

PlayerProfiler Data Dictionary

Advanced Play-By-Play

game_key - unique identifier for each game, combining game date and matchup

week - week of NFL season

off_team - team currently on offense

def_team - team currently on defense

quarter - quarter of the game

minutes - minutes remaining in quarter

seconds - seconds remaining in that minute of the quarter

nfl_play_id - the NFL's play identifier

drive - overall drive number of the game

scoring_drive - 1/0 if it's a scoring drive

drive_outcome - end result of the current drive

team_play_charted_order - denotes order of plays requiring game charting

type - type of play... pass, run kickoff, etc.

down - 1 denotes 1st, 2 denotes 2nd...

yards_to_go - yards from next 1st down marker or yards from scoring

yards_from_scoring - yards away from scoring

yards_gained - yards gained on the current play

first_down - 1/0 if first down was gained on that play

red_zone - 1/0 if play occurred within 20 yards of scoring range

runner - player id of the main running player for the current play

targeted_player - player id of the targeted receiver on the play

targeted_cb - player id of the cornerback covering the targeted receiver for the current play

qb - player id for the quarterback on the play

rb1 - player id for the main running back on the play

defender_rb1 - player id for the defender covering the RB1 on the play

rb2 - player id for the 2nd RB lined up for a play

defender_rb2 - player id for the defender of the RB2

rb3 - player id for the RB3 on the current play

defender_rb3 - player id for defender of the RB3

wr1 - player id for the WR1 on the play

defender_wr1 - player id for the defender guarding the WR1 on that play
cushion_wr1 - yards of space between wr1 and defender_wr1
coverage_wr1 - man/zone coverage against the WR1 on the play
wr2 - player id for the WR2 on the play
defender_wr2 - player id for defender of the WR2
cushion_wr2 - yards of space between wr2 and defender_wr2
coverage_wr2 - man/zone coverage against the WR2 on the play
slot1 - player id for the main slot receiver
defender_slot1 - player id for the defender of Slot1
cushion_slot1 - yards of space between slot1 and defender_slot1
coverage_slot1 - man/zone coverage against the slot1 on the play
slot2 - player id for the secondary slot receiver
defender_slot2 - player id for the defender of Slot2
cushion_slot2 - yards of space between slot1 and defender_slot1
coverage_slot2 - man/zone coverage against the Slot2 on the play
wr5 - player id of the WR5 on the play
defender_wr5 - player id for the defender of the WR5
cushion_wr5 - yards of space between wr5 and defender_wr5
coverage_wr5 - man/zone coverage against the WR5 on the play
te1- player id for the TE1 on the play
defender_te1 - player id for the defender of TE1
te2 - player id for the TE2 on the play
defender_te2 - player id for the defender of the TE2
te3 - player id for the defender of the TE3
defender_te3 - player id for the defender of the TE3
personnel - for current play, # of RBs on the field, underscore, # of WRs on the field
total_rbs - # of RBs on the field for that play
total_wrs - # of WRs on the field for current play
total_tes - # of TEs on the field for current play
wr1_route_run - 1/0 if WR1 ran a route on the current play
wr2_route_run - 1/0 if WR1 ran a route on the current play
wr5_route_run - 1/0 if WR1 ran a route on the current play
slot1_route_run - 1/0 if WR1 ran a route on the current play
slot2_route_run - 1/0 if WR1 ran a route on the current play

rb1_route_run - 1/0 if WR1 ran a route on the current play
rb2_route_run - 1/0 if WR1 ran a route on the current play
rb3_route_run - 1/0 if WR1 ran a route on the current play
te1_route_run - 1/0 if WR1 ran a route on the current play
te2_route_run - 1/0 if WR1 ran a route on the current play
te3_route_run - 1/0 if WR1 ran a route on the current play
neutral_game_script - 1/0 denotes if game script is neutral. Qualifications are: 1st quarter game within 14 points, 2nd quarter game with 2+ minutes left in the quarter and 14 points, 3rd quarter game within 10 points, or 4th quarter within 10 points and 10+ minutes remaining or 4th quarter within 7 points and 5-10 minutes left in the game.
shotgun - 1/0 if current play was in shotgun formation
play_action - 1/0 if current play involved play action
hurry_up - 1/0 if current play was hurry-up offense
defenders_in_box - width of the box is distance between the outer shoulder of right and the outer shoulder of the left tackle. The depth of the box is 6 yards from the line of scrimmage.
completion - 1/0 if pass was completed
catchable_pass - 1/0 if pass was deemed catchable by game charters
air_yards - distance downfield the ball travels on a pass play
contested_target - 1/0 if target is contested
target_accuracy - Scored 1-10 by game charters based on accuracy of the throw. Higher values here indicate more accurate throws
yards_of_separation - yards of separation between the receiver and defender at moment the ball arrives
money_throw - a pass requiring exceptional skill or athleticism as well as critical throws executed in clutch moments. 1/0 determined by game charters.
danger_play - any play in which the quarterback lacked awareness or took an unnecessary risk that could have resulted in a turnover. 1/0 determined by game charters.
interceptable_pass - pass plays that were interception-worthy. 1/0 determined by game charters.
interception - 1/0 if interception on current play
hurry - 1/0 if offensive line does not allow quarterback 4 or more seconds to throw
pressure - 1/0 if the quarterback's pass attempt came while under pressure. Determined by game charters.
drop - 1/0 if receiver dropped the pass

end_zone_target - 1/0 if receiver is targeted in end zone
route_wins - 1/0 if game charts determine receiver wins the route against the defender by catching a pass or creating 2 or more yards of separation. Determined by game charts.
burn - 1/0 if a receiver gets 3 yards deeper than his assigned defender at any point on a vertical or downfield route. Determined by game charts.
pass_breakup - 1/0 if pass is broken up by defender
voided_pass - 1/0 if penalty on play or any other reason a pass play doesn't stand
sack - 1/0 if sack occurs on play
rb_formation - type of running back formation on current play
yards_created - yards beyond the amount blocked, yards after 1st evaded tackle
yards_blocked - yards blocked by the offensive line on run plays
evaded_tackles - # of evaded tackles by primary skill player on current play
big_hit - 1/0 if big hit occurred, denoted by game charts
td - 1/0 if touchdown occurred on play
pass_td - 1/0 if passing touchdown occurred on the play
rush_td - 1/0 if rushing touchdown occurred on the play
return_td - 1/0 if a return touchdown occurred on the play
fg_result - result of field goal
pat_result - result of the extra point
two_pt_result - result of 2 point conversion
safety - 1/0 if safety occurred on play
fumble - 1/0 if fumble occurred on play
fumble_lost - 1/0 if fumble lost on play
penalty - 1/0 if penalty on play
penalty_yards - yards of penalty if enforced
timeout - 1/0 if timeout called on play
timeout_team - team that called timeout
punt_blocked - 1/0 if punt blocked on play
qb_kneeldown - 1/0 if quarterback kneeled down on play
onside_attempt - 1/0 if onside kick attempted on play
onside_recovery - 1/0 if onside kick recovered by kicking team
pass - 1/0 if pass play
run - 1/0 if run play
game_date - date of game

game - away team, underscore, home team
home_team - home team
away_team - away team
off_pts_scored - points scored by offense on current play
def_pts_scored - points scored by defense on current play
away_score - away team score at that moment in the game
home_score - home team score at that moment in the game
final_away_score - final score of away team
final_home_score - final score of home team
day - day of week game was played
dome - 1/0 if stadium has a dome
surface - type of playing surface
synthetic - 1/0 if playing surface is synthetic
sunday_night - 1/0 if game is Sunday Night Football

Advanced Game Log

player_id - unique identifier for each player
name - full name for each player
position - player's position
season - NFL season
week - week of NFL season
team - player's team that week
opponent - opposing team that week
snaps - snaps taken out on the field
pass_attempts - pass attempts
completions - pass completions
pass_yards - passing yards
air_yards_passing - air yards passing
pass_touchdowns - passing touchdowns
interceptions - interceptions
carries - rush attempts
rush_yards - rushing yards
rush_touchdowns - rushing touchdowns

targets - receiving targets
receptions- receptions
receiving_yards - receiving yards
air_yards - distance downfield the ball travels on combined targets
receiving_touchdowns - receiving touchdowns
scrimmage_yards - totaled receiving yards and rushing yards
total_touchdowns - combined rushing and receiving touchdowns
total_touches - combined receptions and carries
opportunities - combined targets and carries
evaded_tackles - total tackles evaded according to game charters
yards_created - yards beyond those blocked by the offensive line
snap_share - percent of total offensive snaps player participated in
pass_yards_per_attempt - passing yards per pass attempt
yards_per_carry - rushing yards per carry
yards_per_target - receiving yards per target
yards_per_reception - receiving yards per catch
yards_per_touch - scrimmage yards divided by total touches
yards_per_opportunity - scrimmage yards divided by total opportunities
opportunity_share - percent of total opportunities going this player's way
target_share - percent of the team's targets going this player's way
air_yards_share - percent of team's total air yards traveling this player's way
fantasy_points - fantasy points (PPR)
fantasy_points_per_target - fantasy points divided by targets
fantasy_points_per_opportunity - fantasy points divided by opportunities
juke_rate - evaded tackles per touch
hog_rate - number of targets per snap
deep_ball_pass_attempts - throws traveling 20 or more air yards
deep_ball_pass_completions - completed throws traveling 20 or more air yards
deep_targets - targets traveling 20 or more air yards
contested_targets - contested targets
contested_catches - contested catches
red_zone_pass_attempts - pass attempts within 20 yards of scoring
red_zone_carries - rush attempts within 20 yards of scoring
red_zone_targets - targets within 20 yards of scoring

red_zone_receptions - receptions within 20 yards of scoring
red_zone_opportunities - opportunities within 20 yards of scoring
red_zone_touches - touches within 20 yards of scoring
end_zone_targets - targets where the ball lands in the end zone
red_zone_completions - completions within 20 yards of scoring
pass_attempts_inside_5 - pass attempts within 5 yards of scoring
pass_attempts_inside_10 - pass attempts within 10 yards of scoring
carries_inside_5 - rush attempts within 5 yards of scoring
carries_inside_10 - rush attempts within 10 yards of scoring
targets_inside_5 - targets within 5 yards of scoring
targets_inside_10 - targets within 10 yards of scoring
routes_run routes run
man_coverage_routes - routes run in man coverage
man_coverage_targets - targets while in man coverage
zone_coverage_routes - routes run in zone coverage
zone_coverage_targets - targets while in zone coverage
routes_won - routes won
routes_won_vs_man - routes won against man coverage
routes_won_vs_zone - routes won against zone coverage
average_cushion - average cushion on all routes
shotgun_snaps - snaps taken in shotgun formation
play_action_snaps - snaps taken with play action
hurries - total hurries
hurry_up_snaps - snaps taken in the hurry-up offense
light_front_carries - rush attempts with 6 or fewer men in the box
heavy_front_carries - rush attempts with 8 or more men in the box
yards_blocked - total yards blocked by the offensive line
danger_plays - total danger throws
drops - total drops
burned_cb - total times burning the defender in coverage
interceptable_passes - interception-worthy passes thrown
big_hits_taken - big hits taken
sacks_taken - sacks taken
shotgun_carries - rush attempts out of shotgun formation

shotgun_targets - targets out of shotgun formation

first_downs_rushing - first downs rushing

first_downs_receiving - first downs receiving

first_downs_passing - first downs passing

three_or_greater_separation_yards_at_target - anytime the receiver has at least 3 yards of separation from their defender when the pass arrives

plays_5_or_greater_yards_created - plays with 5 or more yards created