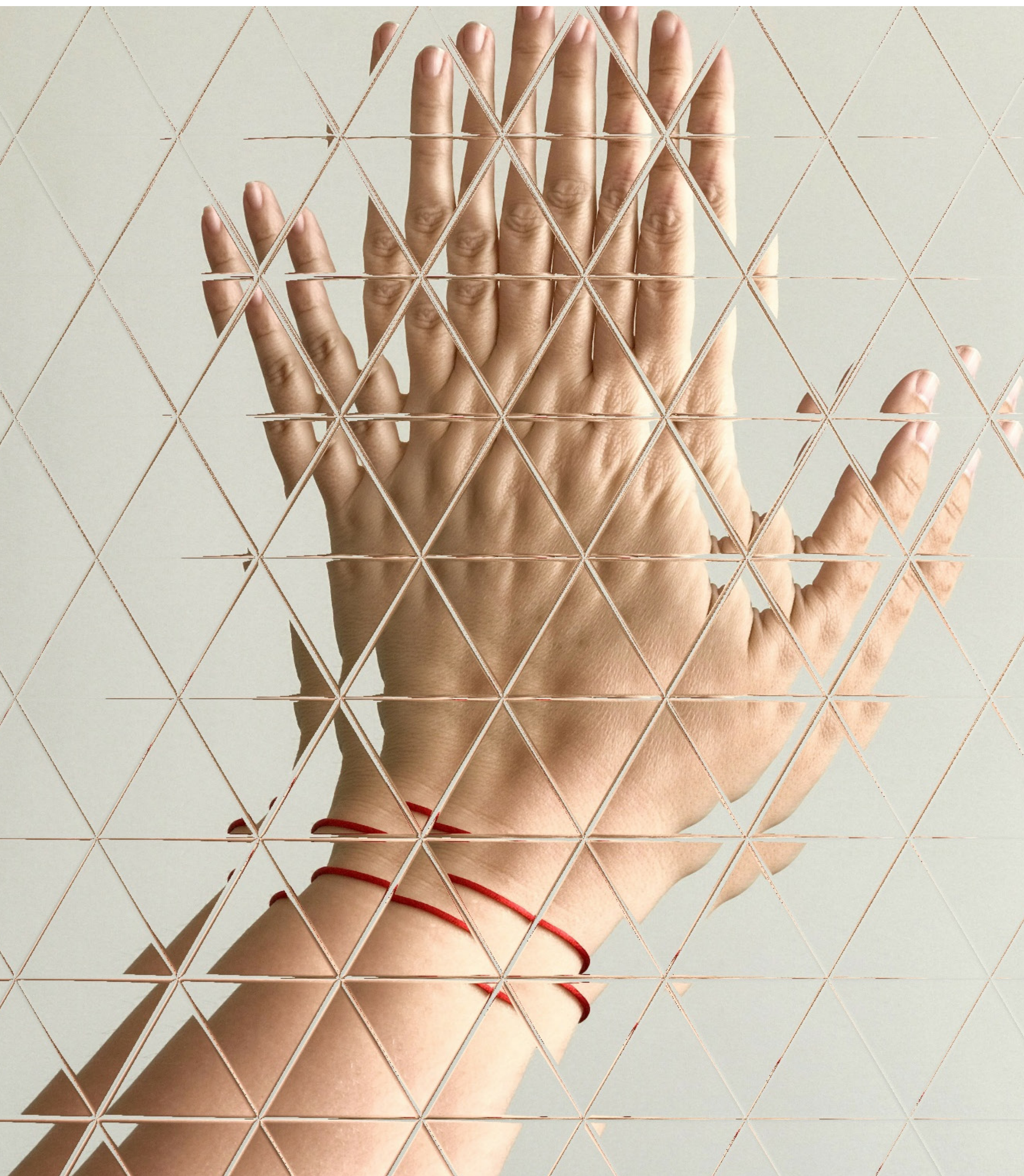
	Year	Avg Faces Per Asset
	2022	6.5
Covid Yrs Fewer Cast Members	2021	4.3
	2020	3.3
	2019	5.0
	4 Yr Avg	4.7

### When Race/Ethnicity is Identifiable

	Year	Avg Faces Per Asset
	2022	6.4
Covid Yrs Fewer Cast Members	2021	5.2
	2020	4.7
	2019	5.3
	4 Yr Avg	5.5



# Detailed Findings

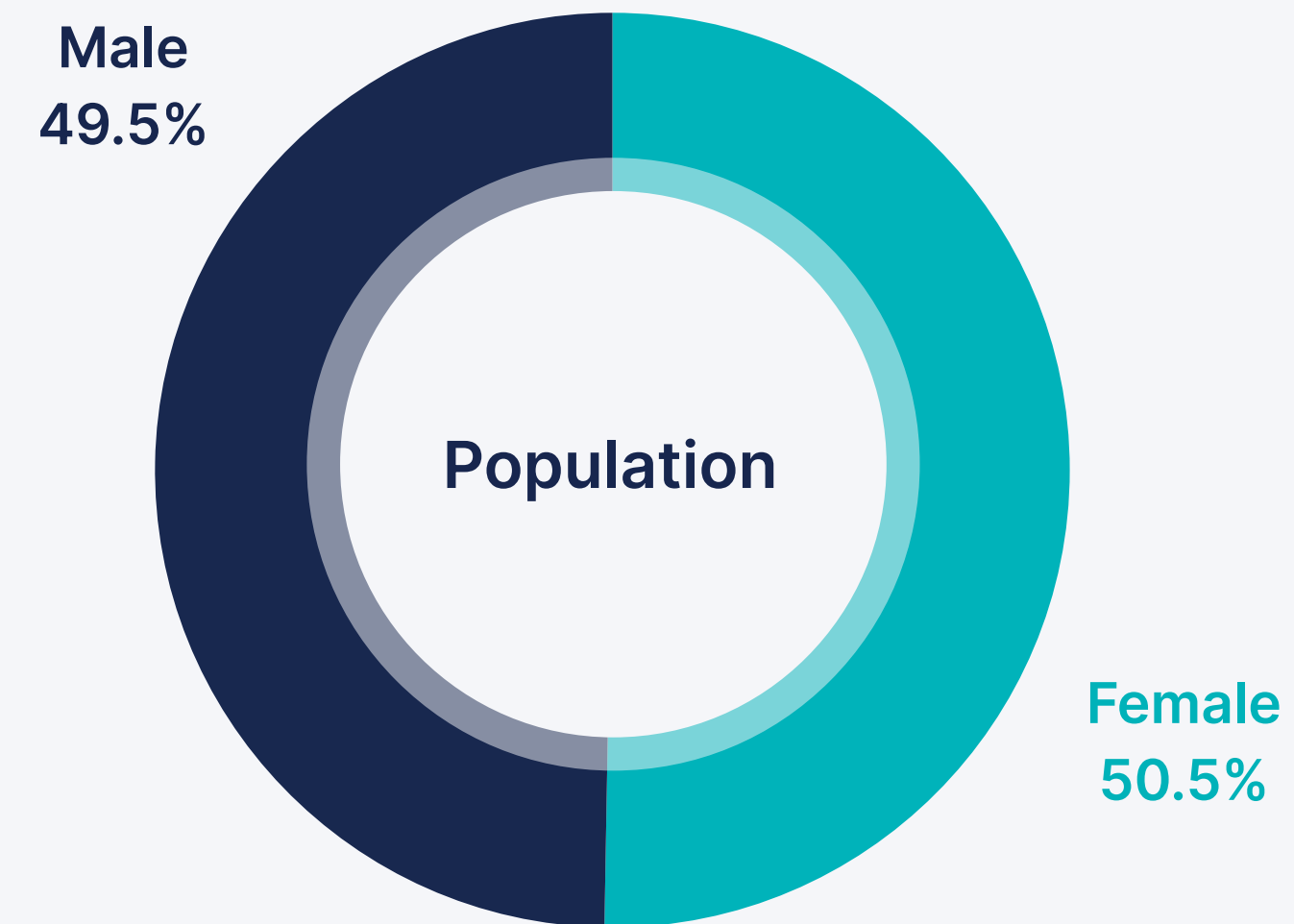




## Detailed Findings: Gender

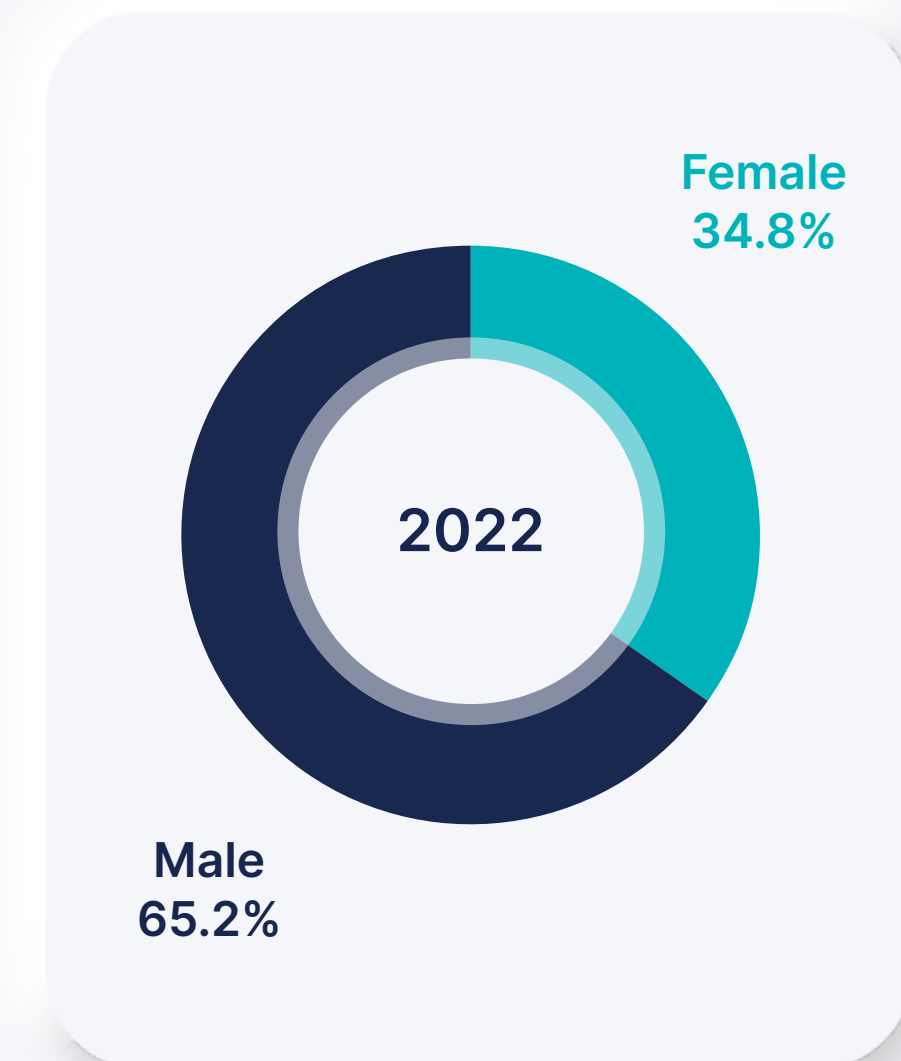
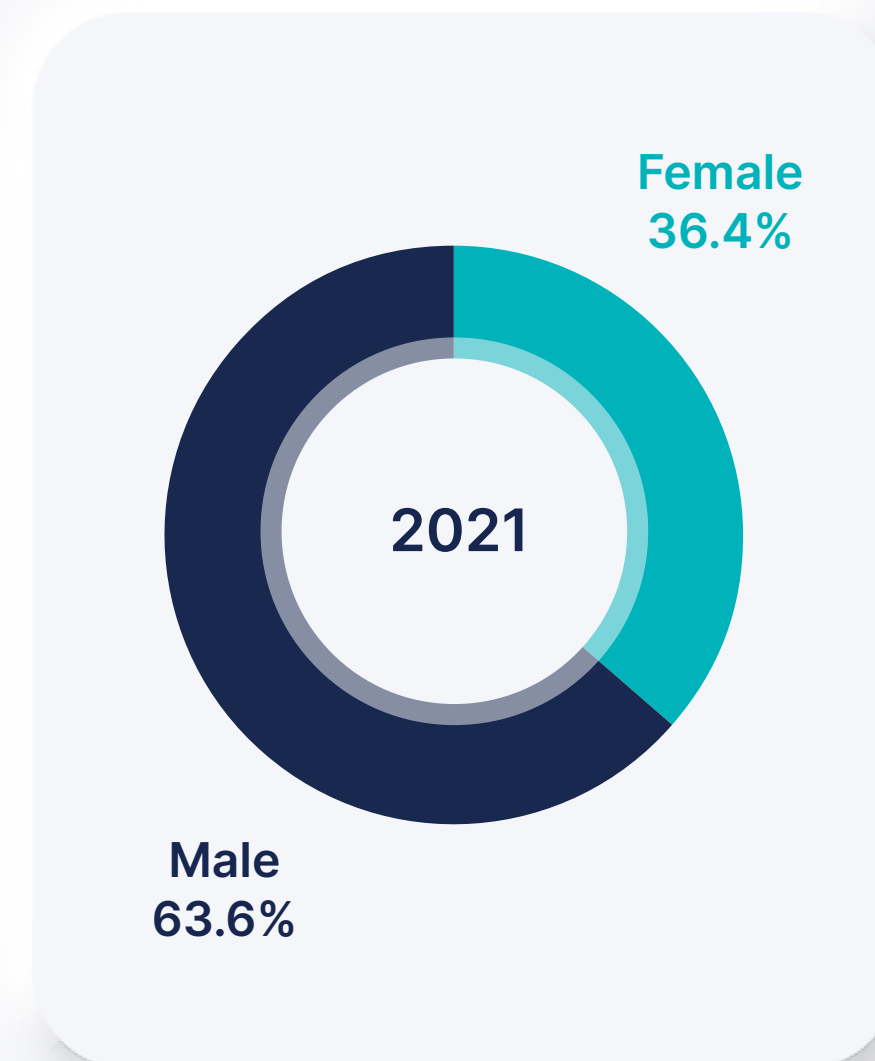
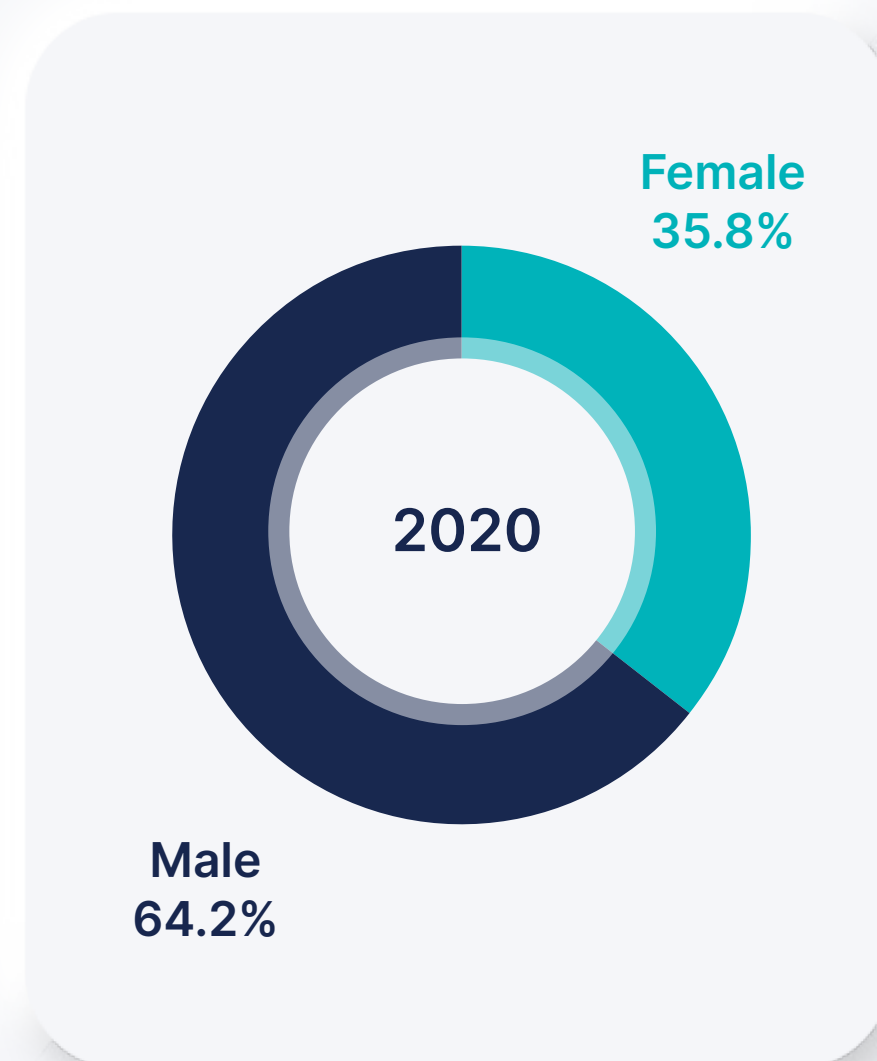
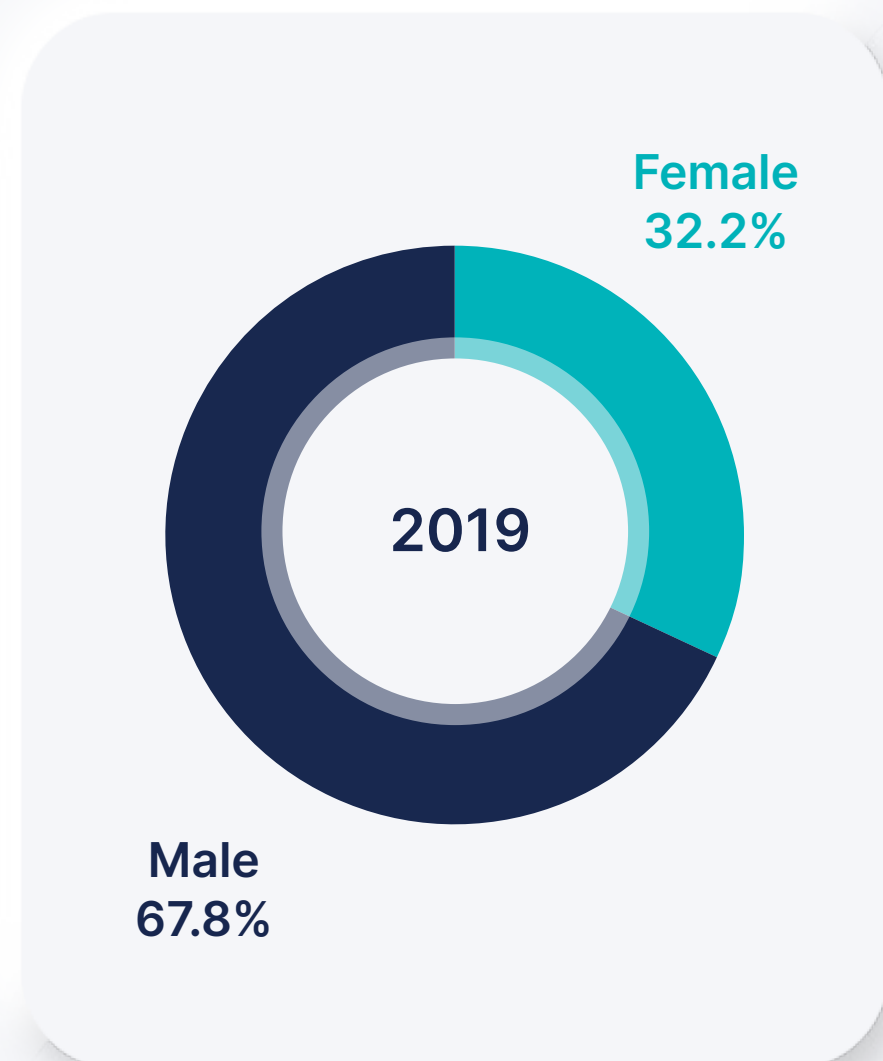
As a reminder, we are reporting on the visual and audio detection within ads based on traditional definitions.

We acknowledge that we cannot analyze, and therefore do not attempt to report on, how an individual may identify in ways that differ from visual and audio detection.





## Who We See in Advertising



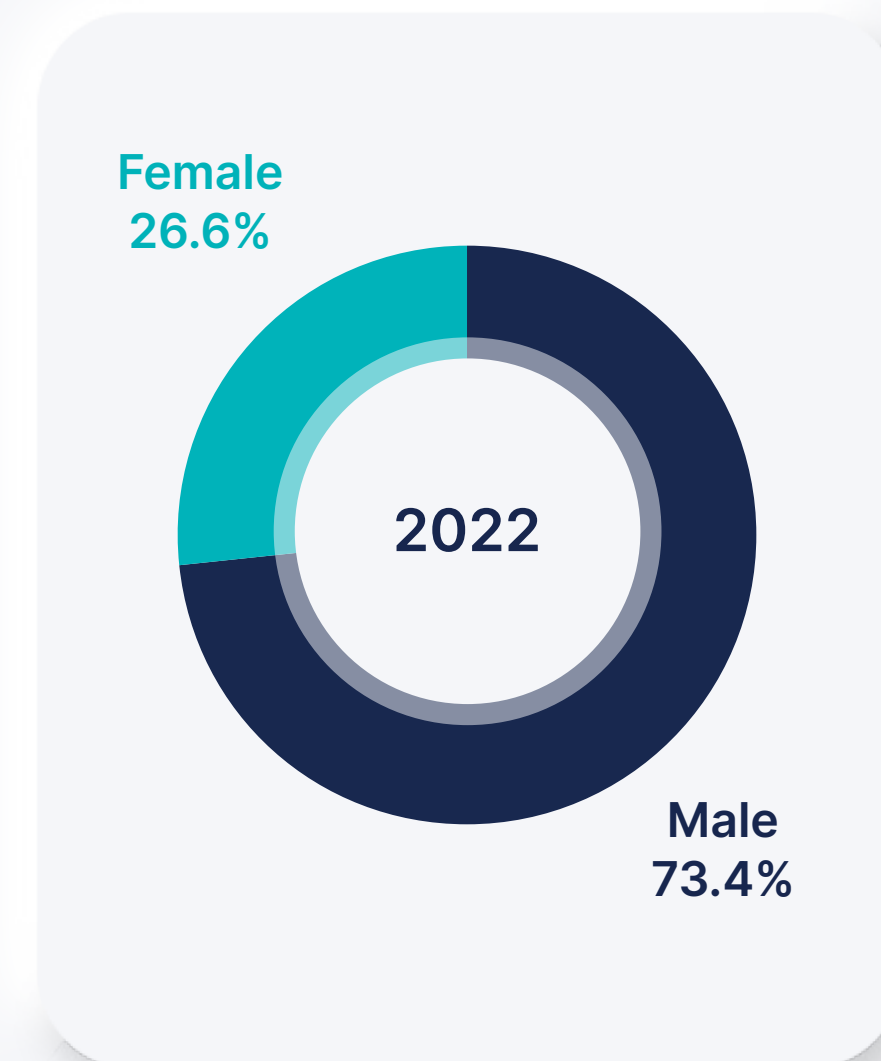
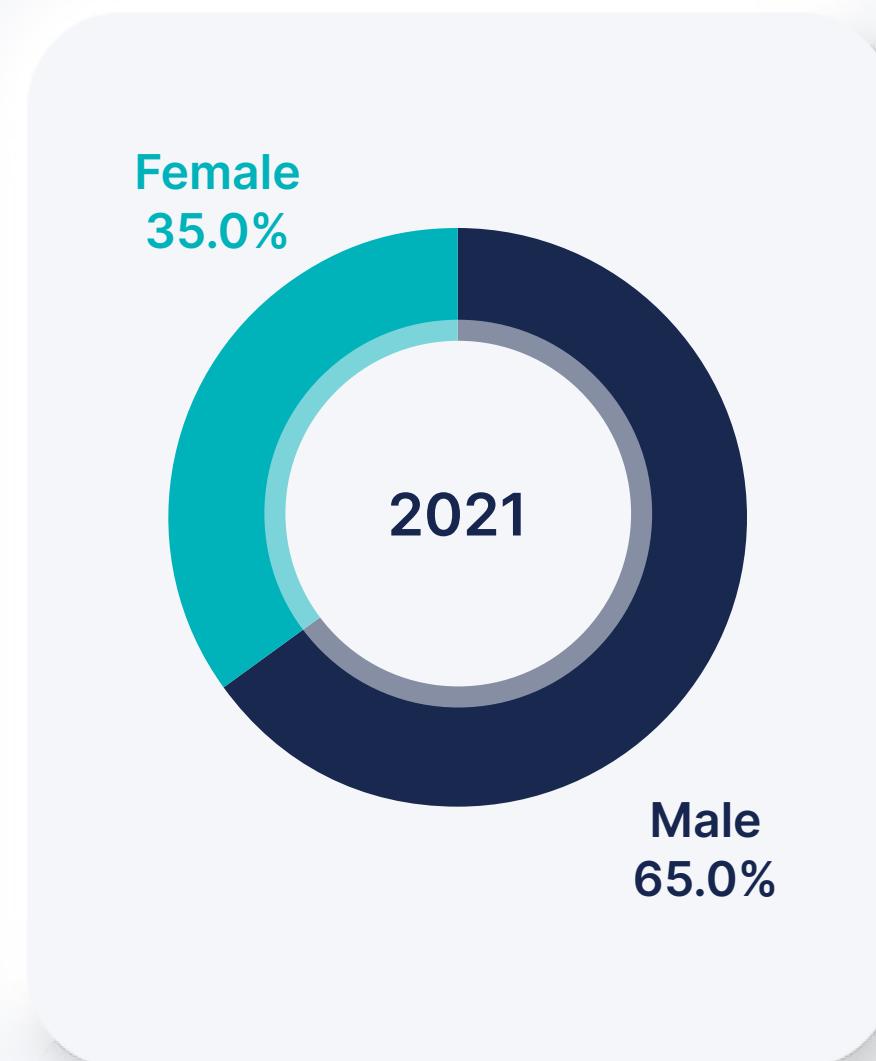
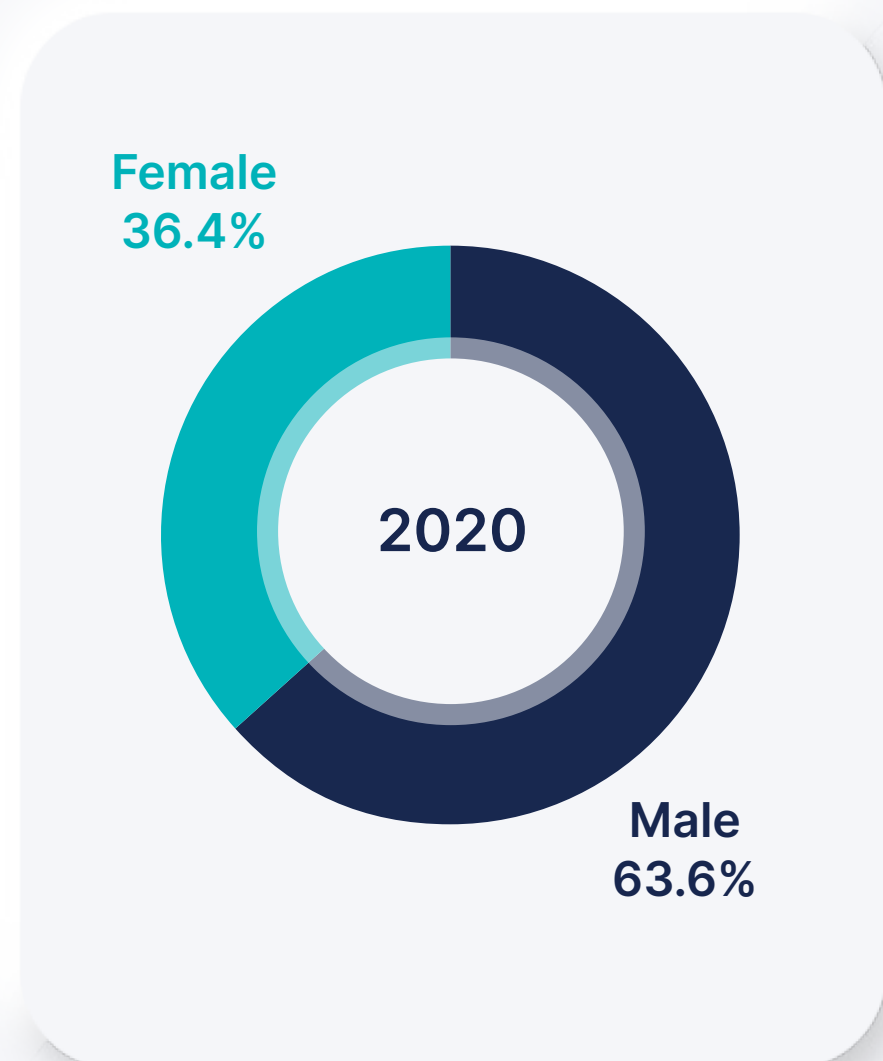
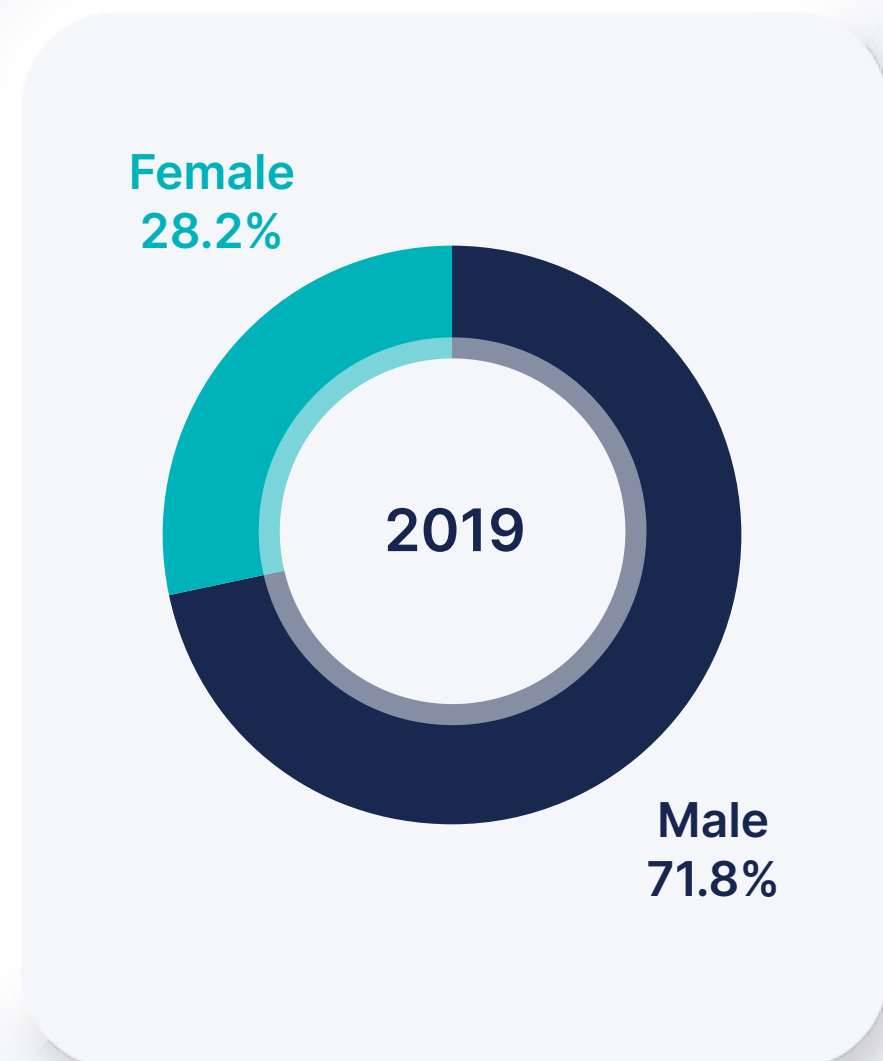
In 2019, 32% of cast members were female. Since that time, we saw **female composition rise then fall back slightly** in 2022.

Overall, **females are underrepresented** in comparison to making up 51% of the population.





## Who We Hear in Advertising



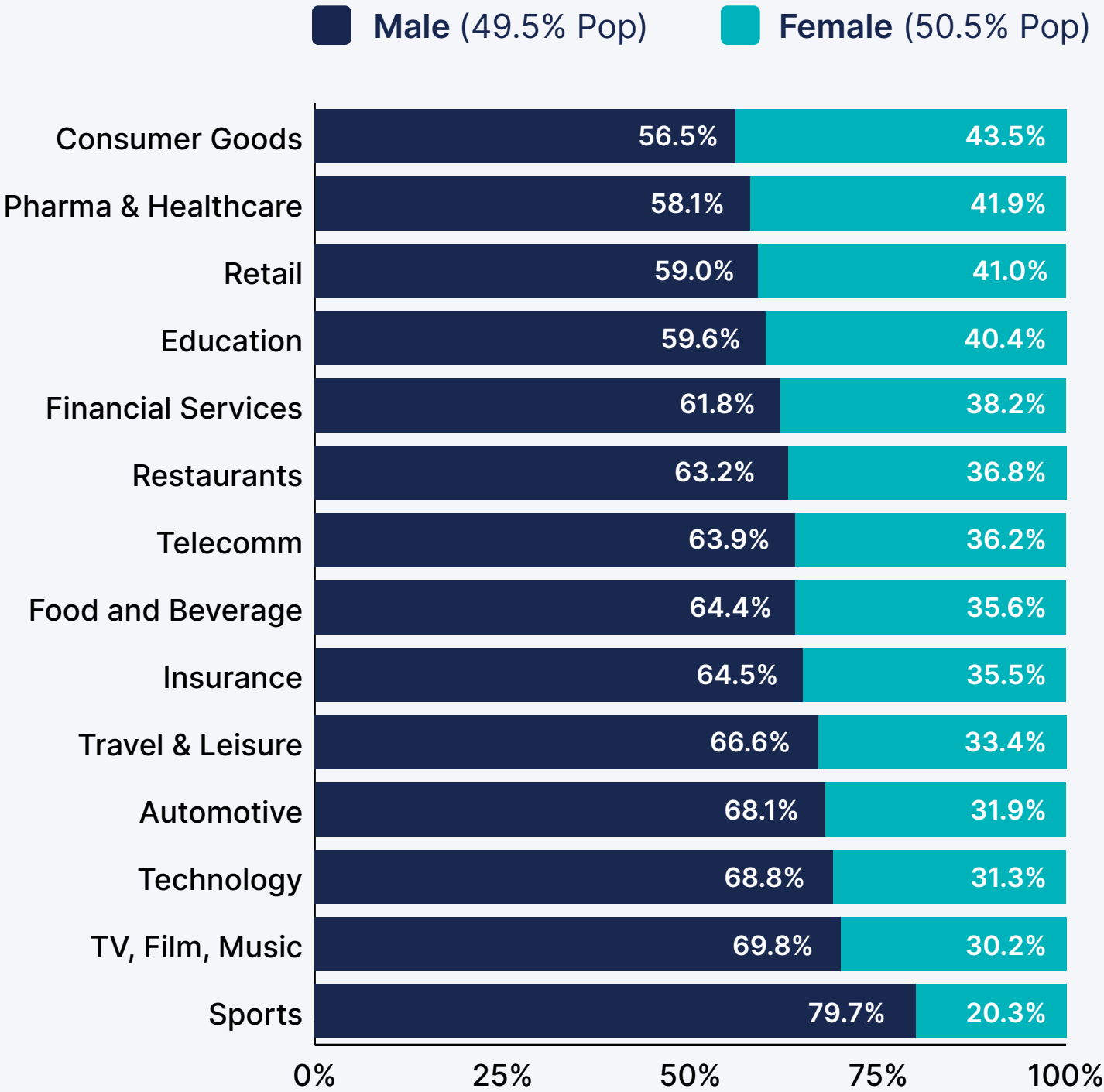
In all the spoken minutes across all assets in 2022, **we hear 27% female voices vs. 73% male.**

This is the **lowest incidence of female voices** over the last 4 years.

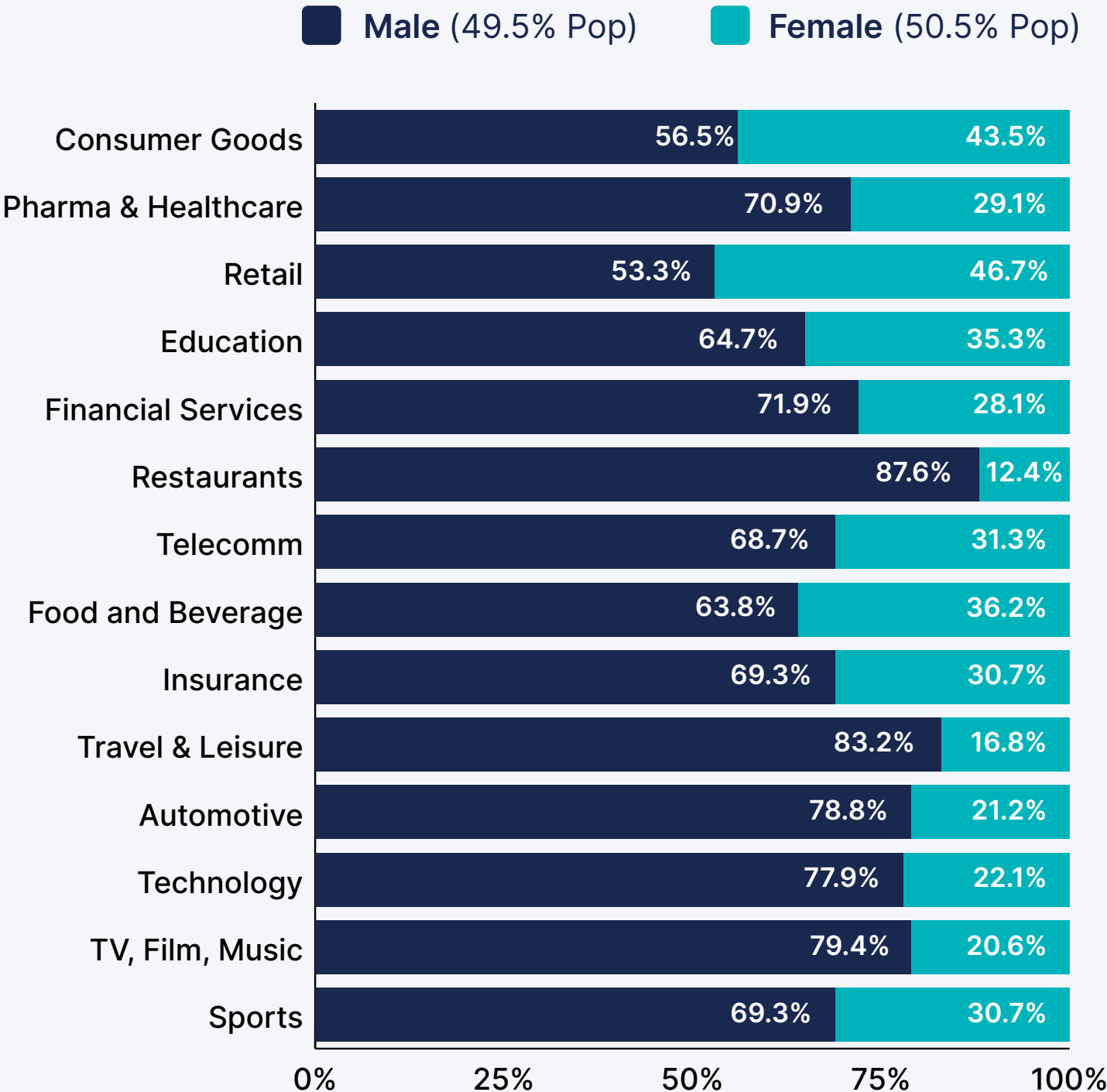
# Detailed Findings: Gender By Large Verticals (Highest Asset Count)



Who We See:  
Gender Composition 2022



Who We Hear:  
Gender Composition 2022



All large verticals skew male with regard to who we see on-screen and who we hear.

Three verticals use **female voices at a higher percentage** than their incidence visually: **Retail, Food & Beverage, and Sports.**

**Restaurant** advertising is 63% male from a visual perspective and has the highest % **male audio at 88%.**

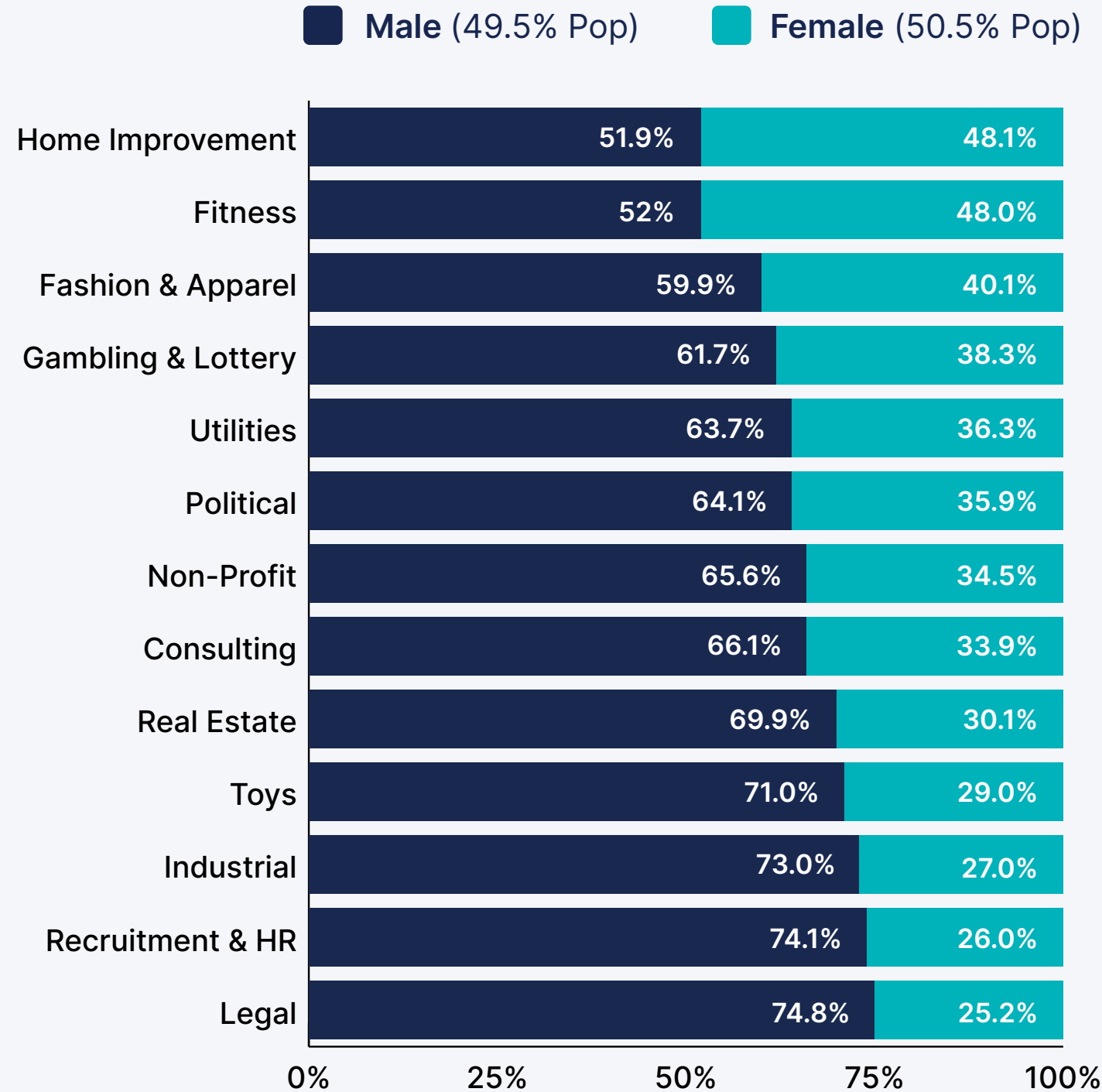
Similarly, **Travel & Leisure** ads are 67% male on-screen and the **audio heard is 83% male.**



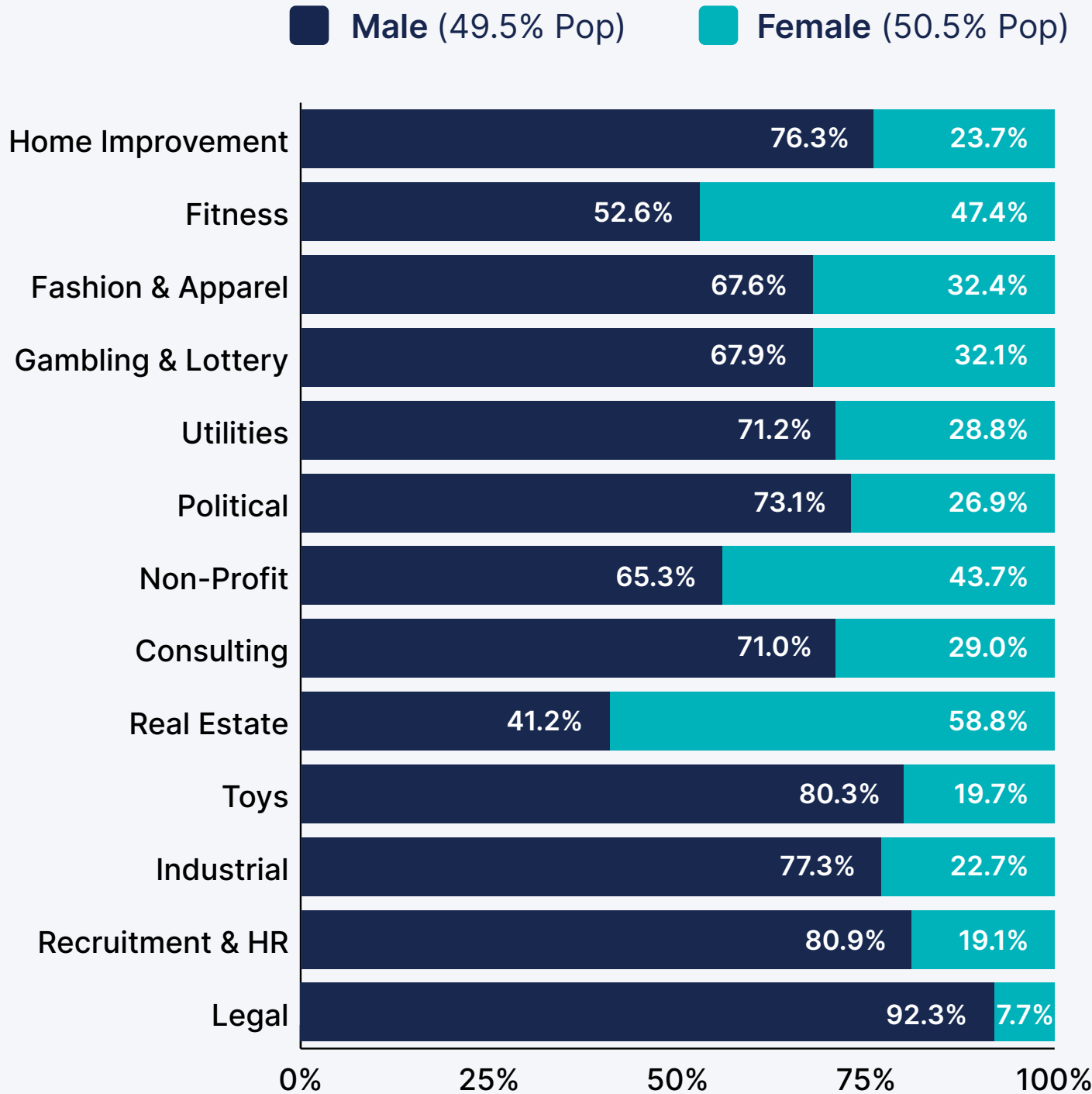
# Detailed Findings: Gender By Small/Medium Verticals



Who We See:  
Gender Composition 2022



Who We Hear:  
Gender Composition 2022



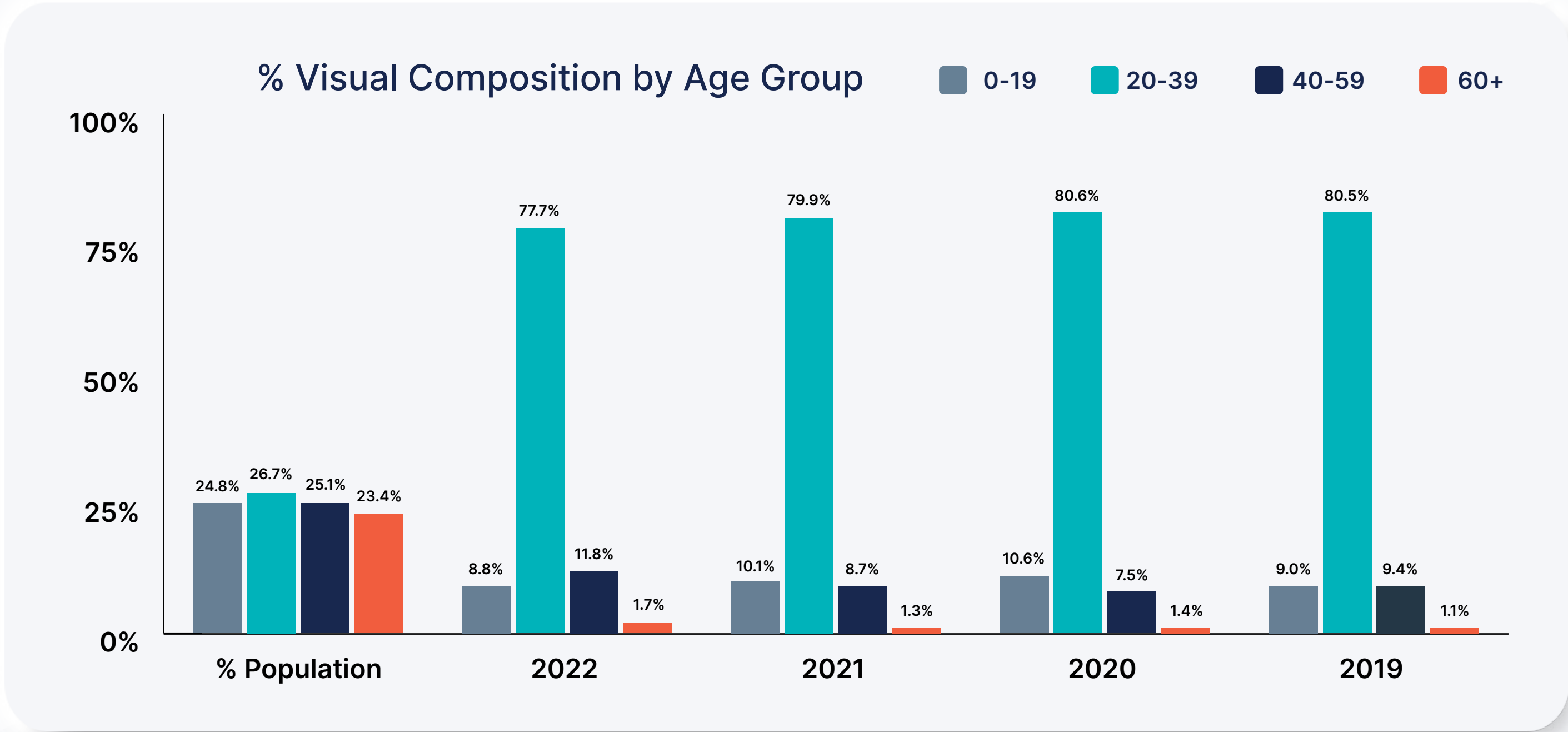
All small/medium verticals skew male with regard to who we see on-screen and who we hear, with one exception: Real Estate ads are the only category with a skew to female voices at 59%.

Legal ads show a similar trend with 75% males on-screen but the audio is 92% male.

Fitness and Non-Profit advertising have higher than average female voices, at 47% and 44% respectively.



# Detailed Findings: Age



While the 20-39 age segment dominates the people we see in ads, there has been a **slight but consistent increase in the older age segments** from 2019 to 2022.

	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	Total
% Pop	11.6%	13.2%	13.1%	13.6%	12.4%	12.7%	12.1%	11.3%	100.0%
2022	6.4%	2.5%	51.0%	26.7%	7.9%	3.8%	1.4%	0.3%	100.0%
2021	7.5%	2.6%	59.6%	20.3%	5.8%	2.9%	1.0%	0.3%	100.0%
2020	7.9%	2.6%	64.3%	16.3%	4.8%	2.7%	1.0%	0.4%	100.0%
2019	6.6%	2.5%	55.7%	24.8%	6.6%	2.8%	0.9%	0.2%	100.0%
Total	7.0%	2.5%	56.8%	22.8%	6.4%	3.1%	1.1%	0.3%	100.0%
% Change '22 vs. '19	-2.9%	-0.8%	-8.4%	7.7%	21.2%	35.8%	51.1%	65.0%	

A more granular breakdown further illustrates the **slight “aging” of advertising overall.**



# Detailed Findings: Age by Vertical 2022

In 2022, these 17 verticals have a younger composition than the average of all ads, which is already skewed very young vs. the population.

The largest verticals high on this list:

**Automotive ads are made up of 88% 20-39 cast members, which is 3 1/2 times that group's concentration in the population.**

**The Restaurant vertical, with 83% Adults 20-39, is 3X's the population.**

% Composition by Age Group

	0-19	20-39	40-59	60+
% Population	24.8%	26.7%	25.1%	23.4%
All Ads (2022)	8.8%	77.7%	11.8%	1.7%
Consulting	6.8%	89.0%	4.2%	0.0%
Recruitment & HR	0.7%	88.4%	10.1%	0.9%
Gambling & Lottery	2.2%	88.2%	8.9%	0.7%
Home Improvement	6.2%	88.1%	5.1%	0.6%
Automotive	5.3%	87.7%	6.8%	0.2%
Fashion & Apparel	6.3%	85.9%	7.0%	0.7%
Fitness	6.9%	83.3%	9.0%	0.8%
Restaurants	10.4%	83.1%	6.0%	0.6%
Sports	5.1%	83.0%	10.8%	1.1%
Food and Beverage	9.1%	82.8%	7.6%	0.5%
Telecomm	8.7%	81.7%	8.4%	1.2%
Technology	6.6%	81.7%	10.6%	1.0%
Retail	8.6%	81.3%	9.1%	1.1%
TV, Film, Music	5.6%	81.1%	12.4%	1.0%
Travel & Leisure	9.1%	80.9%	9.2%	0.8%
Education	11.9%	79.3%	7.9%	1.0%
Real Estate	9.0%	78.6%	11.6%	0.8%

	0-19	20-39	40-59	60+
% Population	24.8%	26.7%	25.1%	23.4%
All Ads (2022)	8.8%	77.7%	11.8%	1.7%
Insurance	5.9%	69.3%	20.3%	4.4%
Political	10.1%	66.4%	19.0%	4.5%
Legal	6.5%	70.2%	18.8%	4.6%
Utilities	11.8%	67.0%	18.5%	2.8%
Industrial	8.8%	76.2%	14.8%	0.2%
Financial Services	8.7%	73.9%	13.4%	4.0%
Toys	16.0%	71.6%	12.4%	0.0%
TV, Film, Music	5.6%	81.1%	12.4%	1.0%
Pharma & Healthcare	21.9%	64.7%	11.6%	1.8%
Real Estate	9.0%	78.6%	11.6%	0.8%

Conversely, these verticals have the highest composition of the 40-59 age segment.

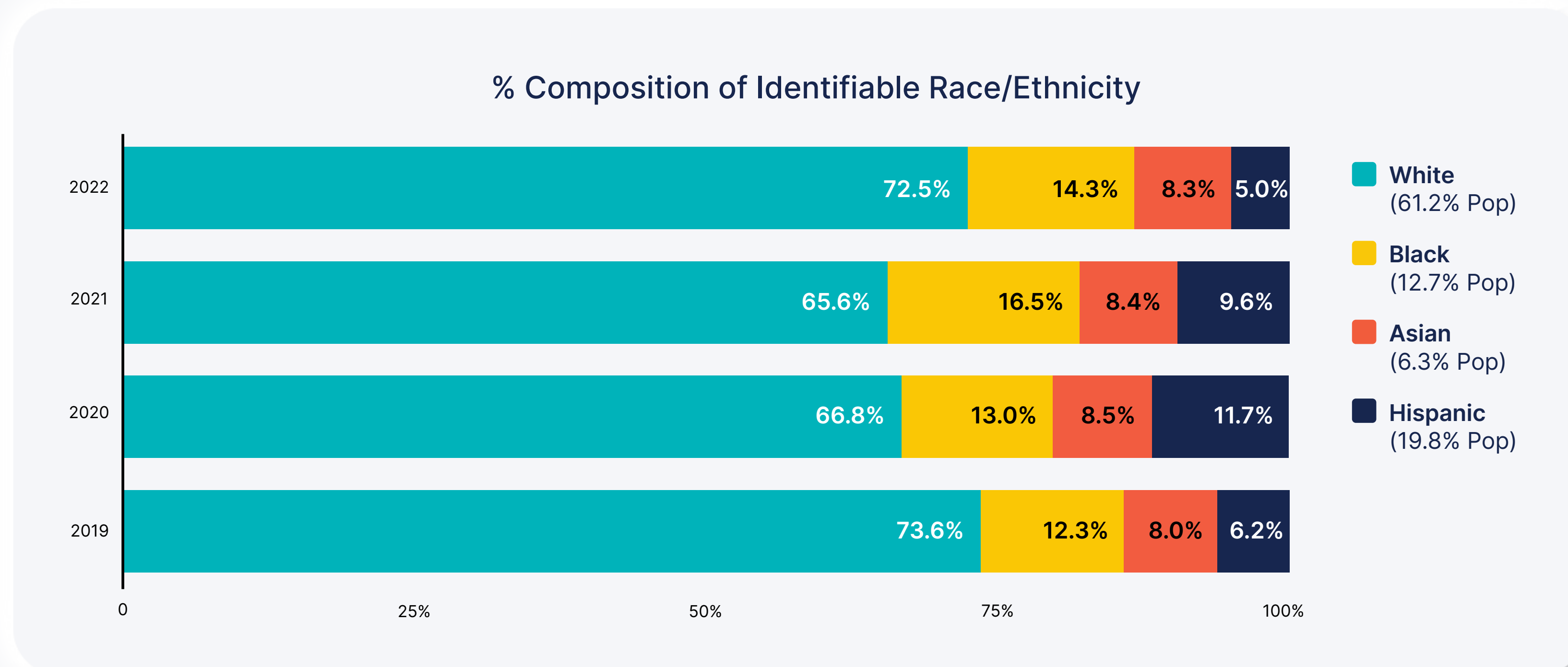
For example, **Insurance tops the list with 20% of cast members in the 40-59 age range**, almost double that group's representation across all ads in 2022.

	0-19	20-39	40-59	60+
% Population	24.8%	26.7%	25.1%	23.4%
All Ads (2022)	8.8%	77.7%	11.8%	1.7%
Charity/Non-Profit	29.1%	54.6%	9.7%	6.6%
Pharma & Healthcare	21.9%	64.7%	11.6%	1.8%
Toys	16.0%	71.6%	12.4%	0.0%
Consumer Goods	13.1%	77.2%	8.3%	1.4%
Education	11.9%	79.3%	7.9%	1.0%
Utilities	11.8%	67.0%	18.5%	2.8%
Restaurants	10.4%	83.1%	6.0%	0.6%

Interestingly, these verticals have the highest propensity to use children/teens in advertising.



# Detailed Findings: Race/Ethnicity



We are only able to report on these broad race/ethnicity segments which are identifiable with high confidence.

As AI and machine learning models become more sophisticated, we hope to report on more granular buckets in line with the Census.

	White	Black	Asian	Amer Indian, Alaska Native	Native/Hawaii/PI	Other	2+ Races	Hispanic or Latino	Total Pop
<b>US Census Categorizations &amp; Populations Figures</b>	191,697,647	39,940,338	19,618,719	2,251,699	622,018	1,689,833	13,548,983	62,080,044	331,449,281
	57.8%	12.1%	5.9%	0.7%	0.2%	0.5%	4.1%	18.7%	100%
<b>Segment Pop</b>	191,697,647	39,940,338	19,618,719	Not yet identifiable with high enough confidence in AI & machine learning models.				62,080,044	313,336,748
<b>Adjusted for 4 Measurable Study Segments (to = 100%)</b>	61.2%	12.7%	6.3%					19.8%	100%



# Detailed Findings: Race/Ethnicity by Large Verticals

The next set of charts looks at the **14 large verticals** (based on asset volume), sorted for each race/ethnicity from highest composition to lowest.

The top 5 verticals for each is listed below. **Restaurant advertising** is the most diverse, with a high composition of Black, Asian, and Hispanic/Latino cast members.

## White

Highest % Composition

Sports

Retail

Automotive

Travel & Leisure

TV, Film, Music

## Black

Highest % Composition

Restaurants

Telecommunications

Automotive

Food & Beverage

TV, Film, Music

## Asian

Highest % Composition

Restaurants

Education

Technology

Consumer Goods

Pharma & Healthcare

## Hispanic/Latino

Highest % Composition

Insurance

Pharma & Healthcare

Financial Services

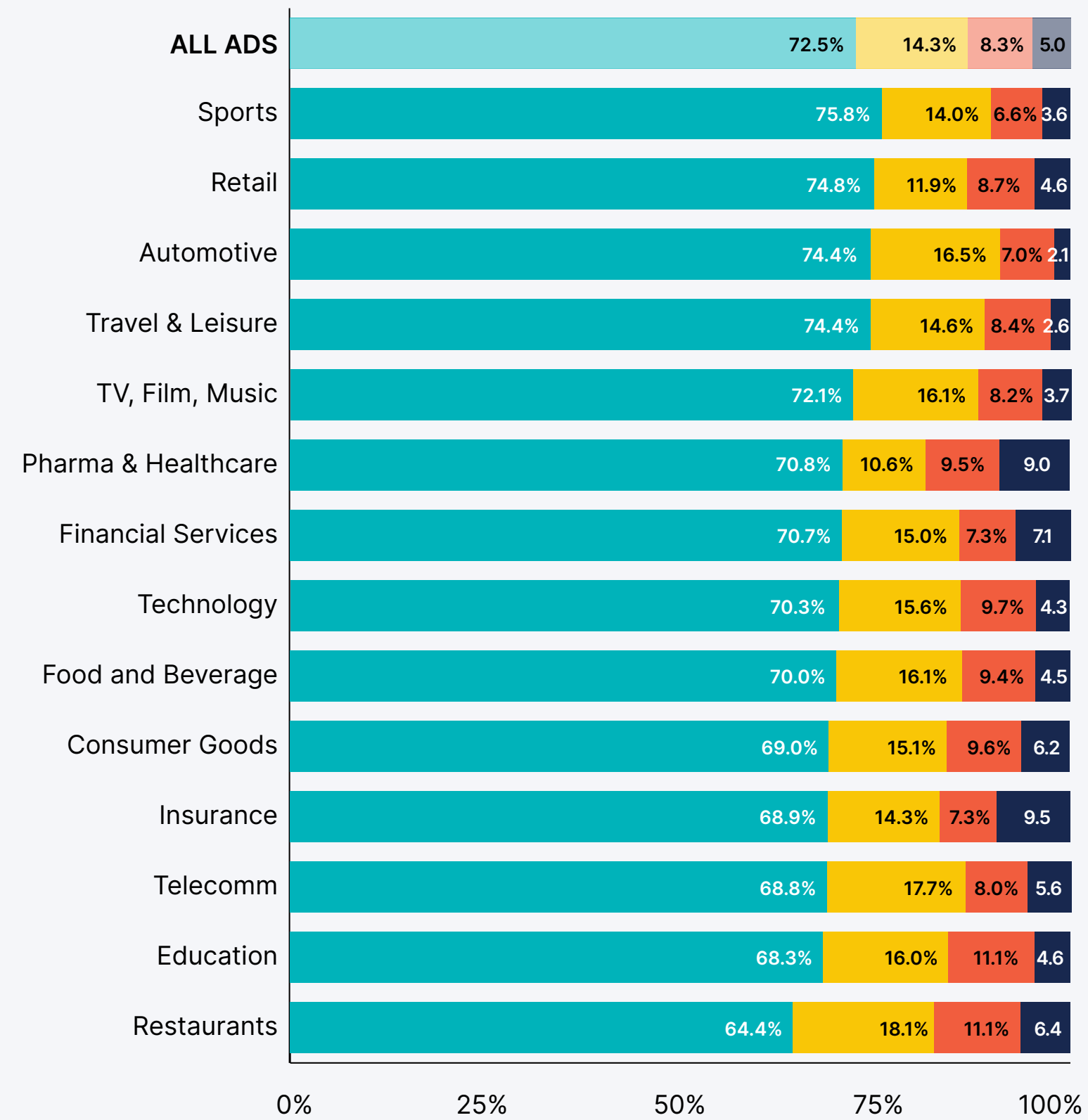
Restaurants

Consumer Goods

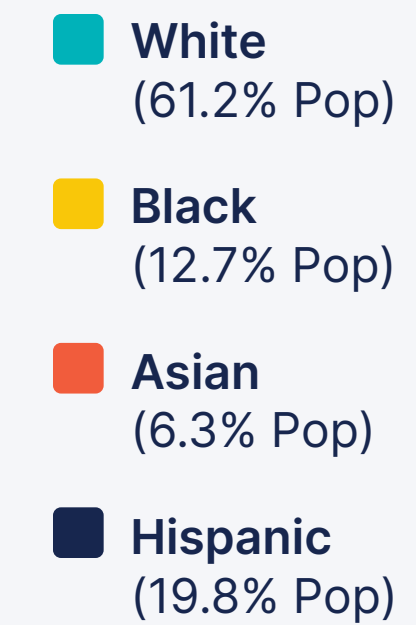
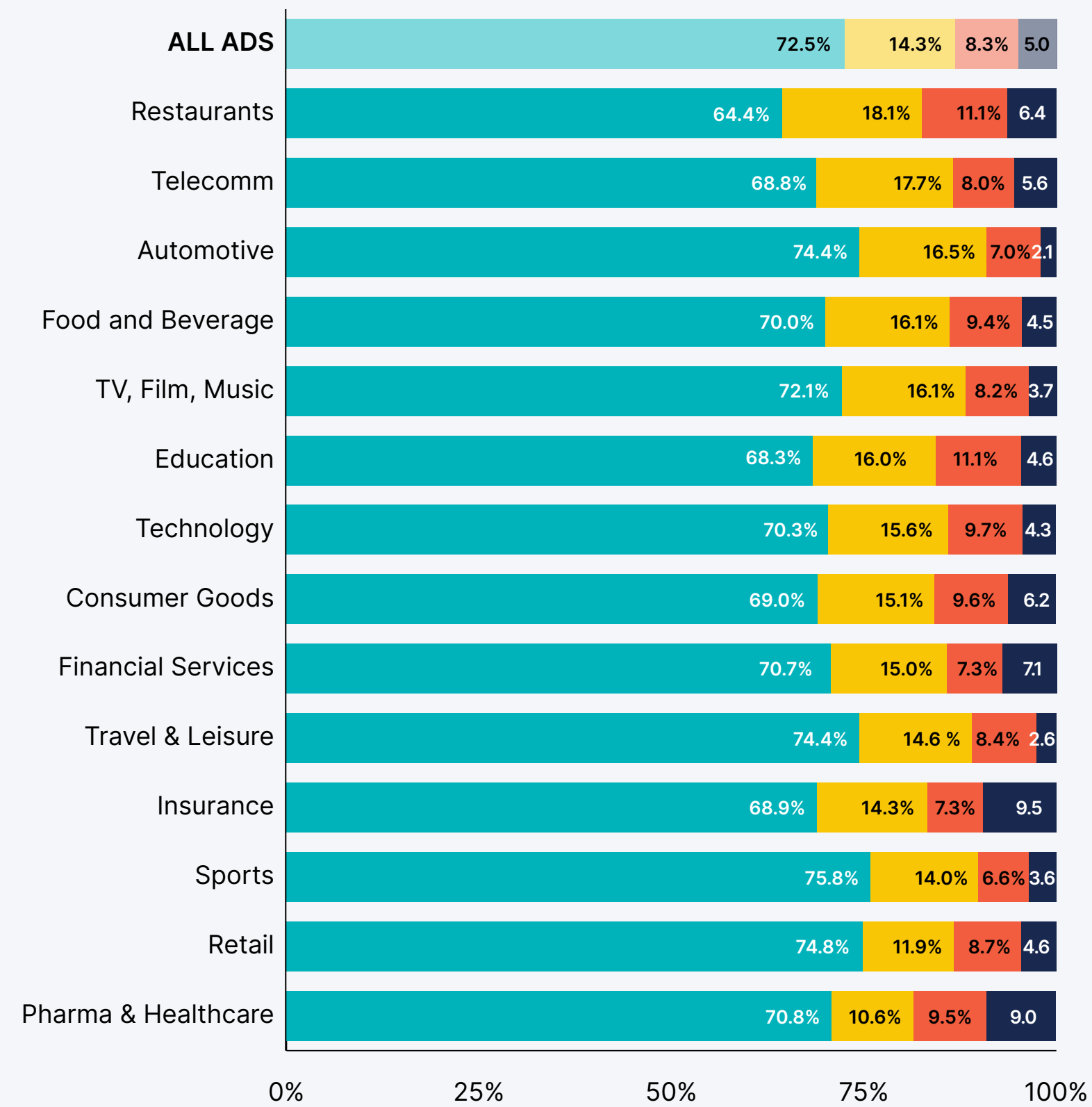


# Detailed Findings: Race/Ethnicity by Large Verticals (Highest Asset Count) 2022

Highest to Lowest % White



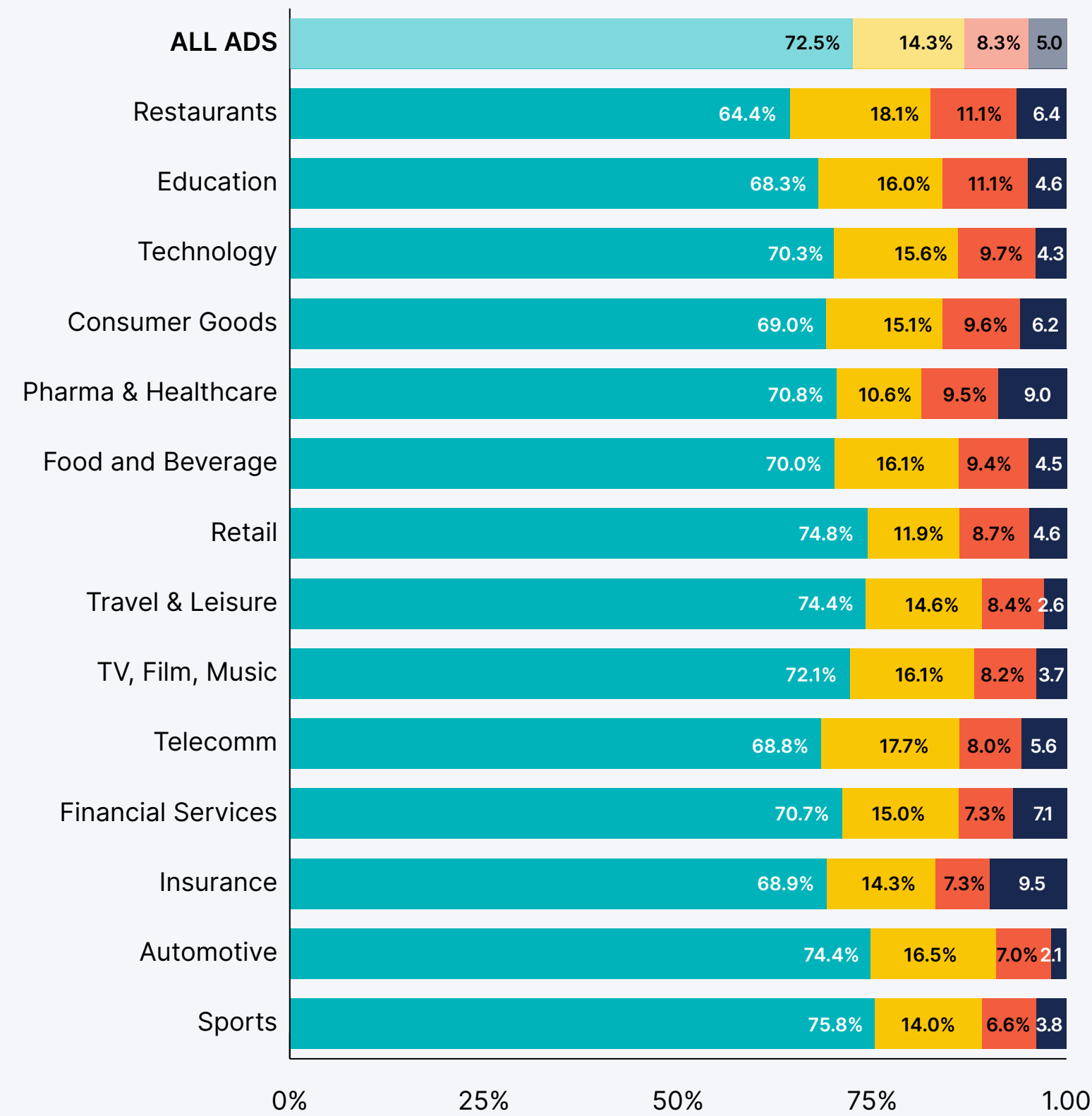
Highest to Lowest % Black



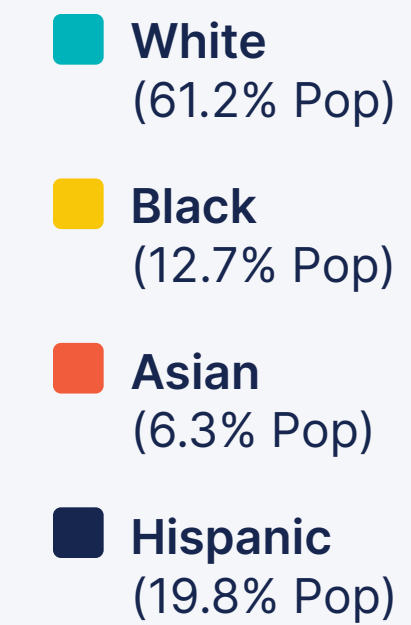
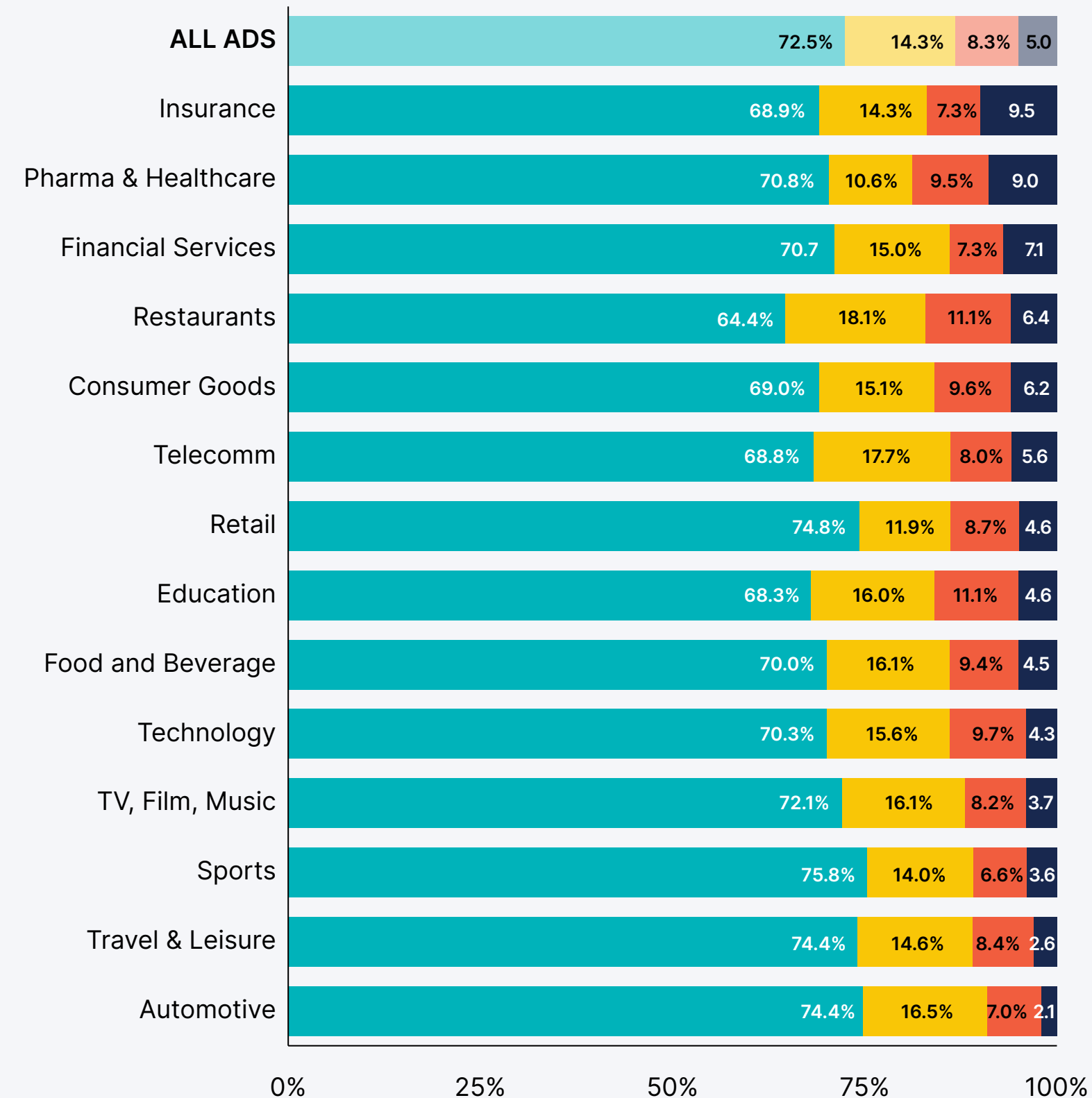


# Detailed Findings: Race/Ethnicity by Large Verticals (Highest Asset Count) 2022

### Highest to Lowest % Asian



### Highest to Lowest % Hispanic or Latino





# Detailed Findings: Race/Ethnicity by Medium/Small Verticals

The next set of charts looks at the **13 small/medium verticals** (based on asset volume), sorted for each race/ethnicity from highest composition to lowest.

The top 5 verticals for each is listed below, **Non-Profit advertising** is the most diverse, with high composition of Black, Asian, and Hispanic/Latino.

## White

Highest % Composition

Toys

Fashion & Apparel

Political

Home Improvement

Fitness

## Black

Highest % Composition

Recruitment/HR

Non-Profit

Industrial

Consulting

Real Estate

## Asian

Highest % Composition

Gambling & Lottery

Non-Profit

Fashion & Apparel

Industrials

Utilities

## Hispanic/Latino

Highest % Composition

Legal

Non-Profit

Political

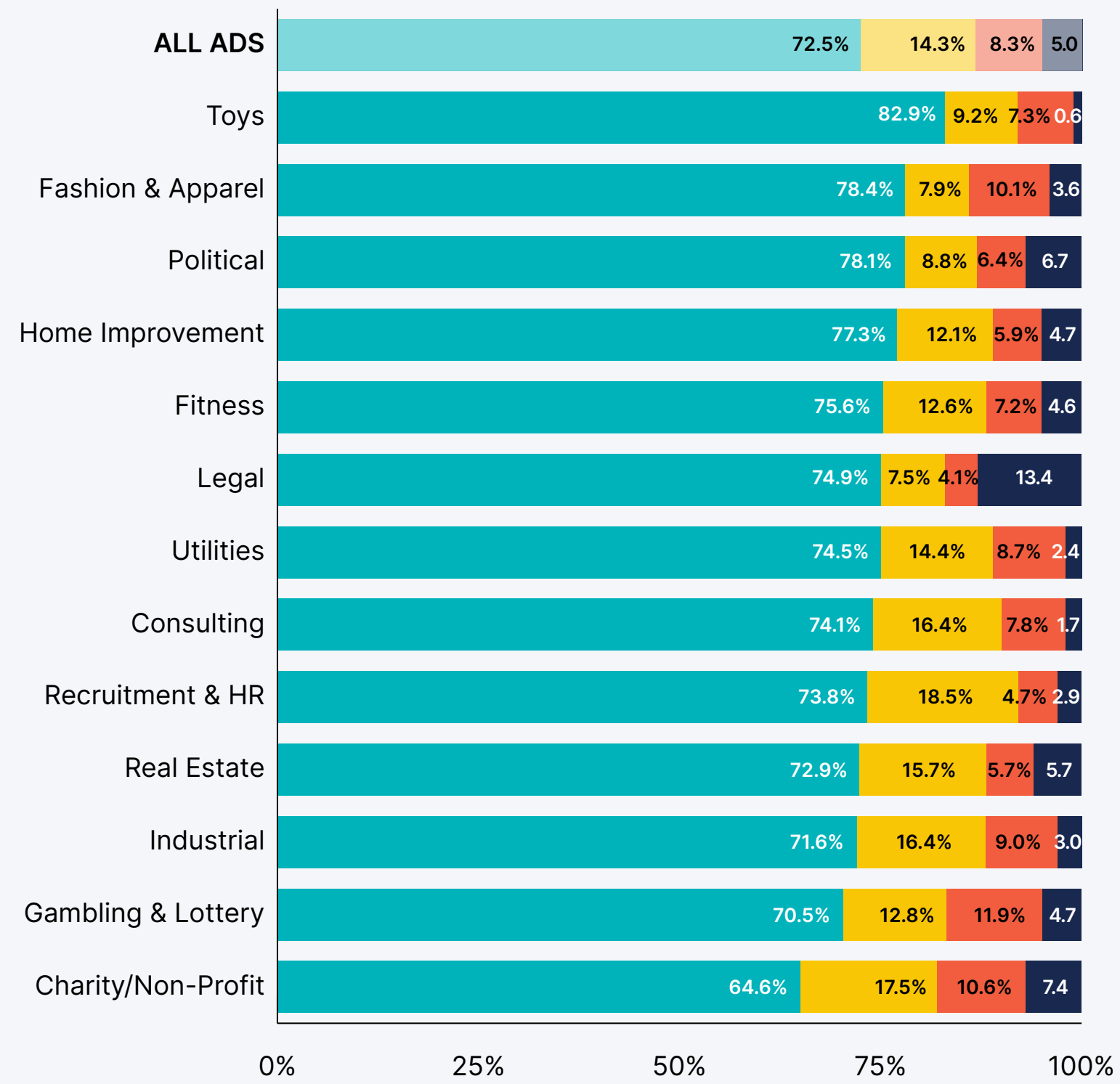
Real Estate

Gambling & Lottery

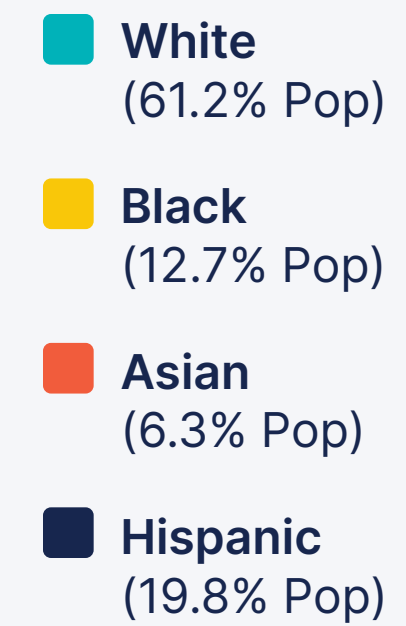
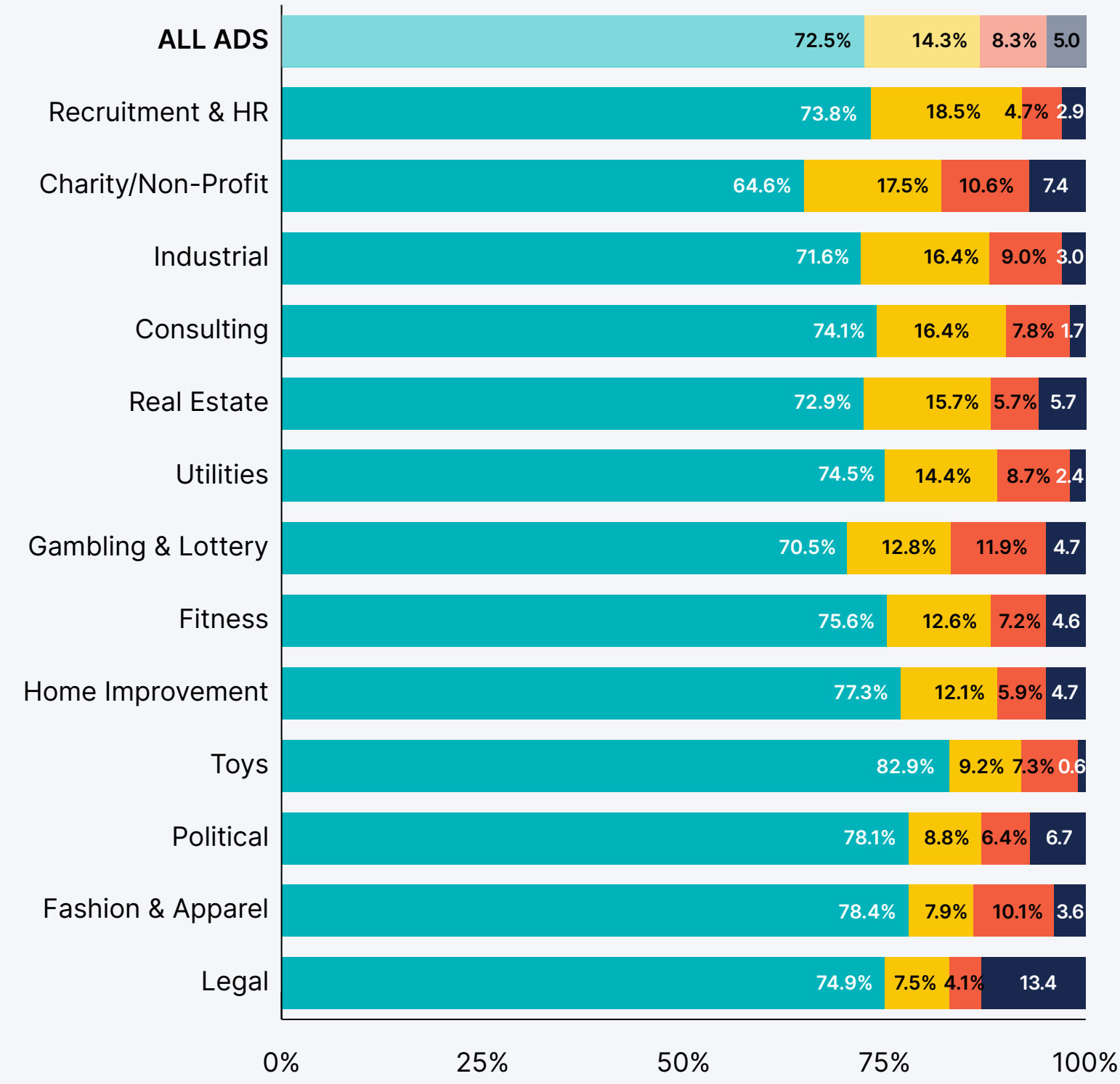


# Detailed Findings: Race/Ethnicity by Medium/Small Verticals (Highest Asset Count) 2022

Highest to Lowest % White



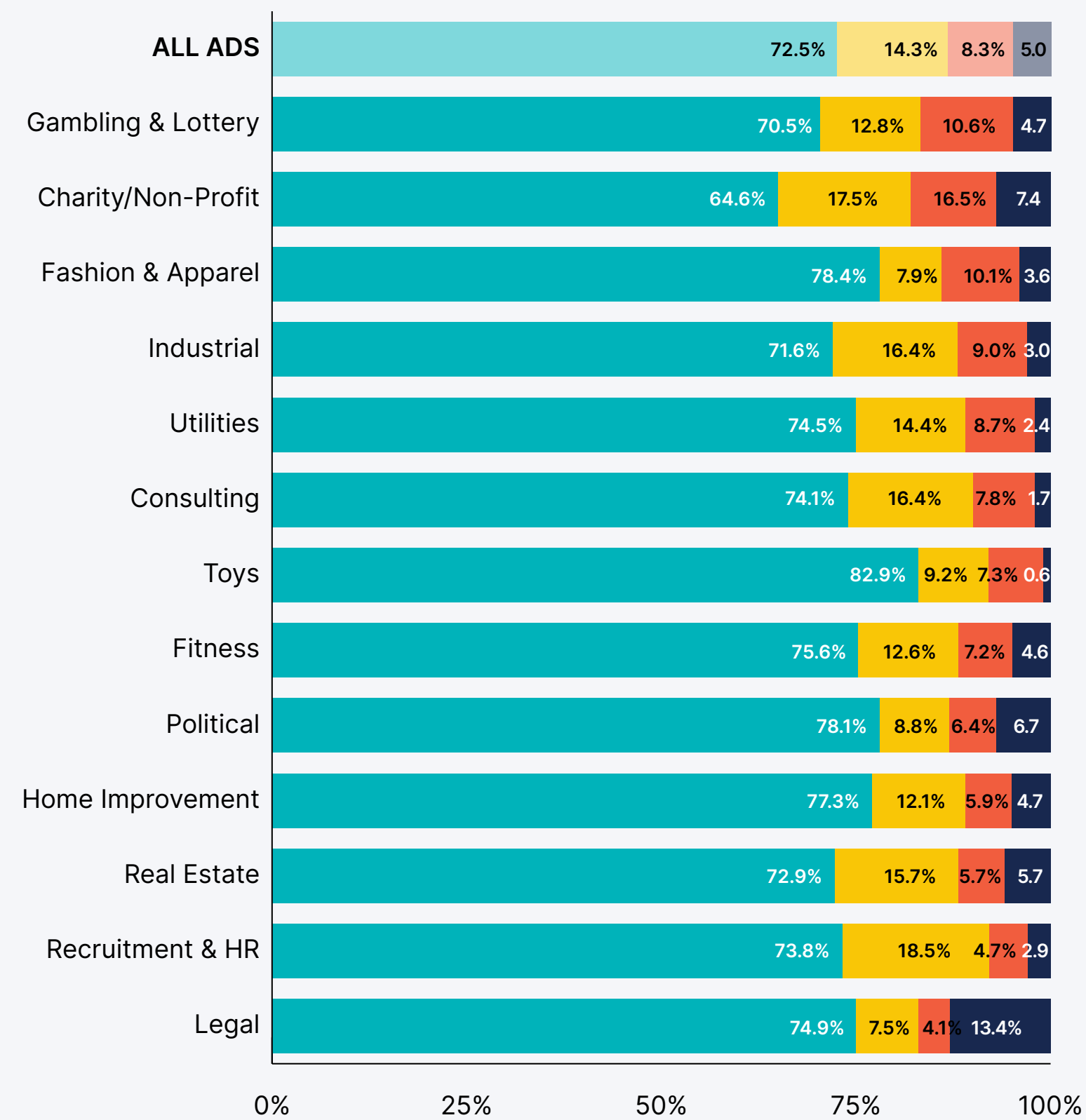
Highest to Lowest % Black



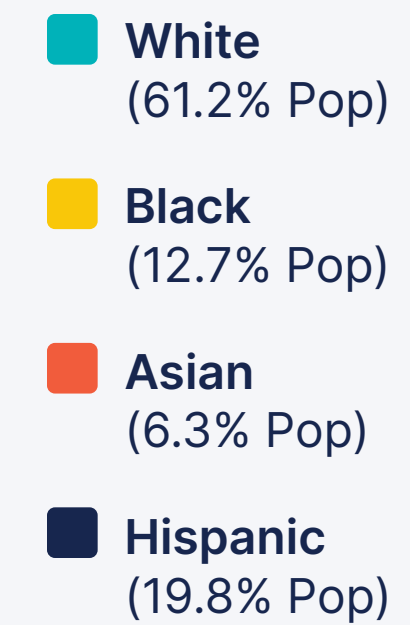
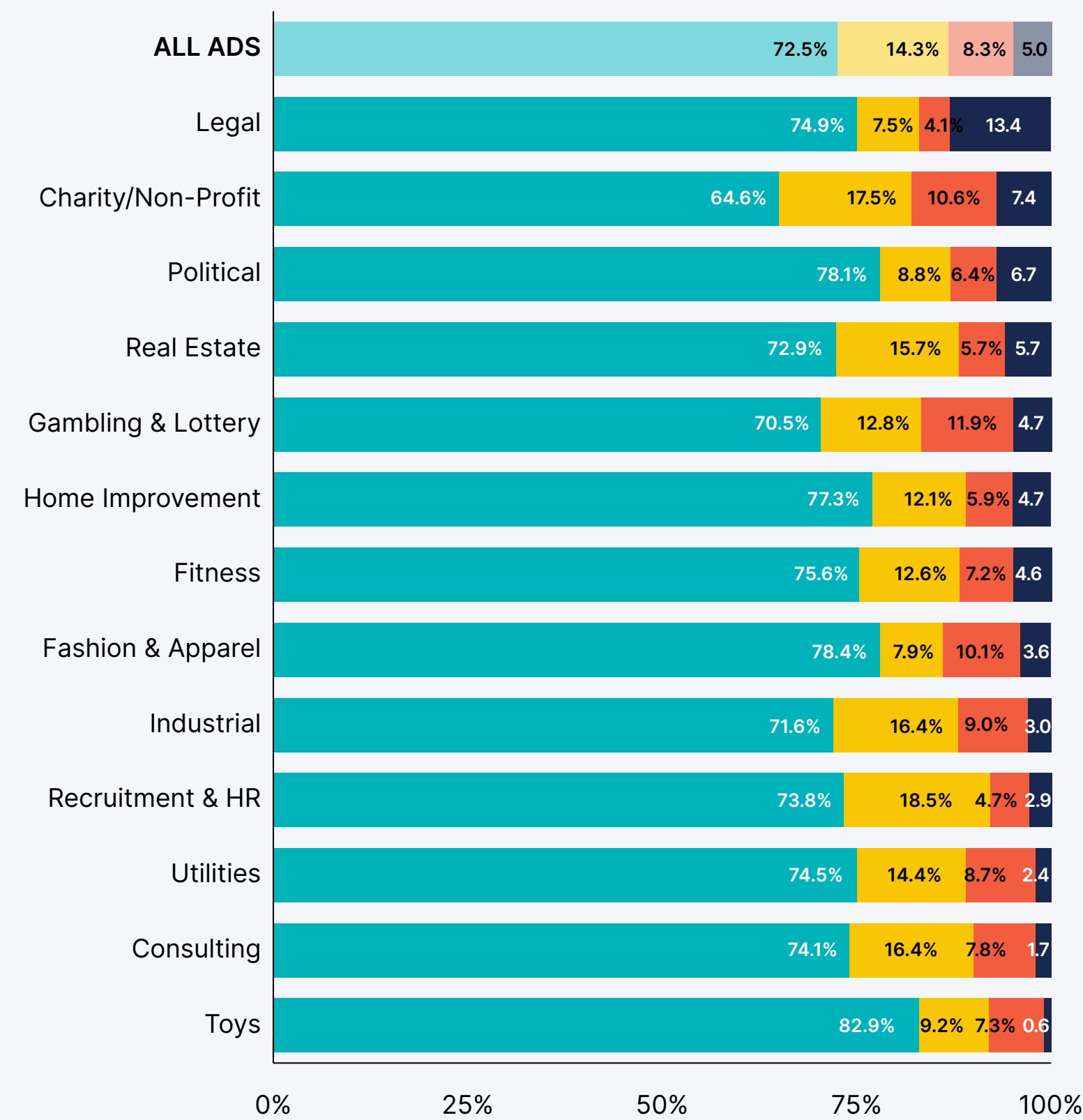


# Detailed Findings: Race/Ethnicity by Medium/Small Verticals (Highest Asset Count) 2022

Highest to Lowest % Asian



Highest to Lowest % Hispanic or Latino





What's  
Next





## Extreme Reach has a unique position at the center of the global advertising ecosystem.

We are honored to serve 93 of the Top 100 global advertisers and believe this comes with a great responsibility to lead the way in areas of our expertise. This study is one such area.

We set out to give brands and agencies the information needed to make the decisions that matter to their business. While this report is a topographic map that establishes the baseline for the industry overall, we are hard at work with individual marketers to provide the data and insight they need to chart their own unique roadmap and measurable goals in this important area.

We look forward to issuing regular updates of these findings, as well as expanding the study into more regions in early 2023.

As we continue to invest heavily in AI and machine learning to understand more about the people and actions represented in ad creative, we're enthusiastic about expanding our insight into new areas:

- Diversity of body type/size
- Makeup of principal performers vs. extras
- Representation of people with disabilities
- Breakdown of who performs which actions (i.e., driving, shopping, household chores, etc.).
- And more...

Reach out with comments or questions.

[info@extremereach.com](mailto:info@extremereach.com)

## About Extreme Reach

**Extreme Reach** (ER) is the global leader in creative logistics. Its end-to-end technology platform moves creative at the speed of media, simplifying the activation and optimization of omnichannel campaigns for brands and agencies with unparalleled control, visibility and insights.

One global creative-to-media supply chain answers the challenges of a complex marketing landscape and an equally complicated infrastructure under the global advertising ecosystem. The company's groundbreaking solution integrates all forms of linear TV and non-linear video workflow seamlessly with talent payments and rights management. Now, brands and agencies can optimize campaigns as fast as consumer consumption shifts across linear TV, CTV, OTT, addressable TV, mobile, desktop, and video-on-demand.

Extreme Reach connects brand content with consumers across media types and markets, fully illuminating the marketing supply chain for a clear view of creative usage, waste, performance and ROI.

With the acquisition of Adstream in 2021, Extreme Reach operates in 140 countries and 45 languages, with 1,100 team members serving 93 of the top 100 global advertisers and enabling \$150 billion in video ad spend around the world. More than half a billion creative brand assets are managed in ER's creative logistics platform.