

This folder contains all of the data used in The Pudding article [How many high school stars make it to the NBA](#) published in March 2019.

Below you'll find metadata for each file.

players.csv

- ****What is this?**: This file contains data about the careers of all 1,873 players in our dataset.**
- **Source(s) & Methods:** High school ranking data is based on the Recruiting Services Consensus Index (RSCI) rankings. All data is from [Basketball Reference](#). We used a combination of VORP and Estimated Wins Added to determine the level of success in an NBA career, limiting to the mean ranking of each player's top five season. "Superstar" = top 30, "Great" = top 60, "Mediocre" = top 120, "Below Average" = 120+.
- **Last Modified:** March 1, 2019
- **Contact Information:** [Russell Goldenberg](#)
- **Spatial Applicability:** United States
- **Temporal Applicability:** All data was collected for players that played in a US high school between 1998 and 2013.
- **Observations (Rows):** Each row represents data for a single player.
- **Variables (Columns):**

Header	Description	Data Type
<code>name</code>	The player's name	text
<code>link</code>	The abbreviated link to a player's profile. If the link is written as follows: <code>/players/h/harrial01.html</code> , then that player has a profile on Basketball Reference and has made it to the NBA. Otherwise, the link is to any available player profile.	text
<code>rank</code>	Each player's high school rank. This should range between 1 and 100. Players that made it to the NBA that were not ranked in the top 100 during high school have an <code>NA</code> here.	number
<code>draft_year</code>	The year that a player declared for the NBA draft. Players that were not drafted into will have an <code>NA</code> here.	number
<code>draft_rd</code>	Denotes which round of the draft a player was selected for the NBA. Players that were not drafted will have an <code>NA</code> here.	number
<code>draft_pk</code>	Denotes which pick number overall the player was selected in the NBA draft. Players that were not drafted will have an <code>NA</code> here.	number

Header	Description	Data Type
college	The college where the player played basketball. If a player attended and played at more than one school, only the school they finished their college career in is shown. Players that did not play in college are displayed as a blank here.	text
recruit_year	The year that the player was either recruited to a college team / their last year of high school	number
bbrID	The player's Basketball Reference id number	text
pick_overall	Denotes which pick number overall the player was selected in the NBA draft. Players that were not drafted will have an NA here.	number
pick_round	Index for draft results table.	number
nba_mean_ws48	The average (mean) Win Shares Per 48 value for a player across all eligible seasons (according to required minutes played).	number
nba_mean_vorp	The average (mean) Value Over Replacement Player value for a player across all eligible seasons (according to required minutes played).	number
nba_mean_pipm	The average (mean) Player Impact Plus Minus value for a player across all eligible seasons (according to required minutes played).	number
nba_mean_wa	The average (mean) Wins Added value for a player across all eligible seasons (according to required minutes played).	number
top_mean_ws48	The average (mean) Win Shares Per 48 value for a player across their top 5 eligible seasons (according to required minutes played).	number
top_mean_vorp	The average (mean) Value Over Replacement Player value for a player across their top 5 eligible seasons (according to required minutes played).	number
top_mean_pipm	The average (mean) Player Impact Plus Minus value for a player across their top 5 eligible seasons (according to required minutes played).	number
top_mean_wa	The average (mean) Wins Added value for a player across their top 5 eligible seasons (according to required minutes played).	number
nba_mean_ws48_rank	The average (mean) league rank of Win Shares Per 48 value for a player across all eligible seasons (according to required minutes played).	number
nba_mean_vorp_rank	The average (mean) league rank of Value Over Replacement Player value for a player across all eligible seasons (according to required minutes played).	number

Header	Description	Data Type
<code>nba_mean_pipm_rank</code>	The average (mean) league rank of Player Impact Plus Minus value for a player across all eligible seasons (according to required minutes played).	number
<code>nba_mean_wa_rank</code>	The average (mean) league rank of Wins Added value for a player across all eligible seasons (according to required minutes played).	number
<code>top_mean_ws48_rank</code>	The average (mean) league rank of Win Shares Per 48 value for a player across their top 5 eligible seasons (according to required minutes played).	number
<code>top_mean_vorp_rank</code>	The average (mean) league rank of Value Over Replacement Player value for a player across their top 5 eligible seasons (according to required minutes played).	number
<code>top_mean_pipm_rank</code>	The average (mean) league rank of Player Impact Plus Minus value for a player across their top 5 eligible seasons (according to required minutes played).	number
<code>top_mean_wa_rank</code>	The average (mean) league rank of Wins Added value for a player across their top 5 eligible seasons (according to required minutes played).	
<code>total_seasons</code>	The total number of seasons played in the NBA.	number
<code>valid_seasons</code>	The number of seasons played in the NBA that meet the minimum required minutes played for advanced stats to count.	number

paths.csv & paths.R

- `paths.csv`: The data as described below
- `paths.R`: The script used to process `players.csv` to create `paths.csv`. The data was then used for the graphics in the web version of [How many high school stars make it to the NBA](#). This script was written in the R programming language. All details describing the R session environment during processing are available [here](#).

- ****What is this?***: This file contains data about the highest level each player reached in their basketball career.

- **Source(s) & Methods**: All data is derived from `players.csv`.
- **Last Modified**: March 1, 2019
- **Contact Information**: [Amber Thomas](#)
- **Spatial Applicability**: United States

- **Temporal Applicability:** All data was collected for players that played in a US high school between 1998 and 2013.
- **Observations (Rows):** Each row represents data for a single player.
- **Variables (Columns):**

Header	Description	Data Type
name	The player's name	text
college	The college where the player played basketball. If a player attended and played at more than one school, only the school they finished their college career in is shown. Players that did not play in college are displayed as a blank here.	text
link	The abbreviated link to a player's profile. If the link is written as follows: <code>/players/h/harrial01.html</code> , then that player has a profile on Basketball reference and has made it to the NBA. Otherwise, the link is to any available player profile.	text
smallMult	Whether or not the player attended a college where at least 20 players from our dataset attended. <code>0</code> = they did not, <code>1</code> = they did.	number
rank	Each player's high school rank. This should range between 1 and 100. Players that made it to the NBA that were not ranked in the top 100 during high school have an <code>NA</code> here.	number
draft_year	The year that a player was drafted into the NBA. Players that were not drafted into the NBA, will have an <code>NA</code> here.	number
draft_rd	Denotes which round of the draft a player was selected for the NBA. Players that were not drafted into the NBA will have an <code>NA</code> here.	number
draft_pk	Denotes which pick number in the round of the draft (as indicated by <code>draft_rd</code>) of the draft a player was selected for the NBA. Players that were not drafted into the NBA will have an <code>NA</code> here.	number
recruit_year	The year that the player was either recruited to a college team or their last year of high school or prep school	number
avgRank	The average (mean) of the <code>top_mean_vorp_rank</code> and <code>top_mean_wa_rank</code> for each player	number
top	Whether the player was ranked in the top 100 when they were in high school (<code>0</code> = no, <code>1</code> = yes)	number
highSchool	Whether or not a player continued to play basketball beyond their high school career (<code>0</code> = no, <code>1</code> = yes)	number

Header	Description	Data Type
<code>coll</code>	Whether or not a player continued to play basketball beyond their college career (<code>0</code> = no, <code>1</code> = yes, <code>2</code> = skipped college and went straight to NBA from high school, <code>NA</code> = didn't make it to college level)	number
<code>draft</code>	Whether or not a player continued to play basketball beyond being drafted (<code>0</code> = no, <code>1</code> = yes, <code>NA</code> = didn't make it to draft level)	number
<code>rookie</code>	Whether or not a player continued to play basketball the first 2 years in the NBA (<code>0</code> = no, <code>1</code> = yes, <code>NA</code> = didn't make it to NBA level)	number
<code>valid_seasons</code>		number
<code>allstar</code>	Whether or not a player reached allstar status in the NBA (<code>avgRank</code> < 30) (<code>0</code> = no, <code>1</code> = yes, <code>NA</code> = didn't make it past rookie level)	number
<code>bad</code>	Whether or not a player reached "below average" status in the NBA (<code>avgRank</code> > 120) (<code>0</code> = no, <code>1</code> = yes, <code>NA</code> = didn't make it past rookie level)	number
<code>good</code>	Whether or not a player reached good status in the NBA (<code>avgRank</code> < 120 && <code>avgRank</code> > 60) (<code>0</code> = no, <code>1</code> = yes, <code>NA</code> = didn't make it past rookie level)	number
<code>great</code>	Whether or not a player reached great status in the NBA (<code>avgRank</code> < 60 && <code>avgRank</code> > 30) (<code>0</code> = no, <code>1</code> = yes, <code>NA</code> = didn't make it past rookie level)	number
<code>highest</code>	The string value for the highest level reached (<code>highSchool</code> , <code>college</code> , <code>draft</code> , <code>rookie</code> , <code>bad</code> , <code>good</code> , <code>great</code> , <code>allstar</code>)	text

Session info -----

```
## setting value
## version R version 3.4.4 (2018-03-15)
## system x86_64, darwin15.6.0
## ui X11
## language (EN)
## collate en_US.UTF-8
## tz America/Los_Angeles
## date 2019-03-04
```

```
## Packages -----
```

```
## package * version date source
## assertthat 0.2.0 2017-04-11 CRAN (R 3.4.0)
## backports 1.1.2 2017-12-13 CRAN (R 3.4.3)
## base * 3.4.4 2018-03-15 local
## bindr 0.1.1 2018-03-13 CRAN (R 3.4.4)
## bindrcpp 0.2.2 2018-03-29 CRAN (R 3.4.4)
## broom 0.4.4 2018-03-29 CRAN (R 3.4.4)
## cellranger 1.1.0 2016-07-27 CRAN (R 3.4.0)
```

```

## cli                1.0.0      2017-11-05 CRAN (R 3.4.2)
## colorspace         1.3-2      2016-12-14 CRAN (R 3.4.0)
## compiler           3.4.4      2018-03-15 local
## crayon              1.3.4      2017-09-16 CRAN (R 3.4.1)
## datasets           * 3.4.4      2018-03-15 local
## devtools            1.13.6     2018-06-27 CRAN (R 3.4.4)
## digest              0.6.15     2018-01-28 CRAN (R 3.4.3)
## dplyr               * 0.7.8     2018-11-10 cran (@0.7.8)
## evaluate            0.10.1     2017-06-24 CRAN (R 3.4.1)
## forcats             * 0.3.0     2018-02-19 CRAN (R 3.4.3)
## foreign             0.8-69     2017-06-22 CRAN (R 3.4.4)
## ggplot2             * 3.1.0     2018-10-25 CRAN (R 3.4.4)
## glue                1.3.0     2018-07-17 CRAN (R 3.4.4)
## graphics           * 3.4.4     2018-03-15 local
## grDevices           * 3.4.4     2018-03-15 local
## grid                3.4.4     2018-03-15 local
## gtable              0.2.0     2016-02-26 CRAN (R 3.4.0)
## haven               1.1.1     2018-01-18 CRAN (R 3.4.3)
## here                * 0.1      2017-05-28 CRAN (R 3.4.0)
## hms                 0.4.2     2018-03-10 CRAN (R 3.4.4)
## htmltools           0.3.6     2017-04-28 CRAN (R 3.4.0)
## httr                1.3.1     2017-08-20 CRAN (R 3.4.1)
## jsonlite            1.6      2018-12-07 CRAN (R 3.4.4)
## knitr               1.20     2018-02-20 CRAN (R 3.4.3)
## lattice             0.20-35   2017-03-25 CRAN (R 3.4.4)
## lazyeval            0.2.1     2017-10-29 CRAN (R 3.4.2)
## lubridate           1.7.4     2018-04-11 CRAN (R 3.4.4)
## magrittr            1.5      2014-11-22 CRAN (R 3.4.0)
## memoise             1.1.0     2017-04-21 CRAN (R 3.4.0)
## methods             * 3.4.4     2018-03-15 local
## mnormt              1.5-5     2016-10-15 CRAN (R 3.4.0)
## modelr              0.1.1     2017-07-24 CRAN (R 3.4.1)
## munsell             0.5.0     2018-06-12 cran (@0.5.0)
## nlme                3.1-131.1 2018-02-16 CRAN (R 3.4.4)
## parallel           3.4.4     2018-03-15 local
## pillar              1.2.2     2018-04-26 CRAN (R 3.4.4)
## pkgconfig           2.0.2     2018-08-16 cran (@2.0.2)
## plyr                1.8.4     2016-06-08 CRAN (R 3.4.0)
## psych               1.8.3.3   2018-03-30 CRAN (R 3.4.4)
## purrr              * 0.2.5     2018-05-29 cran (@0.2.5)
## R6                  2.3.0     2018-10-04 cran (@2.3.0)
## Rcpp                1.0.0     2018-11-07 cran (@1.0.0)
## readr              * 1.1.1     2017-05-16 CRAN (R 3.4.0)
## readxl             1.1.0     2018-04-20 CRAN (R 3.4.4)
## reshape2           1.4.3     2017-12-11 CRAN (R 3.4.3)
## rlang               0.3.0.1   2018-10-25 cran (@0.3.0.1)
## rmarkdown           1.9      2018-03-01 CRAN (R 3.4.3)
## rprojroot           1.3-2     2018-01-03 CRAN (R 3.4.3)
## rstudioapi          0.7      2017-09-07 CRAN (R 3.4.1)
## rvest               0.3.2     2016-06-17 CRAN (R 3.4.0)
## scales             1.0.0     2018-08-09 cran (@1.0.0)

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```
## stats      * 3.4.4    2018-03-15 local
## stringi    1.1.7    2018-03-12 CRAN (R 3.4.4)
## stringr    * 1.3.1    2018-05-10 CRAN (R 3.4.4)
## tibble     * 1.4.2    2018-01-22 CRAN (R 3.4.3)
## tidyr      * 0.8.0    2018-01-29 CRAN (R 3.4.3)
## tidyselect 0.2.5    2018-10-11 cran (@0.2.5)
## tidyverse  * 1.2.1    2017-11-14 CRAN (R 3.4.2)
## tools      3.4.4    2018-03-15 local
## utils      * 3.4.4    2018-03-15 local
## withr      2.1.2    2018-03-15 CRAN (R 3.4.4)
## xml2       1.2.0    2018-01-24 CRAN (R 3.4.3)
## yaml       2.1.18   2018-03-08 CRAN (R 3.4.4)
```