

Data Science In Marketing

SAN JOSE SHARKS

By Jeffrey Hoyle



AGENDA

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- 02 **SPORTS INDUSTRY ANALYSIS**
- 03 **NHL ANALYSIS**
- 04 **SHARKS ANALYSIS**
- 05 **RECOMMENDATIONS**





INTRODUCTION

ABOUT THE SAN JOSE SHARKS

The San Jose Sharks, established in 1991 as part of the NHL's expansion quickly became a vital sport in the Bay Area. Starting off, they struggled in their first season, the Sharks experienced significant growth, culminating in their first playoff appearance in 1993-1994 and continued reaching the playoffs until they reached the Stanley Cup Finals in 2015-2016. With a passionate fan base and a vibrant home arena known as the "Shark Tank." Now since 2020 they have been tanking being the worst team in the league with having the first overall pick, Picking Macklin Celebriini who will be the face of the franchise of his first season the season. The Sharks maybe the worst overall team in the league but they can only go up from here.



RECOMMENDATIONS TO LOOK OUT FOR

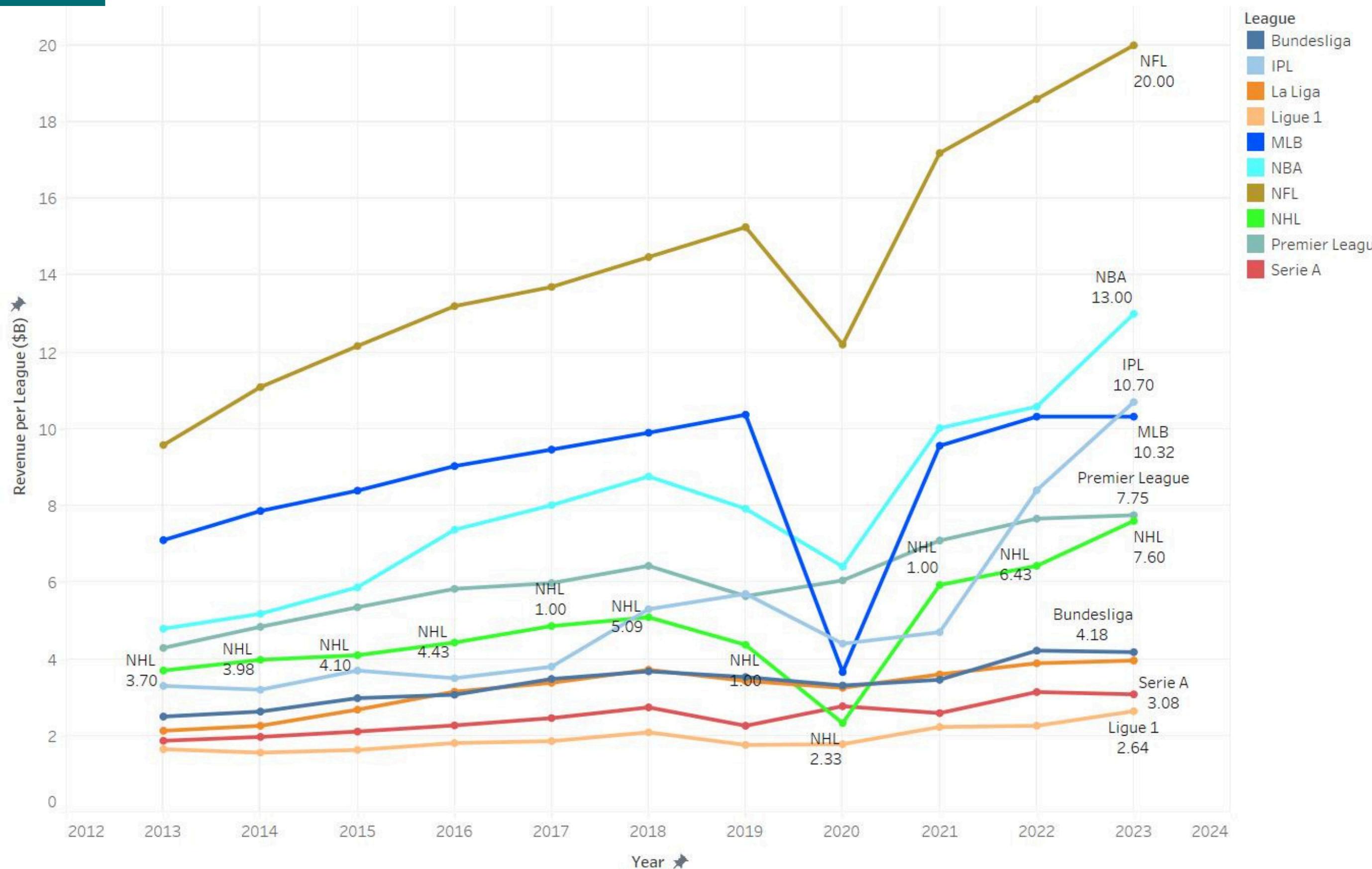
Make sure to keep these three recommendations in mind as we go through the different analysis's.

- Engaging Pre and Post Game entertainment
- Cross marketing to NBA fans to experince NHL games
- Increase Female fans



SPORTS INDUSTRY ANALYSIS

REVENUE PER LEAGUE

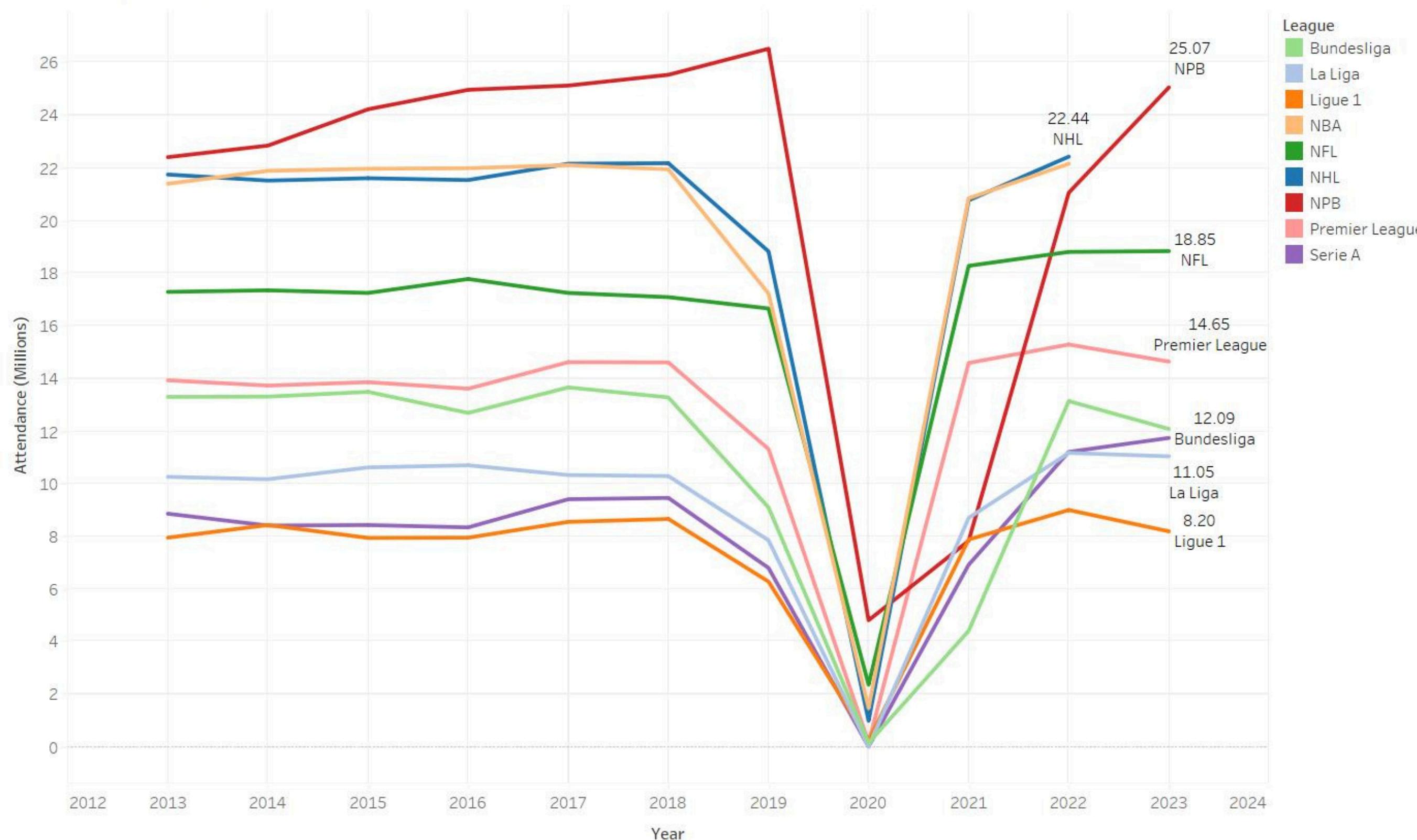


The NHL makes less revenue than the big 3 sports in America (NBA, NFL, MLB) but they do line up with some of the professional soccer leagues. This just shows that they are a league that can make quite a lot of money compared to world sports.

Looking specifically at the NBA and NHL, the NBA almost doubles the amount of revenue made compared to the NHL.

ATTENDANCE PER LEAGUE

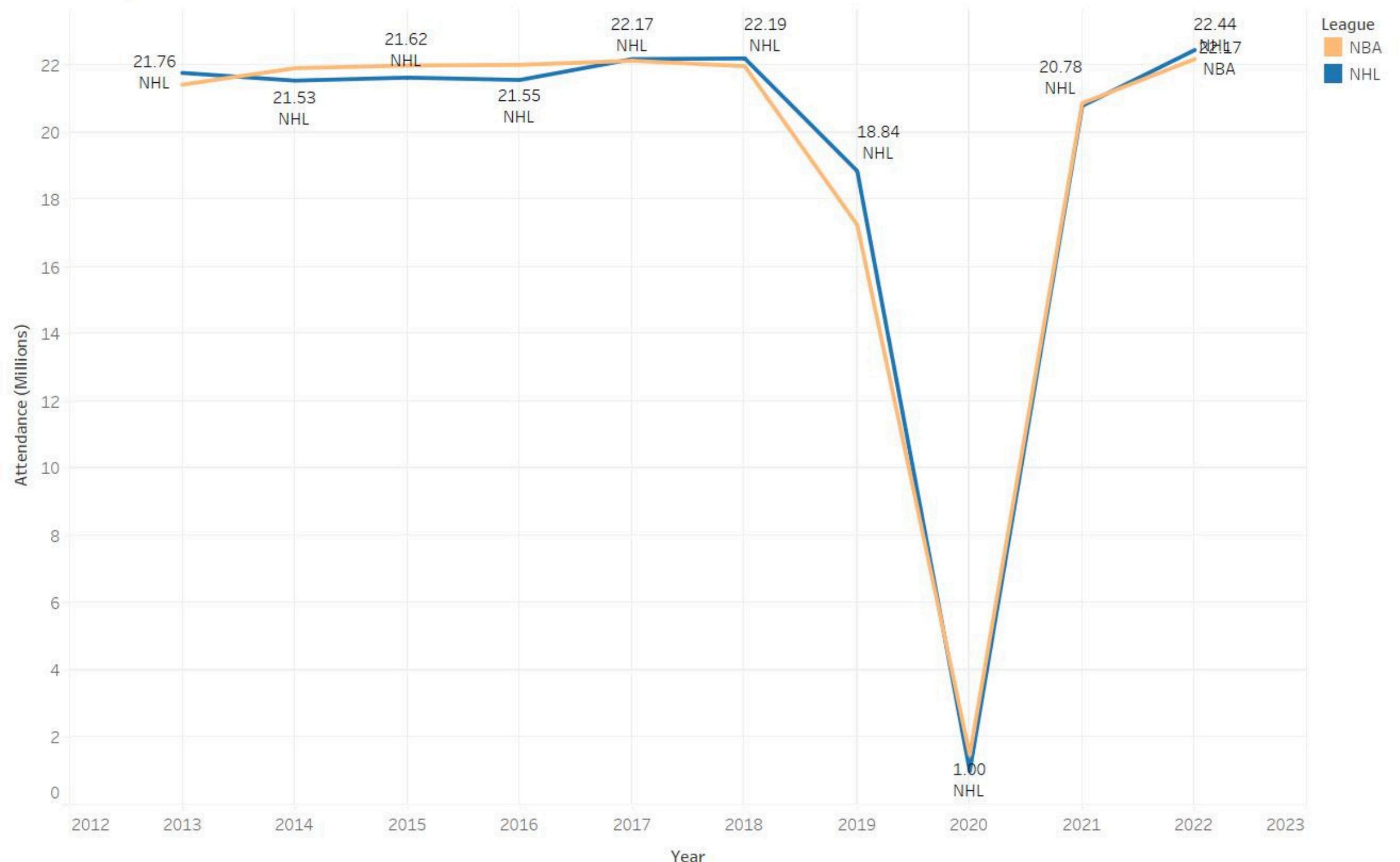
Attendance Per League



Overall attendance per league as the NHL has very similar numbers to the NBA. You can also tell that the NHL is one of the highest attendance numbers in the US compared to the NFL and NBA as the MLB was an outlier on this chart as it has over 162 games per team per season.

ATTENDANCE NHL VS NBA

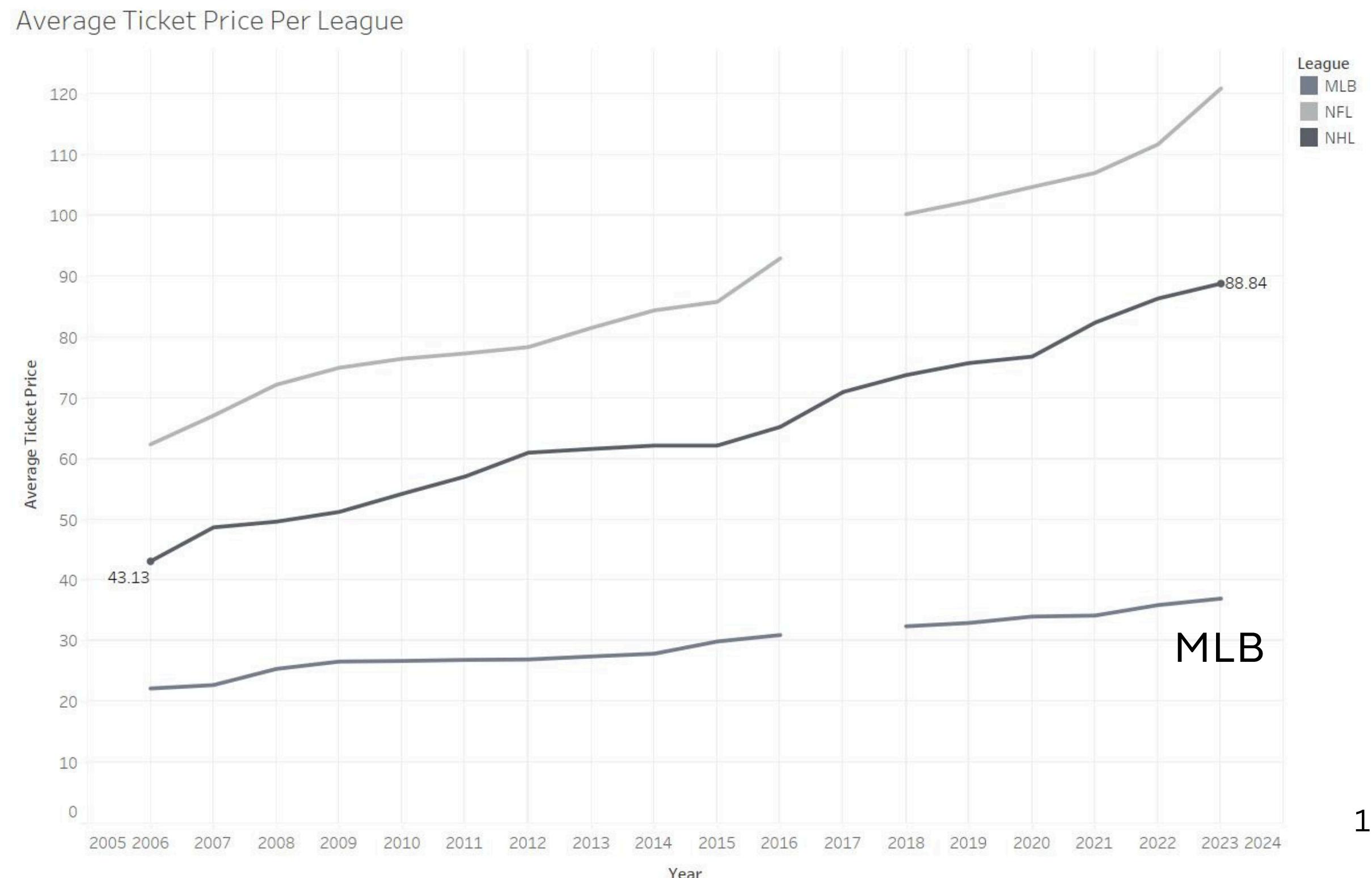
Attendance Per League



In comparison to the NHL, the NBA has a very similar trend in attendance. On the one hand, we would need to see why that is because there is more hype around the NBA, but the same attendance could mean there is some similarity in other ways.

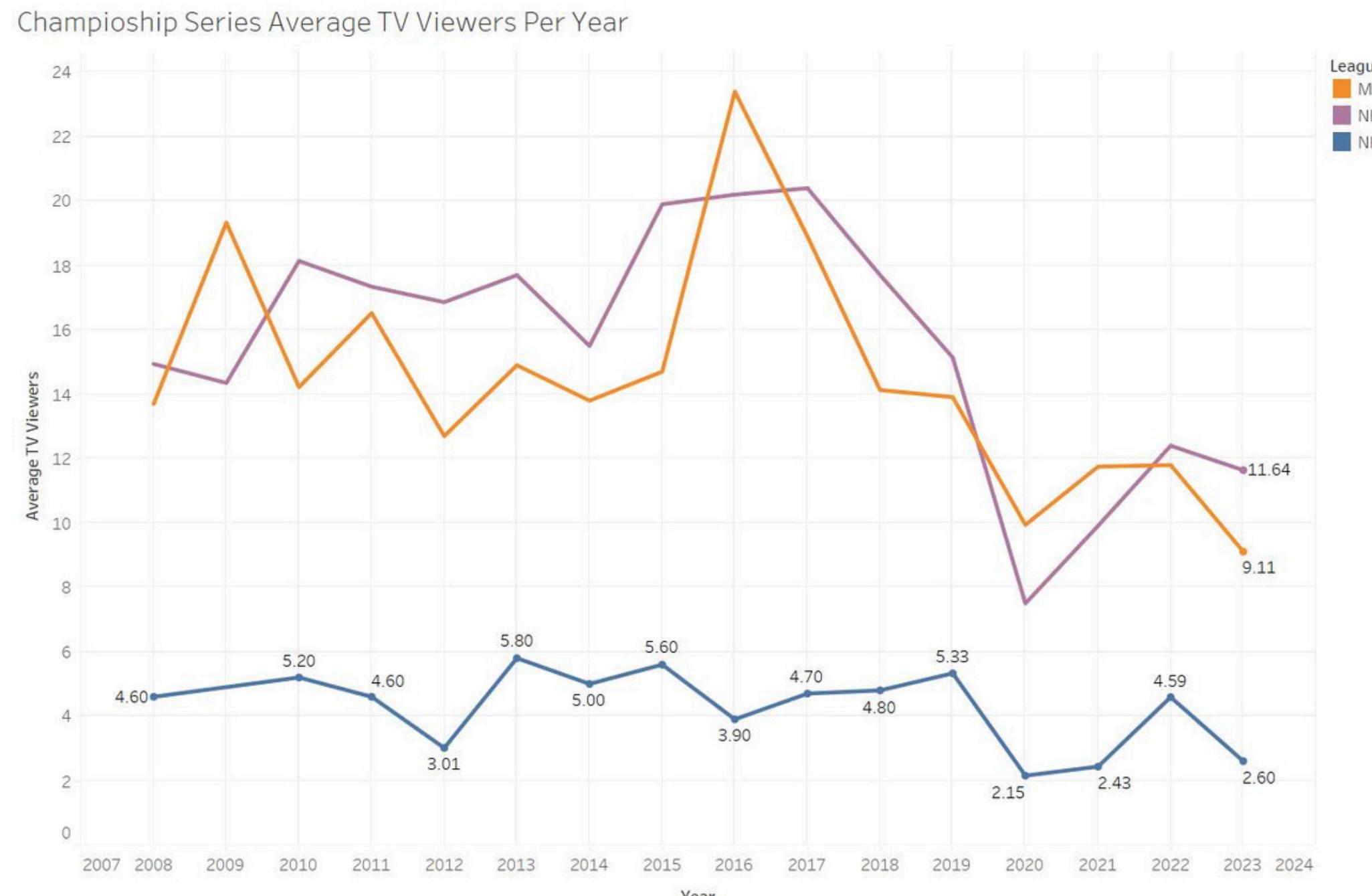
AVERAGE TICKET PRICE PER LEAGUE

As you can see the NHL is middle of the pack when it comes to average ticket price out of the 2 best sports leagues in America. The NBA didn't have year by year averages but they averaged 94\$ in 2024 making NHL games somewhat cheaper in comparison to an NBA game. (Source didn't have information for 2017/18)



CHAMPIONSHIP SERIES AVERAGE TV VIEWERS PER YEAR

As you can see, when looking at overall TV viewers for championship series for the MLB, NBA, and NHL, the NHL is significantly lower in overall viewership. This just adds to the viewership issues that the NHL has, and there needs to be something that can change that. They have the attendance but not the viewership.

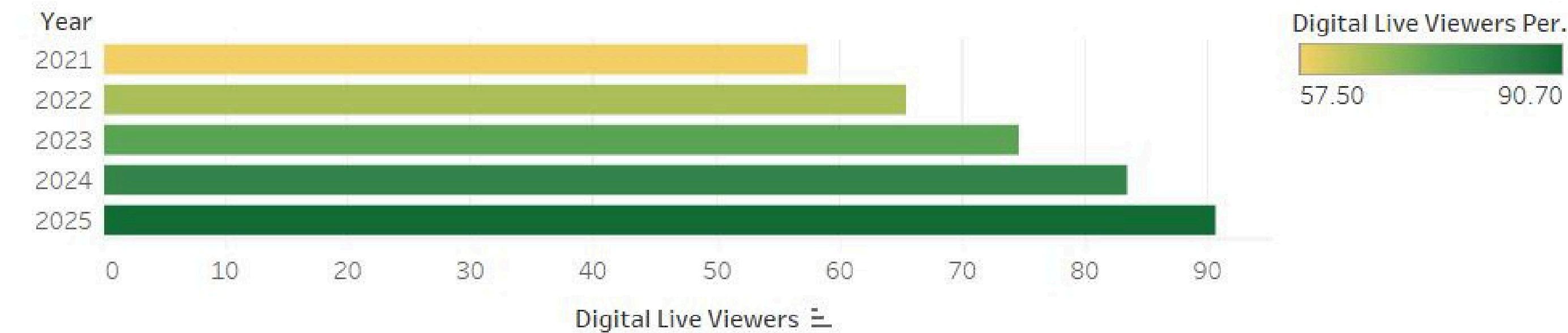


The trend of sum of Championship Series Average TV Viewers for Year. Color shows details about League.

US NUMBER OF DIGITAL LIVE SPORTS VIEWERS

Digital live sports viewing is growing year over year. The NHL could grow their viewership using digital live broadcasts. viewership overall.

Number Of Digital Live Sports Viewers



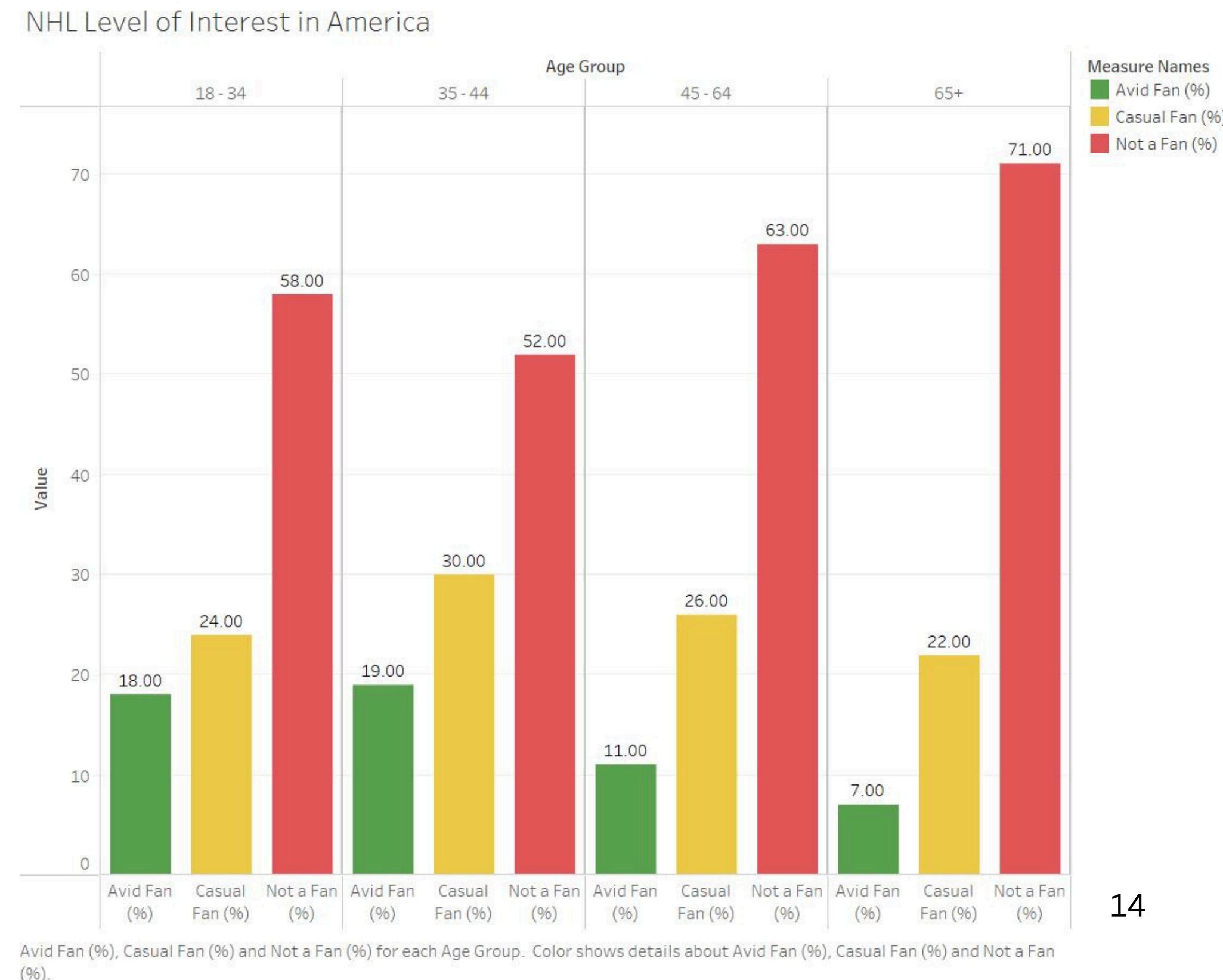
Sum of Digital Live Viewers Per Year for each Year. Color shows sum of Digital Live Viewers Per Year.



NHL INDUSTRY ANALYSIS

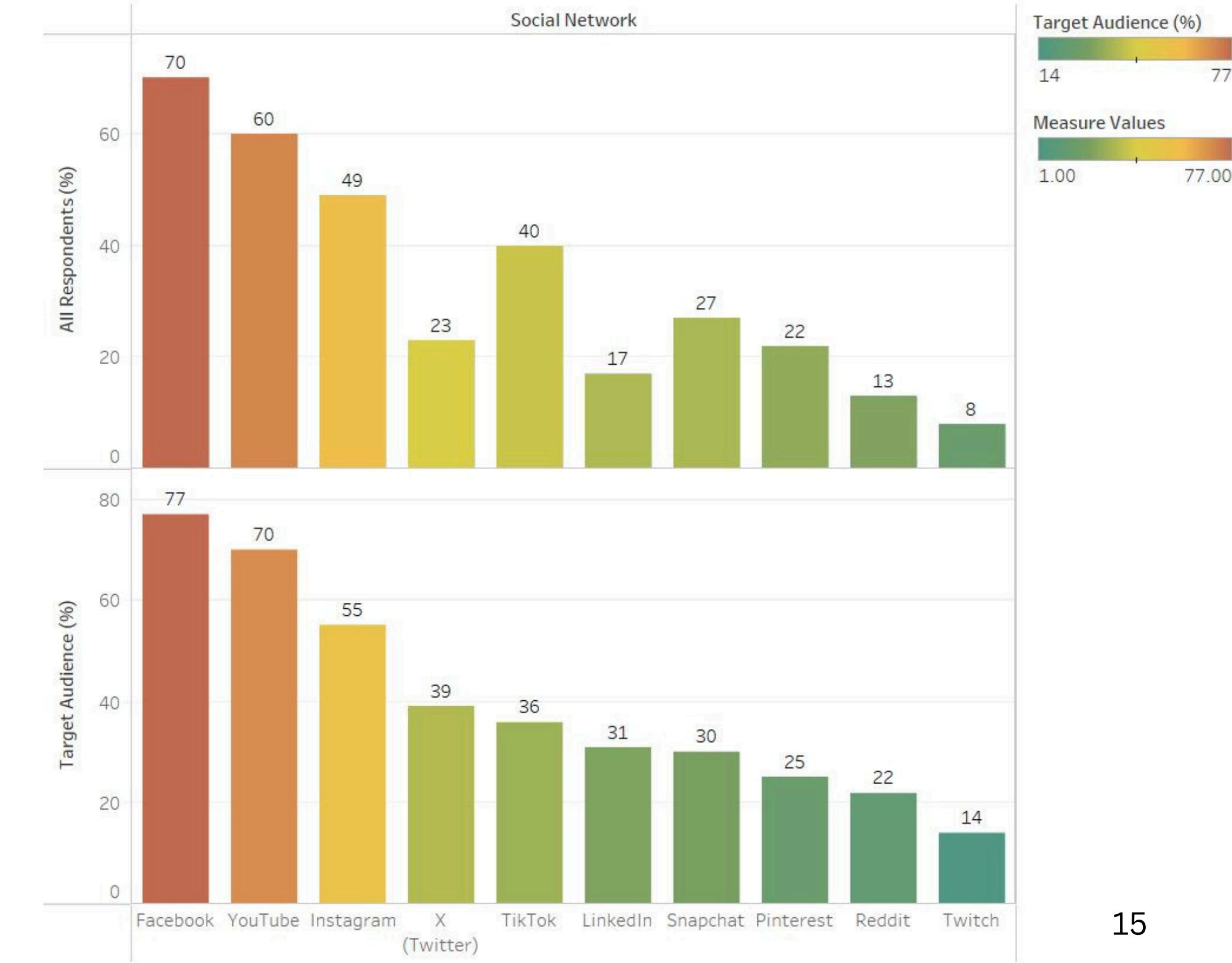
NHL FAN INTEREST BY AGE

- This trend shows that Interest starts when people are young and increase when they are an older adult.
- The 18-34 and 35 - 44 age ranges could be a great target for growth as this could help grow the league interest
- The overall Target Market is to be between 18-45



SOCIAL MEDIA USE FOR NHL FANS

Since the biggest target market is between the ages of 35-44 and then it is 18-34, it makes sense that Facebook would be the number 1 social network for the NHL's target market. Next being YouTube and Instagram for the 18-35 range. Any clips and hockey highlights will be seen the most on these three social media apps.



All Respondents (%) and Target Audience (%) for each Social Network. For pane Sum of All Respondents (%): Color

CONSUMER RUNDOWN ON THE NHL

- 65% of ice hockey fans state that they want to access their media on all their devices.
- 47% of target market hockey fans are in the high income bracket while 33% of the target market are in the middle income area
- Ice hockey fans remember seeing ads on TV more often than the average consumer.
- 62% of NHL fans are also fans of Basketball while a staggering 87% of NHL fans love watching American Football
- 56% of ice hockey fans have dogs while 36% of fans have cats (post your dog/cat in Sharks gear on social media?)

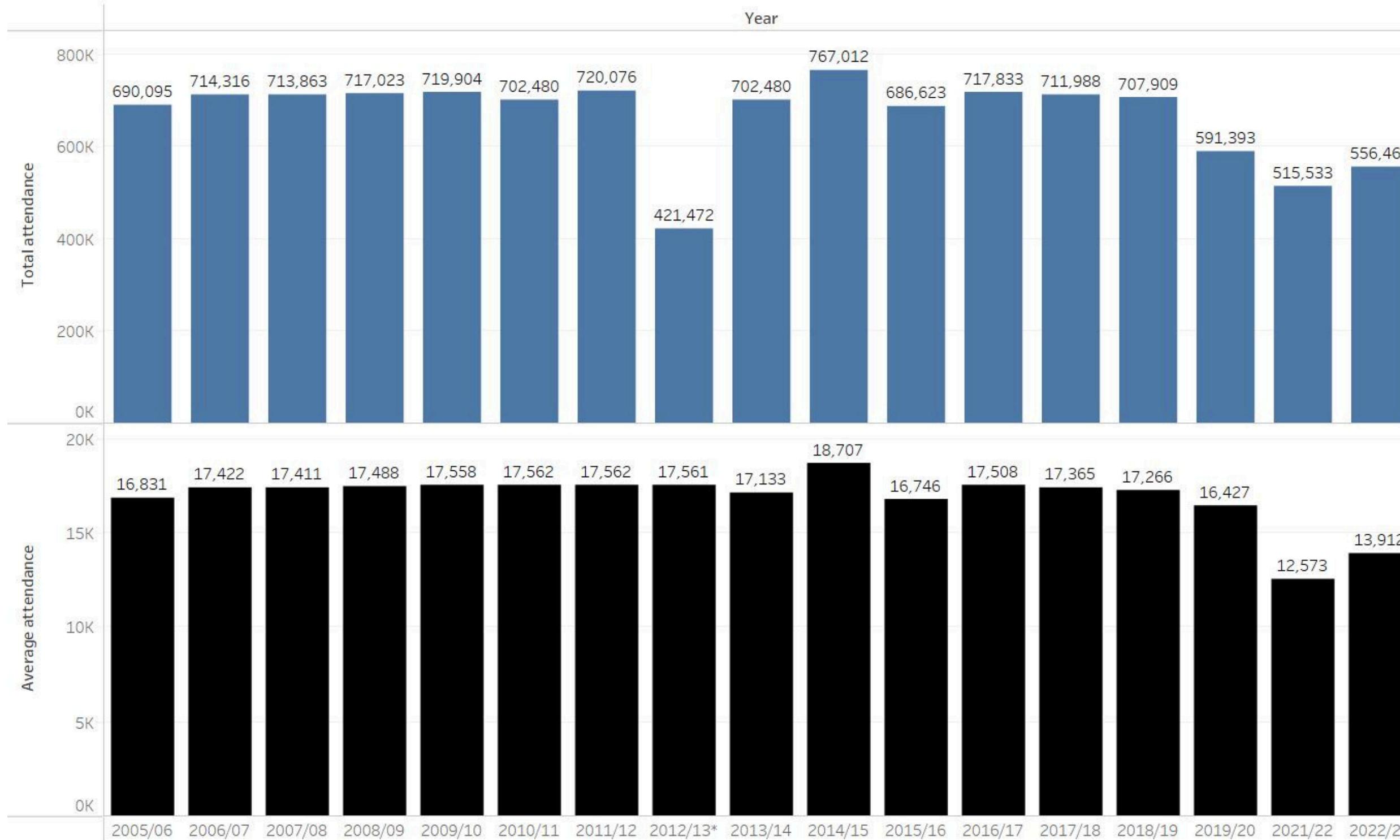




SHARKS ANALYSIS

SHARKS ATTENDANCE 2005-2022

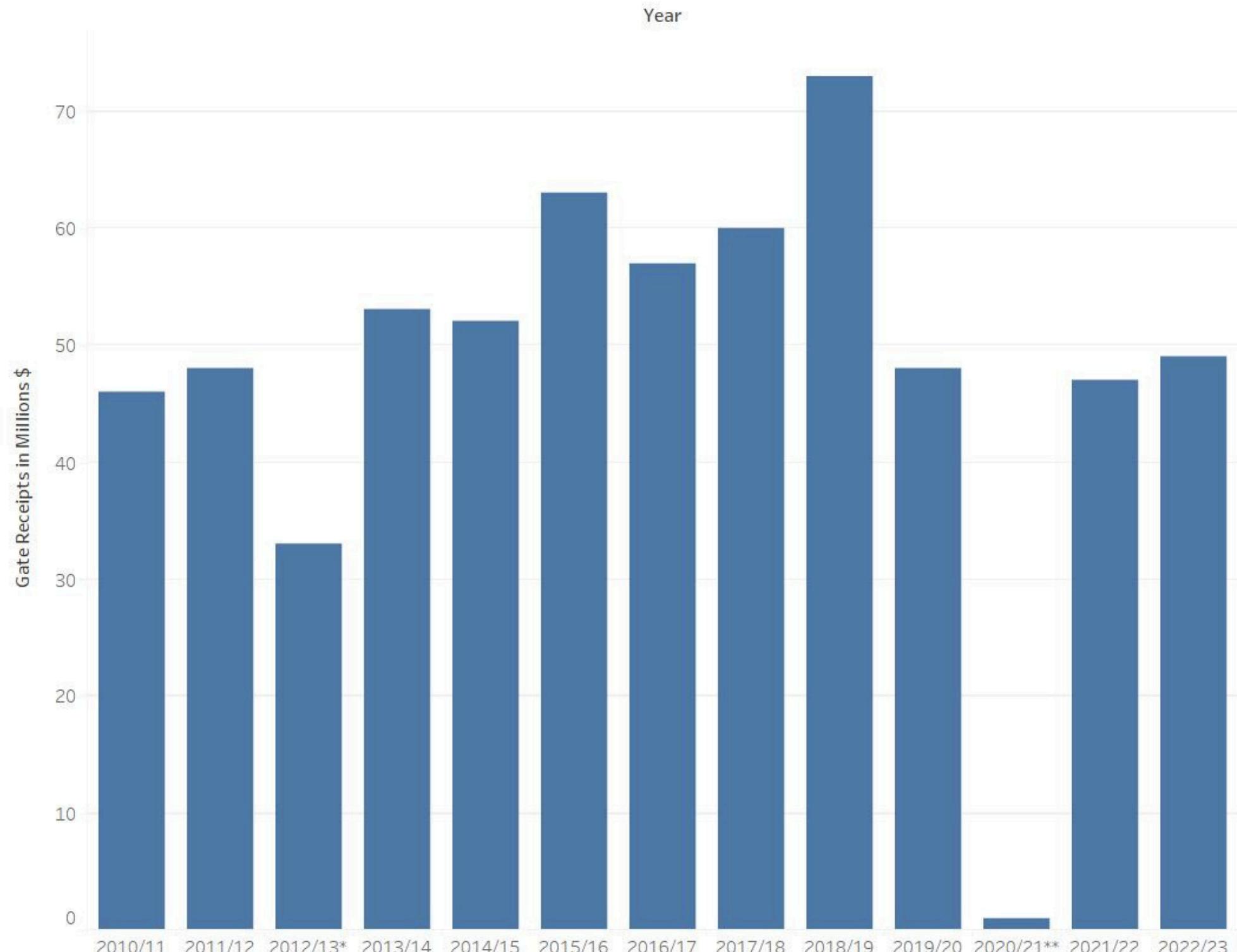
SJ Sharks Attendance 2005 - 2022



Sharks attendance has always been a huge plus since they have always been a competitive team until the 2019 season when they started tanking and losing key players. Attendance has gone down and currently in 2024, the Sharks are the least attended franchise in the NHL this season. Being a rebuilding team is tough, but with the young talent that is going to start to produce, attendance should start to go up.

SHARKS GATE RECEIPTS 2010-2022

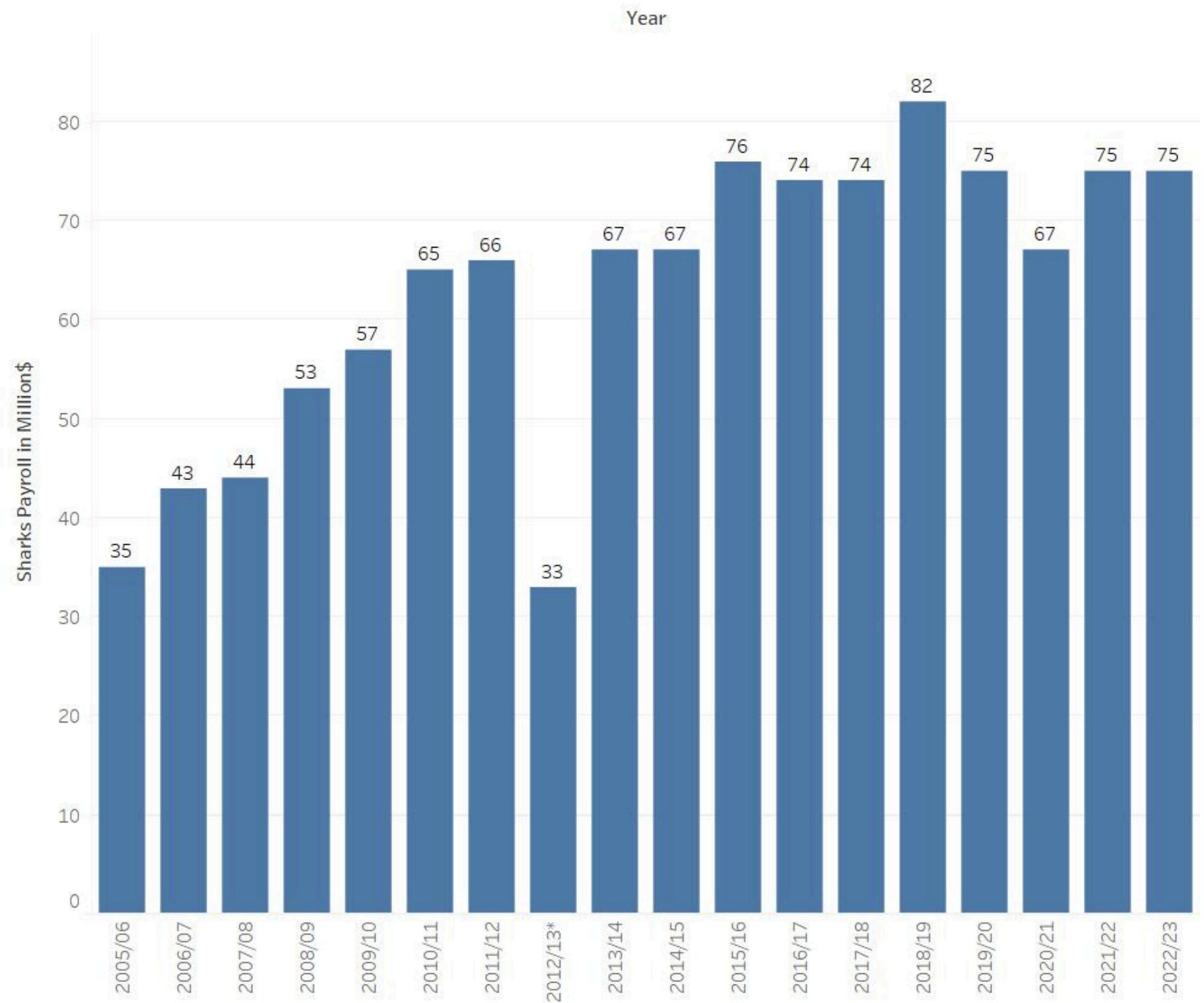
SJ Gate Receipts 2010-2022



Directly related to attendance, you can really see how the Sharks were doing each season and how the increase and decrease in ticket prices for a certain year. The 2018/19 season was huge because it was the Sharks real last push for a Stanley Cup contender being 2nd place in the western conference with a 47-27-9 record. Gate receipts have been low in the past four years because of the tanking and rebuild (and COVID)

SHARKS PAYROLL 2005-2022

Sharks Payroll 2005-2022



Even with the poor seasons after 2020, the Sharks have been trying to reduce and trade away big and long contacts that were originally given around the 2016 season when we were good. In this graph you don't see the 23/24 season which was at \$73 Million or the 24/25 season but with the increase of the salary cap to 88 million the SJ Sharks are at \$79 Million putting them in 29th for league spending.



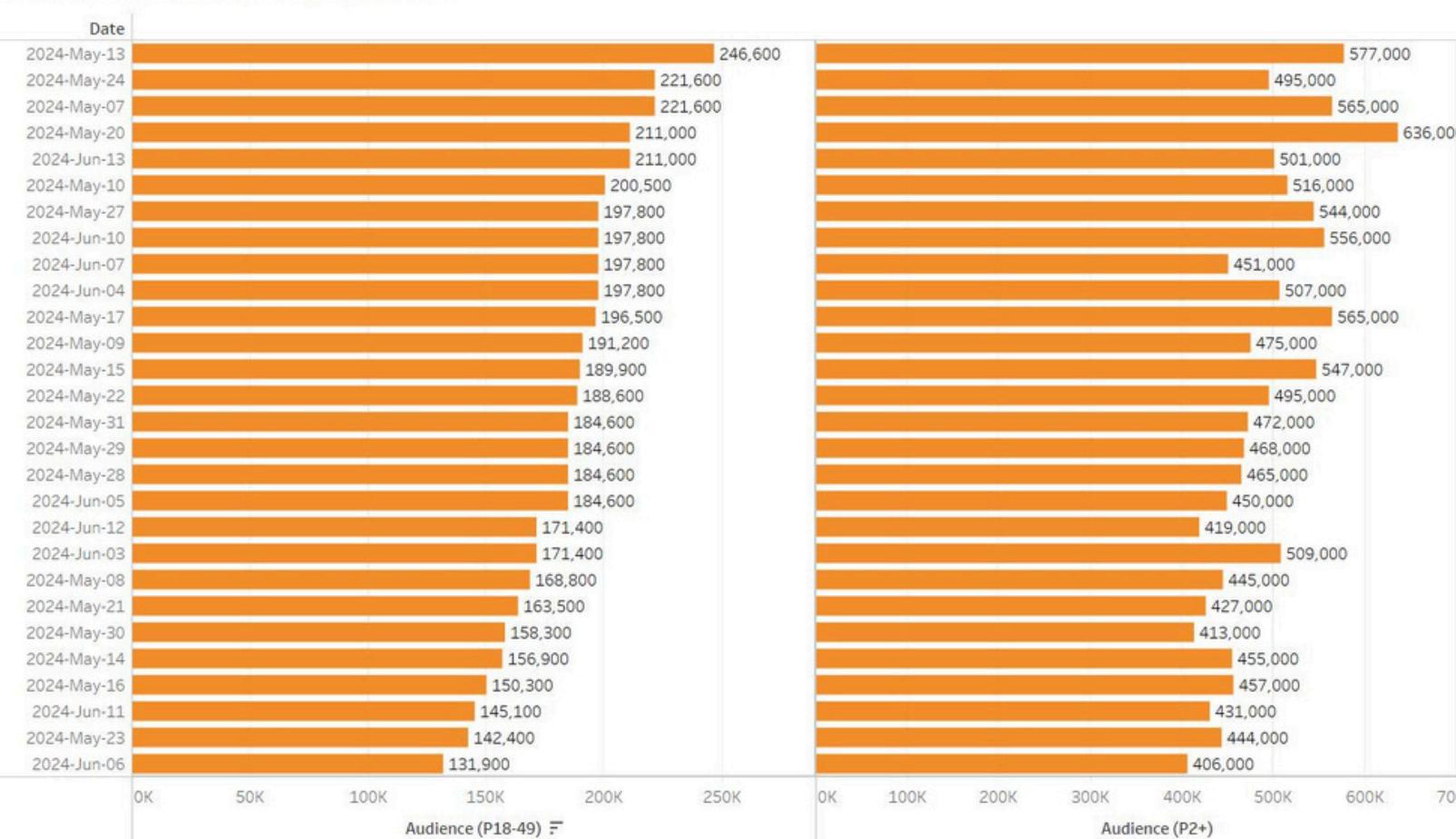
RECOMMENDATIONS



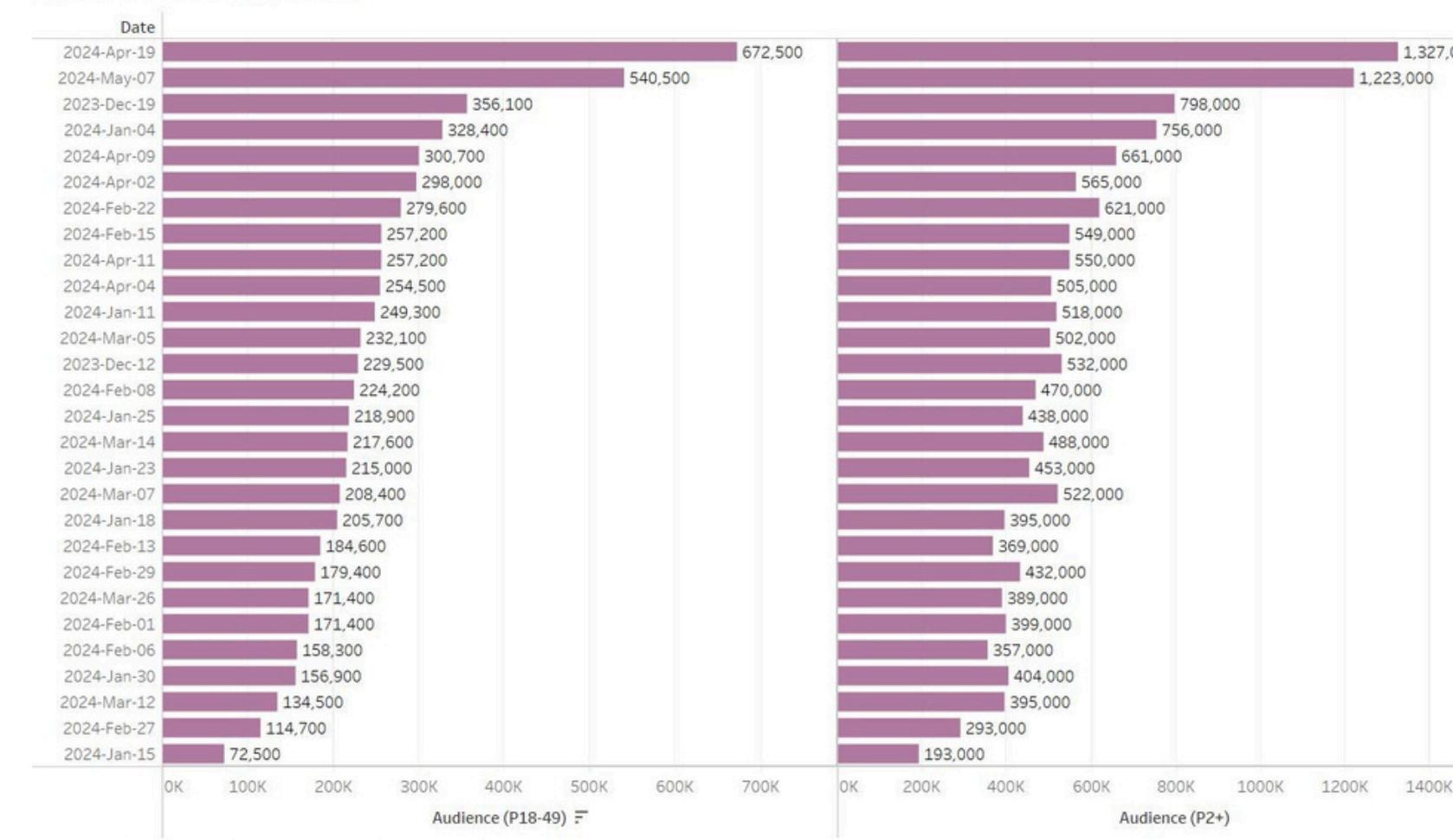
ENTERTAINING PRE AND POST GAME SHOW

NBA PRE/POST GAME SHOWS

First Take NBA Viewership Numbers



Inside The NBA Viewership



Sum of Audience (P18-49) and sum of Audience (P2+) for each Date.

Between First Take, which typically airs in the morning before game days, and Inside the NBA, a pre-and post-game show, both programs attract significant viewership (almost equal to what a singular game gets on average) despite not being the actual games. This type of entertaining but analytical conversations make sports fans very tuned into the story plots of the league.

((P18-49) is the target market viewership and the other is the overall viewership)

NHL PRE/POST GAME SHOWS

The Sharks have Randy Hahn and Drew Remenda as amazing play by play announcer's and Dan Rusanowsky as an iconic voice on the radio play by play's. In no means is that going to change as they are all iconic for the franchise but to have a new pre/post game team that includes more entertaining "Charles Barkley and Shaq" type personalities that can have fun live that are clip worthy while also having the analytical sense of the game might bring up the viewership by being more entertaining.



RECOMMEND: JOE THORNTON

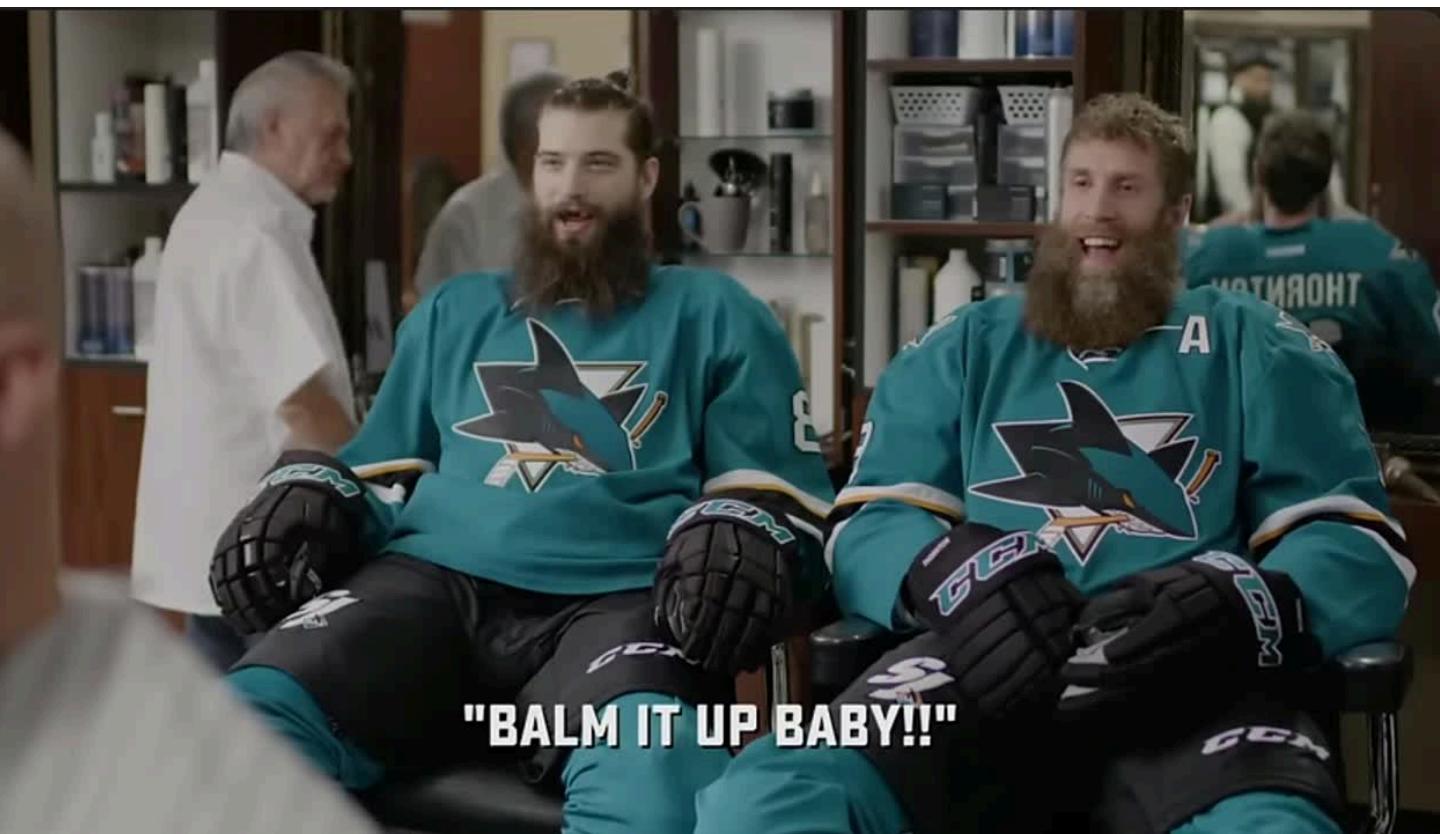
Joe Thornton, one of the top players in Sharks history who is going to have his jersey retired and honored this year, would make an excellent candidate for the role of pre- and post-game entertainer for the Sharks. Known for his vibrant personality, he has shared countless amusing stories that highlight his sense of humor. With over 20 years of experience with the Sharks, he possesses a deep knowledge of the game that can bring an analytical mindset and could also bring that comedic flair of popular TV personalities like Charles Barkley.

Stories like pushups for the PR guys before games, all around jokes and pranks, Celebrini (Sharks number 1 pick this year) and Auston Mathews (In the past) living with him and their funny interactions with Thornton make him the perfect man for the job.



RECOMMEND: BRENT BURNS

Brent Burns is currently in his 21st season and nearing the end of his playing career. After his retirement, co-hosting with his former teammate Joe Thornton could add an exciting and entertaining element to the pre and post-game show. As a defender, Burns can provide insights on the defensive aspects of the game, while Joe focuses on the offensive side. With their humorous personalities and exceptional understanding of the sport, this duo could bring the same lively energy to hockey that Shaq and Barkley bring to basketball.



RECOMMEND: LIAM MCHUGH

Liam started out on NBC sports coverage and went to TNT where he is one of the studio hosts for the NHL. He isn't much of a hockey guy but knows how to run a good solid program. He will be the Ernie Johnson (from Inside The NBA) of the crew and would be a great addition as a main role for the production of the pre/post game show. This might be a downgrade from the job he has right now but this could be a solid "rest of the career" job for him.



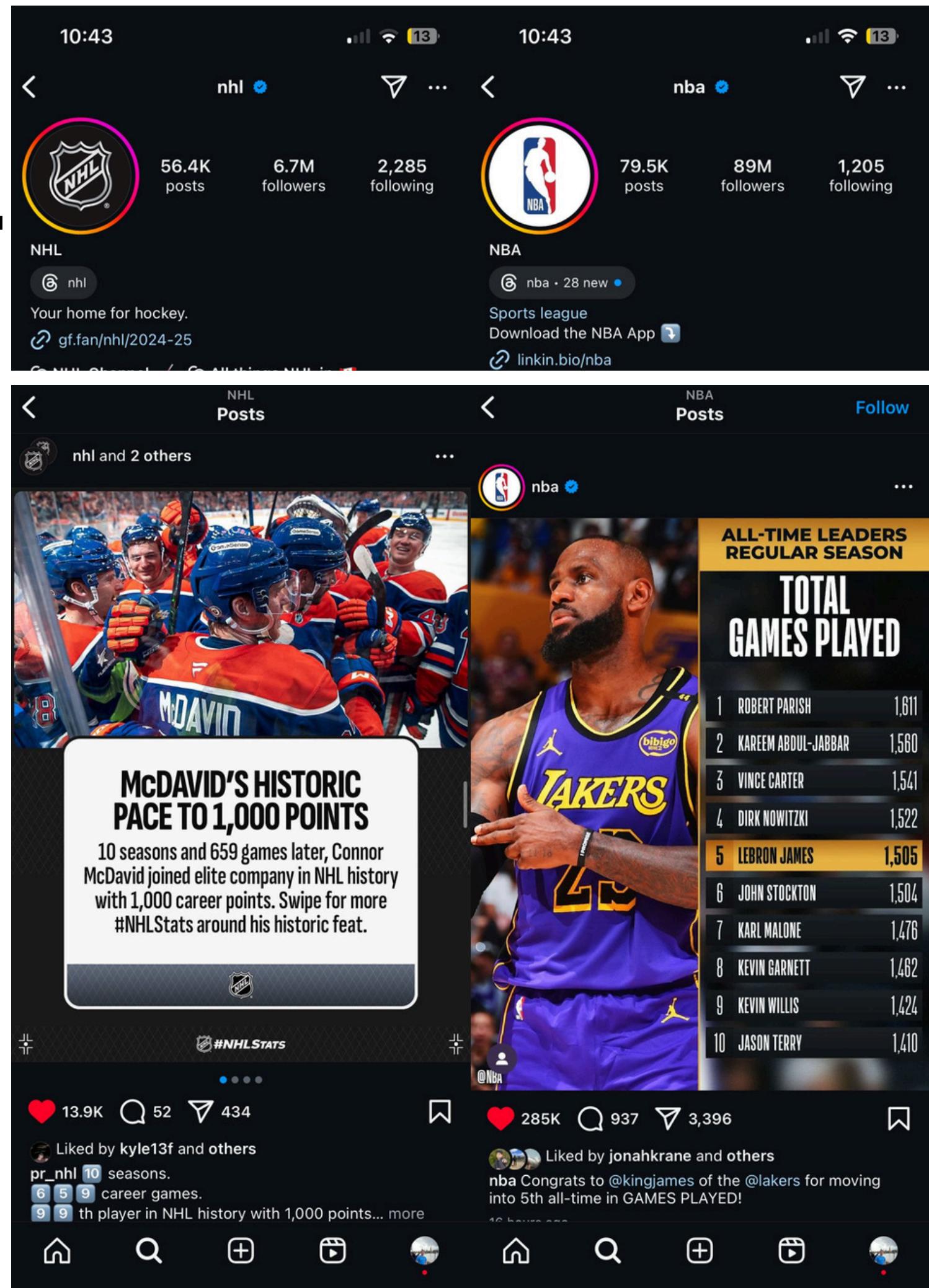


**BRINGING NBA FANS OVER TO
THE NHL**

NBA VS NHL: SOCIAL MEDIA

The NHL has fewer followers than the NBA, which is not a surprise, but their bios are. The NBA encourages users to download their app, creating a call to action, while the NHL simply states, "Your home for hockey." The NBA's app promotes notifications, likely engaging fans more closely with their teams and favorite players. The NHL has an app but doesn't say this.

Moreover, both leagues showcase highlight reels throughout the night to capture the action, but a notable difference lies in the "Story plots" shared by the NBA compared to the NHL. The NBA effectively highlights emphasizes their players personalities and tell a story from their stats. This storytelling approach allows the NBA to present sports from a narrative perspective, truly showcasing the individuality of their players.



NBA VS NHL: FAN ENGAGEMENT

The NHL and NBA share quite similar attendance averages and average ticket prices, especially since they often occupy the same arenas. This similarity presents an opportunity for NBA fans to explore NHL games. While the demographics of the two leagues differ, they also share some similarities within the fast pace game.

Here are a few ideas to potentially attract more fans:

- Create a special package that allows NBA fans to experience their first hockey game and witness the fast pace and excitement of the sport.
- Both sports thrive on speed and flair, making a package deal very appealing.
- For Warriors fans, the presence of a player like Draymond Green on the ice could spark additional interest in the NHL and funny humor with the likes of Joe Thornton and Brent Burns in the post-game show.





INCREASING FEMALE HOCKEY FANS

FEMALE RESPONDANTS AS HOCKEY FANS

ALL RESPONDANTS

50%

Out of the 60,000
respondants women
acumulated for half of the
overall consumers

TARGET AUDIENCE

27%

For women that fit within the
Target Market the
consumeres are only 27%

PARTNERING WITH WOMEN HOCKEY LEAGUES

Partnering up with local communities like Northern California Women's Hockey League (NCWHL) is very important if we want to increase women hockey fans. Sharks Ice which is an Ice Rink that the Sharks used to practice at, also has the SIAHL Women's League which is another great opportunity for women to get excited about playing.

Partnering and doing marketing campaigns with them could attract more women fans and may spark more hockey interest in the Bay Area



PARTNERING WITH WOMEN HOCKEY LEAGUES

With the brand new Professional Women's Hockey League (PWHL) started in 2023 with 6 teams and a 24-game schedule, it is important that the NHL and especially the Sharks market this out. Doing promotions like "Womens Apreciation Night" where women can get a discount to the game, meet and greets with some players from the PWHL and more.

Along with that, having some of the Women's US and Canada national hockey team come to drop the puck or interact in the pre/post-game show with Thornton and Burns can also bring that outreach for the game.



PHOTO VIA PWHL

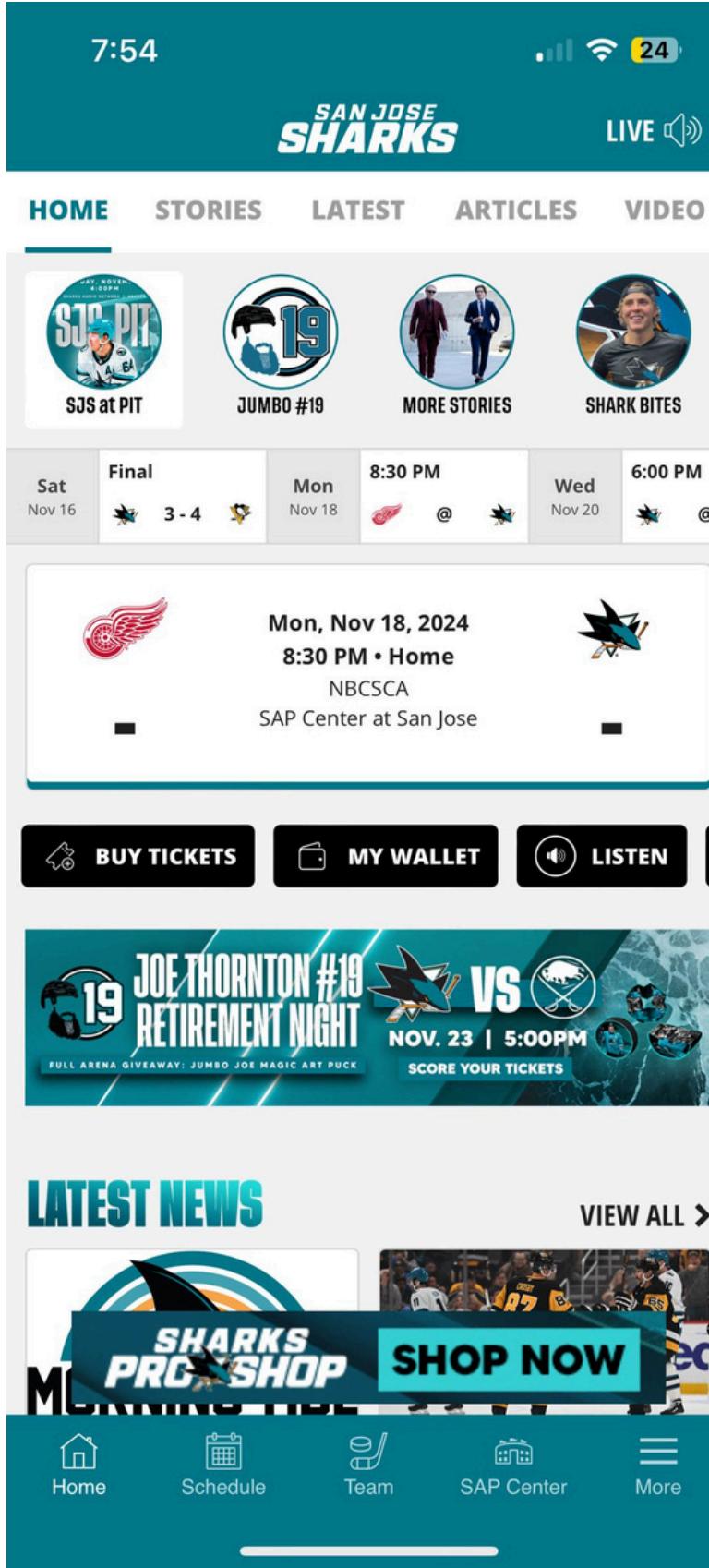
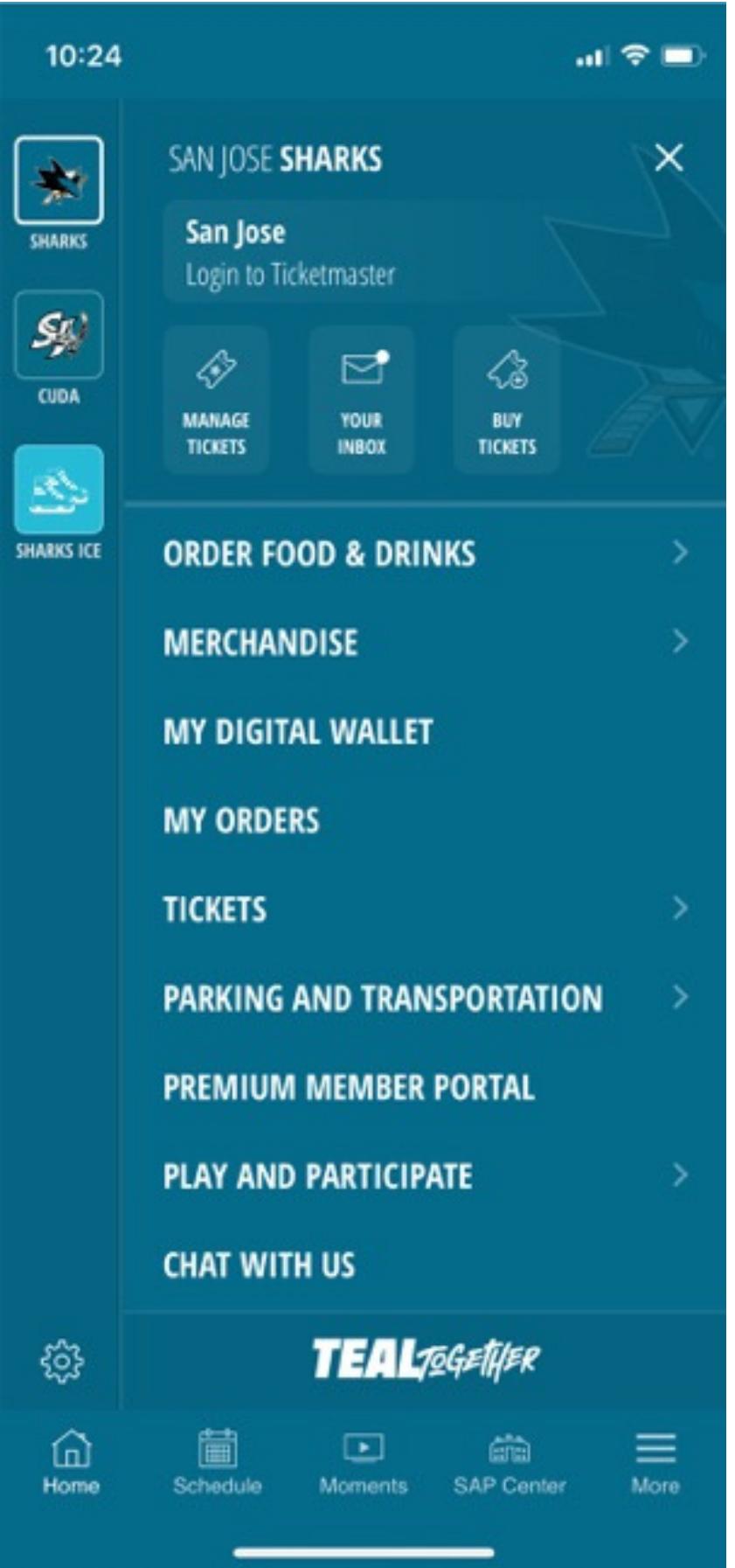


API RECOMMENDATION

API

For the API, having an app for fans is very important, which the Sharks already have. A few suggestions for improvement are:

- Improve parking and transportation page
 - Implement an interactive map showing available parking spots and available parking lots that can be linked with Google Maps
 - Offer discounts on first-time prepaid parking tickets through the app or special deals on certain nights to drive user visits to the app.
- Work with SAP Center to expand the app to include non-Sharks games so the app is being used more.





MOVING FORWARD

MOVING FORWARD

With the overall decrease of the past few years in attendance and overall sales, it can only go up from now. With a young new squad and a devoted fan base, the San Jose Sharks are motivated to grab their first Stanley Cup. Following the three recommendations:

- An Entertaining Pre and Post Game entertainment
- Bringing NBA fans over to watch NHL games
- Increase Female fans

This will hopefully help bring more fans and engagement to the Sharks organization and maybe even bring this up to the NHL level for marketing





THANK YOU





CITATIONS AND APPENDIX

Page 1:

- Page 7:
 - <https://www.statista.com/statistics/193457/total-league-revenue-of-the-nfl-since-2005/>
 - <https://www.statista.com/topics/967/national-basketball-association/>
 - <https://www.statista.com/study/53699/indian-premier-league/>
 - <https://www.statista.com/statistics/193466/total-league-revenue-of-the-mlb-since-2005/>
 - <https://www.statista.com/statistics/193468/total-league-revenue-of-the-nhl-since-2006/>
 - <https://www.statista.com/statistics/261218/big-five-european-soccer-leagues-revenue/>
- Page 8 and 9
 - <https://www-statista-com.du.idm.oclc.org/statistics/783169/la-liga-annual-football-attendance-figures-in-spain/>
 - <https://www-statista-com.du.idm.oclc.org/statistics/924681/japan-professional-baseball-events-watching-people-annual-number/>
 - <https://www.statista.com/statistics/193415/regular-season-attendance-in-the-nhl-since-2006/>
 - <https://www.statista.com/topics/967/national-basketball-association/>
 - <https://www.statista.com/topics/963/national-football-league/>
 - <https://www.statista.com/statistics/282978/total-attendance-german-football-bundesliga/>
- Page 10
 - <https://www.statista.com/statistics/193426/average-ticket-price-in-the-mlb-since-2006/>
 - <https://www.statista.com/statistics/193425/average-ticket-price-in-the-nfl-since-2006/#:~:text=During%20the%202023%20season%2C%20a,average%20of%20120.94%20U.S.%20dollars.>
 - (with AI help to find the rest of the years)
 - <https://www.statista.com/statistics/193432/average-ticket-price-in-the-nhl-since-2006/>
 - <https://www.statista.com/statistics/193757/average-ticket-price-in-the-nhl-by-team-in-2010/>
 - <https://www.statista.com/statistics/193432/average-ticket-price-in-the-nhl-since-2006/#:~:text=This%20graph%20depicts%20the%20average.was%20at%2043.13%20U.S.%20dollars.>

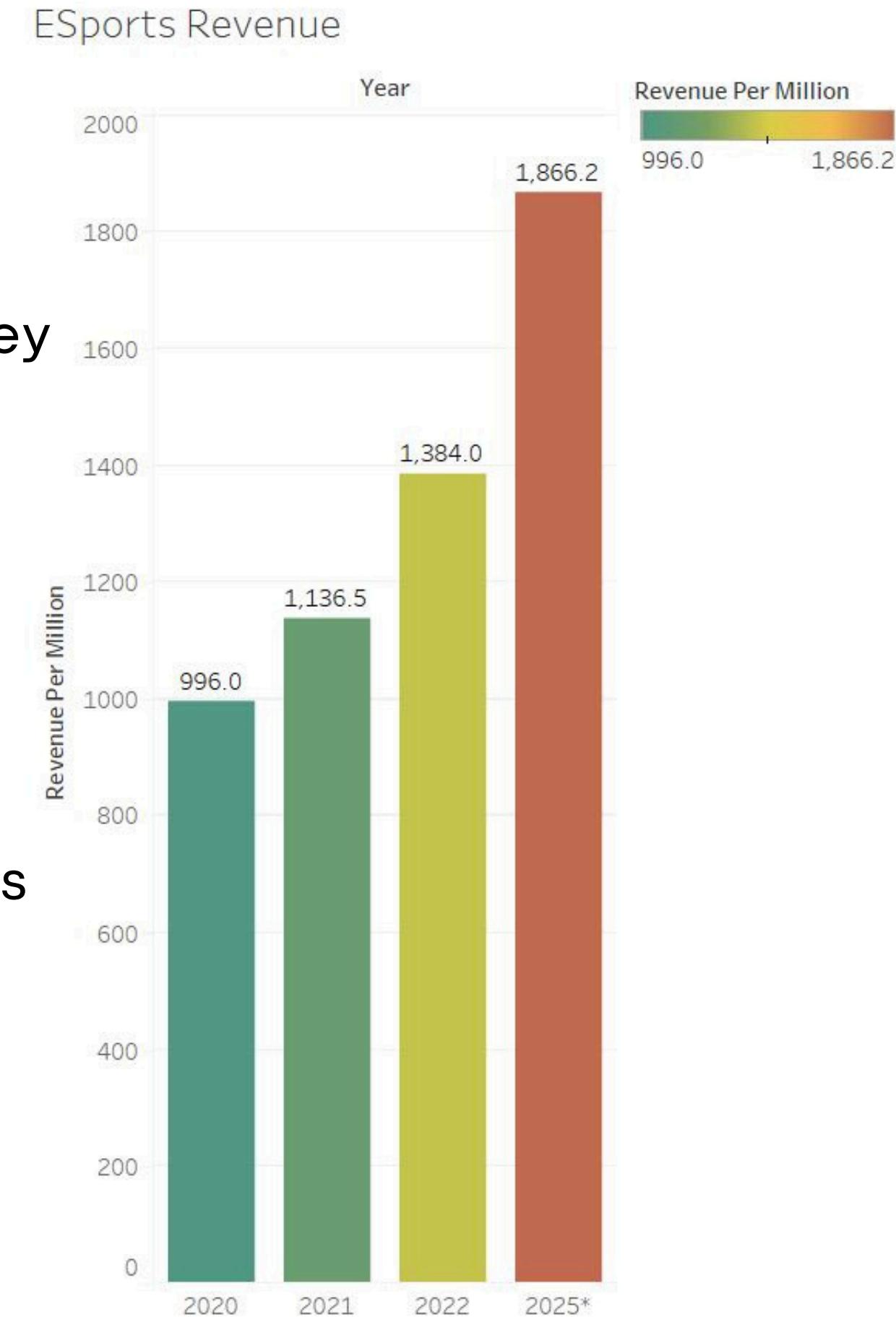
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- <https://www.statista.com/statistics/235678/world-series-tv-viewership-in-the-united-states/>
- <https://www.statista.com/statistics/305801/average-tv-viewership-nhl-stanley-cup-games/>
- <https://www-statista-com.du.idm.oclc.org/statistics/240377/nba-finals-tv-viewership-in-the-united-states/>
- Page 12
 - <https://www.statista.com/topics/2113/sports-on-tv/>
- Page 14-16, 32
 - <https://www-statista-com.du.idm.oclc.org/study/11455/national-hockey-league-statista-dossier/>
- Page 18
 - <https://www.statista.com/statistics/198839/nhl-home-attendance-of-the-san-jose-sharks-since-2006/>
- Page 19
 - <https://www.statista.com/statistics/374763/san-jose-sharks-gate-receipts/>
- Page 20
 - <https://www.statista.com/statistics/374209/san-jose-sharks-player-expenses-payroll/>
- Page 23
 - <https://ustvdb.com/networks/espn/shows/first-take/>
 - <https://ustvdb.com/networks/tnt/shows/inside-nba/>

ESPORTS REVENUE

ESports Is a great sector of entertainment that Hockey should really consider. As Teams like the San Jose Sharks already have an Esports team, the viewership for the sport of hockey just isn't there yet.

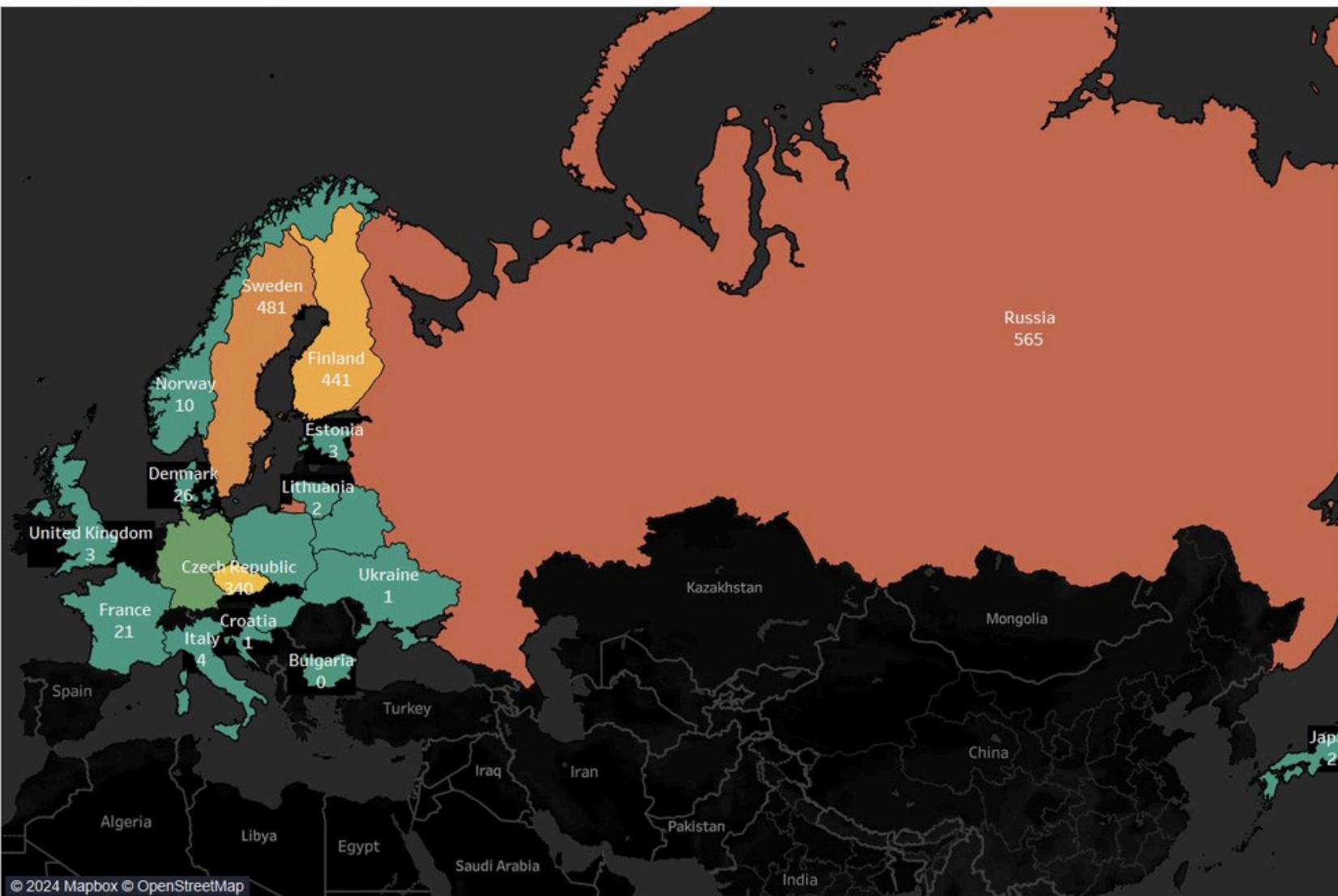
Looking at this trend you can see that the Esports industry is in the billions of dollars per year and is rising. This would be something to consider as Esports is a fast growing sport.



Sum of Revenue Per Million for each Year. Color shows sum of Revenue Per Million. The marks are labeled by sum of Revenue Per Million.

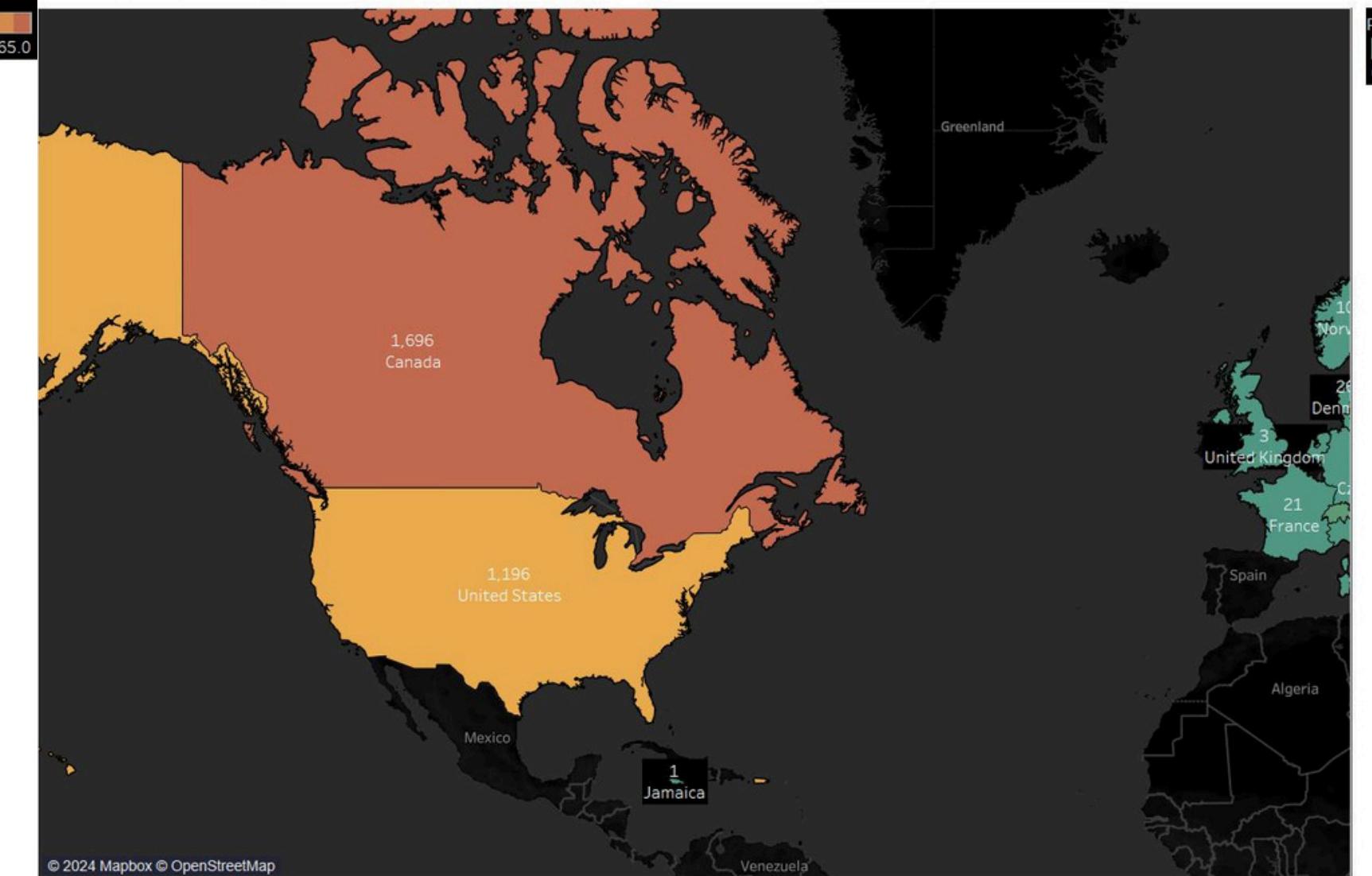
HOCKEY PLAYER ORIGIN ALL LEAGUES

Hockey Origin All Leagues



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Pivot Field Values. The marks are labeled by Country and sum of Pivot Field Values.

Hockey Player Origin North America



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Pivot Field Values. The marks are labeled by sum of Pivot Field Values and Country. Details are shown for Country and Measure Names.