Predicting NFL Wide Receiver Success Using Combine Measurables and PFF College Data

Jack Miller, Nahm Lahade, Matther Paul, Caspian Svenson

```
library(tidyverse)
library(tidyr)
library(readr)
library(dplyr)
library(broom)
library(knitr)
library(nflfastR)
library(nflplotR)
library(ggrepel)
rec_2014 <- read.csv("data_pff_receiver/2014_receiver_pff_data.csv")</pre>
rec 2015 <- read.csv("data pff receiver/2015 receiver pff data.csv")
rec_2016 <- read.csv("data_pff_receiver/2016_receiver_pff_data.csv")</pre>
rec_2017 <- read.csv("data_pff_receiver/2017_receiver_pff_data.csv")</pre>
rec_2018 <- read.csv("data_pff_receiver/2018_receiver_pff_data.csv")</pre>
rec_2019 <- read.csv("data_pff_receiver/2019_receiver_pff_data.csv")</pre>
rec_2020 <- read.csv("data_pff_receiver/2020_receiver_pff_data.csv")</pre>
con_2014 <- read.csv("data_pff_receiver/2014_receiving_concept.csv")</pre>
con_2015 <- read.csv("data_pff_receiver/2015_receiving_concept.csv")</pre>
con_2016 <- read.csv("data_pff_receiver/2016_receiving_concept.csv")</pre>
con_2017 <- read.csv("data_pff_receiver/2017_receiving_concept.csv")</pre>
con_2018 <- read.csv("data_pff_receiver/2018_receiving_concept.csv")</pre>
con_2019 <- read.csv("data_pff_receiver/2019_receiving_concept.csv")</pre>
con_2020 <- read.csv("data_pff_receiver/2020_receiving_concept.csv")</pre>
dep_2014 <- read.csv("data_pff_receiver/2014_receiving_depth.csv")</pre>
dep_2015 <- read.csv("data_pff_receiver/2015_receiving_depth.csv")</pre>
dep_2016 <- read.csv("data_pff_receiver/2016_receiving_depth.csv")</pre>
dep_2017 <- read.csv("data_pff_receiver/2017_receiving_depth.csv")</pre>
dep_2018 <- read.csv("data_pff_receiver/2018_receiving_depth.csv")</pre>
dep_2019 <- read.csv("data_pff_receiver/2019_receiving_depth.csv")</pre>
dep_2020 <- read.csv("data_pff_receiver/2020_receiving_depth.csv")</pre>
sch_2015 <- read.csv("data_pff_receiver/2015_receiver_scheme.csv")</pre>
sch_2016 <- read.csv("data_pff_receiver/2016_receiving_scheme.csv")</pre>
sch_2017 <- read.csv("data_pff_receiver/2017_receiving_scheme.csv")</pre>
sch_2018 <- read.csv("data_pff_receiver/2018_receiving_scheme.csv")</pre>
sch_2019 <- read.csv("data_pff_receiver/2019_receiving_scheme.csv")</pre>
sch_2020 <- read.csv("data_pff_receiver/2020_receiving_scheme.csv")</pre>
sta_sch_2020 <- left_join(rec_2020, sch_2020, copy = FALSE,
                            by = c("player", "position", "team_name",
                                    "player_game_count", "player_id",
                                    "declined_penalties", "franchise_id"))
```

```
con_dep_2020 <- left_join(con_2020, dep_2020, copy = FALSE,</pre>
                          by = c("player", "position", "team_name", "player_game_count", "player_id", "
stats_2020 <- left_join(sta_sch_2020, con_dep_2020, copy = FALSE,</pre>
                        by = c("player", "position", "team_name", "player_game_count", "player_id", "de
sta_sch_2019 <- left_join(rec_2019, sch_2019, copy = FALSE,
                          by = c("player", "position", "team_name", "player_game_count", "player_id", "
con_dep_2019 <- left_join(con_2019, dep_2019, copy = FALSE,</pre>
                          by = c("player", "position", "team_name", "player_game_count", "player_id", "
stats_2019 <- left_join(sta_sch_2019, con_dep_2019, copy = FALSE,
                        by = c("player", "position", "team_name",
                                "player_game_count", "player_id",
                                "declined_penalties", "franchise_id"))
sta_sch_2017 <- left_join(rec_2017, sch_2017, copy = FALSE, by = c("player", "position", "team_name", "
con_dep_2017 <- left_join(con_2017, dep_2017, copy = FALSE, by = c("player", "position", "team_name", "</pre>
stats_2017 <- left_join(sta_sch_2017, con_dep_2017, copy = FALSE,</pre>
                        by = c("player", "position", "team_name", "player_game_count", "player_id", "de
sta_sch_2015 <- left_join(rec_2015, sch_2015, copy = FALSE, by = c("player", "position", "team_name", "
con_dep_2015 <- left_join(con_2015, dep_2015, copy = FALSE, by = c("player", "position", "team_name", "
stats_2015 <- left_join(sta_sch_2015, con_dep_2015, copy = FALSE,</pre>
                        by = c("player", "position", "team_name", "player_game_count", "player_id", "de
#2015 Stats of 2016 DC
dc_2016 <- c("Josh Doctson", "Rashard Higgins", "Daniel Braverman", "Sterling Shepard", "Corey Coleman"
dc_2016_2 <- c("Sabian Holmes", "Kendrick Singleton", "Cameron Dickerson", "Jacob Hillyer", "Kris Kente
dc2016_stats2015 <- stats_2015 %>%
 filter(player %in% dc_2016 | player %in% dc_2016_2)
#2014 Stats of 2015 DC
```