NBA Player of the Week Analysis

GSB 510: Stephanie Liu, Jen McGregor, Nikita Sharma, Jezzia Smith

Agenda

1. **Project Context**
2. **Dataset Variables**
3. **Dataset Analysis**
    a.   Summary Statistics
    b.   Awards won by Various Categories: Player, Team, Position, Conference
    c.   Draft Year & Draft Age
4. **Conclusion**

Project Context

- **Client:** National Basketball Association Archives Committee
- **Title:** NBA Player of the Week
- **Source:** GSB-S524 Computing and Machine Learning for Economics
  - 1984-2018
- **Goals:**
  - Demographics Summary
  - Awards Won by different categories
  - Age Analysis

Dataset Variables

Variable Name	Variable Type	Description
Age	Numeric (Integer)	Age of the Player
Date	Character	Date honor was granted (In Month Day, Year Format)
Draft.Year	Numeric (Integer)	Date player was drafted in NBA
Height	Character	Height of player
Player	Character	Player Name (First and Last)
Position	Character	Player's basketball position
Season	Character	NBA Season that award was granted during (Both years)
Season.short	Numeric	NBA Season that award was granted during (2nd year only)
Seasons.in.league	Numeric	Tenure in NBA at time of award
Team	Character	NBA Team player is on at time of award
Weight	Numeric	Weight of player

Dataset Analysis

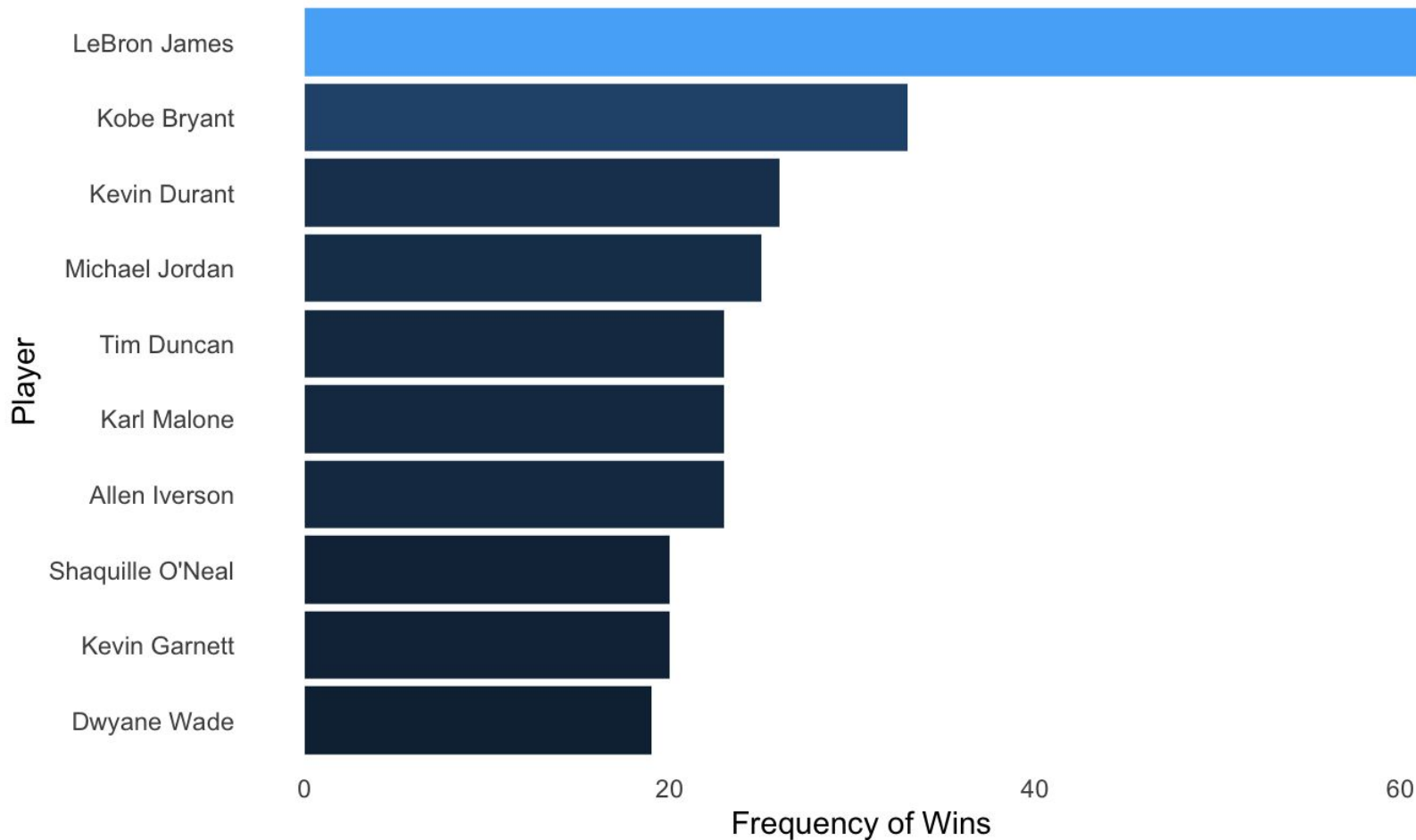# Summary Statistics: Player Height, Weight, Age

	Min	Mean	Max
Height (feet & inches)	5'9"	6'7"	7'6"
Weight (lbs)	149	225	324
Age	19	27	40

25%

of wins went to

4%

of players

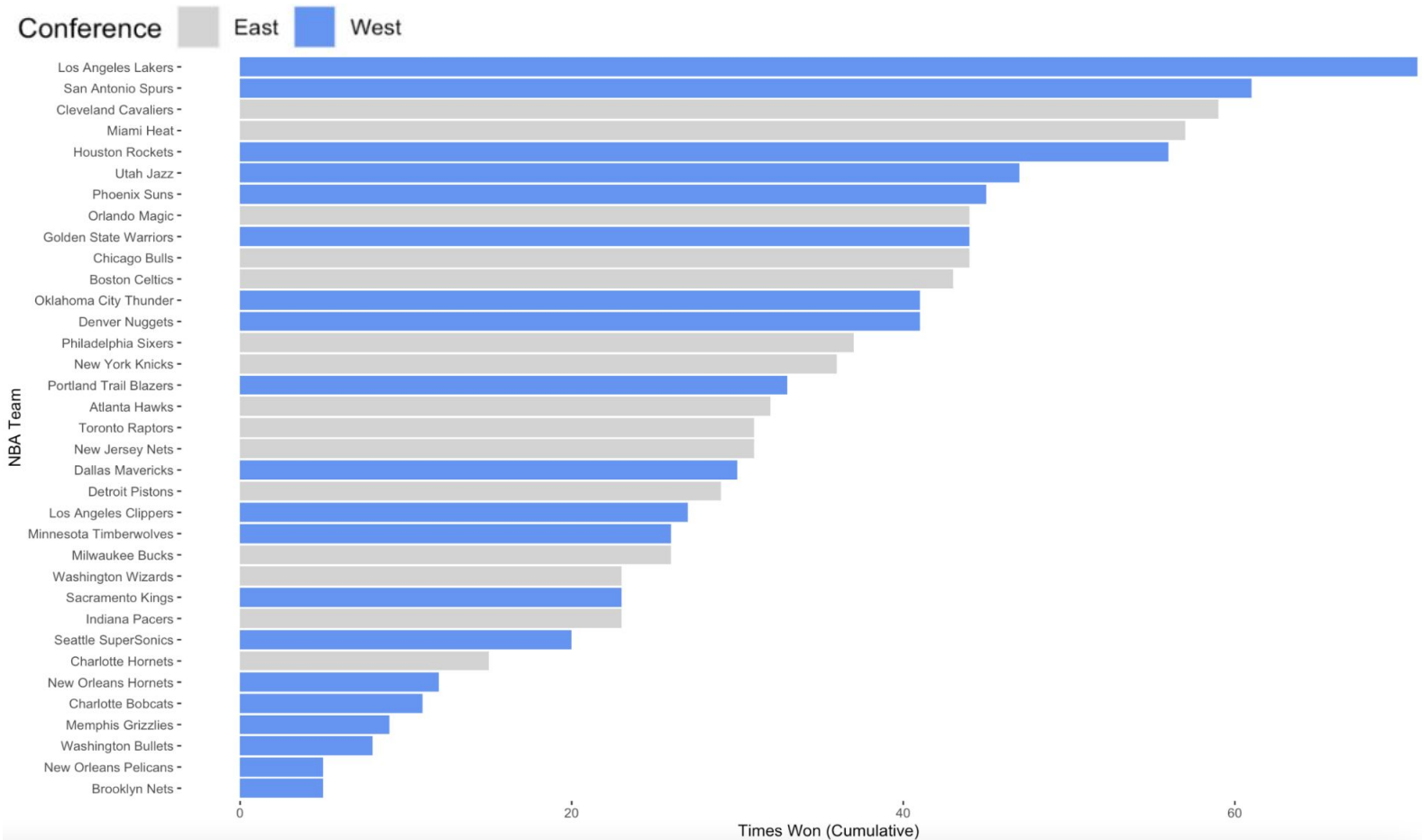# Players With the Highest Frequency of Wins

Frequency of Wins by Position
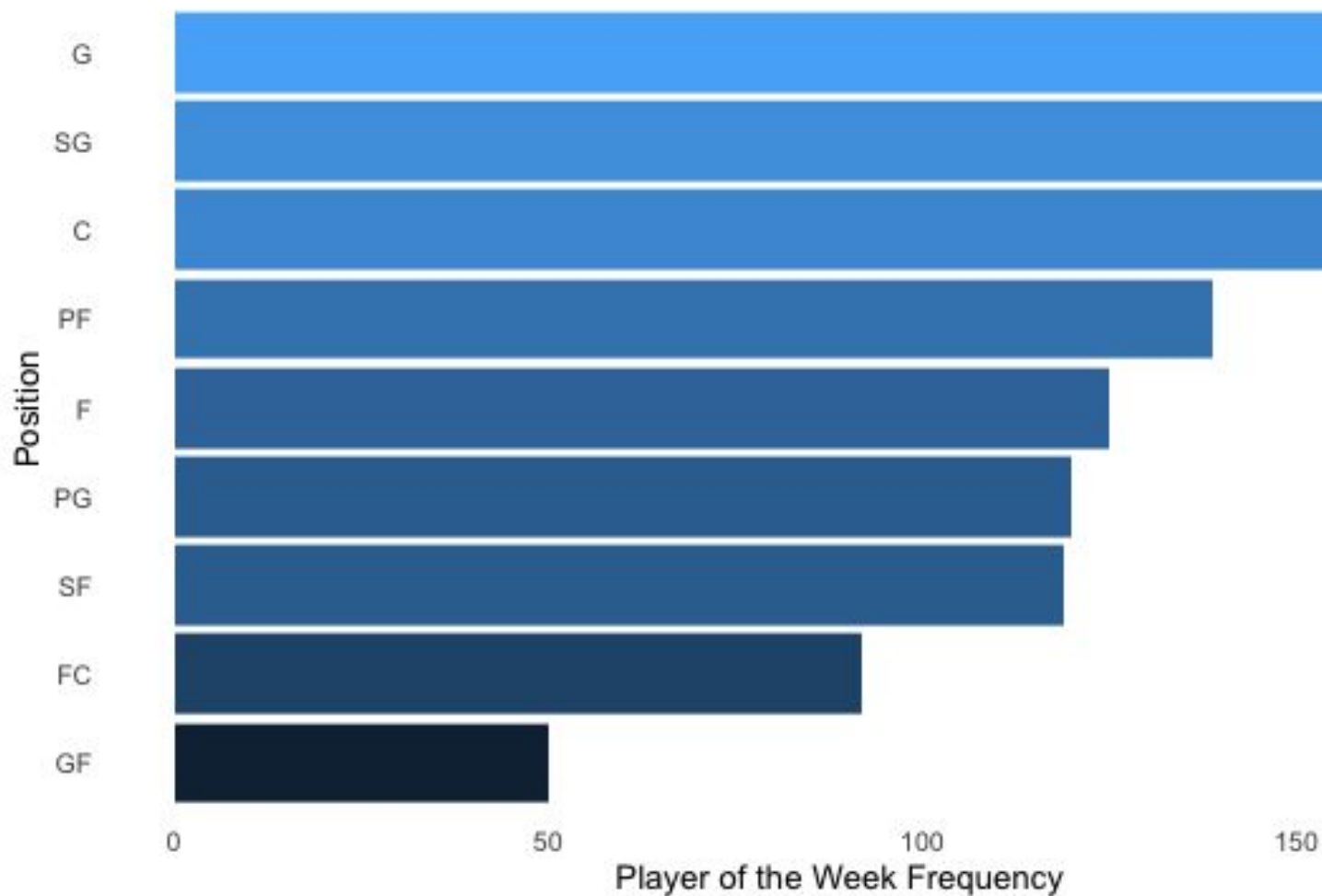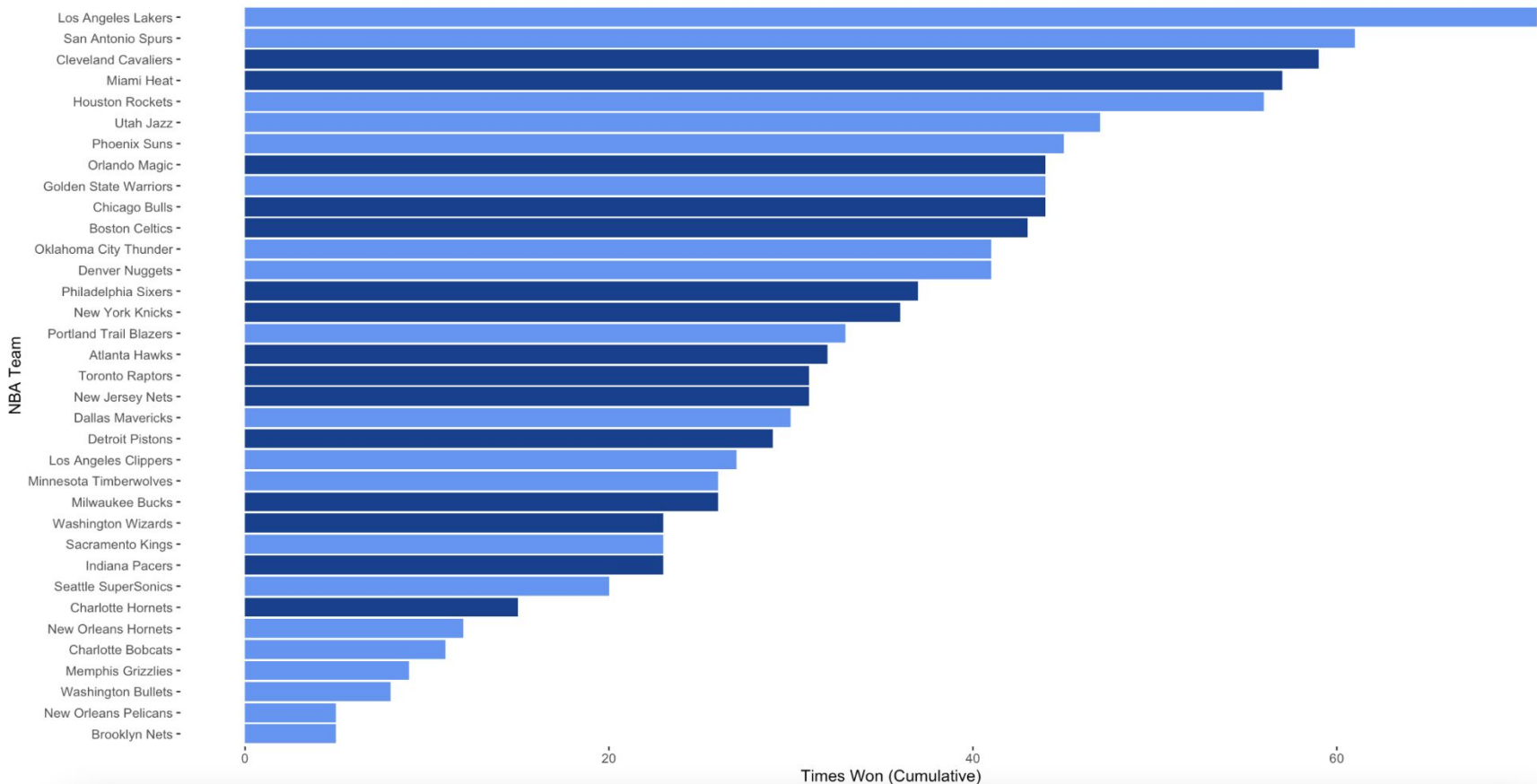
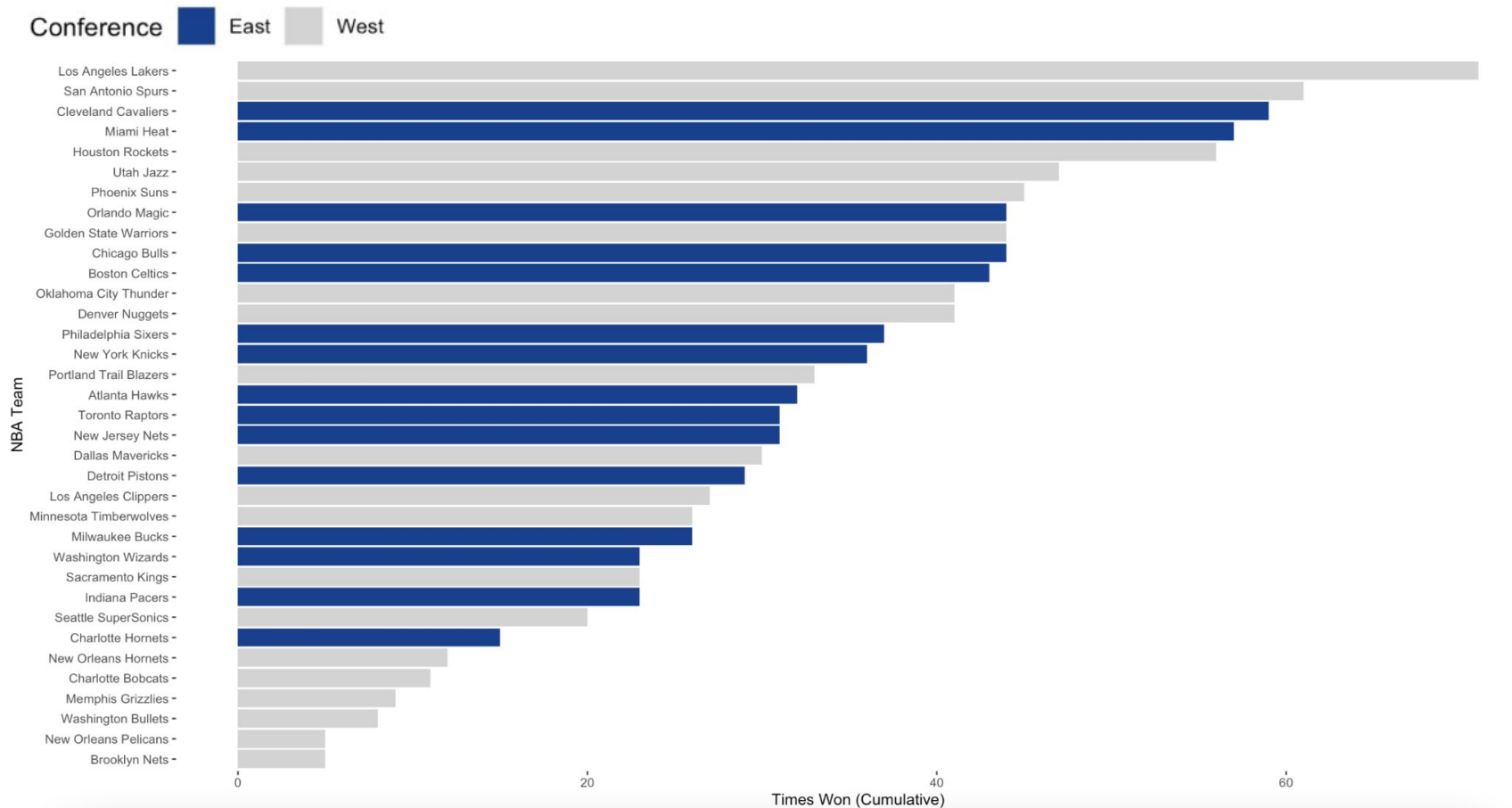# NBA Player of the Week Cumulative Awards by Team Since 1984

NBA Player of the Week Cumulative Awards by Team Since 1984

11

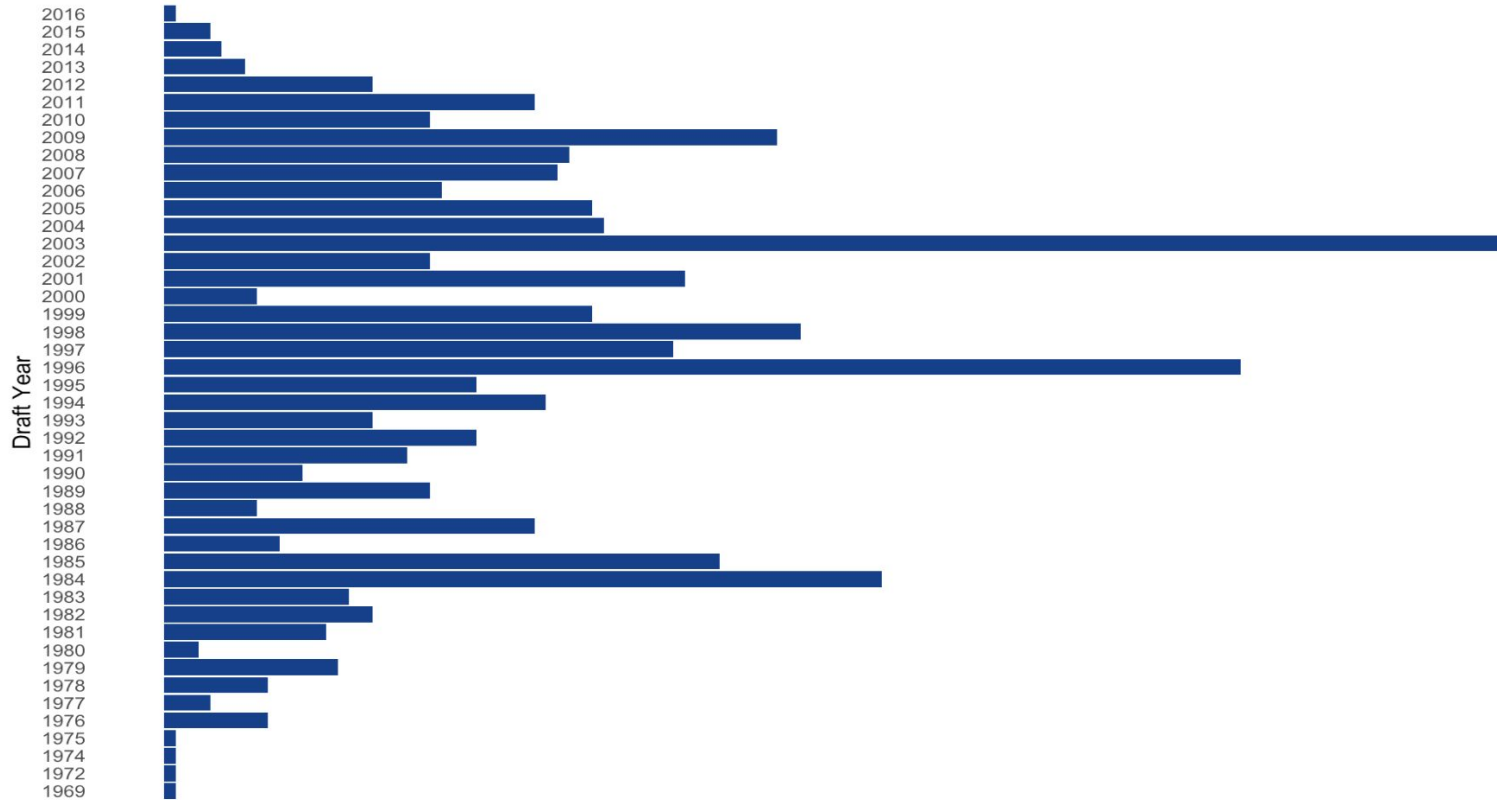# NBA Player of the Week Cumulative Awards by Team Since 1984

West vs East

"Player of the Week" Awards Won, East versus West Conferences

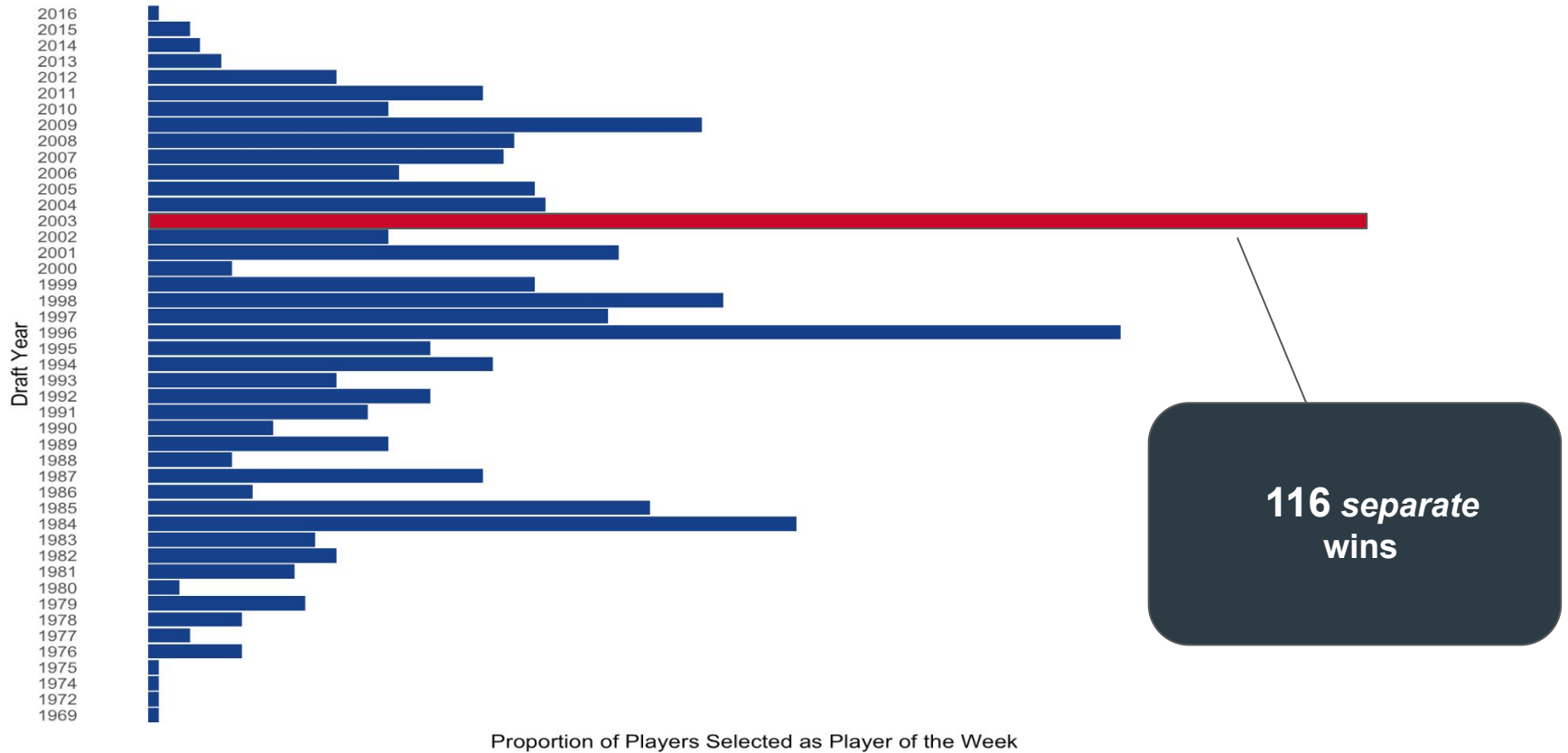|	Average Wins	Total Wins
West Conference	30.75	615
East Conference	35.33	530

Proportion of Players Selected as Player of the Week

Proportion of Players Selected as Player of the Week

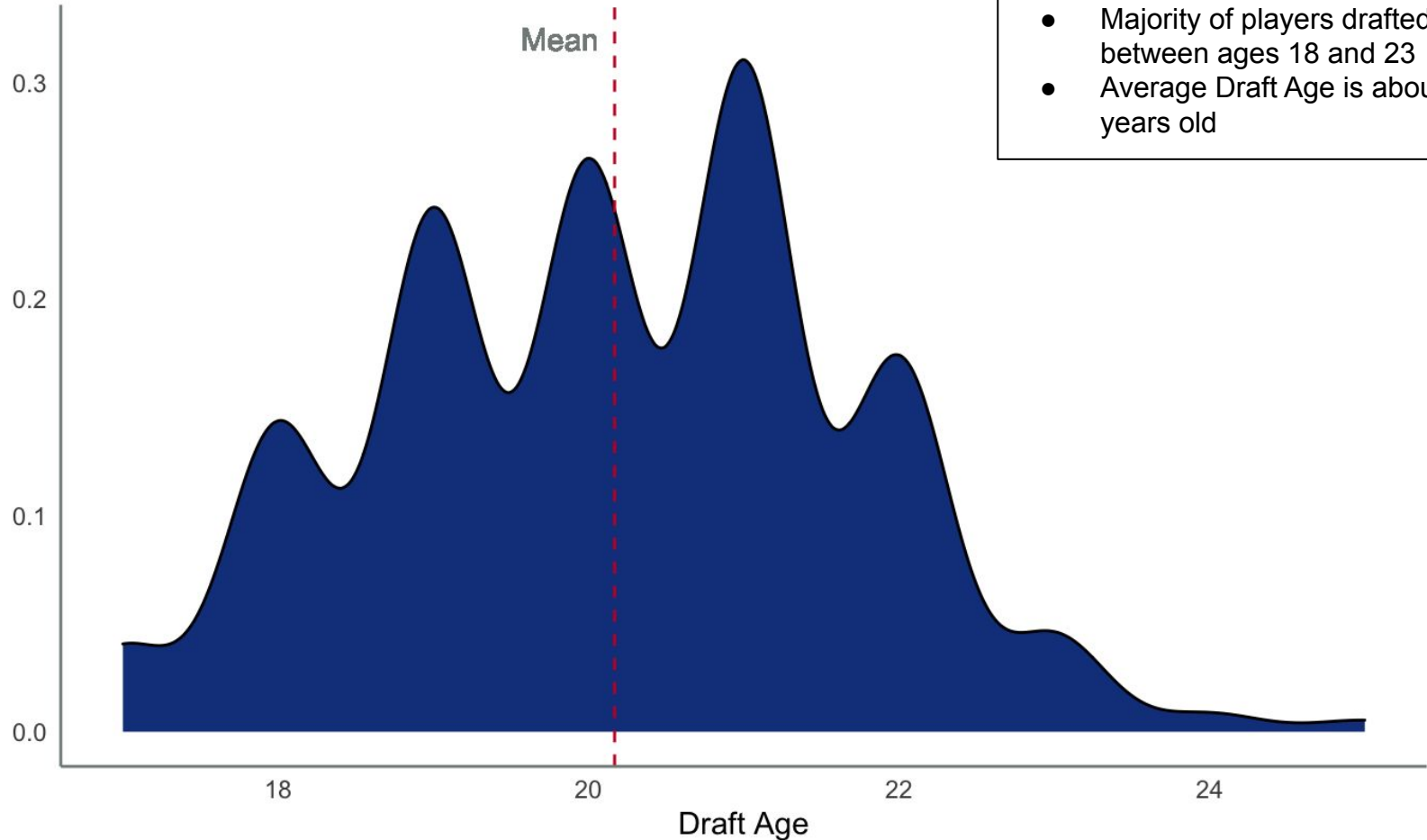# Proportion of Players Selected as Player of the Week
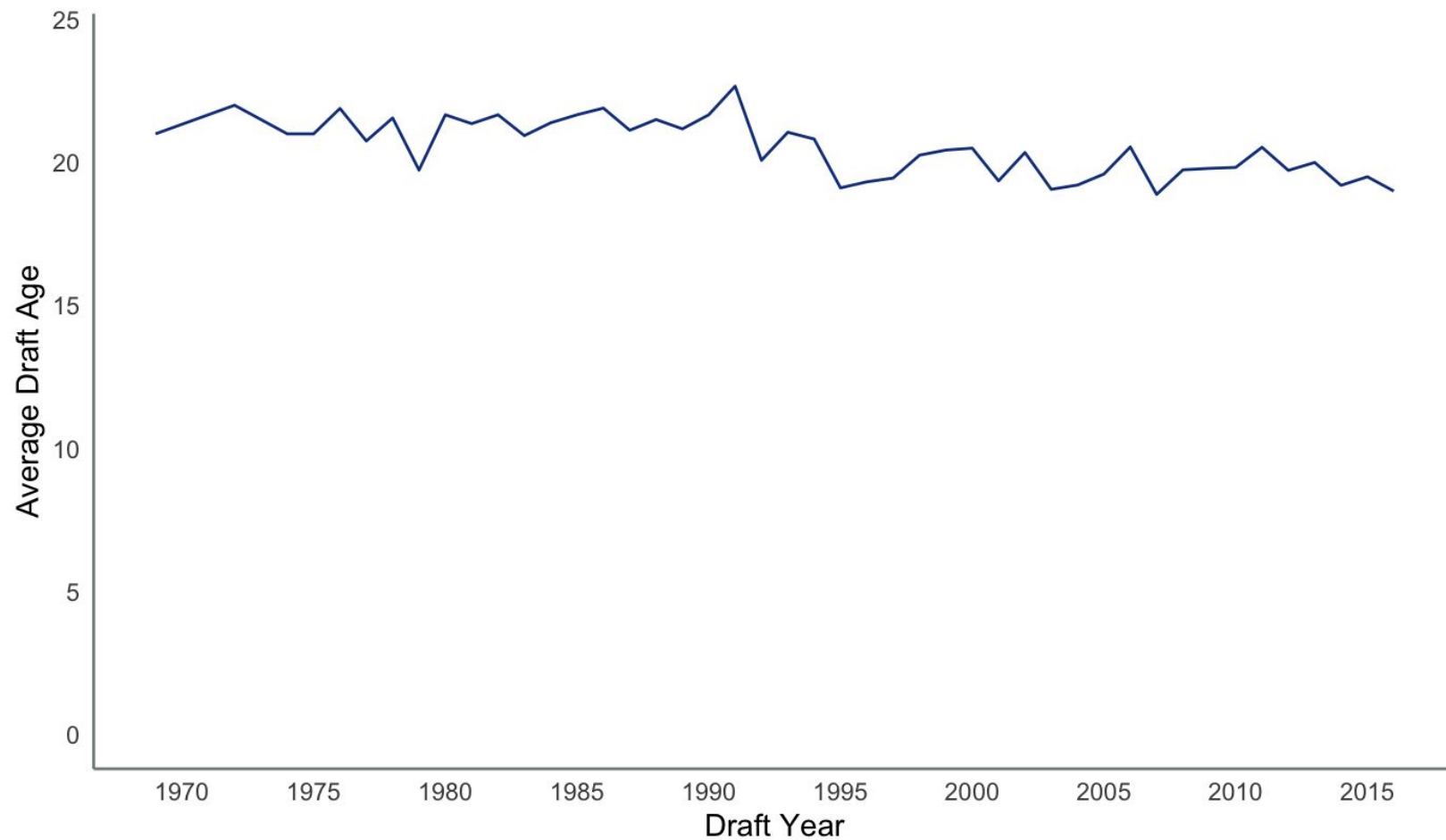

Proportion of Players Selected as Player of the Week

116 *separate* **wins**

Proportion of Players Selected as Player of the Week

Proportion of Players Selected as Player of the Week

93 *separate* **wins**
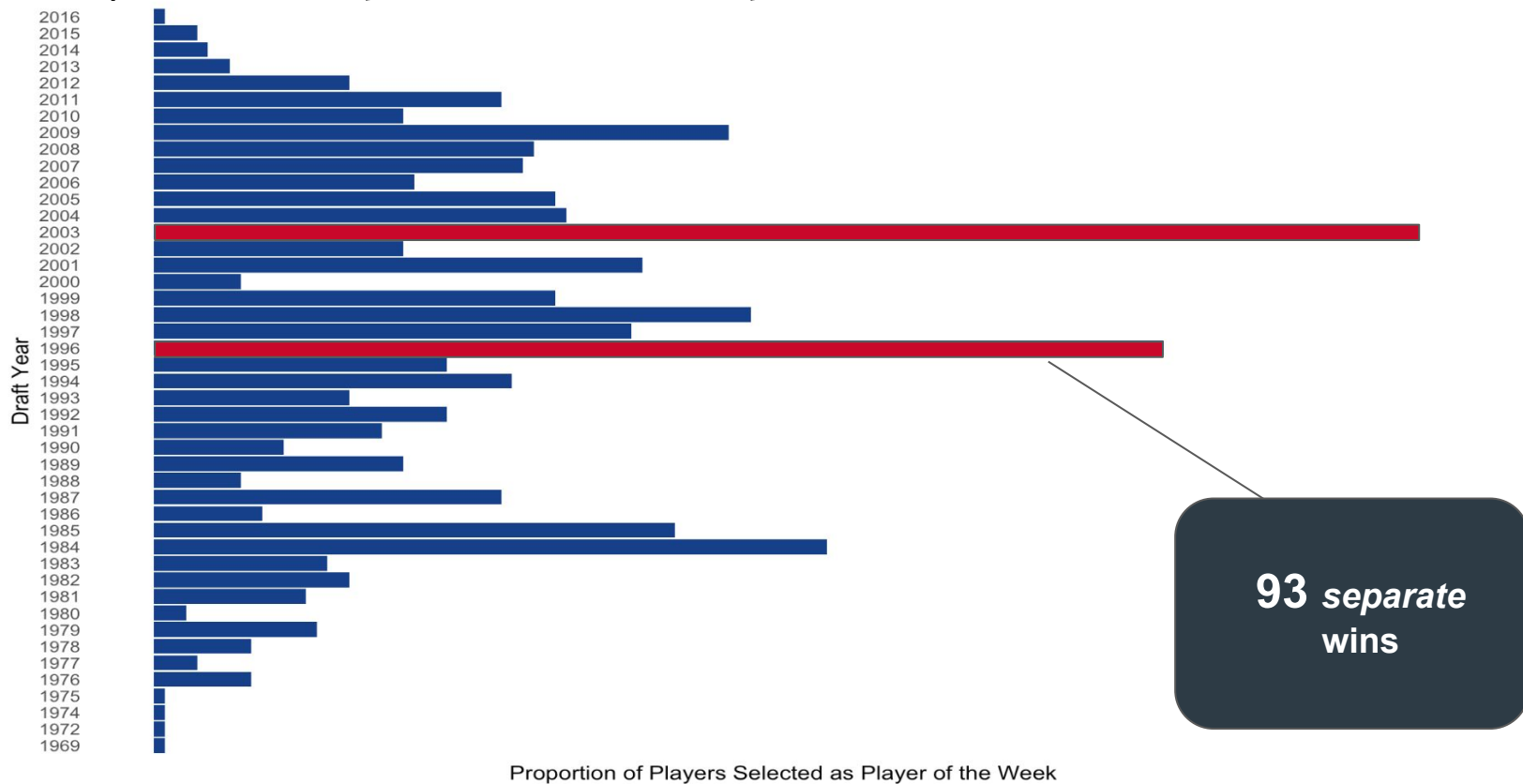
Distribution of the Age of Players When Drafted

- Majority of players drafted between ages 18 and 23
- Average Draft Age is about 20 years old

Average Draft Age Over Time

Conclusion

- **10 players** took home **25%** of awards
- **LeBron James**: highest number of wins
- **Guard**, **Shooting Guard,** and **Center** positions win with highest frequency
- East vs. West Conference
  - **West:** greater **average wins**
  - **East:** greater **total wins**
- Draft Year **2003**: more player of the week awards
- Average Draft Age
  - **18** - **23** years old
  - Little change over time