



COLLEGE FOOTBALL:

The Wild, Wild West of Analytics

Objective

- Introduce college football into the analytics conversation
- Discuss the difference between professional and college football analytics
- Talk about what's been done so far

Football is unpredictable

- So many moving pieces
- “The ball’s not even round” (Bob Voulgaris, Sloan 2013)
- Luck determines more than one-third of an NFL game
 - *The Success Equation (2012)*

College football as Wild, Wild West

- College football is huge – either the second- or third-most popular sport in the country, depending on the survey
- It is still relatively untapped from a data perspective
- College football is off the beaten path
 - Its capitals: Tuscaloosa, Tallahassee, Eugene, Lincoln, Norman, Auburn, Columbus, Ann Arbor

Three Steps to any sport

Step 1

Talent Acquisition

Step 2

Talent
Development


Step 3

Talent Deployment

Pro vs. College: Talent Acquisition

- NFL: Draft, trades, free agent signings
- College: Recruiting, transfers, walk-ons
 - No general managers
 - The head coach is also the GM
 - Each coach scouts, recruits, and develops
 - You might have an ace recruiter or developer, but most have to be well-rounded

Pro vs. College: Talent Development

The background of the slide is a faded, grayscale image of a football player on a field. The player is in a three-point stance, ready to snap the ball. A football is visible on the ground in the center of the frame. The player's legs and hands are visible, wearing dark pants and cleats.

- A chance to make up ground
- Jump from high school to college immense for most
- Redshirt vs. no redshirt
- Schools like Oregon, Stanford, Boise State, Virginia Tech, TCU, and Missouri have found edges here

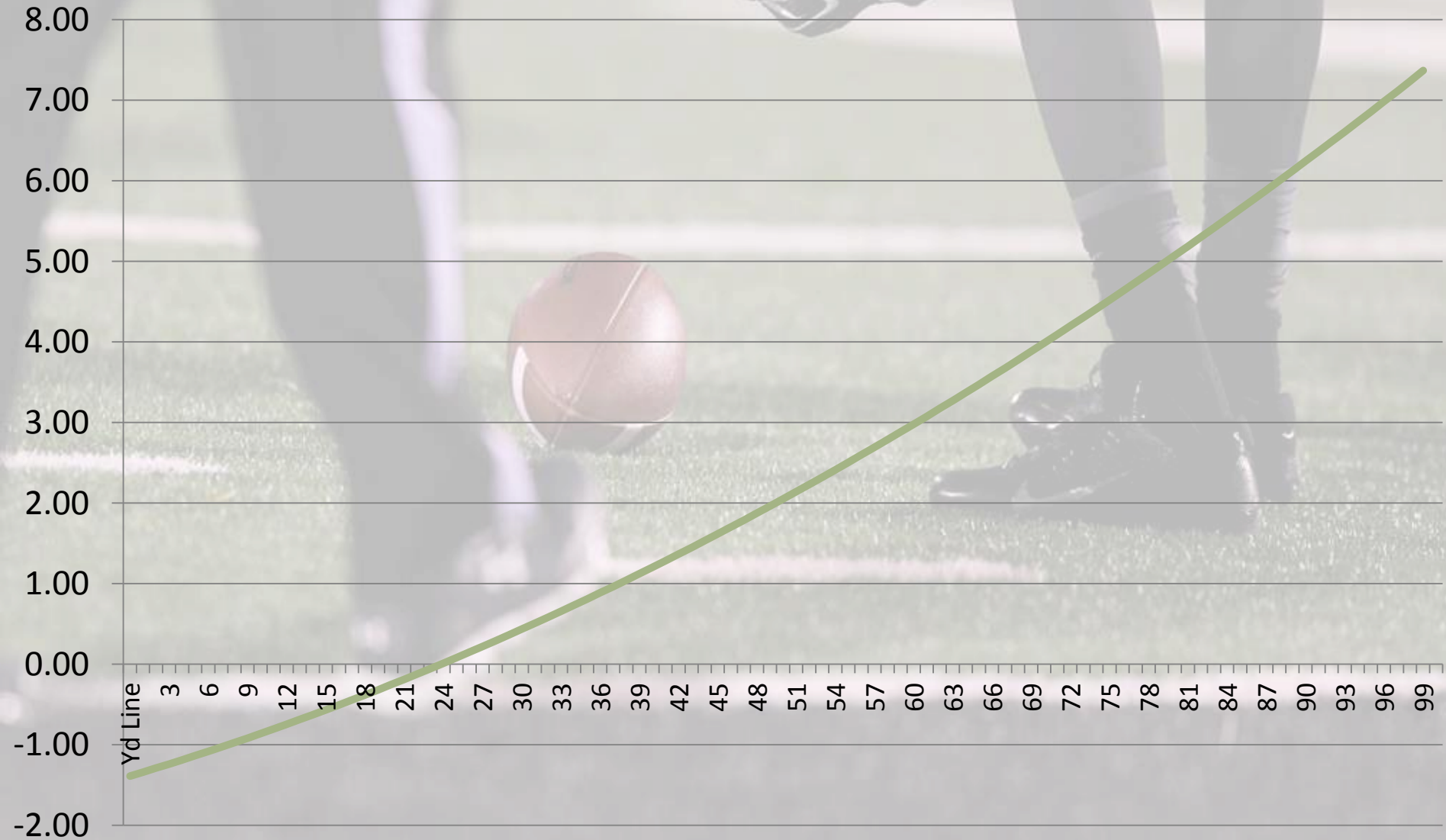
Pro vs. College: Data

- Talent disparity creates unique data environment
- Opponent adjustments are vital, carry much more impact than at pro level
 - Wow, do we misuse Strength of Schedule
- Garbage time adjustments can be key

What are we doing?

- Football Outsiders and Football Study Hall
 - F/+, S&P+, FEI
 - Standard downs vs. Passing downs
 - Turnovers luck
 - Five factors
 - 2013 Charting Project
 - Merging numbers with X&O breakdown
- The Power Rank, Tempo-Free Gridiron, Sports Reference, MGoBlog, and, of course, CFB Stats

Equivalent Net Point Values



Standard Downs and Passing Downs

- Standard Downs: First down, second-and-7 or fewer, third-and-4 or fewer, fourth-and-4 or fewer
- Passing Downs: Second-and-8 or more, third-and-5 or more, fourth-and-5 or more
- Success Rates
 - SD: 48% (48% rushing, 49% passing)
 - PD: 32% (29% rushing, 34% passing)
- More telling, descriptive than simple run-pass

Five Factors



- Explosiveness
- Efficiency
- Finishing Drives
- Field Position
- Turnovers

2013 Charting Project

- 85 volunteers
- 190 games charted (and counting)
- Formation data, # of pass rushers, distance of pass, direction of run/pass, option information, why QB ran (scramble, designed, etc.), broken tackles

Projection

- The white whale of college football analytics
- College football is a hub, with projection going in two different directions
- Important to analysts, coaches alike
 - Opportunity abound for someone who can get a handle on projecting high school to college jump

Study Hall

- Why we love college football
- Why the haters are right
- Advanced Stats 101
- The importance of field position and finishing drives
- Underdog tactics

STUDY HALL

COLLEGE FOOTBALL,
ITS STATS
AND ITS STORIES

Bill Connelly

