

The Search for the Best NFL Defenses (1978-2021)

Oscar Monroy

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Table of Every NFL Team's Defensive Stats from 1978 to 2021

```
library(dplyr)
```

```
## Warning: package 'dplyr' was built under R version 3.6.3
```

```
def <- read.csv("nfl_def.csv")
names(def)[1] <- "Team"
head(def)
```

```
##           Team Year Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G
## 1  Buffalo Bills 2021  17   289  17.0   1866  109.8   2771  163.0
## 2  Carolina Panthers 2021  17   404  23.8   1935  113.8   3266  192.1
## 3  San Francisco 49ers 2021  17   365  21.5   1760  103.5   3510  206.5
## 4 New England Patriots 2021  17   303  17.8   2103  123.7   3181  187.1
## 5  Cleveland Browns 2021  17   371  21.8   1857  109.2   3439  202.3
## 6   Chicago Bears 2021  17   407  23.9   2127  125.1   3257  191.6
## TotYds Yds.G Rank
## 1  4637 272.8    1
## 2  5201 305.9    2
## 3  5270 310.0    3
## 4  5284 310.8    4
## 5  5296 311.5    5
## 6  5384 316.7    6
```

Finding the Greatest Defenses

Generally, people consider the '85 Chicago Bears to be the best defense of all time. Without a doubt they were one of the best to ever do it, but were they truly number 1? The 1985 Chicago Bears played in an era where passing plays were considered a novelty and running backs were the main players that moved the ball forward, so they specialized in creating immense pressure in the backfield and terrorizing running backs. They weren't too shabby at passing defense, but that wasn't the main point of that defense since they didn't need to prepare much for that (except against Dan Marino's Miami Dolphins, who the Bears lost to). Nowadays, if you were to play the '85 Bears in today's game, they would more than likely get absolutely dominated as the game has evolved more in the direction that

Dan Marino had played in: pass happy. Nevertheless that Bears team is still considered one of the greatest for a good reason and part of that is because they hardly allowed their opponents to score. However there are more teams that people overlook when talking about NFL defenses, and we're about to see who they are with some simple data analysis.

Teams that Just Didn't Like Points Being Scored on Them

```
# First let's grab the data for total points allowed for teams that
# ranked first in their respective year.
```

```
num1 <- def %>%
  filter(Rank %in% c(1)) %>%
  group_by(Team)
num1
```

```
## # A tibble: 44 x 12
## # Groups:   Team [20]
##   Team   Year   Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G TotYds Yds.G
##   <fct> <int> <int> <int> <dbl> <int> <dbl> <int> <dbl> <int> <dbl>
## 1 Buff~ 2021    17   289   17    1866  110.    2771  163   4637  273.
## 2 Los ~ 2020    16   296  18.5   1460  91.2    3051  191.   4511  282.
## 3 New ~ 2019    16   225  14.1   1528  95.5    2886  180.   4414  276.
## 4 Balt~ 2018    16   287  17.9   1327  82.9    3360  210   4687  293.
## 5 Minn~ 2017    16   252  15.8   1337  83.6    3078  192.   4415  276.
## 6 Hous~ 2016    16   328  20.5   1595  99.7    3226  202.   4821  301.
## 7 Denv~ 2015    16   296  18.5   1337  83.6    3193  200.   4530  283.
## 8 Seat~ 2014    16   254  15.9   1304  81.5    2970  186.   4274  267.
## 9 Seat~ 2013    16   231  14.4   1626  102.    2752  172   4378  274.
## 10 Pitt~ 2012    16   314  19.6   1450  90.6    2963  185.   4413  276.
## # ... with 34 more rows, and 1 more variable: Rank <int>
```

```
# We're certainly seeing an abundance of Steelers, 49ers, and Vikings on this list...
```

```
# Let's get a look at who the top dogs are in total
# points allowed in their respective year.
```

```
num1 %>%
  select(Team, Year, Gms, TotPts) %>%
  arrange(TotPts)
```

```
## # A tibble: 44 x 4
## # Groups:   Team [20]
##   Team           Year   Gms TotPts
##   <fct>         <int> <int> <int>
## 1 Miami Dolphins  1982     9   131
## 2 Chicago Bears   1986    16   187
## 3 Tennessee Titans 2000    16   191
## 4 Tampa Bay Buccaneers 2002    16   196
## 5 Chicago Bears   1985    16   198
## 6 Baltimore Ravens 2006    16   201
## 7 Green Bay Packers 1996    16   210
## 8 Pittsburgh Steelers 2001    16   212
```

```
## 9 Philadelphia Eagles 1981 16 221
## 10 Pittsburgh Steelers 2008 16 223
## # ... with 34 more rows
```

```
# Now here is an interesting table with an unexpected #1 defense: the '82 Dolphins.
# Now I put in the the Gms variable (Games Played) in here to show an obvious disparity.
# During the 1982, the Players' Strike was going which dropped the number of games
# that season, so ultimately, we end up with this strange bit of info where the
# Miami Dolphins appeared to have achieved one of the greatest feats in sports
# history at first glance until you realize there was only 9 games. Aside from that,
# we still see the '85 Bears in the Top 5 (Top 4 if your exclude the Dolphins),

# Here's is another interesting factoid: the '86 Bears were actually better in every way
# than the '85 Bears. However, due to a malicious injury caused to QB Jim McMahon, their
# season was completely derailed and now the '86 counterpart is mostly forgotten. If that
# injury didn't happen, they would be remembered far more than they currently are.

# Also, the Tennessee Titans (my favorite team) comes in at 3rd place (or 2nd because...
# you know) and also could've been considered one of the greatest teams in history if
# they weren't stopped in the playoffs by rival Baltimore Ravens.

# Just for fun, let's see the '82 Dolphins stats:
num1[40, ]
```

```
## # A tibble: 1 x 12
## # Groups:   Team [1]
##   Team Year Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G TotYds Yds.G
##   <fct> <int> <int> <int> <dbl> <int> <dbl> <int> <dbl> <int> <dbl>
## 1 Miam~ 1982 9 131 14.6 1285 143. 1027 114. 2312 257.
## # ... with 1 more variable: Rank <int>
```

```
# Using their Points Allowed per Game stat, we can estimate where their TotPts would've been
# had they played 7 more games for a standard 16 game season:
131 + (14.6 * 7)
```

```
## [1] 233.2
```

```
# Not too shabby. At 233.2, they would've ranked at #15 in the list
# of best defensive teams of their respective year.

# You may have notciied that I was using the limitation of only having the
# number 1 rated defense of their year but that alone doesn't tell a story. A team could
# be experts at preventing touchdowns from happening but they could also
# simultaneously "struggle" at preventing the ball from traveling to their side
# of the field...
t <- def %>%
  filter(Year != 1982) %>%
  arrange(TotPts)
head(t, 10)
```

```
##           Team Year Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G
## 1      Baltimore Ravens 2000 16 165 10.3 970 60.6 2997 187.3
```

```
## 2      Chicago Bears 1986 16    187 11.7    1463  91.4    2667 166.7
## 3      Tennessee Titans 2000 16    191 11.9    1390  86.9    2423 151.4
## 4      Pittsburgh Steelers 1978 16    195 12.2    1774 110.9    2394 149.6
## 5      Tampa Bay Buccaneers 2002 16    196 12.2    1554  97.1    2490 155.6
## 6      Chicago Bears 1985 16    198 12.4    1319  82.4    2816 176.0
## 7      Denver Broncos 1978 16    198 12.4    1979 123.7    2470 154.4
## 8      Baltimore Ravens 2006 16    201 12.6    1214  75.9    3011 188.2
## 9      Chicago Bears 2005 16    202 12.6    1637 102.3    2872 179.5
## 10     New Orleans Saints 1992 16    202 12.6    1605 100.3    2470 154.4
##      TotYds Yds.G Rank
## 1      3967 247.9    2
## 2      4130 258.1    1
## 3      3813 238.3    1
## 4      4168 260.5    3
## 5      4044 252.8    1
## 6      4135 258.4    1
## 7      4449 278.1    6
## 8      4225 264.1    1
## 9      4509 281.8    2
## 10     4075 254.7    2
```

```
# and the team that fits that bill is the 2000 Baltimore Ravens. They were experts
# at preventing points from being scored but still allowed the opposition to gain yards.
# It is likely that they were just exceptional at the red-zone defense and/or
# getting forced turnovers. Regardless, you'll notice how they're polar opposites
# of their rival from that same year: the Tennessee Titans. Titans allowed more points
# but allowed the least yards [not to say they were bad (far from it) at preventing
# points, but it really is interesting at the opposite method both teams' defenses had].
# Another anomaly is the 1978 Denver Broncos who rank 7th overall and 6th best defense
# of that particular year. Just look at the total yards they allowed; it's like
# an extreme version of the 2000 Ravens. What even was happening there?
# Oh and the legendary Steel Curtain Steelers rank #4 overall but #3 of that year.
# Honestly, what was going on in 1978 and 2000? Maybe we'll find out.
```

Winner of the “Team that Didn’t Like Points Being Scored on Them” Award:

The 2000 Baltimore Ravens

Not bad for a team that ranked #2 in that same year. I still don’t like them.

Teams that Weren’t Fans of Seeing their Opponents Move

```
# I'm going back to using the rank 1 defenses of the year as the limitation
# again only because I like surprising people when I do remove the restriction.
num1 %>%
  select(Team, Year, Gms, TotYds) %>%
  filter(Year != 1982) %>%
  arrange(TotYds)
```

```
## # A tibble: 43 x 4
```

```
## # Groups:   Team [19]
##   Team      Year   Gms TotYds
##   <fct>      <int> <int>  <int>
## 1 Philadelphia Eagles 1991   16   3549
## 2 Pittsburgh Steelers 2008   16   3795
## 3 Tennessee Titans   2000   16   3813
## 4 Chicago Bears      1984   16   3863
## 5 Los Angeles Rams    1978   16   3893
## 6 Dallas Cowboys      1992   16   3931
## 7 Tampa Bay Buccaneers 1979   16   3949
## 8 San Francisco 49ers 1997   16   4013
## 9 New York Jets       2009   16   4037
## 10 Tampa Bay Buccaneers 2002   16   4044
## # ... with 33 more rows
```

```
# First of all, the '85 Bears rank #19 and I blame Dan Marino for that.
# Secondly, we see a load of fresh new faces on the top 10. The '91
# Philadelphia Eagles had a monstrous defense that forced their rivals
# New York Giants, Washington Redskins, and Dallas Cowboys
# to use elite offensive linemen and while the defense still held up
# incredibly well, they still fell short of the Super Bowl. To add
# insult to injury, their rival from New York ultimately won the big game.
# (Granted the New York Giants had help from the greatest defensive
# player to ever exist: Lawrence Taylor, but that's a story for another time)
```

```
# Also, look at that. We finally know who #1 in 1978 was: the LA Rams.
```

```
# Time to remove the restrictions
```

```
t2 <- def %>%
  filter(Year != 1982) %>%
  arrange(TotYds)
head(t2, 10)
```

```
##           Team Year   Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G
## 1 Philadelphia Eagles 1991   16   244  15.2   1136   71.0   2413  150.8
## 2 Pittsburgh Steelers 2008   16   223  13.9   1284   80.2   2511  156.9
## 3 Tennessee Titans   2000   16   191  11.9   1390   86.9   2423  151.4
## 4 Chicago Bears      1984   16   248  15.5   1377   86.1   2486  155.4
## 5 Los Angeles Rams    1978   16   245  15.3   1845  115.3   2048  128.0
## 6 Dallas Cowboys      1992   16   243  15.2   1244   77.8   2687  167.9
## 7 New Orleans Saints  1991   16   211  13.2   1213   75.8   2720  170.0
## 8 Tampa Bay Buccaneers 1979   16   237  14.8   1873  117.1   2076  129.8
## 9 Baltimore Ravens   2000   16   165  10.3    970   60.6   2997  187.3
## 10 Dallas Cowboys     1978   16   208  13.0   1721  107.6   2288  143.0
## TotYds Yds.G Rank
## 1 3549 221.8 1
## 2 3795 237.2 1
## 3 3813 238.3 1
## 4 3863 241.4 1
## 5 3893 243.3 1
## 6 3931 245.7 1
## 7 3933 245.8 2
## 8 3949 246.8 1
## 9 3967 247.9 2
```

```
## 10    4009 250.6    2
```

```
# Turns out there weren't any surprises this time. The top 10  
# is expectedly filled with rank 1 defenses except for the  
# 1991 New Orleans Saints, 2000 Baltimore Ravens and,  
# 1978 Dallas Cowboys. This only reinforces that 1978 was the  
# wildest year for NFL defenses and also maybe 2000. The 2008  
# Pittsburgh Steelers being here is also neat considering that  
# defense really came in handy for that Super Bowl win.
```

Winner of the “Team that Didn’t Take too Kindly to Seeing Movement” Award:

The 1991 Philadelphia Eagles

At least they won their Super Bowl 26 years later.

Well we've seen the best historical defenses when we account for the most generalized stats like Total Points Allowed in a Season and Total Yards Allowed in a Season. Of course, the teams that came out on top when only looking at these stats are truly the greatest that we'll ever see. But generalized stats alone aren't fun; I want to look at teams that specialized in specific defensive aspects of the game like the rushing defense and passing defense. I'd like to make some predictions before we get into that though. Prediction 1: the best rushing defense will consist of those incredible 1978 defenses that defined the year and also the '85 Bears. Prediction 2: the best passing defenses will consist of 21st century era NFL defenses and contain 2013–2014 Seattle Seahawks, any of the Ed Reed era Baltimore Ravens, and the 2015 Denver Broncos.

Teams that Just Had to Stuff the Run

```
# Of course, we'll start out with the run defense as the run was the  
# bread and butter of 20th century (and 21st century Tennessee Titans)  
# offenses. Passing offenses were scarce in the 20th century, so we'll  
# leave that for last. We'll also do the number 1 defenses of their year first  
# just for that surprise factor when people realize that the best defense  
# doesn't actually have the best rushing defense, maybe.
```

```
num1 %>%  
  select(Team, Year, Gms, RushYds) %>%  
  filter(Year != 1982) %>%  
  arrange(RushYds)
```

```
## # A tibble: 43 x 4  
## # Groups:   Team [19]  
##   Team          Year    Gms RushYds  
##   <fct>         <int> <int> <int>  
## 1 San Francisco 1995     16   1061  
## 2 Philadelphia Eagles 1991     16   1136  
## 3 San Diego Chargers 1998     16   1140  
## 4 Pittsburgh Steelers 2001     16   1195
```

```
## 5 Baltimore Ravens      2006    16    1214
## 6 Dallas Cowboys        1992    16    1244
## 7 Pittsburgh Steelers   2008    16    1284
## 8 Pittsburgh Steelers   2004    16    1299
## 9 Seattle Seahawks      2014    16    1304
## 10 Chicago Bears        1985    16    1319
## # ... with 33 more rows
```

```
# Hey look! The '85 Bears are at 10th place.
# Anyways, you'll notice that (in the top 10 at least), that there is an
# even split of 20th century and 21st century era defenses. And the team
# with the best rushing defense overall is the '95 San Francisco 49ers, who
# fielded and incredible run stuffing defense that barely allowed over 1000
# yards and an offense led by the main QB himself Steve Young. We also see
# the legendary '91 Philadelphia Eagles and a surprising new face: the
# '98 San Diego Chargers, who lost 3 years ago in the Super Bowl to our number 1
# overall rushing defense. The surprising 21st century era rushing defenses consist
# the eternal AFC North rivals: the Pittsburgh Steelers and Baltimore Ravens, both
# of whom were in a "arms race" of sorts to create the best defense to beat one
# another with. Then there is the 2014 Legion of Boom Seattle Seahawks, who had
# such a ferocious defense in general that they earned the cheesy, yet intimidating
# nickname Legion of Boom. This was also the team that tragically lost to the
# New England Patriots on a last second interception because they didn't run the ball.
```

```
# Anyways, let's remove the rank-1-only restrictions.
```

```
t3 <- def %>%
  filter(Year != 1982) %>%
  arrange(RushYds)
head(t3, 10)
```

```
##           Team Year Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G
## 1   Baltimore Ravens 2000   16    165  10.3    970   60.6   2997  187.3
## 2   Minnesota Vikings 2006   16    327  20.4    985   61.6   3818  238.6
## 3   Pittsburgh Steelers 2010   16    232  14.5   1004   62.8   3425  214.1
## 4   San Francisco 49ers 1995   16    258  16.1   1061   66.3   3337  208.6
## 5   Minnesota Vikings 1994   16    314  19.6   1090   68.1   3652  228.2
## 6   Detroit Lions    2014   16    282  17.6   1109   69.3   3706  231.6
## 7   Philadelphia Eagles 1991   16    244  15.2   1136   71.0   2413  150.8
## 8   San Diego Chargers 1998   16    342  21.4   1140   71.2   3068  191.8
## 9   New York Giants   2000   16    246  15.4   1156   72.2   3390  211.9
## 10  Philadelphia Eagles 1990   16    299  18.7   1169   73.1   3491  218.2
##           TotYds Yds.G Rank
## 1       3967 247.9    2
## 2       4803 300.2    8
## 3       4429 276.8    2
## 4       4398 274.9    1
## 5       4742 296.4    5
## 6       4815 300.9    2
## 7       3549 221.8    1
## 8       4208 263.0    1
## 9       4546 284.1    5
## 10      4660 291.2   12
```

```
# This whole list is surprisng. First of all, I would've never expected to see
# the Detroit Lions in a top 10 list of the best of anything (unless it's
# a list of the top 10 saddest fanbases). The 2000 Baltimore Raven once again
# reaches the top of the list, only allowing a measley 970 yards. Then we have
# the Minnesota Vikings who ranked number 8 best defense of their own year yet
# fielded the second best rushing defense ever, only allowing 985 yards. We have yet
# another new face in the 2010 Steelers before we finally reach the '95 SF 49ers.
# Well, if you wanna know how the 2006 Vikings made number 2 overall despite being
# number 8 for their year, just look at their rushing yards allowed stats and then look
# at their passing yards allowed and total points allowed stats. Absolutely
# beqildering, yet in character for the perpetually cursed Minnesota franchise.
# Not as bewildering as the Lions being here. That is still a "What the hell? moment.
```

Winner of the “Best Run Stuffing Team” Award:

The 2000 Baltimore Ravens

... bastards.

Honorary award goes to the 2014 Detroit Lions!

It can't be easy to root for the Lions but at least here's this award.

The Anti Air Teams

```
# We're now gonna look at the best pass defenses in NFL history and
# we'll follow the same formula we always do.
```

```
num1 %>%
  select(Team, Year, Gms, PassYds) %>%
  filter(Year != 1982) %>%
  arrange(PassYds)
```

```
## # A tibble: 43 x 4
## # Groups:   Team [19]
##   Team          Year    Gms PassYds
##   <fct>      <int> <int>   <int>
## 1 Los Angeles Rams    1978     16    2048
## 2 Tampa Bay Buccaneers 1979     16    2076
## 3 Buffalo Bills      1980     16    2282
## 4 Philadelphia Eagles  1991     16    2413
## 5 Tennessee Titans   2000     16    2423
## 6 New York Jets       2009     16    2459
## 7 San Francisco 49ers  1987     15    2484
## 8 Chicago Bears       1984     16    2486
## 9 Minnesota Vikings   1988     16    2489
## 10 Tampa Bay Buccaneers 2002     16    2490
## # ... with 33 more rows
```



```

# I don't know if it's obvious, but there is a problem here.
# Passing offenses didn't become popular until later on and
# it was a slow process. Just look at the increasing amount of
# pass attempts done per year in one of my previous bodies of
# works (about NFL passing offenses). According to New York Times,
# "In 1980, teams pass the football 47 percent of the time, compared
# with just 38 percent in 1977...". So my main point here is that there
# is gonna be some skewed numbers looking at older team because they
# didn't have to deal with much passing offenses back then.

# The only way (I believe) to truly look at who the best passing defense is to
# have a "passes allowed" to "total passes done against the team" stat.
# Unfortunately, we don't have such a stat at the moment. Best I can
# do is maybe set the Year variable to start from 1984 (when Dan Marino
# started popularizing the passing offense) and also just brag that the
# 2000 Tennessee Titans are still on the top 10 list despite the issue.
num1 %>%
  select(Team, Year, Gms, PassYds) %>%
  filter(Year > 1983) %>%
  arrange(PassYds)

```

```

## # A tibble: 38 x 4
## # Groups:   Team [18]
##   Team                Year    Gms PassYds
##   <fct>              <int> <int>   <int>
## 1 Philadelphia Eagles  1991    16   2413
## 2 Tennessee Titans    2000    16   2423
## 3 New York Jets       2009    16   2459
## 4 San Francisco 49ers  1987    15   2484
## 5 Chicago Bears       1984    16   2486
## 6 Minnesota Vikings    1988    16   2489
## 7 Tampa Bay Buccaneers 2002    16   2490
## 8 Pittsburgh Steelers  1990    16   2500
## 9 Minnesota Vikings    1989    16   2501
## 10 Pittsburgh Steelers 2008    16   2511
## # ... with 28 more rows

```

```

# If we look at the top 3, we see that the 1991 Philadelphia Eagles once again
# reigns supreme with the 2000 Tennessee Titans coming in second. Now for the
# big surprise, we get the New York Jets coming in at number 3 which is
# absolutely crazy considering they had to deal with Tom Brady twice a year.

```

```

# But now we remove the ranking restrictions.

```

```

t4 <- def %>%
  filter(Year > 1983) %>%
  arrange(PassYds)
head(t4, 10)

```

```

##           Team Year Gms TotPts Pts.G RushYds RYds.G PassYds PYds.G
## 1  Oakland Raiders 2006  16   332  20.8   2144  134.0   2413  150.8
## 2  Philadelphia Eagles 1991  16   244  15.2   1136   71.0   2413  150.8
## 3   Tennessee Titans 2000  16   191  11.9   1390   86.9   2423  151.4
## 4   Kansas City Chiefs 1988  16   320  20.0   2592  162.0   2434  152.1

```

## 5	New Orleans Saints	1984	16	361	22.6	2461	153.8	2453	153.3
## 6	New York Jets	2009	16	236	14.8	1578	98.6	2459	153.7
## 7	New Orleans Saints	1992	16	202	12.6	1605	100.3	2470	154.4
## 8	San Francisco 49ers	1987	15	253	16.9	1611	107.4	2484	165.6
## 9	Chicago Bears	1984	16	248	15.5	1377	86.1	2486	155.4
## 10	Minnesota Vikings	1988	16	233	14.6	1602	100.1	2489	155.6
##	TotYds	Yds.G	Rank						
## 1	4557	284.8	3						
## 2	3549	221.8	1						
## 3	3813	238.3	1						
## 4	5026	314.1	10						
## 5	4914	307.1	4						
## 6	4037	252.3	1						
## 7	4075	254.7	2						
## 8	4095	273.0	1						
## 9	3863	241.4	1						
## 10	4091	255.7	1						

And now we have a new number 1 overall passing defense: the 2006 Oakland Raiders. The Raiders haven't been a steady franchise ever since they lost the Super Bowl in 2002, so to see them after 2002 here is quite a shock. We do see some shifts in rankings such as the addition of '88 Kansas Chiefs (who ranked number 10 in 1988) and the '84 New Orleans Saints. Every team ranked after the '88 Vikings in the previous top 10 list got push out of the top 10 list here without the restrictions.

Winner of the “Anti Air Team” Award:

The 2006 Oakland Raiders

Maybe you'll win one soon... in Las Vegas. Sorry Oakland.