

# Is There a Need for a <br> New Championship System 

And How the BCS Can Be Improved

By Ben Prather

## New Championship System

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## Business Plan

## Executive Summary

The NCAA Division 1 Football Bowl Subdivision is the most popular and revenue generating leagues in all of college sports. Its compelling and significant regular season is unrivaled in its intensity by any pre-tournament system in any other sport league. This premier league deserves a postseason that embodies the competitive nature of the sport and the league's unique place in the hearts of its participants and fans.

College football could profit from the optimal bowl format available given the constraints created by the ideals of those closest to the sport. At the very least the current system needs a long term global vision. What is the 10 year plan? The 20 year plan? The BCS should publically invest in research and development to systematically identify opportunities to improve and implement concrete enhancements.

To implement any format enhancements for 2014 the necessary contracts will need to be finalized in 2013.
To finalize contracts for 2013 the format enhancements will need to be selected in 2012.
To have format enhancements ready for 2012 it will be necessary to systematically evaluate proposals in 2011.
To systematically evaluate proposals for 2011 a rubric defining enhancement will be needed in 2010.
To establish the ideals that define enhancement for 2010 research and development should begin presently.

This document includes:

- An examination of the real world constraints on postseason designs and an application of these constraints to several public designs.
- Two complementary designs that individually provide improvements to the postseason and together could add $\$ 150$ million in additional revenue.
- A comparison of the new ideas to the actual formats over the past 12 years.
- A study on the intrinsic controversy of selecting teams for a tournament.
- A compilation of all reported postseason opinions expressed by the current head coaches of teams having participated in BCS bowls.

NCAA D-1 FBS has the greatest regular season in all of sports and deserves a championship system that accentuates this unique and very popular design.

## Proposal Description and Vision

## Mission Statement

This proposal aims to invigorate and moderate the discussion of the NCAA Division 1 Football Bowl Subdivision postseason format and improve upon the history and traditions currently eroding due to the current designs while actively rewarding competitiveness among all members of this great league.

## Goals and Objectives

- To moderate the conversation of the BCS structures and their strengths and weaknesses.
- To develop rubrics to evaluate proposed alternatives.
- To promote an environment where new ideas can be productively expressed and discussed.
- To produce a robust system with a long term vision to start when the current contracts expire before the 2014 season.


## History

In January of 2000 Ben Prather (then a student at the University of Utah with a hobby of writing ranking algorithms for college football) personally presented a postseason format to Utah athletic director Chris Hill for advice on how to promote it. While a sympathetic ear was found that day, the voice of one attuned to the marketing campaign that would be needed to affect change ruled the day.

In June of 2008 the play-in concept of Bronco Mendenhall ${ }^{1}$ began to renew this interest. Finally a solution that maintained the current postseason time constraints and allowed for the inclusion of teams normally excluded presented itself. The seeds of a new design were planted.

In December the final details were vetted at a number of message boards and blogs. A few interested individuals provided critical insight to enhance the original flexible championship system and its presentation. The end result was a strong and robust proposal.

In January of 2009 (spurred on greatly by the excellence of my alma mater) the first meager attempts to present this idea were undertaken, launching a short lived blog and sending e-mail's of the concept to many of the members of the BCS Presidential Oversight Committee. After the MWC offered their own proposal ${ }^{2}$ this initial presentation was streamlined to better match that presentation style. Harvey Perlman provided valuable feedback planting the seed

[^0]New Championship System
of the collection of postseason ideals that have been applied to several prominent designs in a latter section.

Here are the ideals that guided the original designs:

- Maintain the current scheduling limits.
- Stay within the current December 19th through the second Monday in January postseason window.
- Do not allow any team to participate in more than 16 games total.
- Do not reduce the current length of the regular season.
- Increase consensus at the cutoff.
- Allow all undefeated teams to participate.
- Keep the number of teams small.
- Use gaps in the BCS standings rather than ordinal values to determine eligibility.
- Add transparency to the high profile decision making process.
- Explicitly specify what warrants a particular contractual designation.
- Explicitly state how changes in designation are handled.
- Restore college football traditions.
- New Year's Day once was a celebration of elite college football.
- Bowl timing once represented each bowl's level of prestige.
- Conference and bowl tie-ins once had a competitive incentive.
- Minimize impact on existing structures.
- Improve the significance of bowl conference tie-ins.
- Do not interfere with the regular season or conference championship games.
- Define a concrete role for bowls outside the BCS.

By the end of March a new draft was sent to Bill Hancock, now the BCS Executive Director (who has proven to be very accessible and timely in his responses), and the offices of several of the conference commissioners.

On June 26th, David Frohnmayer pointed out that without a plan to bring an idea to fruition even an elaborate design is little more than an ideal with little actual substance in his address dealing with the final rejection of the MWC proposal ${ }^{3}$. This was exactly what was missing from the original presentations of these concepts (one among the volumes of other ideas he has encountered.)

The design of fresh ideas is currently hampered by the lack of an established rubric that they would be evaluated by. Any valid plan should address this issue and be able to adjust if the rubric is different from the ideals originally perceived by the authors of the plan.

[^1]On July 2nd the first version of this business plan was submitted to Harvey Perlman, Bill Hancock and the primary football contacts of all conferences and independents. Bill Hancock provided significant insight regarding important criteria that presentation failed to address directly.

On July 31st a paper was submitted to the Journal of Quantitative Analysis in Sports (MS\#1212) discussing maximizing consensus of a selection process to support the claim that a variable format does guarantee an increase in consensus of the selections. This paper is included as a later section.

On August 22nd a revised version of this plan was submitted to Bill Hancock, Harvey Perlman and the primary football contacts of all conferences and independents. Significant improvements included adding a section dedicated to addressing key issues and a manifest destiny regular season exhibition game design that has been abandoned.

On January $18^{\text {th }} 2010$ this major revision if the plan was released, merging these two documents and adding NCAA bylaw recommendations allowing the implementation of these and other potential ideas. The study of the real world constraints was greatly expanded, a new plus-one design has been introduced and simulations of these designs over the past 12 years have been generated.

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## Proposal Description

Survey of the Situation

Strengths of the BCS
The BCS is a popular series of exhibition games between the elite programs in the premier collegiate football league that allow the top two teams to meet every year. Immense revenues are generated and shared even among conferences and teams that do not participate in the series. Changes implemented for 2006 allowed programs outside the traditionally powerful conferences greater access to these elite games than was allowed at any prior point in college football history.

Without the BCS Utah would have likely played Arizona in the Las Vegas Bowl in 2008 and been marginalized regardless of the outcome. The BCS allowed Utah to showcase their talent nationally against a recognized and respected opponent in the 2009 Sugar Bowl. TCU and Boise State would never have both earned a spot in the BCS bowls in the same year as we saw in 2009.

Fan attendance and viewership of the BCS bowls has never been higher while the excitement and intensity of the regular season is amplified as the published standings shift weekly, often dramatically. For those in the running late in the race a single loss will deal a serious blow to their postseason ambitions. Even plus-one proponent Mark Richt states that "the whole season is a playoff."4

The BCS freed the premier teams from the rigid conference tie-ins that preceded it, ending years of chaos in the elite bowls that often prevented determination of a clear national champion while allowing the bowl tradition to continue.

## Weaknesses of the BCS

Since its inception in 1998, 26 teams have gone undefeated in the regular season. Fourteen of those participated in the National Championship Game. Twelve teams were eliminated from the national championship before a single game was played. Seven of those twelve continued on to win their bowl game, with five winning in the elite BCS bowls. Five undefeated teams were left out of the championship game for teams with a loss and one was left out for a team with two losses.

What nation's anthem played before the home games for Tulane in 1998, Marshall in 1999, Auburn in 2004, Utah in 2004 and 2008, Boise State in 2004, 2006, 2008 and 2009, Hawaii in 2007, Cincinnati in 2009 and TCU in 2009? The

[^2]New Championship System
BCS did not reflect the championship interests of the respective nations of these teams in the years specified.

When USC fans expressed in message boards and blogs before bowl selections in 2008 that the PAC 10 Rose Bowl tie-in locks them into yet another Big 10 beat down when they could be silencing their east coast critics you know that some of the allure of the bowl tradition has faded.

If the highest paid football coach in 2008, Nick Saban, cannot motivate his players and fans to get excited to participate in a game with the tradition and history of the 2009 Sugar Bowl and a national power like Florida has difficulty selling their allotment of tickets for the 2010 Sugar Bowl then this is the most damaging claim I can imagine against a system designed to foster the significance of the bowl tradition.

## Current BCS alternatives

Some advocate for an expansion of the format to determine the national champion on the field while others would rather abandon the notion of an authoritative crowned champion altogether.

An overview of the published postseason opinions of the current head coaches of all institutions who have participated in a BCS bowl since its inception in 1998 are compiled in a later section (page 108). In 2008 several prominent coaches publically changed their stance on this issue and tipped the balance towards a desire for change. Shouldn't the opinions of those coaches who participate most in the current structures be given more consideration than those sitting on the outside looking in?

Do you favor a playoff over the BCS? Here is an answer that best sums up the situation.

I think they both have (benefits). If you truly want to find a true national champion, then probably a playoff is (the best system). The thing I have against a playoff is that the kids get cheated, for the simple reason that bowl games are a great experience. You get a chance to go somewhere. In a playoff, you work out at home all week. ... You fly, play, come home. You don't get a chance to be rewarded (with an extended visit). Bowl games are a reward for student-athletes.

Gary Patterson, Head Coach TCU ${ }^{5}$

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## State of the BCS conversation

The dialog on this topic has been less like an open conversation and more like parties separated by teams of lawyers prepared for an inevitable legal showdown. This appearance (caricatured in the media) is greatly amplified by the bureaucratic nature of the process, stalling any decision on a topic for months and forcing any real change to take years.

Congressional hearings and constant media harassment regarding the BCS system has produced a state where most of the BCS policy makers and the officials who could sway them are exasperated by this topic and would rather do any other task their job requires. Pursuing changes to the BCS is low on the job priorities for any of the policy makers and the people in a position to influence them.

This has lead to the hiring of an Executive Director to facilitate this as provide a persistent voice defending the BCS. This has greatly improved the state of the conversation but falls short of answering the desires of the fans. What is needed is an individual dedicated to generating fresh ideas. This would involve collecting opinions, analyzing concepts and bringing all relevant issues to the forefront for consideration.

## Detailed Contingency Plan

## 2010A: Acceptance of the plan

The first step is to submit this plan for acceptance. The conferences should have time to review these ideas before the April BCS meeting and acceptance could be made then. In the worst case this proposal would be formally presented to the BCS in their April meeting, waiting for the conferences to meet separately and then determine the final results in June.

Once accepted, the infrastructure needed to foster the communication channels needed would be brought online and the proper channels for outsiders to express their interests marketed. The survey process would begin immediately upon acceptance.

## 2010B: Construction of a rubric

A short survey, followed by a longer optional survey, would be needed to produce the outline for the rubric to be used to evaluate potential concepts.

This would be followed by attending AFCA meetings, FBA meetings, conference meetings and media days, BCS Presidential Oversight Committee meetings, congressional hearings and other gatherings of large groups of officials to

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provide every opportunity to address concerns over the process, gather opinions, hone the results and provide feedback on the process.

The outline of the requirements for an improved system will be developed or a solid referendum demonstrating conclusively that no structural change is desired will be produced.

Design parameters for alternatives will be specified or a resolve to develop the current system into a long term solution will be identified.

## 2011: Proposal submissions

A published rubric would generate a flood of unsolicited proposal submissions, requiring an individual dedicated to handling this volume of material. Any interested party would have the ability to submit proposals to be evaluated by the rubric established the year before.

These would be distilled into their basic parts and fresh ideas would be examined for their utility in other leading designs.

If a need for systemic changes is demonstrated then a list of rules and NCAA bylaws that need to be amended to accommodate the leading alternatives will need to be compiled. If no changes are needed then proposals to establish criteria and procedures for changes in the quality of conference members with time should be firmly established.

If a wide base of support is found to exist, it is possible to implement the designs in this document for 2012, especially A Tier Based Plus-One, as all currently contracted games are a part of these formats.

## 2012: Proposal selection

A handful of the leading proposals, based on the established rubrics, will be presented for consideration. The compiled base proposals may have options that allow one proposal to encompass a varied range of options.

Bylaw and rule changes that allow the widest gambit of alternatives to be possible would be formally presented for consideration.

These competing proposals would be used to further refine the rubric based on concrete examples of their application and narrow the field to two or three leading candidates.

If no structural changes are needed the contractual guidelines for future periods should be developed. This should include replacing lists of institutions in the
contract language with clearly defined classifications and clear procedures for handling changes in classifications.

## 2013: Plan finalization

Final determinations on open issues and the finishing touches on the necessary agreements would need to be made and necessary rule changes finalized.

If no final consensus can be reached temporary contracts and structures implementing the agreed upon changes may be employed as the final long term resolution is discussed further.

Marketing of the strength of the new agreements and anticipation of the upcoming results would begin.

## 2014: Christening

With the expiration of the old contracts, initiation of the infrastructure of the new structures and agreements would come into play and the logistical issues involved would need to be identified and managed.

All duties of those executing this proposal that would need to be continued and systems to evaluate the results and continuously develop improvements would be brought online.

## Price of This Proposal

The tasks outlined above are those of a Director of Research and Development. Many organizations spend $3.5 \%$ of their revenue on research and development. $3.5 \%$ of the BCS revenue sharing amounts to a $\$ 5$ million per year budget. While the BCS is known for its frugal expense management, it should be noted that research and development has been woefully undervalued in its 12 year history. This percentage may warrant reductions in percentage after the current contract cycle.

This budget would cover the frequent travel costs associated with this plan, hiring outside experts to consult on standard methodologies, hiring support staff and a salary for the Director of Research and Development not to exceed $80 \%$ of the salary of the BCS Executive Director.

## Value of This Proposal

The tier based plus-one design should add six or seven games at a profile close to the BCS bowls in potential revenue, increasing the total revenue by roughly $\$ 130$ million per year. A flexible championship system on its own would add

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roughly $\$ 36$ million per year due to the added games. These gains offset if both are implements, reducing the sum to roughly $\$ 150$ million per year. This would create a short term return 30 times larger than the suggested costs of research and development.

By bringing all parties to the table to negotiate an agreeable resolution to the current system and developing a contract environment where designations are clearly defined by merit and revenue distributed accordingly, the potentially very large legal costs of antitrust investigations would be avoided.

A detailed rubric of the actual ideals of those closest to the sport would allow genuine proposals to be tailored to optimally address the real issues with the postseason, providing value for decades.

Having a thorough study to support the postseason structure and a process to hear ideas and evaluate them will silence those who characterize the BCS as an ostracized entity with no respect for the views of the fans.

## Organization and Management

This proposal was originally designed as an outside contractor position. With the hiring of an Executive Director it became more practical to create a Director of Research and Development within a newly expanded BCS.

This proposal is being developed and promoted by Ben Prather at BCS Evolution (www.BCSEvolution.com). Ben Prather is the manager/editor for BCS Evolution, which is a property of SB Nation.

SB Nation is a collection of 230 and growing high quality and interconnected sports blogs from a passionate fan's perspective. More information on SB Nation can be found at http://www.sbnation.com/pages/about.

Ben Prather is an independent contractor/blogger for SB Nation and is solely responsible for the content of this proposal.

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## Intellectual Property

Any reproduction of or derivative works from this proposal or any of its parts would be strongly encouraged. Ben Prather at BCS Evolution should be credited and, if possible, a link to http://www.BCSEvolution.com or the page listed above provided.

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## NCAA BYLAW Amendment Recommendations

## Additional bowl for teams with nine wins over FBS teams

Intent: To allow teams with nine or more wins over FBS opponents to participate in two bowl games.

Bylaws: The following changes to the specified bylaws would be made:
A. 17.9.4 (b) is amended as follows:
(b) Bowl Games, NCAA and NAIA Championships, International Competition, Heritage Bowl and Gridiron Classic. [FBS/FCS] One pPostseason games defined by 17.9.5.2(e) approved by the Championships/Sports Management Cabinet or those games played in the Division I Football Championship; football contests played on a foreign tour certified by the member institution, or the National Association of Intercollegiate Athletics football championships. In championship subdivision football only, a member institution's last contest also may include participation in the Heritage Bowl or Gridiron Classic.
B. 17.9.5.2 (e) is amended as follows:
(e) Bowl Games. [FBS] One postseason game approved by the Championships/Sports Management Cabinet (see 30.9):, unless a team has defeated at least nine FBS opponent when two such games would be allowed.

Source: TBA
Effective Date: August 1, 2011
Category: Amendment
Topical Area: Playing and Practice Seasons
Rationale: Bowl games are a strong source of college football's unique tradition and revenue system. The recent proliferation of bowl games has lead to confusion regarding the prestige of individual bowls and impaired distinctions between highly successful programs and barely winning programs. Allowing teams with nine or more FBS wins to participate in two bowl games would allow a higher tier of bowls to naturally form to cater to and recognize this higher level of success and generate significant revenue to be distributed according to market pressures. This would also increase the expected financial benefit for teams expecting to be close to nine wins to avoiding FCS opponents and increase the overall competitiveness of the regular season games.

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Estimated Budget Impact: Significant gains from added high-profile bowls would be mitigated somewhat by team travel costs, personnel costs and increased student athlete awards.

Impact on Student-Athlete's Time: Increased practice time during winter break, commensurate with Division II and FCS championship participants.

## Position Statement(s):

History:

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## Constraints on a future tournament

Intent: To allow teams with at least nine FCS wins to participate in two bowl games and to allow the potential for the formation of a tournament under the same governance structure as the bowls that is maintained within the current postseason bounds, preferentially selects undefeated teams over teams with a loss, would not allow a team to play more than sixteen games total, respects the travel costs of the fans and does not interfere with the new ability of highly successful programs to play two postseason games.

Bylaws: The following changes to the bylaws would be made:
A. 17.9.4 (b) is amended as follows:
(b) Bowl Games, NCAA and NAIA Championships, International Competition, Heritage Bowl and Gridiron Classic. [FBS/FCS] One pPostseason games defined by 17.9.5.2(e) approved by the Championships/Sports Management Cabinet or those games played in the Division I Football Championship; football contests played on a foreign tour certified by the member institution, or the National Association of Intercollegiate Athletics football championships. In championship subdivision football only, a member institution's last contest also may include participation in the Heritage Bowl or Gridiron Classic.
B. 17.9.5.2 (e) is amended as follows:
(e) Bowl Games. [FBS] One postseason game approved by the Championships/Sports Management Cabinet (see 30.9) =, unless a team has defeated at least nine FCS opponents allowing two such games or participation in a tournament approved by the Championships/Sports Management Cabinet that meets the following conditions:

1) The tournament concludes within the dates specified by 17.9.4.3;
2) All undefeated teams are invited if any team with a loss is invited;
3) No team would be bracketed to allow more than four exempt games using 17.9.5.2 (c)(e)(k) or 17.28.2;
4) No team would be bracketed for more than two neutral site games;
5) Teams may participate in a single additional bowl game outside the tournament only if they are eliminated in the first round or seeded directly to the final round;

Source: TBA
Effective Date: August 1, 2011
Category: Amendment

Topical Area: Playing and Practice Seasons
Rationale: Bowl games are a strong source of college football's unique tradition and revenue system. The recent proliferation of bowl games has lead to confusion regarding the prestige of individual bowls and impaired distinctions between highly successful programs and barely winning programs. Allowing teams with nine FCS wins to participate in two bowl games would allow a higher tier of bowls to naturally form to cater to and recognize this higher level of success and generate significant revenue to be distributed according to market pressures. This would also provide a strong financial incentive for teams expecting to be close to nine wins to avoid scheduling FCS teams and improve the overall competitiveness of the regular season games.

Codifying expressed concerns regarding tournament designs would foster the discussion of feasible designs by specifying hard bounds that represent the majority opinions. Keeping football a one semester sport, increasing the fairness of the selection processes for all teams and limiting the total number of games possible to levels currently achieved by FCS champions are several prominent concerns.

Estimated Budget Impact: Significant gains from added high-profile bowls and potential gains from the formation of a tournament mitigated somewhat by team travel costs, personnel costs and increased student athlete awards.

Impact on Student-Athlete's Time: Increased practice time during winter break, commensurate with FCS and Division II championship participants.

## Position Statement(s):

History:

## Tournament Restrictions

The tournament restrictions of the second design are intended to allow the NCAA to be proactive in setting bounds for any discussion of proposed idea for the 2014 season. These rules would guide market forces to design qualifying structures for consideration by the same NCAA body that governs and certifies the existing bowls. This would allow the NCAA to maintain a voice in any design without requiring a full rule change to approve a design that meets these standards.

It would also allow conferences freedom to form a qualifying tournament even if some conferences choose not to participate in any tournament.

In addition to the goals of the design above, the restrictions on the tournament aim to:

- Respect the health of the players due to extra games by keeping the total number of games permitted equal to that allowed by an FCS champion.
- Establish NCAA oversight by requiring any tournament to be certified by the Championships/Sports Management Cabinet.
- Improve access to all teams by allowing all undefeated teams before any teams with a loss are invited.
- Allow teams participating in a tournament to keep promises to their players that if they end the regular season with at least nine FBS wins they will get to play in two bowl games.
- Respect the travel costs of fans by limiting the number of neutral site venues to two per team.

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## A Tier Based Plus-One

## Introduction

The beauty of this design is that it would only require teams with nine or more wins over FBS opponents to be eligible for a second bowl game. It also maintains the existing BCS bowls allowing the BCS to adopt it without jeopardizing the existing contracts.

It also respects the identity of the bowls by maintaining their privilege of selecting teams and allowing conference tie-ins to be maintained for bowls wishing to maintain them and their prestigious time slots.

## Two Bowl Tiered Plus-One Design



NCG: National Championship Game SFG: Semifinal Games
BCS: Existing BCS Bowls
FRG: First Round Games EXB: Existing Bowls

If teams with at least nine FBS wins were allowed to participate in a second bowl 15-24 teams would typically be available to play in a first round qualifier. Six games involving twelve of these teams can be played on December $19^{\text {th }}$ or $20^{\text {th }}$. Any remaining teams with at least nine FBS wins would be free to negotiate two bowl appearances on their own.

For high paying New Year's Eve and New Year's Day bowls it might be in their best interest to maintain their conference tie-ins with expected nine win teams from the top conferences in their historic timeslots. Other bowls would consider the ability to host these first round games as an improvement over their current lot. They would be vacating their current conference tie-ins, potentially improving the tie-ins for all remaining bowls as the available tie-ins trickle down.

Enough winning teams would be present to fill 80 to 90 bowl slots with this change, allowing for 40 to 45 bowls annually. With 42 bowls the $6-6$ teams would be expected to be able to cover the typical annual variances in this number. This would allow the formation of eight new bowls, after the existing bowls that choose to do so are promoted. It might be prudent to generate two new semi-final games, allow four bowls to be promoted to be designated as BCS first round games and allow six new bowls after the current bowls are promoted.

Each of the first round games should be regionally tied to one of the BCS bowls and work with this BCS bowls in making selections.

If not enough teams qualify for a first round game, one of the first round games could select from among all bowl eligible teams but not be a first round game and an additional team selected for direct participation.

## Possible Selection Process:

## Upon the conclusion of the regular season:

1) The top four eligible teams would be seeded in the semifinal games
A) No conference will have more than two teams participate in the semifinals
B) Teams from the same conference will not play each other in the semifinals
2) The BCS bowls would select two teams for direct participation
A) The top two ranked conferences with BCS bowl tie-ins not earning nine FCS wins would be selected, if needed.
B) The top ranked conferences with BCS bowl tie-ins would be selected and cleared to negotiate an early bowl game outside the four first round games.
3) The four first round games select among the remaining nine FBS win teams, but no conference may have more than three teams selected for a first round game, direct participation in a BCS bowl or a semifinal game unless no other qualifying teams remain.
4) The remaining bowls make selections, allowing up to four New Year's Eve or latter bowls to save a spot for later selection.

## After the first round games:

1) The semifinal winners would advance to the National Championship Game
2) BCS bowls make selections among the semifinal losers, direct participants and first round winners
A) Any conference champions are assigned to their historic BCS tie-in.
B) If a champion is not available from a traditional tie-in and another team from that conference is available they will take that spot.
C) If no member of a conference with a traditional tie-in is available, selections are made in order of the ranking of the champion lost.
D) Remaining selections are made by a prearranged order.
3) The bowls leaving a spot open select among teams losing the first round games in payout order.

One possible change to this process would be to give preference to undefeated teams in the selection of the semifinals.

New Championship System

## A Flexible Championship System

## Introduction

The key component of this design is the paradigm shift in the selection process. Most tournaments select format and wrestle with how to select and seed teams based on the outcomes of each year. This design selects the qualified teams each year and wrestles with how to select a tournament that matches each year's participants.

This design satisfies the NCAA bylaw requirements proposed above for a viable tournament and would be compatible with the presented eligibility for two bowls.

## Eligibility requirements

1) All undefeated teams.
2) All teams above the first significant gap in the BCS standings.

A team's schedule must include at least two teams that were ranked in the top 25 in the final BCS standings in any of the past four years for a team to qualify as an undefeated team.

A significant gap equals an average ballot difference of 1.5 in the polls ( 0.0600 using the current BCS formula).

Gaps between \#1 and \#2 are ignored. The second significant gap is also used if undefeated teams lower than \#8 would not have a play-in game otherwise.

If more than eight teams qualify, the largest gap in the standings allowing at most eight teams is used.

If more than eight teams go undefeated the undefeated teams will be added from highest to lowest in the standings until the sum of the thirteen-win teams and half of the twelve-win teams would exceed eight.

## Tournament structure

The New Championship System format is determined by the number of teams that qualify.

In all cases the National Championship Game is played the second Monday of January.

- For three through five teams the Wild Card Game is played as a semifinal on January 1st or 2nd, but not on a Sunday.
- For four or more teams a BCS bowl would be selected to be a semifinal.
- For five or more teams play-in games on December 19th or 20th would determine the lowest seeded semifinal slots.
- For six or more teams a second BCS bowl is used as a semifinal instead of the Wild Card Game.
- For eight teams a December 19th or 20th regional bowl is used to host the play-in game between the \#4 and \#5 teams.


The National Championship Game rotates among the sites of the BCS bowls.

The Wild Card Game is hosted by cities who had successfully bid for a spot on the Wild Card Game queue.

Play-in games are hosted by the favored teams. Away teams are guaranteed an allotment of tickets upon request. Play-in games can be scheduled on a Sunday only at the request of both institutions.

All selections of BCS bowls for use as semifinals are based on which BCS bowls have conference tie-ins to the highest ranked teams.

If a team that has participated in 14 games due to an extra game from playing in Hawaii, Alaska or Puerto Rico and a conference championship game qualifies they will be placed directly into the semifinals. If they would have played in a play-in game otherwise they will play the highest ranked team to qualify for the semifinals.

In the event that more than eight teams finish undefeated an additional round of play-in games will be added on December 26th and the lowest seeded twelve win teams will play for a spot in these additional play-in games as needed.

It is possible to arrange five thirteen-win teams and six twelve-win teams in such a format, representing one team from each conference with twelve regular season games each plus the current conference championship games.

If ten or eleven teams are needed an additional regional bowl would be selected to act as a play-in game for the first round for the twelve win teams, two for cases with twelve or thirteen teams.

Regional bowls are selected for play-in consideration by the preferences of the participating teams.

## Annual bowl selection process

These selection processes use terminology defined in the next section regarding conference and bowl classifications.

1) Teams and format for the championship system are selected.
A) Tournament is seeded
B) BCS bowl conference tie-ins are assigned.
C) BCS bowls losing their tie-in make selections in order of the rank of the team lost.
D) BCS bowls make at-large selections from eligible teams in pre determined order, unless they are provisional.
E) Provisional BCS bowls make at-large selections from eligible teams.
2) Premier bowls are assigned
A) Premier bowl conference tie-ins are assigned
B) Premier bowls list their top five remaining at-large teams in order of interest.
C) If a team is the top pick of only one bowl they are assigned to that bowl.
D) If a team is the top pick of several bowls they are asked to pick among them.
E) Once the top picks are examined all selected teams are removed from the lists and the next picks of the remaining bowls are examined.
F) If a bowl's list is consumed they are asked to supply a new list from the remaining eligible teams.
3) Regional bowl participants are assigned
A) Regional bowl conference tie-ins are assigned.
B) Regional bowls negotiate with remaining eligible teams independently.
4) Conference and bowl classifications are determined for the next year.
5) BCS officials meet to review the performance of the process, propose changes to the processes and review applications for the Wild Card Game queue.

## Revenue Sharing

These revenue estimates are based on an increase in current revenue distribution of $\$ 142$ million by the increase in TV revenue in the ESPN contracts
plus an estimated $\$ 36.1$ million in added value for the play-in and wild card games. A table of these figures can be found on pages 116 through 118.

The first team from each conference participating in the tournament structure would receive $\$ 7.8$ million for their conference, unless they earned an automatic qualification but not a ranking that would qualify them for at-large consideration.

The second team from each conference, any independents selected and any low ranked automatic qualifying champions would earn their conference $\$ 5.8$ million.

Any team participating in more than one round would individually earn \$2.6 million to cover travel costs for each additional game. Hosted a play-in games would not count.

The remaining revenue will be distributed among all conferences proportionally to some metric of performance. The current BCS automatic qualification criteria scaled linearly to best match the revenue distribution from other sources is the recommended methodology. The average attendance of all conference members is used in conference revenue estimates due to the unavailability of this data.

Premier bowls must guarantee a minimum of $\$ 2.5$ million to conference tie-ins, and $\$ 0.5$ million to the BCS revenue sharing fund. At-large berths earn $\$ 2.0$ million and also require an additional $\$ 0.5$ million payout to the BCS revenue sharing fund.

Regional bowls must guarantee a minimum of $\$ 1.0$ million to all participants and demonstrate that $75 \%$ of their participants over the past four years showed a profit from their bowl arrangements.

Payouts exceeding these minimums for premier and regional bowls must be matched with a payout to the BCS revenue sharing fund of half the excess and help determine at large selection orders.

New Championship System

## Conference and Bowl Classification Process

This section examines how the conferences and bowls can be classified and outlines processes to handle changes in classification.

## Conference Classification

## Ranking methodology

The official conference rankings are released after the National Championship Game is completed. They are based on a four year average of four indices.

The four indices represent the number of top 25 teams in the final BCS standings, the average ranking of all conference members in the BCS computers, the highest ranked team in the final BCS standings and bowl PCT.

These values are scales such that 0.5000 represents a borderline automatic qualifying performance and 1.0000 represents a performance that is just out of reach over a four year average.

## Top 25 index

The top 25 index shall be the number of teams from each conference in the top 25 of the final BCS standings divided by five.

## Computer average of all teams in each conference index

Remove the highest and lowest BCS computer rankings for each team and add zero points for last place thru 119 for first place. Divide by the total points possible to get each team's score.

Average the team scores for each conference to get a raw score. The conference index is then (Raw Score - 0.5000) / 0.2000. Negative values are truncated at 0.0000 .

## Highest ranked team index

The BCS average of the top team of each conference in the final BCS standings is the highest ranked team index.

## Bowl PCT index

The bowl PCT is scaled using the formula (PCT-.5000)*2+. 5000.

## Conference classifications

Once the four indices are averaged over the four years the final score is used to classify each conference.
1.0000-0.7500: Premier conferences
$0.7500-0.5000$ : Automatic qualifying conferences
0.5000-0.0000: At-large conferences

Any conference with a BCS bowl tie-in that would be an at-large conference is a provisional conference.

## Classification Definitions

## Nomenclature methodology

The goals of this section are to replace lists of specific institutions in all contracts with their classifications, establish clear procedures to determine all classifications and establish procedures for changes in classification.

## Bowl classifications

BCS bowls - The \#1 conference tie-in for a premier or automatic qualifying conference. The National Championship Game rotates between the sites of these bowls.
Premier bowls - The \#1 conference tie-in for an at-large conference, \#2 conference tie-in for an automatic qualifying conferences, or the \#2 or \#3 conference tie-in for a premier conference.
Regional bowls - All other bowls.
Bowl conference tie-ins should be maintained such that nearly $1 / 4$ of the slots at each tier are at-large bids.

## BCS bowl certification

A BCS bowl is reevaluated when it hosts the National Championship Game

- The bowl's premier and automatic qualifying conferences are given an opportunity to change their top tie-in.
- The bowl is given an opportunity to extend a tie-in to a conference without an existing BCS bowl tie-in or with a tie-in to a BCS bowl with more than one tiein.
- The bowl is re-certified if it has the top tie-in for a premier or automatic qualifying conference at this point.


## Restrictions on BCS Bowl conference tie-in agreements

- If a BCS bowl has a tie-in to a single premier or automatic qualifying conference the tie-in can not be altered in years it does not host the National Championship Game.
- If a BCS bowl has a tie-in to a conference that would be an at-large conference that conference is called a provisional tie-in.
- If a BCS bowl only has provisional tie-ins it is called a provisional BCS bowl.


## Earning BCS certification

- After the BCS bowl hosting the National Championship Game is evaluated, all Premier and Regional bowls are evaluated.
- If a bowl garners the \#1 tie-in for a premier or automatic qualifying conference through a change of classification of its conference tie-ins or by forming new conference tie-ins it will earn BCS status.
- Upon earning BCS status a bowl would be appended to the end of the current cycle to host the National Championship Game.


## Bowl eligibility

Eligibility requirements are established for at-large bids to each bowl classification. A team with a higher priority level must be placed in a bowl of the same tier before a lower priority team may be selected as an at-large bid.

The regional bowl specifications match the NCAA bowl eligibility requirements and outweigh any conference tie-in agreements.

BCS bowl at-large eligibility

- The champion of any conference.
- Any team in the top 14 of the final BCS standings.


## BCS bowl priorities:

- Any premier automatic qualifying conference champion losing its bowl tie-in due to its use as a semifinal.
- The highest ranked at-large conference champion, if none make the championship system and at least one is ranked in the top 14 of the final BCS standings.
- Any team in the top 14 from a conference with less than 2 berths.
- Any conference champion in the top 20 or a third team from a conference in the top 14.

Premier bowl at-large eligibility:

- Any team with a W-L record at least 8-5.

New Championship System
Premier bowl priority:

- All teams with nine or more FBS wins.

Regional bowl at-large eligibility:

- Any team with W-L record at least 6-6.

Regional bowl priority:

- All teams with a winning record.


## Bowl timing

BCS Bowls are played on January 1st or 2nd.
Premier bowls are played December 31st or (if they have the top tie-in for an atlarge champion) the week between the BCS bowls and the national championship.

Regional Bowls are played between December 19th and December 30th.

## Current Classifications

More details on the calculations used to generate these classifications can be found on page 116.

## Conference classifications:

Premier: SEC, Big East
Automatic Qualifying: Pac 10, Big 12, Big 10, ACC
At-large: MWC, WAC, Sun Belt, C-USA, MAC

## Bowl classifications:

BCS: Sugar, Fiesta, Rose, Orange
Premier: Las Vegas, Humanitarian, Motor City, Liberty, New Orleans, Capitol
One, Out Back, Cotton, Gator, Holiday, Sun, Chick-fil-A
Regional: All remaining bowls.

## 12 Years of Controversy

## Introduction

The following section reviews the controversies of each year related to the BCS since its inception in 1998 and examines how the two alternatives presented previously would have responded.

BCS Bowls for the Flexible Championship System and first round games for the Tier Based Plus-One are estimated and may not have been the actual selections made.

## 2009

| Rank | Team | BCS | Notes |
| :--- | :--- | :--- | :--- |
| 1 | Alabama | 0.9978 | AQ SEC |
| 2 | Texas | 0.9433 | AQ Big 12 |
| 3 | Cincinnati | 0.8878 | AQ Big East |
| 4 | TCU | 0.8836 | AQ Other |
| 5 | Florida | 0.8636 | AQ \#5 |
| 6 | Boise State | 0.8106 | At Large |
| 7 | Oregon | 0.7568 | AQ PAC 10 |
| 8 | Ohio State | 0.6568 | AQ Big 10 |
| 9 | Georgia Tech | 0.6471 | AQ ACC |
| 10 | Iowa | 0.6180 | At Large |
| 11 | Virginia Tech | 0.5675 |  |
| 12 | LSU | 0.5375 | $3^{\text {rd }}$ team |
| 13 | Penn State | 0.5319 | $3^{\text {rd }}$ team |
| 14 | BYU | 0.4531 |  |

## What actually happened

NCG: Alabama 37 Texas 21
Sugar: Florida 51 Cincinnati 24
Fiesta: Boise State 17 TCU 10
Rose: Ohio State 26 Oregon 17
Orange: Iowa 24 Georgia Tech 14

## Controversy

## Championship selection

Cincinnati was somewhat close to Texas indicating that the public opinion largely supported this selection but it could not be called unanimous. TCU was not far from the picture, and if either TCU or Cincinnati were not present it is likely the other would have cut into Texas' lead in the polls.

## Undefeated non-champions

For the second time in the BCS era five teams finished the regular season undefeated. Unlike 2004, two of the remaining teams were paired in a BCS bowl and all three were invited to BCS bowls. Boise State finished as the only undefeated team, other than the BCS national champion.

## At large selections

For the first time in BCS history the teams selected to participate in the BCS bowls were the top teams in the standings. Added to the fact that the largest
difference in rankings between paried teams was 2 spots, 2009 was arguable the most balanced and fair pairings in BCS history.

For the first time in the history of college football two teams from at large conferences were invited to a BCS bowl in the same year.

## A Tier Based Plus-One

## Semifinals

Alabama would have played TCU and Texas would have played Cincinnati. Boise State would have been left out as the fifth highest undefeated team.

Direct BCS participants
Oregon and Ohio State would have been selected for direct participation as the highest ranked automatic qualifying conferences

## First round games

Georgia Tech and Boise State would have been guaranteed a spot in the first round games.

Florida, BYU, Central Michigan, Houston, lowa, LSU, Middle Tennessee State, Nebraska, Penn State, Troy, Utah and Temple would have qualified for a second bowl game. Temple is the only team in the BCS era to earn nine wins over FBS opponents with a loss to an FCS team.

Possible first round games:
Mid-West: Iowa vs. Nebraska
North: C. Michigan vs. Penn State
South: Georgia Tech vs. Florida
West: Boise State vs. BYU

## A Flexible Championship System

## Tournament

Alabama, Texas, Cincinnati, TCU, Florida, Boise State and Oregon would have qualified as the top group of teams. This includes all undefeated teams.

On December $19^{\text {th }}$ or $21^{\text {st }}$ Texas would host Oregon, Cincinnati would host Boise State and TCU would host Florida. Alabama would play the lowest ranked team to advance in the Sugar Bowl and the remaining teams would play in the Fiesta

Bowl. The Sugar and Fiesta Bowl winners would then play in the national championship game.

Possible BCS Bowls
Rose: Ohio State vs. BYU
Orange: Georgia Tech vs. Iowa
Virginia Tech would also have been eligible and Penn State would have been an alternative for lowa.

## 2008

| Rank | Team | BCS | Notes |
| :--- | :--- | :--- | :--- |
| 1 | Oklahoma | 0.9757 | AQ Big 12 |
| 2 | Florida | 0.9479 | AQ SEC |
| 3 | Texas | 0.9298 | AQ \#3 |
| 4 | Alabama | 0.8443 | At Large |
| 5 | USC | 0.8208 | AQ PAC 10 |
| 6 | Utah | 0.7846 | AQ Other |
| 7 | Texas Tech | 0.7840 | $3^{\text {rd }}$ Team |
| 8 | Penn State | 0.7387 | AQ Big 10 |
| 9 | Boise State | 0.6980 |  |
| 10 | Ohio State | 0.6354 | At Large |
| 11 | TCU | 0.5848 |  |
| 12 | Cincinnati | 0.5384 | AQ Big East |
| 13 | Oklahoma St. | 0.4866 | $3^{\text {rd }}$ Team |
| 14 | Georgia Tech | 0.4516 |  |
| 19 | Virginia Tech | 0.2440 | AQ ACC |

## What actually happened

NCG: Florida 24 Oklahoma 14
Fiesta: Texas 24 Ohio State 21
Sugar: Utah 31 Alabama 17
Rose: USC 38 Penn State 24
Orange: Virginia Tech 20
Cincinnati 7
Boise State, TCU and Georgia
Tech were BCS eligible but not selected.

Controversy
Championship selection
Texas was very close to Florida but the real arguments were presented relative to Oklahoma. Texas had beat Oklahoma earlier that year and the tie breaker for the opportunity to play in the Big 12 championship game came down to a campaign for BCS votes in the final week. Oklahoma jumped Texas that week and the Big 12 championship game leveraged that slim advantage further.

## Undefeated non-champions

Utah and Boise State were the only two teams to finish the regular season undefeated and only one was guaranteed a spot. Boise State played TCU in the Poinsettia Bowl which featured the two highest ranked teams not selected for BCS bowls. TCU won 17-16. This left Utah as the only undefeated team in the nation.

New Championship System
At Large Selections
Boise State also saw lower ranked Ohio State take a spot in the Fiesta Bowl that they coveted.

## A Tier Based Plus-One

## Semifinals

Oklahoma would have played Alabama and Florida would have played Texas in the semifinal games. (Guaranteeing access to undefeated teams would have replaced Alabama with Boise State and Texas with Utah.)

## Direct BCS participants

USC and Penn State would have advanced directly to the BCS as the highest ranked guaranteed conference champion.

## First round games

Cincinnati and Virginia Tech would have been guaranteed access to the first round games due to BCS bowl conference tie-ins.

Utah(Texas), Boise State(Alabama), Ball State, BYU, East Carolina, Michigan State, Ohio State, Oregon, Pittsburgh, Rice, TCU, Texas Tech and Tulsa would have been eligible for a second bowl game.

Possible first round games:
Mid-West: TCU (Texas) vs. Texas Tech
North: Ohio State vs. Cincinnati
South: East Carolina(Alabama) vs. Virginia Tech
West: Utah(BYU) vs. Boise State(Oregon)

## The flexible championship system

## Tournament:

Oklahoma, Florida and Texas would have qualified as the top group of teams. Utah and Boise State would have qualified as undefeated teams.

On December 19th or 20th Utah would host Boise State for the opportunity to play Oklahoma in the Fiesta Bowl. Florida and Texas would play in the Wild Card Game. The winners would advance to the National Championship Game.

New Championship System

## Possible BCS Bowls:

Rose: USC vs. Penn State
Sugar: Alabama vs. Ohio State
Orange: Virginia Tech vs. Cincinnati
TCU and Georgia Tech would also have been eligible for an at-large berth.

2007

| Rank | Team | BCS | Notes |
| :--- | :--- | :--- | :--- |
| 1 | Ohio State | 0.9588 | AQ Big 10 |
| 2 | LSU | 0.9394 | AQ SEC |
| 3 | Virginia Tech | 0.8703 | AQ ACC |
| 4 | Oklahoma | 0.8572 | AQ Big 12 |
| 5 | Georgia | 0.8392 | At Large |
| 6 | Missouri | 0.7763 | $3^{\text {rd }}$ team |
| 7 | USC | 0.7637 | AQ PAC 10 |
| 8 | Kansas | 0.7589 | At Large |
| 9 | West Virginia | 0.6628 | AQ Big East |
| 10 | Hawaii | 0.6468 | AQ Other |
| 11 | Arizona State | 0.6204 |  |
| 12 | Florida | 0.6133 | $3^{\text {rd }}$ team |
| 13 | Illinois | 0.4597 | At Large |
| 14 | Boston College | 0.4586 |  |

What actually happened
NCG: LSU 38 Ohio State 24
Orange: Kansas 24 Virginia
Tech 21
Fiesta Bowl: West Virginia 48 Oklahoma 28
Sugar: Georgia 41 Hawaii 10
Rose: USC 49 Illinois 17
Arizona State and Boston College were BCS eligible but not selected.

## Controversy

Championship selection

The selection of teams was far more controversial than the standings would indicate. LSU was selected with two losses over one loss Kansas and undefeated Hawaii. LSU redeemed themselves by manhandling Ohio State and Hawaii eliminated themselves by losing convincingly to Georgia.

## Undefeated non-champions

No teams finished undefeated in 2007.

## At large selections

Missouri was left out for Kansas, who took the second and final Big 12 BCS berth. Illinois was selected over Arizona State but this was mitigated by the fact that they faced a team from the same conference as Arizona State.

New Championship System

## A Tier Based Plus-One

## Semifinals

Ohio State would have played Oklahoma and LSU would have played Virginia Tech in the semifinal games. (Guaranteeing access to undefeated teams would have replaced Oklahoma with Hawaii)

## Direct BCS participants

USC and West Virginia (Oklahoma) would have earned direct participation in a BCS bowl as the highest ranked automatic qualification champions.

## First round games

Hawaii (West Virginia) would have been guaranteed access to a first round game.

Arizona State, Central Florida, Kansas, Missouri, Boise State, Boston College, BYU, Florida, Georgia, Tennessee, Tulsa and Virginia would have been eligible for a second bowl game.

Possible first round games:
Mid-West: Kansas vs. Tulsa
North: Boston College(West Virginia) vs. Missouri
South: Central Florida vs. Georgia
West: Hawaii (BYU) vs. Arizona State

## A Flexible Championship System

## Tournament

Ohio State and LSU would have qualified as the top group of teams. Hawaii would have qualified as an undefeated team. The next group of teams, Virginia Tech, Oklahoma, and Georgia, would have been added since Hawaii was not ranked high enough to be placed directly into a semifinal.

Hawaii did not play two teams that were in the final BCS top 25 in 2003-2006 but would likely have scheduled differently had this rule been in place. If this rule is applied here the current system would have been used.

The following play-in games would be held on December 19th or 20th:
Hawaii @ Virginia Tech, Georgia @ Oklahoma

The lowest ranked team to advance would play LSU in the Sugar Bowl. The other advancing team would face Ohio State in the Rose Bowl. The winners would advance to the National Championship Game.

Possible BCS Bowls
Fiesta: Kansas vs. USC
Orange: West Virginia vs. Arizona State
Missouri, Illinois and Boston College would have been eligible for BCS bowls.

## 2006

| Rank | Team | BCS | Notes |
| :--- | :--- | :--- | :--- |
| 1 | Ohio State | 0.9999 | AQ Big 10\#1 |
| 2 | Florida | 0.9445 | AQ SEC \#1 |
| 3 | Michigan | 0.9344 | AQ \#3 AQ |
| 4 | LSU | 0.8326 | At-large |
| 5 | USC | 0.7953 | AQ PAC 10\#1 |
| 6 | Louisville | 0.7944 | AQ Big East |
| 7 | Wisconsin | 0.7480 | $3^{\text {rd }}$ team |
| 8 | Boise State | 0.7099 | AQ other |
| 9 | Auburn | 0.6486 | $3^{\text {rd }}$ team |
| 10 | Oklahoma | 0.6297 | AQ Big 12 |
| 11 | Notre Dame | 0.6287 | At-Large |
| 12 | Arkansas | 0.5166 | $3^{\text {rd }}$ team |
| 13 | West Virginia | 0.5073 |  |
| 14 | Wake Forest | 0.4314 | AQ ACC |

## What actually happened

NCG: Florida 41 Ohio State 14
Rose: USC 32 Michigan 18
Sugar: LSU 41 Notre Dame 14
Orange: Louisville 24 Wake Forest 13
Fiesta: Boise State 43 Oklahoma 42 (OT)

West Virginia was BCS eligible but not selected.

## Controversy

Championship selection
The discussion in 2006 was whether Ohio State and Michigan would play each other in a NCG rematch of their season finally. The late season loss proved to be too much to prevent Florida from taking the \#2 spot. At the end of the bowls Ohio State and Michigan had both been exposed as pretenders to the crown.

## Undefeated non-champions

In addition to Ohio State, Boise State finished the regular season undefeated. Boise State became the second team from outside the six automatic qualifying conferences to get invited to and win a BCS bowl. Unlike the Utah game in 2004, Boise State was a heavy underdog.

At large selections
No BCS eligible teams were left out for a lower ranked team.

New Championship System
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## A Tier Based Plus-One

## Semifinals

Ohio State would have played LSU and Florida would have played Michigan in the semifinals. (Guaranteeing access to undefeated teams would have replaced LSU with Boise State)

Direct BCS participants
USC and Louisville would have earned a direct berth in a BCS bowl as the highest ranked automatic qualifying champions.

## First round games

Boise State (LSU), Oklahoma and Wake Forest would have been guaranteed a spot in the first round games.

Auburn, BYU, Notre Dame, Wisconsin, Arkansas, Central Michigan, Hawaii, Houston, Rutgers, Tennessee, TCU, Virginia Tech and West Virginia would have been eligible for a second bowl game.

Possible first round games:
Mid-West: Oklahoma vs. Houston
North: Notre Dame vs. Wisconsin
South: Auburn (LSU) vs. Wake Forest
West: Boise State (BYU) vs. TCU (Hawaii)

## A Flexible Championship System

## Tournament

Ohio State, Florida and Michigan would have qualified as the top group of teams. Boise State would have qualified as an undefeated team.

Ohio State would have host Boise State in the Rose Bowl while Florida and Michigan played in the Wild Card Game. The winners would have advanced to the national Championship Game.

Possible BCS Bowls
Sugar: LSU vs. Notre Dame Orange: Wake Forest vs. Louisville
Fiesta: Oklahoma vs. USC

New Championship System
Arkansas and Virginia Tech would have been eligible for at-large selection.

## 2005

| Rank | Team | BCS | Notes |
| :--- | :--- | :--- | :--- |
| 1 | USC | 0.9868 | AQ PAC 10 |
| 2 | Texas | 0.9732 | AQ Big 12 |
| 3 | Penn State | 0.9187 | AQ Big 10 |
| 4 | Ohio State | 0.8559 | At large |
| 5 | Oregon | 0.7989 |  |
| 6 | Notre Dame | 0.7329 | At large |
| 7 | Georgia | 0.7182 | AQ SEC |
| 8 | Miami(FL) | 0.7037 |  |
| 9 | Auburn | 0.6747 |  |
| 10 | Virginia Tech | 0.6715 |  |
| 11 | West Virginia | 0.6403 | AQ Big East |
| 12 | LSU | 0.6293 |  |
| 13 | Alabama | 0.4538 |  |
| 14 | TCU | 0.4445 |  |
| 22 | FSU | 0.1110 | AQ ACC \#1 |

## What actually happened

This was the last year before the NCG became a stand alone game and the requirements for an atlarge conference was reduced from a top 6 ranking.

NCG-Rose: Texas 41 USC 38
Orange: Penn State 26 FSU 23 (3OT)
Fiesta: Ohio State 34 Notre Dame 20
Sugar: West Virginia 38 Georgia 35

Oregon, Miami(FL), Auburn, Virginia Tech, LSU, Alabama and TCU were BCS Eligible but not selected. At most one of the three SEC teams listed could have been selected

Under the current rules TCU would have been earned an automatic qualification.

## Controversy

## Championship selection

This is one of the years the BCS is said to have worked. Texas and USC were undisputed \#1 and \#2 in the nation and the lone undefeated teams.

## Undefeated non-champions

BCS champion Texas was the only team to finish undefeated
At large selections
Oregon was left out for Notre Dame despite a sizable lead that their adjacent ranking made look deceptively small.

New Championship System

## A Tier Based Plus-One

In addition to the changes in BCS design, this was also the last year the regular season was eleven games. Many teams have added an FCS opponent since then.

## Semifinals

USC would have played Ohio State and Texas would have played Penn State in the semifinals.

## Direct BCS participants

Georgia would have earned a direct berth in a BCS bowl as the highest ranked automatic qualifying champion. FSU would have gotten a direct BCS berth because they are not eligible for two bowls.

First round games
West Virginia and TCU would have earned an automatic berth to the first round games.

Virginia Tech, Alabama, Boston College, LSU, Louisville, Miami(FL), Notre Dame, Oregon, UCLA and Wisconsin would have been eligible for a second bowl game.

Possible first round games:
Mid-West: UCLA vs. LSU
North: West Virginia vs. Notre Dame
South: Virginia Tech vs. Miami(FL)
West: Oregon vs. TCU

## A Flexible Championship System

## Tournament

USC, Texas and Penn State would have qualified for being in the top group of teams.

Texas would play Penn State in the Wild Card Game for the opportunity to play USC in the National Championship Game.

## Possible BCS Bowls

Rose: Ohio State vs. Oregon

New Championship System
Fiesta: TCU vs. Notre Dame
Sugar: Georgia vs. Miami
Orange: FSU vs. West Virginia
Auburn, Virginia Tech, LSU and Alabama would have also been BCS eligible, but only one SEC team could qualify.

## 2004

| Rank | Team | BCS | Notes |
| :--- | :--- | :--- | :--- |
| 1 | USC | 0.9770 | AQ PAC 10 |
| 2 | Oklahoma | 0.9681 | AQ Big 12 |
| 3 | Auburn | 0.9331 | AQ SEC |
| 4 | Texas | 0.8476 | AQ \#4 |
| 5 | California | 0.8347 |  |
| 6 | Utah | 0.8181 | AQ other |
| 7 | Georgia | 0.6966 |  |
| 8 | Virginia Tech | 0.6712 | AQ ACC |
| 9 | Boise State | 0.6564 |  |
| 10 | Louisville | 0.6490 |  |
| 11 | LSU | 0.6109 |  |
| 12 | lowa | 0.5553 |  |
| 13 | Michigan | 0.5058 | AQ Big 10 |
| 14 | Miami(FL) | 0.4705 |  |
| 21 | Pittsburgh | 0.1546 | AQ Big East |

## What actually happened

NCG-Orange: USC 55 Oklahoma 19
Sugar: Auburn 16 Virginia Tech 13 Rose: Texas 38 Michigan 37
Fiesta: Utah 35 Pittsburgh 7
California, Georgia, Boise State, Louisville, LSU, lowa and Miami(FL) were BCS eligible but not selected.

## Controversy

Championship selection
With three undefeated teams at the top of the standings the public perception of the day was that Auburn was left out because of a worse ranking in the preseason poll.

## Undefeated non-champions

Auburn and Utah both finished undefeated without being invited to the NCG. Boise State finished the regular season undefeated but lost to Southern Mississippi in the Liberty Bowl. Utah broke their Liberty bowl contract to participate in the Fiesta Bowl.

## At large selections

Texas lobbied their case hard and passed California in the final standings. Thanks to rules put in place years earlier a \#4 team was guaranteed a spot, otherwise the Rose Bowl would have taken California due to thier PAC 10 tie-in.

New Championship System

## A Tier Based Plus-One

## Semifinals

USC would have played Texas and Oklahoma would have played Auburn in the semifinals. (Guaranteeing access to undefeated teams would have replaced Texas with Utah)

## Direct BCS participants

Virginia Tech (Utah) would have earned a direct BCS berth as the highest ranked automatic qualifying champion. Pittsburgh gets a direct berth due to having insufficient wins to qualify for two bowl games.

## First round games

Utah and Michigan would be guaranteed a spot in the first round games.
Boise State, California, Louisville, lowa, LSU, Tennessee, Toledo (, Texas) and Wisconsin would have been eligible for a second bowl game.

Possible first round games:
Mid-West: Boise State (Texas) vs. Iowa
North: Michigan vs. Toledo
South: Louisville vs. LSU
West: Utah (Boise State) vs. California

## A Flexible Championship System

## Tournament

USC, Oklahoma and Auburn would have been selected for being in the top group of teams. Utah and Boise State would have been selected for being undefeated.

On December 19th or 20th Utah would host Boise State for the opportunity to play USC in the Rose Bowl. Oklahoma and Auburn would play in the Wild Card Game. The winners would advance to the National Championship Game.

## Possible BCS Bowls

Fiesta: Texas vs. California
Sugar: Georgia vs. Michigan
Orange: Virginia Tech vs. Pittsburgh

Boise State, Louisville, LSU, and lowa would also have been BCS eligible. Only one of Georgia or LSU would have been eligible.

| Rank | Team | BCS | Notes |
| :--- | :--- | ---: | :--- |
| 1 | Oklahoma | 5.11 | AQ BCS \#1 |
| 2 | LSU | 5.99 | AQ SEC |
| 3 | USC | 6.15 | AQ PAC 10 |
| 4 | Michigan | 10.63 | AQ Big 10 |
| 5 | Ohio State | 14.28 | At large |
| 6 | Texas | 14.53 |  |
| 7 | FSU | 17.93 | AQ ACC |
| 8 | Tennessee | 19.64 |  |
| 9 | Miami(FL) | 19.79 | AQ Big East |
| 10 | Kansas State | 22.73 | AQ Big 12 |
| 11 | Miami(OH) | 24.22 |  |
| 12 | Georgia | 24.59 |  |
| 13 | lowa | 28.94 | $3^{\text {rd }}$ team |
| 14 | Purdue | 32.93 | $3^{\text {rd }}$ team |

## What actually happened

This was the last year of the previous formula. A gap of an average ranking difference of 1.5 by this method is 4.5 points. This formula often masked the differences in the polls, making 4.4 a better value to use.

NCG-Sugar: LSU 21 Oklahoma 14
Rose: USC 28 Michigan 14
Fiesta: Ohio State 35 Kansas State 28
Orange: Miami(FL) 16 FSU 14
Texas, Tennessee, Miami(OH), Georgia, lowa and Penn State were BCS eligible but not selected.

Under the current rules Miami $(\mathrm{OH})$ would have earned an automatic qualification.

## Controversy

## Championship selection

Oklahoma was \#1 in the BCS standings despite being \#3 in both polls and having lost the Big 12 Championship Game. Oklahoma proved to be a dud by losing to LSU while USC demolished a respectable Michigan team. The result was a split title that led to massive changes in the standings and eventually more inclusion for the at-large conferences.

## Undefeated non-champions

No teams were undefeated in 2003.

## At large selections

No teams were selected over higher ranked eligible teams in 2003.

New Championship System

## A Tier Based Plus-One

## Semifinals

Oklahoma would have played Michigan and LSU would have played USC in the semifinals.

## Direct BCS participants

FSU and Miami(FL)would have earned a direct berth into the BCS bowls as the highest ranked automatic qualifying conference champions.

## First round games

Miami $(\mathrm{OH})$ and Kansas State would have been guaranteed a spot in the first round games.

Boise State, TCU, Georgia, Ohio State, Tennessee, Texas, Iowa, Louisville, Minnesota, Mississippi, Nebraska, North Texas, Northern Illinois, Purdue, Southern Mississippi, Utah and Washington State would have been eligible for a second bowl game.

Possible first round games:
Mid-West: Kansas State vs. TCU
North: Miami $(\mathrm{OH})$ vs. Ohio State
South: Tennessee vs. Louisville
West: Boise State vs. Georgia

## A Flexible Championship System

## Tournament

Oklahoma, LSU and USC would have been selected for being the top group of teams.

USC would play LSU in the Wild Card Game for the opportunity to play Oklahoma in the National Championship Game.

Possible BCS Bowls
Rose: Michigan vs. Washington State
Orange: FSU vs. Miami(FL)
Fiesta: Kansas State vs. Miami(OH)
Sugar: Tennessee vs. Ohio State
\#16 Washington State would become eligible because not enough teams in the top 14 would have been eligible since conferences are limited to three teams.

After the field was expanded Boise State and TCU would also have been eligible, but Florida would not have been.

Georgia, lowa and Purdue would have been eligible had a second team from their conference not already been selected or if conferences could qualify a third team if no other conference has a team ranked high enough to qualify.

2002

| Rank | Team | BCS | Notes |
| :--- | :--- | ---: | :--- |
| 1 | Miami(FL) | 2.93 | AQ Big East |
| 2 | Ohio State | 3.97 | AQ Big 10 |
| 3 | Georgia | 8.37 | AQ SEC |
| 4 | USC | 10.51 | At large |
| 5 | lowa | 10.79 | At large |
| 6 | Washington State | 16.14 | AQ PAC 10 |
| 7 | Oklahoma | 16.79 | AQ Big 12 |
| 8 | Kansas State | 20.13 |  |
| 9 | Notre Dame | 20.93 |  |
| 10 | Texas | 21.08 |  |
| 11 | Michigan | 23.91 |  |
| 12 | Penn State | 26.97 |  |
| 13 | Colorado | 33.27 |  |
| 14 | Florida State | 33.95 | AQ ACC |

What actually happened<br>NCG-Fiesta: Ohio State 31 Miami(FL) 24(2 OT)<br>Sugar: Georgia 26 FSU 13 Orange: USC 38 Iowa 17 Rose: Oklahoma 34 Washington State 14<br>Kansas State, Notre Dame, Texas, Michigan, Penn State and Colorado were BCS eligible but not selected.

2002 was the last year of preseason classics, allowing many teams to have 13 game regular seasons.

## Controversy

In short, 2002 is one of the years the BCS worked.

## Championship selection

The consensus top two teams played in the championship game in 2002.

## Undefeated non-champions

The only two undefeated teams met in the championship game in 2002.
At large selections
No teams were selected over higher ranked eligible teams in 2002.

New Championship System

## A Tier Based Plus-One

## Semifinals

Miami would have played USC and Ohio State would have played Georgia in the semifinals.

## Direct BCS participants

Washington State and Oklahoma would have been selected for direct participation as the highest ranked automatic qualifying conference champions.

First round games
FSU would have been guaranteed a first round game.
Boise State, Iowa, Colorado State, Notre Dame, Texas, Colorado, Hawaii, Marshall, Maryland, Michigan, Penn State, TCU and Virginia Tech would have been eligible for a second bowl game.

Alabama had ten wins over FBS teams but was on an NCAA probation from the postseason in 2002.

Possible first round games:
Mid-West: lowa vs. Colorado
North: Michigan vs. Notre Dame
South: FSU vs. Texas
West: Boise State vs. Virginia Tech

## A Flexible Championship System

## Tournament

$\operatorname{Miami}(F L)$ and Ohio State would have qualified as the highest group of teams.
Miami(FL) and Ohio State would have played in the National Championship Game.

Possible BCS Bowls
Sugar: Georgia vs. Kansas
Rose: lowa vs. Washington State
Fiesta: Oklahoma vs. USC
Orange: Florida State vs. Notre Dame

New Championship System

## 2001

| Rank | Team | BCS | Notes |
| :--- | :--- | ---: | :--- |
| 1 | Miami(FL) | 2.62 | AQ Big East |
| 2 | Nebraska | 7.23 | BCS \#2 |
| 3 | Colorado | 7.28 | AQ Big 12 |
| 4 | Oregon | 8.67 | AQ PAC 10 |
| 5 | Florida | 13.09 | At large |
| 6 | Tennessee | 14.69 |  |
| 7 | Texas | 17.79 |  |
| 8 | Illinois | 19.31 | AQ Big 10 |
| 9 | Stanford | 20.41 |  |
| 10 | Maryland | 21.29 | AQ ACC |
| 11 | Oklahoma | 21.54 |  |
| 12 | Washington State | 26.91 |  |
| 13 | LSU | 27.73 | AQ SEC |
| 14 | S. Carolina | 37.77 |  |

## What actually happened

NCG-Rose: Miami 37
Nebraska 14
Fiesta: Oregon 38 Colorado 16 Orange: Florida 56 Maryland 23
Sugar: LSU 47 Illinois 34
Tennessee, Texas, Stanford, Oklahoma, Washington State and S. Carolina were BCS eligible but not selected.

## Controversy

## Championship selection

The main question was who was Miami(FL) going to get to beat down in the BCS championship game. Nebraska edged Colorado despite losing to them in the Big 12 championship game in the final week of the season. Oregon was in close contention as well.

## Undefeated non-champions

Miami(FL) was the only team to finish the regular season undefeated.

## At large selections

No teams were selected above higher ranked eligible opponents.

## A Tier Based Plus-One

## Semifinals

The games would have been rearranged to prevent teams from the same conference playing in the first round. Miami would have played Colorado and Nebraska would have played Oregon in the semifinal games.

Direct BCS participants
Illinois and Maryland would have earned a direct participation as the highest ranked automatic qualifying champion.

New Championship System

## First round games

LSU would have been guaranteed a first round game.
BYU, Fresno State, Oklahoma, Tennessee, Texas, Florida, Louisville, Stanford, Syracuse and Toledo would have been eligible for a second bowl game.

Possible first round games:
Mid-West: BYU vs. Oklahoma
North: Tennessee vs. Louisville
South: LSU vs. Texas
West: Fresno State vs. Stanford

## A Flexible Championship System

## Tournament

Miami, Nebraska, Colorado and Oregon would have qualified as the top group of teams.

Miami (FL) would host Oregon in the Orange Bowl while Nebraska and Colorado play in the Wild Card Game. The winners would advance to the National Championship Game.

Possible BCS Bowls
Fiesta: Texas vs. Maryland
Rose: Illinois vs. Stanford
Sugar: LSU vs. Oklahoma

New Championship System

2000

| Rank | Team | BCS | Notes |
| :--- | :--- | ---: | :--- |
| 1 | Oklahoma | 3.30 | AQ Big 12 |
| 2 | FSU | 5.37 | AQ ACC |
| 3 | Miami(FL) | 5.69 | AQ Big East |
| 4 | Washington | 10.67 | AQ PAC 10 |
| 5 | Virginia Tech | 12.20 |  |
| 6 | Oregon State | 14.68 | At large |
| 7 | Florida | 14.75 | AQ SEC |
| 8 | Nebraska | 18.22 |  |
| 9 | Kansas State | 24.30 |  |
| 10 | Oregon | 24.32 | $3^{\text {rd }}$ team |
| 11 | Notre Dame | 25.07 | At large |
| 12 | Texas | 27.22 |  |
| 13 | Georgia Tech | 29.62 |  |
| 14 | TCU | 33.01 |  |
| 17 | Purdue | ??.?? | AQ Big 10 |

What actually happened

NCG-Orange: Oklahoma 13 FSU 2
Sugar: Miami(FL) 37 Florida 20 Rose: Washington 34 Purdue 24 Fiesta: Oregon State 41 Notre Dame 9

Virginia Tech, Nebraska, Kansas State, Oregon, Texas, Georgia Tech and TCU were BCS eligible but not selected.

Under the current rules TCU would have earned an automatic qualification.

## Controversy

## Championship selection

FSU and Miami were practically tied with FSU coming out ever so slightly ahead in the standings despite having beat Miami earlier that season.

## Undefeated non-champions

No teams finished the regular season undefeated in 2000
At large selections
Oregon State was selected over Virginia Tech but most of the complaints came against Notre Dame being selected over Virginia Tech, Nebraska and Kansas State.

This was the third year in a row Kansas State sat out while a lower ranked team qualified.

A Tier Based Plus-One

## Semifinals

Oklahoma would have played Washington and FSU would have played $\operatorname{Miami}(\mathrm{FL})$ in the semifinals.

New Championship System

## Direct BCS participants

Florida would have qualified as a direct participant for being the highest ranked automatic qualifying conference champion. Purdue would have qualified due to not winning enough games to be eligible for two bowls.

First round games
TCU would have been guaranteed a spot in the first round games.
Kansas State, Virginia Tech, Auburn, Georgia Tech, Nebraska, Notre Dame, Oregon, Oregon State, and Texas would have been eligible for a second bowl game.

Possible first round games:
Mid-West: Oregon vs. Kansas State
North: Notre Dame vs. Nebraska
South: Virginia Tech vs. Texas
West: Oregon State vs. TCU

## A Flexible Championship System

## Tournament

Oklahoma, FSU and Miami(FL) would have qualified as the top group of teams.
Florida State would have played Miami(FL) in the Wild Card Game for the opportunity to play Oklahoma in the National Championship Game.

## Possible BCS Bowls

Orange: Virginia Tech vs. Georgia Tech
Sugar: Florida vs. Notre Dame
Rose: Oregon State vs. Purdue
Fiesta: Nebraska vs. TCU

1999

| Rank | Team | BCS | Notes |
| :--- | :--- | ---: | :--- |
| 1 | FSU | 2.24 | AQ ACC |
| 2 | Virginia Tech | 6.12 | AQ Big East |
| 3 | Nebraska | 7.42 | AQ Big 12 |
| 4 | Alabama | 12.11 | AQ SEC |
| 5 | Tennessee | 13.71 | At large |
| 6 | Kansas State | 15.23 |  |
| 7 | Wisconsin | 16.71 | AQ Big 10 |
| 8 | Michigan | 18.08 | At large |
| 9 | Michigan State | 19.11 | $3^{\text {rd }}$ team |
| 10 | Florida | 23.06 | $3^{\text {rd }}$ team |
| 11 | Penn State | 28.75 | $3^{\text {rd }}$ team |
| 12 | Marshall | 31.15 |  |
| 13 | Minnesota | 33.61 | $3^{\text {rd }}$ team |
| 14 | Texas A\&M | 34.76 |  |
| 22 | Stanford | $? ? . ? ?$ | AQ PAC 10 |

qualification.

## What actually happened

NCG-Sugar: FSU 46 Virginia Tech 29
Orange: Michigan 35 Alabama 34(OT)
Fiesta: Nebraska 31 Tennessee 21
Rose: Wisconsin 17 Stanford 9
Kansas State, Michigan State, Florida, Penn State, Marshall, Minnesota and Texas A\&M were BCS eligible but not selected.

Under the current rules Marshall would have earned an automatic

## Controversy

## Championship selection

FSU had a solid lead on everyone but Nebraska and Virginia Tech were in a dead heat for the second spot in the championship game. The fact that Nebraska had a loss reduced complaints about the selection of undefeated Virginia Tech over them.

## Undefeated non-champions

In addition to FSU and Virginia Tech, Marshall finished the season undefeated and beat BYU 21-3 in the Motor City Bowl.

At large selections
Michigan was selected over a higher ranked Kansas State.

## A Tier Based Plus-One

## Semifinals

FSU would play Alabama and Virginia Tech would play Nebraska in the semifinal games.

New Championship System

## Direct BCS participants

Stanford and Wisconsin would have qualified for direct participation due to not qualifying for a second bowl.

## First round games

Marshall would have been guaranteed a spot in the first round games.
Kansas State, East Carolina, Florida, Michigan, Michigan State, Penn State, Tennessee and Texas would have been eligible for a second bowl.

Possible first round games:
Mid-West: Michigan State vs. Kansas State
North: Marshall vs. Michigan
South: Tennessee vs. East Carolina
West: Texas vs. Florida

## A Flexible Championship System

## Tournament

Florida State, Virginia Tech and Nebraska would have qualified as the top group of teams. Marshall would have qualified for being undefeated.

Since Marshall is not in the top 8 of the standings and would not face three rounds the next group of teams would be added. This group consisted of Alabama, Tennessee, Kansas State, Wisconsin, Michigan, Michigan State and Florida. Since this would expand the field past 8 teams the largest gap allowing a field between 5 and 8 would be used. This gap occurred between Alabama and Tennessee, so only Alabama would have been added.

On December 19th or 20th Alabama would host Marshall for the opportunity to play Florida State in the Orange Bowl. Virginia Tech and Nebraska would play in the Wild Card Game. The winners would advance to the National Championship Game.

Possible BCS Bowls
Sugar: Tennessee vs. Southern Mississippi
Fiesta: Kansas State vs. Georgia Tech
Rose: Wisconsin vs. Stanford
Orange: Michigan vs. Miami(FL)

Three at large spots would have required the BCS eligibility to be lowered to \#18 and the official standings for that year were only released to 15 . With three spots open it is possible the field might have required expanding to 22. Miami(FL), Southern Mississippi and Georgia Tech would have been likely candidates.

Allowing a third team from a conference in the top 14 would have allowed Michigan State, Florida, Penn State, or Minnesota to be selected instead.

1998

| Rank | Team | BCS | Notes |
| :--- | :--- | ---: | :--- |
| 1 | Tennessee | 3.47 | AQ SEC |
| 2 | FSU | 4.91 | AQ ACC |
| 3 | Kansas State | 9.69 |  |
| 4 | Ohio State | 10.37 | At large |
| 5 | UCLA | 10.90 | AQ PAC 10 |
| 6 | Texas A\&M | 15.70 | AQ Big 12 |
| 7 | Arizona | 16.49 |  |
| 8 | Florida | 19.95 | At large |
| 9 | Wisconsin | 21.61 | AQ Big 10 |
| 10 | Tulane | 26.67 |  |
| 11 | Nebraska | 29.06 |  |
| 12 | Virginia | 32.22 |  |
| 13 | Arkansas | 32.28 |  |
| 14 | Georgia Tech | 32.76 |  |
| 15 | Syracuse | 34.80 | AQ Big East |

## What actually happened

NCG-Fiesta: Tennessee 23 FSU 16
Sugar: Ohio State 24 Texas A\&M 14
Rose: Wisconsin 38 UCLA 31
Orange: Florida 31 Syracuse 10
Kansas State, Arizona, Tulane, Nebraska, Virginia, Arkansas and Georgia Tech were BCS eligible but not selected.

Under the current rules Tulane and Kansas State would have earned an automatic qualification.

## Controversy

## Championship selection

A wide gap formed between \#2 and \#3 after Kansas State's season ending loss to Texas A\&M in the Big 12 championship game.

## Undefeated non-champions

In addition to Tennessee, Tulane finished the regular season undefeated and went on to beat BYU 41-27 in the Liberty Bowl.

## At large selections

Ohio State being selected over higher ranked Kansas State was widely overlooked because Kansas State had just lost the Big 12 Champion Game to Texas A\&M.

Florida being selected over Kansas State and Arizona made geographical sense but caused some controversy.

## A Tier Based Plus-One

## Semifinals

Tennessee would have played Ohio State and FSU would have played Kansas State. (Guaranteeing access undefeated teams would have replaced Ohio State with Tulane.)

## Direct BCS participants

UCLA would have received a direct participation as the highest ranked automatic qualifying conference champion. Syracuse would have received a direct BCS participation for not qualifying for two bowl games.

## First round games

Tulane, Texas A\&M and Wisconsin would have been guaranteed a direct participation. Ohio State would have been guaranteed a spot if the top four eligibility rules are used.

Air force, Arizona, Miami (OH), Arkansas, Georgia Tech, Marshall, Michigan, Nebraska, Notre Dame and Virginia would have been eligible for a second bowl.

Possible first round games:
Mid-West: Nebraska(Wisconsin) vs. Texas A\&M
North: Wisconsin (Ohio State) vs. Miami (OH)
South: Tulane vs. Virginia
West: Notre Dame vs. Arizona

## A Flexible Championship System

## Tournament

Tennessee and Florida State would have qualified for being the top group of teams. Tulane would have qualified for being undefeated.

Since Tulane was not in the top 8 and would not have played three rounds the next group of teams would have been added. This next group of teams was Kansas State, Ohio State and UCLA.

The following play-in games would be held on December 19th or 20th:

Tulane @ Kansas State, UCLA @ Ohio State.
The lowest ranked team to advance would play Tennessee in the Sugar Bowl. The other advancing team would face FSU in the Orange Bowl. The winners would advance to the National Championship Game.

Possible BCS Bowls
Rose: Wisconsin vs. Arizona
Fiesta: Nebraska vs. Florida

## Logistical Statistics

## Controversy

Number of close teams left out: 9
Total number of undefeated teams: 26
Number of undefeated teams outside the top 2: 12
Number of undefeated teams in excess of two: 7
Number of undefeated teams outside the top 4: 8
Number of undefeated teams in excess of 4:2
Number of undefeated teams outside the top 8: 5
Number of undefeated teams in excess of 8: 0
Number of undefeated teams left out of the BCS: 4
Number of at large teams selected with higher ranked eligible teams available: 8 Number of teams not selected with lower ranked at large bid made: 10
Number of years all at large bids were the highest ranked teams available: 6

## A Tier Based Plus-One

Number of years with an AQ champion with less than 9 FCS wins: 5
Number of AQ champions with less that 9 FCS wins: 6
Number of years with more than 2 AQ champions with less than 9 FCS wins: 0
Number of years with insufficient teams for 4 first round games: 0

## A Flexible Championship System

2 Teams: 2002
3 Teams: 2005, 2003, 2000
4 Teams: 2006, 2001
5 Teams: 2008, 2004, 1999
6 Teams: 2007*, 1998
7 Teams: 2009
*2007 would have had 2 teams if Hawaii did not qualify due to an insufficient schedule.

Average number of teams: 4.4
Current system used: 1 out of 12 years
BCS Bowls used as semifinals: 11, during 8 of the 12 years
Wild Card Games: 8 out of 12 years
Play-in games: 10, during 6 of the 12 years
Field expanded for low ranked undefeated teams: 3 out of 12 year Cutoff criteria adjustments needed: 1 out of 12 years

Likelihood of more than eight teams going undefeated: 0.4\%. Maximum possible undefeated teams: 14
Maximum possible twelve win undefeated teams: 10
Undefeated teams with less than two quality opponents: 1 out of 26
Teams with less than two quality opponents in 2009: 7

New Championship System
[This article was written in June 2008. The page layout, table names, figure names and numbering have be altered]

## Maximizing the Consensus of a Selection Process Based on a Weighted Borda Count Ranking System.

## Introduction

This paper is motivated by the National Collegiate Athletic Association Division 1 Football Bowl Subdivision postseason design. This system features conference championship games for subgroups within the NCAA D-1 FBS followed by an elaborate system of exhibition games called bowls. Teams are currently limited to a single bowl game.

Prior to 1934 no official national champions were identified. In 1934, and continuously since 1936, the Associated Press has released a Borda count of the top teams in the nation, varying in the number of teams per ballot from ten to the current value of 25 . In 1950 the United Press began publishing a Borda count of the coaches, now run by USA Today. Occasionally the two systems produced different results over the top team causing a split championship.

In 1998 an attempt was made to renegotiate the conference tie-ins for the most exclusive bowl games to allow the top two teams to meet in a national championship bowl game. This necessitated the development of a formula to determine the top two teams. Originally this formula involved a number of ad hoc measures that got adjusted almost annually in response to perceived failings of its calculations.

In 2004 this formula was significantly overhauled to a form that mostly amounts to a weighted Borda count of 114 media representatives and former participants in the sport, 65 current head coaches and six computer ranking algorithms. The three components are weighted equally (BCS pg9). The computer component is not a pure Borda count as the highest and lowest values are dropped to mitigate the effects of outliers.

Two of the six computer ranking algorithms used by the Bowl Championship Series have been published (Colley) (Massey 1997). David Wilson has compiled an extensive "Bibliography on College Football Ranking Systems" with hyperlinks to many of these sources at http://homepages.cae.wisc.edu/~dwilson/rsfc/rate/biblio.html. Articles have been written comparing the results of various ranking methods (Gill) (Stefani). Susan Buchman and Joseph B. Kadane recently analyzed the equal weighting of the
three BCS components finding this was not optimal but within a range of acceptable solutions.

Rather than focusing on the ranking methodology it might be more useful to examine the strengths of various tournament selection processes. David H. Annis and Samuel S. Wu have written an analysis of the commonly proposed alternative formats for this league and include an excellent summary of many of the philosophical and political issues present with each.

This paper focuses on the design of a tournament selection process maximizing the consensus based on Borda count ranking systems. It is likely that a tournament format with a variable number of teams will be able to increase the $95 \%$ confidence limit of the selection consensus regardless of the ranking methodology used. It is likely that the tools used here to measure the consensus for college football will have applications beyond the narrow focus of sports.

Borda Count Properties

| Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1.28 | 0.55 | 28.36 | 9.85 | 50.22 | 9.94 | 71.24 | 14.25 | 96.89 | 6.47 |
| 3.16 | 1.22 | 28.72 | 4.86 | 51.40 | 8.95 | 72.37 | 9.87 | 96.92 | 7.34 |
| 3.37 | 1.38 | 29.19 | 6.51 | 52.43 | 10.92 | 73.17 | 10.29 | 97.70 | 6.65 |
| 3.83 | 1.20 | 29.39 | 8.44 | 53.32 | 6.51 | 74.64 | 14.54 | 97.73 | 8.08 |
| 4.69 | 3.65 | 30.49 | 8.02 | 54.39 | 6.92 | 76.04 | 11.93 | 97.83 | 7.39 |
| 7.43 | 2.09 | 32.11 | 7.40 | 55.80 | 7.37 | 78.25 | 8.03 | 99.70 | 6.55 |
| 7.90 | 2.17 | 32.59 | 8.91 | 56.56 | 10.37 | 79.95 | 10.45 | 100.62 | 5.76 |
| 8.74 | 2.67 | 33.08 | 8.52 | 59.34 | 13.97 | 80.08 | 10.91 | 103.37 | 5.03 |
| 9.72 | 3.71 | 33.21 | 8.56 | 59.96 | 11.75 | 80.16 | 7.89 | 104.36 | 6.87 |
| 10.24 | 3.09 | 34.88 | 11.45 | 61.30 | 7.76 | 82.11 | 7.74 | 104.70 | 8.48 |
| 11.79 | 3.44 | 36.31 | 7.77 | 61.46 | 11.31 | 82.17 | 8.88 | 106.14 | 4.91 |
| 13.22 | 4.07 | 37.25 | 11.35 | 61.53 | 9.82 | 83.77 | 9.99 | 107.10 | 5.02 |
| 13.26 | 4.79 | 37.47 | 16.25 | 61.60 | 11.11 | 84.31 | 6.13 | 107.30 | 5.54 |
| 16.86 | 4.49 | 39.48 | 10.27 | 61.80 | 12.88 | 85.26 | 10.66 | 108.72 | 5.83 |
| 17.13 | 8.36 | 39.58 | 12.08 | 64.27 | 11.10 | 85.66 | 9.11 | 109.68 | 4.79 |
| 18.84 | 4.89 | 39.62 | 7.57 | 64.44 | 10.41 | 85.78 | 8.26 | 109.92 | 5.32 |
| 19.50 | 4.31 | 41.55 | 10.47 | 65.39 | 13.33 | 86.22 | 9.23 | 111.56 | 7.06 |
| 19.65 | 8.80 | 42.29 | 5.86 | 65.99 | 8.58 | 87.34 | 8.10 | 112.67 | 7.22 |
| 20.64 | 5.69 | 43.10 | 7.25 | 66.40 | 11.75 | 87.68 | 11.25 | 113.53 | 3.94 |
| 20.96 | 5.06 | 43.50 | 8.07 | 66.80 | 8.36 | 87.76 | 10.25 | 115.21 | 3.52 |
| 22.57 | 9.67 | 43.51 | 5.51 | 68.43 | 16.46 | 88.99 | 12.05 | 115.25 | 3.38 |
| 23.78 | 5.66 | 45.53 | 9.76 | 68.94 | 11.58 | 92.06 | 9.31 | 116.05 | 3.84 |
| 24.29 | 6.12 | 48.94 | 8.28 | 69.61 | 11.62 | 92.59 | 5.37 | 116.58 | 2.90 |
| 25.45 | 8.38 | 50.00 | 7.42 | 70.20 | 13.10 | 94.12 | 8.86 | 118.73 | 1.74 |

Table 1: Mean and standard deviation for Kenneth Massey's final 2008-09 College Football Ranking Comparison

The final BCS rankings for 2008 can be found at the official BCS website and all previous years can be found in their media guide (FOX) (BCS pgs 19-28). Massey's "College Football Ranking Comparison" provides an independent measure of the population statistics. It also has the added advantage that it includes standard deviation measures and all 120 teams in the results. The mean and standard deviations for all 120 teams for 2008-2009 are given in Table 1 and plotted against each other in Figure 1 (Massey 2009). 2004 featured an unusually large number of undefeated teams, suggesting this year might be problematic for any observed relations. Figure 2 plots the data for 2004-05 (Massey 2005).


Figure 1: Standard Deviation vs. Mean and a quadratic fit for 2008-09
The gaps between the means have a mean of 0.987 with a standard deviation of 0.810 . Since the gap size cannot be negative and the standard deviation is large relative to the mean it is necessary that the distribution of gaps be skewed left significantly. For this discussion gaps will be treated as mutually independent values.

The standard deviation of each team is not independent of its mean. A second degree polynomial curve fit of the standard deviation against the mean gives the equation SD $=-0.0025467 \mathrm{Mean}^{2}+0.32178$ Mean +0.53318 for 2008-09. The plot for 2004-05 gives the curve fit of SD $=-0.002626$ Mean $^{2}+0.32831$ Mean -

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0.25064 . The second derivatives are within $3 \%$ of each other and the vertex in each is slightly on the right side of the middle in both with a value near ten.


Figure 2: Standard Deviation vs. Mean and quadratic fit for 2004-2005
The relation between standard deviation and mean in Massey's "College Football Ranking Comparison" can be fit by a second order polynomial with a maximum near the center that is fairly consistent from year to year, even when an unusually large number of undefeated teams are present.

These results suggest the margin of error for a Borda count is larger in the middle of the results than at the extremes. This could be exacerbated by the distortions of the underlying distribution caused by the polling process, possible causing the ends to contract more than the denser middle to achieve a more uniform density.

If this is a byproduct of the Borda vote process then when only the top 25 teams are polled these same patterns should emerge. In this range a steady increase in the standard deviation with the mean should be expected. These results would be truncated at a point where a significant number of votes would be expected lower than \#25. At a mean of 15 the standard deviation is expected to be 4.8, two standard deviations above where the vote is truncated.

The Harris Interactive poll samples 114 human voters, rather than the computer intensive survey of Massey. The associated press releases votes for several sports including men's and women's basketball. Table 2 lists the mean and
standard deviation of the top fifteen teams for NCAA football, men's basketball and women's basketball after conference championships are determined but before the global postseason structure for each league. These values were generated from the raw votes found at Pollspeak, a poll watchdog website dedicated to analyzing voter anomalies and biases (Pollspeak 2009).

| Football |  | Men's Basketball |  | Women's Basketball |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| Mean | SD | Mean |  | SDean |  |
| 1.43 | 0.76 | 1.58 | 0.62 | 1.00 | 0.00 |
| 2.12 | 0.78 | 1.62 | 0.66 | 2.76 | 0.90 |
| 2.85 | 1.05 | 3.58 | 0.71 | 3.20 | 1.02 |
| 4.39 | 0.99 | 4.25 | 1.56 | 3.53 | 0.83 |
| 4.65 | 0.99 | 4.69 | 1.25 | 5.02 | 1.27 |
| 6.66 | 1.23 | 6.30 | 1.49 | 6.91 | 1.46 |
| 7.25 | 1.32 | 7.00 | 1.42 | 7.53 | 1.39 |
| 7.50 | 1.28 | 8.45 | 1.23 | 7.56 | 1.80 |
| 8.85 | 1.35 | 8.58 | 1.40 | 9.93 | 2.63 |
| 9.56 | 1.04 | 10.39 | 1.37 | 10.22 | 1.62 |
| 12.02 | 1.93 | 11.38 | 2.06 | 10.51 | 1.85 |
| 12.48 | 2.04 | 12.23 | 2.61 | 12.33 | 2.55 |
| 13.59 | 2.70 | 13.18 | 2.24 | 13.71 | 1.97 |
| 15.20 | 2.14 | 15.03 | 2.53 | 14.42 | 3.37 |
| 15.28 | 2.45 | 15.41 | 2.48 | 15.82 | 3.75 |

Table 2: Mean and standard deviation for the top 15 of three different leagues prior to postseason results

All three leagues produce a pattern of increased variance with an increase in the mean over the top fifteen teams demonstrating that it is not the league nor Massey's sampling methods causing these relations. It is interesting that in the case of football the human poll shows half the variance of its computer equivalent despite a very similar number of voters and reliance on the same season data.

A reduction in the overall variance during a season is expected if we view the added information each week as improving our measurements for each team. This is supported by the mean of the top teams having a larger value and a wider dispersion of first place votes at the start of the season.

These patterns appear to be an intrinsic result of the Borda polling process. One could expect this is not specific to the Borda process but an intrinsic issue with any ranking system. The closer two points lie in the ranking the more likely they are to cause disagreement and the closer to the extremes they lie the more likely they are to have a stronger agreement for a similar gap size. The more information is provided the more the rankings improve and the smaller the variations become.

Scheduling paradigms and unexpected outcomes also influence the information content and variance for teams. One simple but effective measure of schedule strength is the number of teams finishing in the final BCS top 25 over the past four years played. Stronger conferences typically get six or seven such games from conference play alone while other conferences may not have any.

With conference schedules occupying 60-75\% of a team's opponents only four games are generally available to compensate for this disparity. Based on the ratio of teams ranked over the past four years to the total number of teams an average of 1.7 such games are available to all teams. Including conference games, only seven teams in 2009 scheduled less than two games against teams that were ranked in the final BCS standings from 2005 to 2008.

If a strong team plays a large number of teams they should beat we don't get as much information to verify our opinions as if they play a larger number of quality opponents. With the large percent of conference games, undefeated teams from weak conferences would be expected to have unusually large variance due to the reduced information value of their conference games. Table 3 lists the teams finishing undefeated since 2004.

| Team | Year | Mean | SD | Fit |
| :---: | :---: | ---: | ---: | ---: |
| USC | $2004-05$ | 1.06 | 0.24 | 0.87 |
| Auburn | $2004-05$ | 2.58 | 1.26 | 1.35 |
| Utah | $2004-05$ | 4.64 | 1.88 | 1.97 |
| Utah | $2008-09$ | 4.69 | 3.65 | 1.99 |
| Boise State | $2006-07$ | 6.76 | 4.41 | 2.59 |

Table 3: Undefeated Teams standard deviation compared to the quadratic fit
These numbers would suggest that all three teams in 2004 were from strong leagues while Utah in 2008 and Boise State in 2006 were not. Utah in 2004 would have been expected to have a higher standard deviation than was found here.

In 2004 Utah was favored to win all of their games, including their Fiesta Bowl win over Pittsburgh. In 2008 Utah defeated a highly favored Alabama in the Sugar Bowl and in 2006 Boise State defeated a highly favored Oklahoma in the Fiesta Bowl.

When only a few top teams are played a win over a big name team works to increase the variance more than to increase the mean.

## Model of the Formula

Each ballot is assumed to be randomly selected from a very large population of opinions. The opinions for each team are assumed to be normally distributed about some value with an independent mean and standard deviation for each team. This allows the generated rankings to be used as an estimate of the mean and standard deviation of opinions for a given team. The standard deviations in the opinions are viewed as originating from an error measure on the strength of the teams represented by the mean.

Given estimates of the mean and variance of the opinions of two teams it is possible to estimate the probability that a random ballot would favor the team with the higher mean using a z-score based on the difference between them and the sum of their variance. This pair wise consensus that team $i$ is better than team $j$ can be defined mathematically.

$$
\text { (1) PairwiseConsensus }(i, j)=\text { CumulativeStdNormalDistribution }\left(\frac{\left(\mu_{i}-\mu_{j}\right)}{\sqrt{\sigma_{i}^{2}+\sigma_{j}^{2}}}\right)
$$

When seeding a tournament some teams often have a guaranteed spot due to having met some requirements while other teams are selected from a pool of teams to fill the remaining slots.

The absolute consensus of a selection process is defined as the probability that a random opinion will agree with all teams selected. This can be estimated by the product of the probability that a selected team is viewed as better than a team that was a possible alternative over all possible options. Let P be the set of pools of teams for the various selection options and $S$ be the set of teams selected.

$$
\text { (2) AbsoluteConsensus }(S, P)=\prod_{P} \prod_{\substack{i \\ j \in \cap \cap \\ j \in P \cap \bar{S}}} \text { PairwiseConsensus }(i, j)
$$

This absolute consensus is very sensitive to the effects of large numbers of small dissents when formats with increasing numbers of teams are examined. Often people look at specific cases where the system appears to fail. The minimum probability that a selected team is viewed as better than a team it was selected over is the maximum case consensus.
(3) MaximumCaseConsensus $(S, P)=\operatorname{Min}_{P} \operatorname{Min}_{\substack{i \in P \cap S \\ j \in P \cap \bar{S}}}$ PairwiseConsensus $(i, j)$

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Often it is desired to determine how much claim a team has to the top spot. This can be defined as the product of the pair wise comparison of that team with every other team if the opinions are treated as independent.

$$
\text { (4) Claim }(i)=\prod_{j \neq i} \text { PairwiseConsensus }(i, j)
$$

## Errors in the Model

The two human polls have been criticized for the potential partiality of the coaches and ties of media and former participants to the colleges they are more familiar with. This presents a regional and historical bias to these polls. The computer ranking algorithms used by the BCS have been limited by not allowing margin of victory to be used in the computer ranking algorithms selected.

This is shown to be significant by the fact that four out of the six computer ranking algorithms used by the BCS picked Utah as the \#1 team after the conclusion of the bowl games while only thirteen of 116 rankings tracked by Kenneth Massey at his "College Football Ranking Comparison" picked Utah (Massey 2009). Most of the remaining 103 rankings selected the BCS champion Florida. Utah was \#4 in the final coaches' poll.

These differences suggest that the three components reflect samples from different populations, not the assumed single population.

The balloting process distorts the normal distribution of opinions by taking the scale the teams are actually measured on and artificially constricting large gaps between teams and expanding densely packed regions. This would cause a significant skew in the distribution of votes near the boarders between densely packed teams and large gaps.

It is likely that the probabilities used to calculate the consensus might not be independent due to the mutual exclusion of the balloting process. Dependencies from the connectedness of the schedules could be expected to be significant as well.

## Absolute Consensus

Table 4 compares the probability that \#1 Florida was better than each of the remaining top five plus a team with significant variance. (Massey 2009).

Utah's mean was further from the top but their higher variance gave them a larger portion of dissent than any other team. Mississippi was not even in the top ten and received a non-trivial percentage of dissent. Beating \#1 Florida and

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losing to \#46 Vanderbilt and \#43 South Carolina provide justifications for the observed very large error measure.

| Team | Mean | SD | Delta | Sigma | Z-score | \%Dissent |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Florida | 1.28 | 0.55 | N/A | N/A | N/A | N/A |
| Texas | 3.16 | 1.22 | -1.88 | 1.34 | -1.40 | $8.00 \%$ |
| USC | 3.37 | 1.38 | -2.09 | 1.49 | -1.41 | $7.97 \%$ |
| Oklahoma | 3.83 | 1.20 | -2.55 | 1.32 | -1.93 | $2.67 \%$ |
| Utah | 4.69 | 3.65 | -3.41 | 3.69 | -0.92 | $17.78 \%$ |
|  |  |  |  |  |  |  |
| Mississippi | 17.13 | 8.36 | -15.85 | 8.38 | -1.89 | $2.93 \%$ |

Table 4: Consensus of the final 2008-09 National Champion
These results alone reduce the absolute consensus of Florida's championship to $65.77 \%$. The remaining teams are more than two standard deviations away, most four or more, significantly reducing their effect. The results accumulate and reduce the absolute consensus to 60.26\%.

| Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1.67 | 0.89 | 24.83 | 8.10 | 47.63 | 13.75 | 70.58 | 8.72 | 96.99 | 6.24 |
| 2.45 | 1.36 | 26.24 | 9.67 | 47.79 | 6.32 | 70.95 | 12.48 | 97.91 | 6.75 |
| 3.05 | 1.24 | 26.70 | 7.06 | 48.28 | 12.78 | 72.26 | 13.00 | 97.94 | 7.42 |
| 5.16 | 2.27 | 27.61 | 8.70 | 54.88 | 7.60 | 72.34 | 10.62 | 98.07 | 6.35 |
| 6.40 | 2.80 | 27.63 | 7.84 | 55.04 | 8.76 | 73.77 | 11.32 | 99.16 | 7.10 |
| 6.75 | 1.84 | 27.99 | 10.46 | 55.25 | 11.07 | 76.04 | 8.73 | 99.56 | 8.22 |
| 6.96 | 1.88 | 32.79 | 5.33 | 55.44 | 10.22 | 78.23 | 7.72 | 100.90 | 5.72 |
| 7.54 | 4.43 | 33.32 | 8.87 | 57.51 | 13.11 | 80.34 | 7.78 | 102.73 | 6.90 |
| 8.62 | 3.21 | 33.49 | 9.07 | 58.43 | 6.52 | 82.92 | 7.55 | 102.98 | 5.31 |
| 10.08 | 2.22 | 36.19 | 8.12 | 58.88 | 9.48 | 83.61 | 9.25 | 104.23 | 9.08 |
| 11.57 | 3.43 | 36.36 | 8.24 | 59.30 | 13.09 | 83.71 | 9.89 | 105.49 | 5.45 |
| 15.25 | 4.99 | 38.73 | 9.19 | 59.66 | 9.73 | 84.34 | 7.41 | 105.81 | 4.45 |
| 16.67 | 4.11 | 38.80 | 8.81 | 61.88 | 10.98 | 84.46 | 7.99 | 106.81 | 5.66 |
| 18.20 | 9.30 | 40.08 | 6.83 | 63.93 | 11.54 | 84.83 | 10.93 | 108.91 | 5.31 |
| 18.92 | 7.39 | 40.35 | 5.90 | 64.89 | 12.40 | 85.24 | 10.23 | 109.87 | 4.93 |
| 18.96 | 5.55 | 44.85 | 8.99 | 65.04 | 6.63 | 86.44 | 6.10 | 110.57 | 4.47 |
| 19.42 | 5.41 | 45.02 | 16.20 | 65.53 | 8.93 | 86.70 | 10.19 | 113.05 | 5.10 |
| 20.24 | 6.11 | 45.33 | 8.17 | 66.35 | 16.53 | 87.31 | 11.21 | 114.04 | 5.96 |
| 21.89 | 7.38 | 45.36 | 10.99 | 66.60 | 11.11 | 88.69 | 8.67 | 114.05 | 3.38 |
| 22.75 | 6.00 | 46.20 | 5.95 | 68.07 | 11.76 | 89.21 | 7.95 | 114.20 | 3.69 |
| 23.18 | 5.64 | 46.31 | 6.29 | 68.16 | 9.52 | 89.41 | 10.06 | 115.58 | 3.48 |
| 23.82 | 7.99 | 46.80 | 11.35 | 69.31 | 15.61 | 89.60 | 11.08 | 115.97 | 2.87 |
| 24.15 | 9.21 | 47.03 | 12.14 | 69.33 | 11.13 | 93.37 | 9.43 | 116.39 | 2.91 |
| 24.73 | 10.81 | 47.27 | 11.36 | 70.42 | 14.11 | 94.33 | 5.61 | 118.84 | 1.60 |

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Table 5: Ranking statistics prior to BCS selection (Massey 2008). Conference champions in bold.

The consensus prior to the BCS selection process can be measured along with the consensus that the process itself selected the proper teams based on the data available. The mean and standard deviations prior to the BCS selections are given in Table 5 (Massey 2008).

The absolute consensus for the top team is found to be $38.29 \%$ before the BCS selections. The BCS is found to have increased the absolute consensus of the champion in a year where the favored team lost.

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The absolute consensus over the selection process was found to be 18.02\%, with a $55.95 \%$ absolute consensus for Oklahoma and a $32.20 \%$ absolute consensus for Florida. It should be noted that the lead contender, Texas, only had an $18.30 \%$ dissent over Oklahoma and a $37.22 \%$ dissent over Florida creating a total dissent of $48.71 \%$. The absolute consensus values are lower from the aggregate effect of almost a dozen teams with $90-99 \%$ agreement that the correct selections were made.

Consensus over the selection of two teams in 2008 to play for the title was significantly less than the consensus of who the top team was, before or after the championship game was played. There would have been less absolute dissent over the championship system without a designated national championship game than was generated by select teams for this game. The absolute consensus for the selection of the top four teams would have been $2.61 \%$.

Adding more teams will increase the absolute consensus of the teams already selected by the amount of the added teams' dissent, but all omitted teams' dissent to the new teams would be expected to significantly reduce the absolute consensus further than these gains.

One method of increasing absolute consensus is to determine pools of preferred teams such as conference champions and undefeated teams. The consensus for these selection methods is tied to the popularity of the criteria more than the opinions of the teams from different pools. Another method is to add eligibility requirements such as winning 10 games or not losing more than 2 games. These increase absolute consensus by eliminating large numbers of teams with small but accumulative dissent.

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The National Football League uses a widely accepted tiebreaker process to build consensus for playoff and draft pick selections. The success of this method demonstrates the effectiveness of the principles above but relies on the near equal schedule strengths found in this league.

The figures here assume the selection criteria themselves do not cause dissent. The absolute consensus in 2008 for selecting the top two conference champions in would have been $48.62 \%$ and $9.95 \%$ for the top four conference champions.

A selection process that invited all undefeated teams and then selected the cutoff location that maximized the agreement of the adjacent teams at the cutoff could be expected to produce a relatively high degree of consensus at the cost of producing a variable number of teams. This variable selection method directly improves the maximum case consensus discussed later.

In 2008 Utah and Boise State went undefeated and would have been selected. The highest consensus found between consecutive teams was $79.27 \%$ between \#3 Texas and \#4 USC. This format would have five teams and an absolute consensus of $24.86 \%$.

An analysis over a number of years is needed to rule out the possibility that these results are anomalous and to get a better feel for the variations in these percentages. These values are produced for 2004 through 2008 in Table 6.

| Year | Champion | $\# 1$ | Top 2 | Top 4 | Top 2 CC | Top 4 CC | Variable | Public |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | $60.26 \%$ | $38.29 \%$ | $18.02 \%$ | $2.61 \%$ | $48.62 \%$ | $9.95 \%$ | $24.86 \%$ | $24.86 \%$ |
| 2007 | $31.61 \%$ | $6.67 \%$ | $1.18 \%^{*}$ | $0.07 \%$ | $6.94 \%$ | $9.94 \%$ | $0.06 \%$ | $0.06 \%$ |
| 2006 | $25.87 \%$ | $46.01 \%$ | $6.90 \%^{*}$ | $0.43 \%$ | $21.85 \%$ | $15.65 \%$ | $0.83 \%$ | $0.48 \%$ |
| 2005 | $82.65 \%$ | $51.47 \%$ | $48.80 \%$ | $11.32 \%$ | $66.77 \%$ | $27.55 \%$ | $48.80 \%$ | $11.32 \%$ |
| 2004 | $79.66 \%$ | $54.77 \%$ | $48.35 \%$ | $4.40 \%$ | $58.79 \%$ | $39.00 \%$ | $27.83 \%$ | $27.83 \%$ |

Table 6: Comparison of the absolute consensus for various ranking methods over a 5 year period. * in 2006 and 2007 the College Football Ranking Comparison disagreed with the BCS over the top 2 , using the actual teams selected would have reduced these numbers.

It is apparent that in 2008 the variable selection method significantly outperformed its normal performance relative to the current process of selecting the top two teams. The variable selection method has consistently outperformed a four team system despite typically using a similar number of teams. The public version discussed below loses some value but still performs near or better than the four team method. 2006 is the only year examined where the current system failed to increase the absolute consensus of the top team.

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## Maximum Case Consensus

A 95\% confidence limit for the maximum case consensus can determined for fixed number of selections using the empirical distribution of gaps in Table 1 with the curve fit of Figure 1 to determine the standard deviation at the 1.5, 2.5 and 4.5 cutoffs. For six possible cutoff values it is $95 \%$ likely that at least one will be in the lower $55 \%$. A standard deviation at a cutoff of 8.15 was used for the public method ( $95 \%$ of the way from 2.5 to 8.5 ). $50 \%$ confidence limits can be generated in a similar manner and be compared to the averages but the cutoff for the public method should be changed to 5.0. All cutoff values are scaled from the fixed point of 60.5 by the gap mean of 0.987 and the variances of the curve fit are doubled to represent the sum of the two teams. Difficulties not addressed here are present when determining the confidence limits for the variable method above, using only conference champions and handling the effects of including a championship game. The maximum case consensus from 2004 to 2008 is displayed in Table 7 along with these confidence limits.

| Year | Champion | Top 1 | Top 2 | Top 4 | Top 2 CC | Top 4 CC | Variable | Public |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | $82.22 \%$ | $68.44 \%$ | $62.78 \%$ | $63.46 \%$ | $84.71 \%$ | $56.54 \%$ | $79.27 \%$ | $79.27 \%$ |
| 2007 | $78.50 \%$ | $53.14 \%$ | $61.99 \%^{*}$ | $58.85 \%$ | $61.99 \%$ | $71.48 \%$ | $64.79 \%$ | $64.79 \%$ |
| 2006 | $66.75 \%$ | $82.61 \%$ | $60.25 \%^{*}$ | $65.08 \%$ | $53.95 \%$ | $71.76 \%$ | $65.08 \%$ | $77.23 \%$ |
| 2005 | $95.09 \%$ | $68.66 \%$ | $89.88 \%$ | $68.66 \%$ | $89.88 \%$ | $68.23 \%$ | $89.88 \%$ | $68.23 \%$ |
| 2004 | $88.20 \%$ | $71.32 \%$ | $83.89 \%$ | $52.55 \%$ | $83.89 \%$ | $78.85 \%$ | $87.48 \%$ | $87.48 \%$ |
|  |  |  |  |  |  |  |  |  |
| Ave | $82.15 \%$ | $68.83 \%$ | $71.76 \%{ }^{*}$ | $61.72 \%$ | $74.88 \%$ | $69.37 \%$ | $77.30 \%$ | $75.40 \%$ |
| $50 \%$ |  | $70.03 \%$ | $65.22 \%$ | $61.15 \%$ |  |  |  | $72.03 \%$ |
| $95 \%$ |  | $51.13 \%$ | $50.91 \%$ | $50.66 \%$ |  |  |  | $59.15 \%$ |

Table 7: Maximum case consensus over a 5 year period. * see Table 6.
These numbers are far closer than the absolute consensus where the differences were of order of magnitude. Again we see that the championship game tends to increase consensus of the champion, with 2006 being the only exception. Several of the selection processes generate more maximum case consensus than simply selecting the top team.

The five year average and 50\% confidence level are in reasonable agreement. The $95 \%$ and $50 \%$ confidence levels clearly show that including more teams decreases the maximum case consensus when comparing tournaments with fixed numbers of teams.

The variable selection method has the best average performance, typically generating a consensus near three to one. Its true value is demonstrated when one examines the $95 \%$ confidence levels. A fixed structure can end up arbitrarily close to $50 \%$ while a variable format can be expected to maintain a consensus over 60\%.

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## Championship Claim

Table 8 shows the significant championship claims defined in equation 4.
The championship claims quickly drop off to 0 very rapidly as more teams with significant percentages above them are included. Utah's claim increased by a factor of 307 , demonstrating that one week can have significant effect on this value. The sum of championship claims who played vary significantly for teams how played head to head signifying a very nonlinear relation between championship claims and games. The championship claim for Texas was reduced significantly despite convincingly winning their bowl game.

| Before Bowls |  | After Bowls |  |
| :---: | ---: | :---: | ---: |
| Oklahoma | $38.29 \%$ | Florida | $60.26 \%$ |
| Florida | $10.17 \%$ | Texas | $1.32 \%$ |
| Texas | $2.81 \%$ | USC | $0.91 \%$ |
| Alabama | $0.03 \%$ | Oklahoma | $0.13 \%$ |
| Total | $51.29 \%$ | Utah | $0.19 \%$ |
|  |  | Total | $62.81 \%$ |

Table 8: Championship claims over 0.005\% before and after the 2008-2009 bowl season.

The championship claims also don't add up to $100 \%$. If we treat the opinions as independent then we cannot assert that opinions must be transitive, as transitivity requires a strong dependence. This would require us to consider all potential graphs of opinions between teams.
(5) opinionGraphNumber $($ teams $)=2^{\binom{\text {teams }}{2}}$

Most of these graphs do not have a unique team at the top. Graphs with Florida, Texas and USC at the top in either of the two orders of a rock-paper-scissors like formats account for $0.40 \%$ of the total after the bowls. It might be better to claim that the remaining votes don't accept that there is a clear champion. These results certainly raise some questions about these methodologies.

It is clear that this measure of total championship claim increased from 51.29\% to $62.81 \%$ due to the 2008-2009 bowls. It is not clear what these graphs represent. It is likely that synergisms of the following factors are in play.

1) A faithful representation of actual non serialized opinions
2) A byproduct of a failure to account for the transitivity of the Borda votes
3) A byproduct of using a probability measure as a Boolean comparison
4) Some unidentified factor

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## Intensity

A major factor this analysis does not include is the intensity of the opinions. The amount of consensus has been demonstrated to decrease the further from the top one draws the cutoff. It is often the case that fan interest also diminishes the further from the top a team is in a given year.

In NCAA D-1 Basketball a battery of ranking systems are sifted by a selection committee to seed teams for a 65 team tournament. The selection committee is needed because with this large of a field there is little agreement about the order of the group of ten to twenty teams near the cutoff, much less if the last team in is better than the last team out. It should also be noted that roughly sixteen automatic spots for low ranked conference champions fill the bottom of the seeding each year with little controversy. The consensus of the selection process is essentially zero with everyone following the sport having a team or two they felt should have been in instead of someone else.

The teams near the boarder line occasionally make it past the first two rounds but rarely make it to the semifinals. I am not aware of any at-large team from the last eight selected making it to the championship game. While many teams each year feel left out of the tournament, none feel entitled to a claim of the title.

2004 is the only year from 2004 to 2008 where the \#1 team beat the \#2 team in the BCS national championship game. 2005 is the only year during this period where no other team expressed that they deserved to be in consideration for a shot at the national title.

If a tournament could be run where the teams near the cutoff do not earn their way to the final rounds this would be the preferred system. Once teams near the cutoff begin to approach the title game pressure will build to add more teams to the structure.

In 1970 the National Football League replaced tiebreaker games with extensive tiebreaker procedures and fixed wild card games. The number of participating teams has grown over the years as wild-card teams have increased their success in the playoffs. This expansion would be anticipated by the results above for a field with a fixed number of entrants and successful performance of the wildcard teams.

The length of the regular season and physicality of the game of football put significant limits on the number of games a team should be allowed to play. Other NCAA football leagues feature formats that require up to sixteen games total. With thirteen game regular seasons possible in NCAA D-1 FBS three
rounds are available for the postseason. This sets a limit of eight teams for a single elimination tournament.

Three rounds are not enough to prevent statistical variances in performance from allowing low seeds to advance to the title game (or even win the title). The intensity for a fixed tournament format of at most eight teams is likely to be very highly dependent on the consensus of its selection process.

## A Practical Method

The data studied here included measures of standard deviation while the BCS ranking processes used do not address the related issues of the variance of the components of the poll needed to calculate the uncertainty between consecutive teams. These calculations are not trivial and an acceptable selection process should be designed for public consumption.

The general public can understand that the number of available slots must be constrained to a predetermined range. If the differences in the standings are emphasized most would be able to see that wider gaps represent significant differences and narrow gaps represent nearly equal teams. Many would not readily accept that a smaller gap higher in the rankings could be more significant than a larger gap lower in the rankings.

A simplified system based on these observations would:

1) Include all undefeated teams
2) Include the top two teams
3) Use the largest gap in the rankings allowing between two and eight teams to participate

Personal observations of historical poll dynamics suggest that an undefeated team ranked worse than \#8 should have at least three rounds to guarantee they are able to pass teams ahead of them but not selected, thus the largest gap allowing five to eight teams should be used in this case.

Concerns over teams weakening their schedule to increase their odds of going undefeated can be mitigated by setting minimum scheduling requirements to qualify. Requiring teams to play at least two teams that have been ranked in the final BCS top 25 in the past four years is not an unreasonable limit to impose on teams desiring to qualify as an undefeated team given the current conference scheduling paradigms.

Using gaps instead of a set cutoff would also decrease the moral hazards present when coaches with possible league affiliations and personal ties to teams near the cutoff are a part of the selection process. It would be significantly New Championship System
harder to manipulate the presence or location of a large gap than to manipulate the order of two closely ranked teams.

Using gaps also necessitates a format able to handle a variable number of games. Major League Baseball and Major League Basketball both feature the possibility of a one game playoff prior to the formal postseason tournament. Both formats feature series with a variable number of games at each round. The longest running unmodified format in the history of the NFL postseason included the possibility of tiebreaker divisional games before the championship game from 1933 through 1966. All of these systems require the ability to be more flexible with the locations and dates of the games with less notice than would be necessary for the NCAA D-1 FBS postseason with a variable selection method.

The NCAA D-1 FBS is contractually obligated to the current system until 2014. To produce a robust system for 2014 the new contracts will need to be finalized during the 2013 offseason. If the contracts are to be finalized in 2013 then an agreement as to the structure to be finalized will be needed during the 2012 offseason. To select a structure in 2012 it will be required to compile a list of robust designs during the 2011 offseason. To compile a list of robust designs for 2011 the leaders of the NCAA D-1 FBS need to determine rubrics that represent the ideals such a system should strive for in 2010.

On July $2^{\text {nd }} 2009$ a concrete structure implementing a qualification based tournament selection method was included as an appendix to a business plan submitted to the BCS to survey the ideals desired of the NCAA D-1 FBS postseason, systematically review all proposed alternatives and implement all agreed upon improvements for the 2014 season.

## Conclusion

Analyzing an explicit example of Borda counts revealed a pattern where the variance was a quadratic function of the mean. This observation was found in several Borda counts truncated at a cutoff.

Undefeated teams from weak conferences are a source of NCAA D-1 FBS teams with a high enough variance to cause controversy. The presence of such teams outside the tournament structure also provides significant philosophical objections to the official championship process.

The current NCAA D-1 FBS postseason format was found to increase the absolute consensus over the top team in four of the last five years. The process of selecting the top two teams had less absolute consensus than the top team before or after the championship game was played. This is shown to be worse for a four team tournament demonstrating that including more teams produces less
absolute consensus. 2004 had five undefeated teams suggesting that a field of four teams in not sufficient.

Restricting the field of eligible teams to conference champions significantly increases the absolute consensus but does not guarantee the top two teams will participate. It is even possible that a team can be ranked \#1 without winning their conference.

Including all undefeated teams and using the consecutive teams with the highest agreement between them to be the cutoff significantly outperformed a four team tournament while allowing a similar number of teams. This method also directly addresses a major philosophical objection to the current process but requires a variable number of teams per year.

The maximum case consensus for the variable selection method was found to maintain a 95\% confidence limit just under 60\% and averaged near three to one from 2004 to 2008. No process with a fixed number of teams can guarantee better than a $50 \%$ maximum case consensus and none were found to exceed a three to one average.

The absolute and maximum case consensus of the champion are both increased as a result of a championship game. Increasing the number of participants is likely to increase the effect of this tournament boost in consensus. Increasing the number of participants also decreases the expected consensus of the selection process for fixed numbers of teams.

The consensus of the selection process could be made irrelevant if the field is large enough that teams near the cutoff never make it to the final rounds. Established limits for the sport of football prevent a field this large from being practical.

Some are in favor of a quantitative boycott of the BCS due to its disregard for traditional statistical methodologies (Stern). It is far more productive to quantify weaknesses of the current system and design alternatives that yield improvements.

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## Postseason Ideals and Application

## Introduction

The principle parties in the postseason discussion are (in order of priority) the players \& coaches, NCAA, institutions \& conferences, bowls, TV networks and fans. The following table lists the established ideals and a best estimate as to how each principle party values each ideal. The ideals are arranged in the order of the highest priority party where a difference in opinion occurs.

|  |  |  |  | $\begin{aligned} & \infty \\ & 3 \\ & 0 \\ & 0 \end{aligned}$ | $\gtrless$ | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enhance the value of the regular season | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Restore the value of the bowl tradition | $\checkmark$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |
| Enhance the student athlete's bowl experience | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |  |  |
| Reduce the logistical issues for the teams and fans | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  |  | $\checkmark$ |
| Improve the academic success of the students | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ |  |  |  |
| Allow all conference champions a chance to win the national championship | $\checkmark$ | $\checkmark$ | $\checkmark$ | X | $\sqrt{ }$ | $\checkmark$ |
| Allow the best teams to prove their worth on the field | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | X | $\sqrt{ }$ | $\checkmark$ |
| Respect the health of the players due to extra games | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | X | X | X |
| Reduce the moral hazard of the selection process | $\checkmark$ | $\sqrt{ }$ |  |  |  | $\checkmark$ |
| Determine a widely accepted national champion | $\checkmark$ | $\sqrt{ }$ |  | X |  | $\checkmark$ |
| Fair venues | $\checkmark$ | $\sqrt{ }$ |  | X |  | $\sqrt{ }$ |
| Reward champions of the top conferences | $\checkmark$ |  | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |
| Prevent unworthy teams from having a chance at the national title | $\checkmark$ |  | $\checkmark$ | $\sqrt{ }$ |  |  |
| Reduce controversy to a manageable level | $\checkmark$ |  |  |  |  | $\checkmark$ |
| Avoid competing with the NFL for viewership |  | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ |
| Improve the financial success of proven championship contenders |  | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ | $\sqrt{ }$ |  |
| Maintain current level of sponsor involvement |  | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  |
| Improve the financial strength of the bowl system |  | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ |  |
| Long term stability |  | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |  |  |
| Reduce logistical issues for game organizers |  | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |  |  |
| Be legal |  | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ |  |  |
| Minimize the number of games in the season |  | $\sqrt{ }$ |  |  | X | X |
| Respect the established postseason time periods |  | $\checkmark$ |  |  | X | X |
| Respect the travel costs of the fans |  |  | $\checkmark$ | X |  | $\checkmark$ |

Seven different postseason designs will be examined to see how they compare and to give concrete examples of each constraint. A summary of these results is given below. This evaluation was inspired by a similar evaluation by the Enhanced Bowl System. ${ }^{6}$

|  | 0 3 0 0 0 0 | 0 <br> 0 <br> 0 <br>  <br>  <br> 0 |  |  |  | $\begin{aligned} & \overline{0} \\ & 0 \\ & 0 \\ & \text { O} \\ & \text { o } \\ & 0 \\ & \vdots \\ & \sum \end{aligned}$ |  | $\begin{aligned} & \frac{c}{0} \\ & \overline{0} \\ & \mathbb{N} \\ & \mathbb{N} \\ & 0 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enhance the value of the regular season | + | - | $\checkmark$ | $\checkmark$ | + |  | - | - |
| Restore the value of the bowl tradition | $\checkmark$ | + | + | $\checkmark$ | $\checkmark$ | - | - | X |
| Enhance the student athlete's bowl experience | + |  | + | + | + |  | $\checkmark$ | - |
| Reduce the logistical issues for the teams and fans | $\sqrt{ }$ | $\checkmark$ | + | - | X | X | X | - |
| Improve the academic success of the students | + |  |  |  |  | - | - | - |
| Allow all conference champions a chance to win the national championship | - |  | + | + | + | + | $\checkmark$ | $\sqrt{ }$ |
| Allow the best teams to prove their worth on the field | + |  | + | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ |
| Respect the health of the players due to extra games | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ | + | + | + |  |  |
| Reduce the moral hazard of the selection process | $\sqrt{ }$ |  | - | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ | - | - |
| Determine a widely accepted national champion | X | X | + | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Fair venues |  | + | + | - | - | + | - | - |
| Reward champions of the top conferences | $\sqrt{ }$ | $\checkmark$ | + | - | + | - | - | - |
| Prevent unworthy teams from having a chance at the national title | $\checkmark$ | $\sqrt{ }$ | + | $\checkmark$ | $\checkmark$ |  | - | - |
| Reduce controversy to a manageable level | X | X | - | $\checkmark$ | $\checkmark$ |  | + | + |
| Avoid competing with the NFL for viewership | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ |
| Improve the financial success of proven championship contenders | - |  | $\checkmark$ | $\checkmark$ | + | + | $\checkmark$ | $\sqrt{ }$ |
| Maintain current level of sponsor involvement | - |  | + | + | + | + | $\checkmark$ | $\checkmark$ |
| Improve the financial strength of the bowl system | - |  | $\checkmark$ | $\checkmark$ | + |  | + | - |
| Long term stability | $\sqrt{ }$ | X | - | $\checkmark$ | $\checkmark$ | - | + | + |
| Reduce logistical issues for game organizers | $\checkmark$ | $\checkmark$ | - | X | X | + | - | - |
| Be legal | - |  | + | + | + | + | + | + |
| Minimize the number of games in the season | $\sqrt{ }$ | $\sqrt{ }$ | + | + | + | + | - | - |
| Respect the established postseason time periods | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | + | - |
| Respect the travel costs of the fans | $\sqrt{ }$ | $\checkmark$ | + | + | + | - | - | - |

[^4]The first phase of this plan is to formally determine the actual ideals of the principle parties to firmly establish what aspects of the current design deserve the most attention.

## Enhance the value of the regular season

College football is unique among sports in its compelling and marketable regular season. The limited postseason and significance of the rankings play a large part in this value.

Each week during the regular season generates more revenue for college football than the BCS bowls. To expand a playoff to the point where weeks of the regular season need to be removed would require doubling or tripling the current BCS revenue. The Enhanced Bowl System references a source indicating this is possible for their design but this is far from a guarantee. This would also need to be after the added travel costs of the participating teams are taken out as well.

Regularly including teams with more than one loss would reinforce the idea that a single tournament loss is more significant than two, three or even four regular season losses. This would be highly distasteful to many associated with college football.

## Old Bowl System

Originally the bowls were purely exhibition games played after the national championship was determined immediately after the regular season. Eventually it was decided to crown the national championship after the bowls because this was a large proportion of the games where the top teams played each other.

The old bowl system strongly maintained the value of the regular season games by having only a single game in the postseason to reward the top teams.

## BCS

One of the major complaints against the BCS is that it appears to encourage top teams to weaken their out of conference games to avoid the severe risk of potential losses.

The PAC 10 considered going to an eight game conference format so each team played one less conference game (and five less guaranteed conference losses

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per year) for this reason. Florida State Head Coach John Fisher plans to make similar adjustments to FSU's scheduling philosophy ${ }^{7}$.

## A Tier Based Plus-One

Teams out of the national championship race attempting to earn those final wins needed to earn a second bowl berth would make more regular season games meaningful. The championship field is not expanded to where teams with multiple losses would be regularly included in the championship race.

Allowing all teams with nine FBS wins to be eligible for a second bowl game creates a financial pressure to reduce the number of FCS opponents greater than the improved chance to participate in the tournament FCS opponents would allow, producing an incentive to create more competitive regular season games.

## A Flexible Championship System

Opening access to the national championship game allows more teams to be a part of the championship race at the end of the season.

The criteria are such that a late season loss would still be likely to cost a team a chance at the tournament and would definitely cost them the honor of being the team that decides which BCS bowls are selected as semifinals.

## MWC Proposal

The MWC Proposal is fairly neutral to the regular season. The risk of including teams with multiple losses is minimal and no reduction in the regular season is called for. More two and three loss teams would be included with this design.

## Enhanced Bowl Season

The Enhanced Bowl System claims to only require four tournament games for a total of sixteen games, implying a removal of conference championship games and extra games for playing at or being Hawaii.

Conference championships are not going away any time soon.

## The Wetzel Plan

Dan Wetzel uses unranked candidates who win conferences with three or four losses as pseudo bye weeks, arguing the added games increase the revenue for the highly ranked teams that would be hosting them.

[^5]Upsets would reinforce the idea that one playoff loss is equal to the three or four regular season losses. This is opposed to the expressed desires of those who are closest to the game.

Upsets would also build pressure over time to expand the format, requiring a shortening of the regular season.

## Restore the value of the bowl tradition

New Year's Day was once a celebration of elite college football. Bowls were once played in order of increasing prestige. Bowls were once limited in number to maintain the significance of their reward.

The recent bowl creep and (to a lesser degree) the BCS have eroded these traditions.

Selecting participants and maintaining relationships with conferences are major parts of the major bowls' self image. Most major bowls will not agree to be hosts for seeded games with arbitrary participants. The New Year's Day and New Year's Eve dates are also largely non negotiable.

The BCS bowls expect to have teams from the top 10 in most years. Having them as an outside NIT like role after the tournament selection will not achieve this. Consolation games and third place games have never worked in any league. The BCS bowls will not agree to become games for those eliminated from the tournament alone.

## Old Bowl System

No one values the bowls more than the bowls themselves. A designated championship game takes away from the old bowl system's ability to generate several games that could be viewed as championship games depending on regional interests.

While failing to provide a consensus champion at the national level, compelling games were produced with excellent regional interest and strong national interest.

New Year's Day was a celebration of elite football. Games were played in increasing order of prestige. Bowl games were limited to maintain their value as a reward for the top teams.

The recent proliferation of bowls is not likely to be undone and contributes to the erosion of the bowl tradition. Adding strong tier divisions to the bowl selection process would help restore this value.

## BCS

The current system is designed to work within the current system with as little disruption as possible. To a large degree it has been successful but the traditional tie-ins are regularly disrupted and the traditional bowl timing has been spread over a wider time period.

An authoritative national championship game reduced the luster of games that once could often claim a share of legitimacy as a title game.

## A Tier Based Plus-One

This design builds on the strengths of the bowls by adding more opportunities for the existing bowls to bid on ranked teams. The BCS bowls could be restored to their traditional dates and times and would have a majority of teams who had to win their way into these games.

While they are respected, the BCS bowl tie-ins would be disrupted more than the current designs.

## A Flexible Championship System

This design keeps the BCS bowls at a level of prestige near the semifinals and maintains the number and quality of teams available for all remaining teams.

This design is not incompatible with the idea of allowing top teams not selected for the tournament to play a second bowl game but this would cause more variability in the selection options for the remaining bowls.

## MWC Proposal

The MWC proposal significantly impacts the conference tie-ins for the four BCS bowls. It does maintain a field of eligible teams that is constant for all other bowls.

## Enhanced Bowl Season

This design argues that using the bowls as tournament games builds their tradition. Allowing smaller bowls to participate as the first round games would certainly increase their marketability. Bowls just short of BCS status would be better served remaining outside the tournament and would have a greatly reduced pool of teams to select from.

## The Wetzel Plan

Dan Wetzel leaves the bowls out of the tournament entirely, making all games except the championship home games for the favored teams. While many bowls would be unaffected by this, the oldest bowls with the most precious traditions would be compromised to an unacceptable degree.

Allowing the teams dropping out of the first two rounds to play in these bowls would not bring the four BCS bowls to anywhere near the level of prestige they now enjoy.

## Enhance the student athlete's bowl experience

The bowls are a reward for the student athletes. They allow them to experience a city they likely have never been to in a week long party atmosphere. Tournament are often a short trip with little more than landing, playing and going home, hopefully to prepare for the next round.

No one wants to celebrate after a loss and they don't have time in a tournament to enjoy each event like they do now.

## Old Bowl System

With the old bowl system more athletes would be in a position where their bowl game has national championship implications. Every competitor enjoys the opportunity to demonstrate their worthiness on the field of competition.

## BCS

The BCS allows championship teams to have the bowl experience in addition to a chance to earn a championship on the field.

Some student athletes, particularly among undefeated teams, are rewarded with high profile games against solid opponents but are left feeling they should have had an opportunity to prove more.

## A Tier Based Plus-One

With the possibility of two full bowl experiences, the student athletes would have twice the opportunity to enjoy all the perks of a bowl game. Two or three weeks between bowls can be arranged within the current bowl windows allowing time to recover, prepare and enjoy the environment of a second big stage game.

## A Flexible Championship System

This design maintains the bowl experience for all participants at the semifinal round while the play-in and national championship games would take on a more playoff atmosphere.

## MWC Proposal

This design would allow the top teams to play for a legitimate national title but would reduce the experience of an extended bowl trip.

## Enhanced Bowl Season

Teams would have time to prepare for each game and take some time to enjoy each bowl environment due to the multiple weeks between games. All while having a real path to the national title.

## The Wetzel Plan

Dan Wetzel focuses on the fan's interest and does not address the players' interest in any of his posts. In a playoff you fly in, play your game and go home. Players for the top sixteen teams are robbed of their bowl experience in exchanged for an insulting berth to a consolation bowl.

## Reduce the logistical issues for the teams and fans

Every tried to book a plane flight and hotel over the holidays on a moments notice? Imagine having to do this for two or three weeks straight. That is rough for the fans.

Now multiply this by the size of a football team, band, cheerleaders and coaching staff and add in all the equipment for each of these groups as they cross the country from game to game. Mix in some finals and needing to prepare for a weekly contest with one of the top teams in the nation and the logistical issues become daunting. This is what the athletic directors at the top schools would be looking at each December in most playoff designs.

One more round of games would not be too big of a stretch. One way of addressing this constraint is by making additional rounds home games for the favored teams. Adding additional weeks between games helps significantly as well.

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## Old Bowl System

With only a single game, the old bowl system is as minimal as any design one could have, other than having no postseason.

## BCS

The BCS inherits its logistically friendly status from the old bowl system it still largely embodies.

## A Tier Based Plus-One

This design potentially adds a second bowl game but allows two to three weeks between each round. This allows a fair amount of time to address the logistical issues involved for fans and teams alike.

## A Flexible Championship System

The final two rounds would be a challenge in this design. It would help significantly if the championship game could be moved further into January.

## MWC Proposal

This design fails to address this issue in any meaningful way, leading to a design that would be a logistical nightmare for the teams. Conflicts with finals are mitigated by holding the games in January.

## Enhanced Bowl Season

This design features two weeks between games allowing ample time to travel, study and prepare between games. Making each site a neutral site increases the overall travel costs per team.

## The Wetzel Plan

The Wetzel plan offers four straight weeks of games, but uses home fields to alleviate much of this pressure.

## Improve the academic success of the students

FBS football is more respectful of final exams and conflicts with class times than any other NCAA postseason design.

Strong resistance to conflicting with the spring semester exists limiting the discussion to designs ending the second Monday in January. The gap between
the regular season and the bowls is also valued but would be a far more likely place to find success expanding the time frame.

If college football played every weekend in December it would still cause fewer conflicts than the regular season and tournament for almost any other NCAA sport.

## Old Bowl System

The old bowl system is the only alternative that would allow the postseason time frame to be contracted. Time conflicts with finals and classes are viewed as the largest components of the game impacting the academic success of the student athletes.

## BCS

The BCS extended the bowl season into January causing some conflicts with spring semester class schedules. This adjustment was intended to be a final line that would not be extended further.

## A Tier Based Plus-One

This design does not alter the current bowl time period resulting in a study neutral result.

## A Flexible Championship System

This design would inherit its friendliness to the student athletes' academic needs from the current BCS time periods.

## MWC Proposal

This design runs far into January, crossing lines that the NCAA has indicated were intended to be final expansions of the bowl season into January.

## Enhanced Bowl Season

This design runs far into January but takes significant amounts of time to justify this by providing one of the best case studies of schedule conflicts publically available.

This study demonstrates that this design would cause less total class conflicts than the college world series despite the significantly larger number of players per team. ${ }^{8}$

This does not alter the fact that an expansion into January is very unlikely.

## The Wetzel Plan

Dan Wetzel does not completely specify the timing of the games, but suggests three rounds in December and one in January. This is a slight encroachment on the final exam period, but not a deal breaker.

## Allow all conference champions a chance to win the national championship

Many playoff designers express the ideal that all conference champions should be allowed to participate. This would guarantee access to all teams every year and maintain the historical emphasis on winning the conference.

This also requires a minimum of eleven teams and four rounds which would add pressure to several other constraints. Some conferences do not always crown an outright champion and co-championships are often poorly considered by most playoff designs.

Plans allowing all conference champions also tend to minimize issues of how to fairly account for independents.

## Old Bowl System

The old bowl system regularly failed to determine a consensus national champion. This is one of the motivating factors that drove the formation of the BCS.

## BCS

The BCS does not even guarantee access to all undefeated teams to their exclusive bowl games, much less all conference champions access to the national championship game.

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## A Tier Based Plus-One

All conference champions would not be invited to the four team championship design. Some conference champions would not qualify for a second bowl but could still automatically qualify for a BCS bowl.

More conference champions would have an opportunity to earn a spot each year if undefeated teams are given priority, significantly expanding the national championship field.

## A Flexible Championship System

Even in years with a maximal eight teams, not all conference champions would participate. With a wider field more opportunities are open for a larger group of conference champions and all undefeated conference champions.

## MWC Proposal

Eight teams is not enough to allow all conference champions. It would allow all major contenders to participate and compellingly allows a spot for automatic qualifying conference champions with multiple losses outside the tournament.

## Enhanced Bowl Season

The Enhanced Bowl System maintains the current automatic qualifying conference champions and supplements them with any conference champions or independents in the top 12.

While not guaranteeing access to all conferences every year, this would allow them all to prove they should participate.

Voters would likely support an undefeated team's push for a \#12 spot and the current computers used by the BCS heavily favor undefeated teams.

## The Wetzel Plan

Dan Wetzel vehemently includes all eleven conference champions. He fails to address how he would handle conferences that allow co-champions.

## Allow the best teams to prove their worth on the field

In most years the controversy is centered around undefeated and the highly ranked one loss teams. Teams with two losses are often seen as filling in since no other team stepped up to fill the spot they have usurped.

To become a widely accepted national championship these teams will need to be included. Five teams finished undefeated in 2004 and 2009, setting a minimum for the number of spots needed to satisfy this criteria.

## Old Bowl System

More teams had an opportunity to prove their worth in multiple high profile games, making the entire top five viable candidates for the national championship if they perform well.

The national championship was far more subjective than today. Pairing the top two teams generally amplifies a small consensus prior to the game into a moderate consensus after the game.

## BCS

The BCS generates games between quality teams that would not happen in the regular season or under the old bowl system. This allows more questions to be answered on the field than ever before in the history of college football.

## A Tier Based Plus-One

A second bowl game would give teams that did not have an opportunity to play quality opponents during the regular season a chance to face nationally recognized opponents in two high profile games.

## A Flexible Championship System

This design enhances the paradigm for selecting the best teams and customizing the tournament around each year's situation, allowing the consensus best teams to participate each year.

Allowing a second bowl for all teams with nine FBS wins would enhance this for the next level of teams not earning national championship consideration.

## MWC Proposal

This design would be expected to allow all undefeated teams and most one loss conference champions every year.

## Enhanced Bowl Season

All teams would have a reasonable path to the national tile every year. With one prominent all or nothing design little room is left for achievements between a conference championship and a national championship.

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## The Wetzel Plan

With all conference champions and five at large teams all undefeated and most one loss teams would be included every year.

## Respect the health of the players due to extra games

The participants in the FCS championship game currently participate in up to sixteen games. The NCAA is unlikely to expand the number of allowed games beyond this limit.

A standard regular season consists of twelve regular season games. Additional games can be added if a team travels to or is Hawaii or if they qualify for a conference championship game. This allows thirteen games for many championship teams and fourteen for some.

This limits the number of rounds to three and the number of teams to eight. Each additional round would require one more week to be removed from the regular season while doubling the number of potential participants.

Comparisons to NFL schedules are unfounded due to the fact that student athletes are not millionaire professionals and collegiate injury rates are comparable and often medical expenses are less funded than for NFL players.

## Old Bowl System

There was no change in the number of games between the old bowl system and the establishment of the BCS. The NCAA has recently expanded the regular season by a game, indicating these are not currently an issue.

## BCS

The BCS inherits its athlete friendly season length from the old bowl system.

## A Tier Based Plus-One

Adding a game would remain within (and usually be a game shorter than) the season lengths of FCS champions.

## A Flexible Championship System

This design restricts the maximum number of games to exactly that of the FCS championship participants.

New Championship System

## MWC Proposal

This design mostly stays within the sixteen game constraints except for cases where a teams plays an extra game for traveling to (or being from) Hawaii and then earning a trip to a conference championship game, when a team would play seventeen games if they won the first two rounds.

## Enhanced Bowl Season

With the claim that only sixteen games total would be played, this design maximizes the number of games that are likely to be allowed.

This plan does not specify how it addresses conference championships or extra games for trips to Hawaii.

## The Wetzel Plan

Dan Wetzel admits to allowing up to seventeen games in his design. This ignores the possibility of gaining an extra two games for a team playing at Hawaii and in a conference championship game, which would create eighteen game schedules.

His claim that this is similar to other divisions is off by one game. FCS only allows sixteen games total.

## Reduce the moral hazard of the selection process

Often it is known that the final ballots will be close and that the votes in the final ballots will determine the national championship game participants.

Coaches represent institutions that may have significant financial interests in one or more institution involved in the dispute. They also might have personal ties or enmity with one or more of the coaches involved that might sway their vote. This presents potential conflicts of interest within the ranking system.

Strong support exists for maintaining the tradition of having the coaches' vote for the best teams. The AFCA (who runs the coaches poll) also owns the rights to the iconic trophy associated with the BCS Championship Game.

Any design that establishes a rigid cutoff at a given spot will perpetuate this issue. The wider the field the more convoluted the potential conflicts of interests become.

New Championship System

## Old Bowl System

The moral hazards above were not a part of the bowl selection process. Instead, each bowl acted according to market principles to attract the teams that would generate the most revenue for the bowls.

By using third parties to select the teams, the consequences of the moral hazards intrinsic to the coaches' poll are greatly reduced.

## BCS

The BCS has had occurrences where one computer or five votes in the coaches' poll could have changed the selection of the \#2 team (2006 Florida and Michigan for example).

Although this is more against the Big 12 tie-breakers - In 2008 the Big 12 South was decided by the BCS rankings, leading to coaches lobbying for votes.

Any sport where coaches are becoming campaign managers of a voting system and conferences are hiring PR firms to promote themselves to voters should find a more competitive way to settle its disputes.

## A Tier Based Plus-One

The use of the current BCS rankings and a rigid cutoff at the top 4 maintains the current sources of moral hazard. With a lower cutoff the potential for controversy is increased.

## A Flexible Championship System

By using the gaps in the standings rather than a set cutoff this design significantly reduces the controversy over the selection process.

The determination of byes between closely ranked teams would likely be the largest source of controversy with this design.

## MWC Proposal

This design uses a selection committee to place the teams and removes the current sources of moral hazard.

New Championship System

## Enhanced Bowl Season

This design shifts the moral hazard from the \#2 and \#3 spot to both at large conference champions' top twelve bid and for the determination of the last at large berths.

Teams just short of a bye would create controversy as well.

## The Wetzel Plan

Dan Wetzel does not specify how the five at large teams would be selected. Most likely he would employ an outside selection committee that would not have the same moral hazards present in the coaches' poll.

## Determine a widely accepted national champion

Some have questioned whether there is a need to determine a widely accepted championship. The bowls actually thrived in regional marketing of competing potential championship games that add to the discussion and coverage of the sport.

To a marketer any print is good print.
The fans and players strongly desire the results to be determined on the field.
This can only be accomplished by including all undefeated teams and other teams that have demonstrated that they have proven their worth in a broad battery of measurement techniques.

## Old Bowl System

This was the largest motivating factor in the decision to move from the old bowl system to the BCS. In the old bowl system each region would claim their local major bowl winning team was the champion.

Some don't think this was a bad thing.

## BCS

Twice in twelve years the BCS has paired two consensus teams. Once in twelve years the BCS failed to prevent a split national championship.

Even among the computers used by the BCS, teams other than the winner of the national championship game are ranked \#1 after the bowls. In 2008 Utah was the only team to finish undefeated and finished \#1 in four of the six BCS computers.

As long as teams can be undefeated without having a chance to win the title there will not be a widely accepted national championship game.

## A Tier Based Plus-One

This design includes a two round tournament that expands the field and greatly increases the degree of acceptance of the national champion.

2004 and 2009 would have not allowed all undefeated teams to participate. The team left out would still face two solid opponents. This has the potential to generate disagreement regarding who the best team really was in these years.

## A Flexible Championship System

This design allows all teams in the national consciousness to participate in the tournament every year. This is the minimal design able to accomplish this task.

## MWC Proposal

With a three round tournament the consensus of the champion would be significantly enhanced.

## Enhanced Bowl Season

A twelve team tournament would give its winner a large margin of certainty that they are the most deserving team.

## The Wetzel Plan

A sixteen team format significantly reduces the controversy around the crowning of the eventual winner as champion.

## Fair venues

Tournament games should be played at venues that are away games for both teams. Home seeding for favored teams is a common technique used in many sports leagues to add importance to regular season games for teams having secured their eligibility for the tournament.

The old bowl system and the BCS use venues that are often home fields of regular participants. Any design that uses the bowls to host games will face this issue.

New Championship System

## Old Bowl System

Many bowls use college stadiums as venues and as a result have strong ties to the universities whose field they use. The reduced travel expense of selecting a local team also makes them a compelling choice.

The result is that teams playing a bowl game on their home field were not a rare event. USC playing in the Rose bowl is a prime example of this.

The bowls did not have any system that forced home field games, even for favored teams.

## BCS

The BCS's venues are as fair as the old bowl system it emerged from.

## A Tier Based Plus-One

This design would inherit the fairness of its venues from the bowl system.

## A Flexible Championship System

This design maintains the venue fairness of the bowl system except in the play-in games which are hosted by the favored teams.

## MWC Proposal

This design uses the BCS bowls for the first round followed by neutral site games for each additional round. Its venues are as fair as the current design.

## Enhanced Bowl Season

Using regionally tied bowl helps mitigate against travel costs but significantly increases the chance that teams would end up playing on their home field.

## The Wetzel Plan

By using home venues for the higher seeded team the Wetzel plan sacrifices fair neutral venues for an added significant benefit for highly ranked teams to keep late season games meaningful to their championship run.

## Reward champions of the top conferences

The champions of the top conferences go to the top bowls. Any tournament is going to be viewed as more prestigious than any bowls that are not part of the tournament.

The field will have to be smaller than the number of strong conferences, the top bowls will have to lose their traditional tie-ins or the top bowls woven into the tournament in a way that maintains their tie-ins. Either way, the unique reward of the bowl system will be diminished.

The BCS has already eroded some of this by breaking the traditional tie-ins, especially prior to the addition of the national championship game as a stand alone bowl.

## Old Bowl System

The primary aim of the bowls was originally to provide a reward for the conference champions. This remains to be the case for the major bowls.

## BCS

The BCS excels at guaranteeing the top conferences a berth to one of the highly prestigious BCS bowls. This is a solid reward for a team with a couple of losses in a contentious conference battle in a nationally recognized competitive conference and ending up on top.

## A Tier Based Plus-One

This design does not add rewards to the champions of the top conferences but does maintain the existing automatic berths. The potential for conference champions to be demoted to a first round game rather than a BCS bowl is mitigate by allowing three teams from a conference to be eligible.

## A Flexible Championship System

The BCS bowls not selected for semifinal consideration are maintained as part of this design to allow all automatic qualifying champions a chance at the tournament or their current BCS bowl tie-in.

The only way an automatic qualifying champion outside the tournament would not get their traditional tie-in by is if the Rose Bowl is selected as a semifinal and the other conference failed to qualify for the tournament. This conference champion would still be guaranteed a berth in one of the remaining BCS bowls.

New Championship System
91

## MWC Proposal

This design includes metrics to determine the top conferences on a recurring basis. These conferences would have a guaranteed spot in the tournament or in a single side bowl.

## Enhanced Bowl Season

This design guarantees eligibility for the champions of the automatic qualifying conferences, recognizing long term success. It also gives the highest ranked champions (or independent in the top 6) a first round bye, recognizing annual performances.

## The Wetzel Plan

Dan Wetzel does not provide any means to single out any conferences in any manner a priori. The top conferences would tend to be ranked higher and better seeded, giving some advantage in the tournament.

## Prevent unworthy teams from having a chance at the national title

Many people feel that teams with two or more losses do not deserve to be in championship consideration. Some believe that teams that don't win their conference should not be in the national championship discussion.

The larger the field the lower the standards become for entry into the tournament. Lower standards mean that the reward of entry into the tournament is diminished.

## Old Bowl System

Only the top teams would have a chance to earn the top spot after the bowls. Two loss teams rarely climbed to the top or high enough to threaten an undefeated or one loss team.

Strength of schedule was not considered as strongly twenty years ago as it is today in the polls.

BCS

The BCS errs on the side of limiting the field so this is not an issue for it.

New Championship System

## A Tier Based Plus-One

This design would restrict the field to a point that this would not be an issue. A two loss participant would be rare.

## A Flexible Championship System

A fixed cutoff allows an arbitrarily large gap between the last two teams selected. This could be interpreted to represent a large consensus that the last team did not really earn the right to participate and would generally be accompanied with a large number of teams claiming they should have been selected instead of that team.

Using gaps in the standings minimizes the risk of selecting unworthy teams for the last spots filled.

## MWC Proposal

Two or even three loss teams would begin to participate regularly in an eight team field and wins over undefeated teams would reinforce the ideas that one game in the postseason is worth two or three in the regular season.

## Enhanced Bowl Season

This design would allow teams with three or four losses to participate and success of these teams would demean the value of the regular season games.

## The Wetzel Plan

Including all conference champions allows teams with three or four losses to regularly participate. In 2001 North Texas won the Sun Belt with a losing record of 5-6 and would have been in Wetzel's tournament.

## Reduce controversy to a manageable level

The controversy surrounding the BCS has become toxic. The two primary sources of controversy relevant to a tournament are the failure to give all teams a chance to earn a national championship and having to choose between arbitrarily close teams at the \#2 and \#3 spot. Moving this to a lower spot actually decreases the consensus of the selection and increases the number of teams claiming they were deserving of a spot.

The old bowl system avoided this by not even pretending to be interested in determining a true national champion. If more games could claim to be a part of the championship picture the better for them all.

Undefeated teams can be managed by requiring any tournament to select undefeated teams prior to teams with a loss. At least five spots would be needed to cover the past twelve years.

Only using gaps instead of a set cutoff addresses the cutoff consensus issue.

## Old Bowl System

The old bowl system thrived in controversy and used it to add value to more games by being able to claim that each had a potential for shaping the national championship outcome.

## BCS

The BCS creates controversy by claiming to present a national championship game that is widely disputed. Selections of the teams and omission of undefeated teams are two persistent sources of controversy.

At large berths out of order relative to the BCS's own standings are also a source of mild controversy.

## A Tier Based Plus-One

This design would reduce controversy in the championship and increase the controversy of the selection process by expanding the field.

The qualifications for two bowl games are concrete and accessible to all teams. With the current volume of bowls all teams eligible for two bowls would be expected to be selected by two bowls, even if they are not selected for a first round game.

## A Flexible Championship System

This design was formed to minimize sources of controversy in the selection process. It gets the teams right, while risking controversy in the bracketing, particularly among the bye determinations.

## MWC Proposal

The number of undefeated teams left out would be significantly reduced. The controversy over the selection of teams would be dependent on the public opinion of the selection committee. The choices would be more difficult than the current options.

New Championship System
94

## Enhanced Bowl Season

This design increases the net controversy for clarity over the national champion.

## The Wetzel Plan

A sixteen team tournament with five at large teams would significantly reduce the controversy over the champion while magnifying the selection controversy.

## Avoid competing with the NFL for viewership

FBS football currently generates less than half the revenue that the NFL makes with four times as many teams. Cooperate sponsors will favor NFL over college football any day. Fans don't want to have to choose between NFL games and college games when they can watch both.

NFL is also played mostly on Sunday and some schools refuse to play on Sunday for religious reasons.

I have yet to see a playoff design that failed to accomplish this ideal.
Old Bowl System
Bowls do not want to compete with the NFL for viewers nor limit their team selection options by playing on Sunday. Bowls rarely schedule Sunday games.

## BCS

The BCS is tied to the bowls and has the same designs, including rare Sunday games.

A Tier Based Plus-One
No games added by this design would be played on a Sunday.

## A Flexible Championship System

No new Sunday games here. Move along.

## MWC Proposal

It might even be possible to align the championship game with the bye week before the Super Bowl in the MWC Proposal. This would be huge for many fans.

New Championship System
95

## Enhanced Bowl Season

I actually got this ideal from these guys. This design also moves the championship game to the bye week before the Super Bowl.

## The Wetzel Plan

No new Sunday games here either.

## Improve the financial success of proven championship contenders

The top teams from the top conferences can find sponsors to promote and sell exhibition games on their own. Any postseason design will need to exceed the revenue these teams and conferences would make on their own or they will not participate.

The Big 10 and PAC 10 have stated that they would rather return to an exclusive deal with the Rose Bowl than participate in an expanded tournament.

Without the top teams from the top conferences any tournament would fail to be credible in determining the national championship.

More games generate more revenue and each team you add to a single elimination tournament adds a game. Most tournaments generate enough revenue to exceed the BCS revenue. The question is how the pot gets split.

## Old Bowl System

Conference tie-ins and the marketability of big names make well known teams from prominent conferences better draws than teams with a smaller profile but a stronger performance.

The removal of the highly marketable and financially valuable championship game would reduce the total revenue being shared.

## BCS

Most NCAA tournaments distribute revenue in a manner far more egalitarian than what is observed for other revenue sources for the league in question.

The BCS accounts for roughly $6.1 \%$ of the total football revenue and the automatic conferences and at large conferences in aggregate each receive this amount of their total revenue from the BCS.

New Championship System

## A Tier Based Plus-One

The proven championship contenders are also the teams most likely to win the number of games qualifying them for a second bowl berth. These conferences would likely also be able to negotiate stronger bowl ties for these teams, adding a double benefit to the historically proven conferences.

## A Flexible Championship System

This design adds more games to the current BCS design while maintaining the same participants to a large degree. This should be expected to increase the revenue from the design roughly proportional to the current system, with some improvements for undefeated teams from at large conferences.

This design does not conflict with the idea of adding a second bowl game for qualifying teams and the benefits that would bring here.

## MWC Proposal

With the addition of two more tournament games the top teams would have more revenue to split among themselves.

## Enhanced Bowl Season

The Enhanced Bowl Season provides a source quoting Big 10 commissioner Jim Delaunay stating that an NFL style playoff would likely bring the Big 10 three to four times their current BCS revenue.

The numbers in this proposal make a far more conservative estimate.

## The Wetzel Plan

Dan Wetzel completely ignores the issue of revenue sharing. Unless the big name conferences make more than they get without the tournament they will not agree. The reduced travel costs and added revenue of the likely home games aids this somewhat.

## Maintain current level of sponsor involvement

A large part of the bowl revenue is generated by granting sponsorship rights to corporations wishing to promote their name. A playoff would attract a large share of interest that could detract from the smaller bowls.

Without these sponsorship deals the smaller bowls would not be profitable and would be eliminated. This would reduce the postseason opportunities for dozens of teams.

This argument is not as strong as it is often presented. Fans have proven they will watch as much football as they can get and sponsors will get their names wherever the fans are willing to watch. Several teams agree to participate in bowls at a net loss.

A much larger issue is the reduction of sponsorship due to the current economic state of the country. This effect is far more profound than what any change in design would accomplish.

## Old Bowl System

Under the old bowl system there was not a clear cut championship game. A national championship game will be a larger draw for a cooperate sponsor than an exhibition game. If the championship game is abandoned some drop in sponsorship might be observed.

## BCS

The formation of a championship game and branding of the partnership between the top bowls has produced a marketable product that has significantly enhanced the sponsorship of these games.

## A Tier Based Plus-One

This design adds more bowls between ranked teams creating more space for sponsors. This increase in supply would outweigh any realistic decrease in value to the other bowls caused by the added games.

## A Flexible Championship System

More tournament games with an intentional effort to maintain the prestige of the existing bowls should provide a slight increase in sponsorship opportunities.

Again, allowing qualified teams to participate in a second bowl game adds these benefits to this design.

## MWC Proposal

This design allows more net sponsorship due to the two additional tournament games.

New Championship System

## Enhanced Bowl Season

Increasing the profile of smaller bowls would significantly increase their sponsorship potential.

## The Wetzel Plan

Each bowl has a large number of sponsors that would be drawn to the tournament, potentially reducing the net sponsorship value.

## Improve the financial strength of the bowl system

Based on attendance and TV viewership the bowls are popular and financially successful. Players and coaches enjoy the bowls.

Any design that fails to promote the health of this system will fail to win the support of the players and coaches who are directly tied to the game.

One issue is the recent proliferation of bowls. Adding a strong tier structure to the bowls and their selection processes would help define and enhance the marketability of the bowls as a whole.

## Old Bowl System

A return to the old bowl system would allow all bowls to pursue their independent financial success. The loss of a national championship game would reduce the net value of the system.

## BCS

The BCS has significantly increased the revenue of the bowls involved and maintains the value of all remaining bowls.

Some minor bowls have even taken the opportunity to move into an early January date the NCAA allowed to accommodate the BCS.

## A Tier Based Plus-One

This design would allow most bowls to increase the quality of their expected opponents and allow for the formation of new bowls without lowering the standards for bowl eligibility.

## A Flexible Championship System

This design focuses on maintaining the health of the bowl system but also adds a strong tier based selection process to enhance the health of the less prominent bowls.

Adding a second bowl for qualified teams would provide additional tangible increases to the bowl system.

## MWC Proposal

This design maintains the current bowl system with significant alterations to the BCS bowls. These bowls would lose significant amounts of tradition with nothing added to increase the tradition of the remaining bowls.

## Enhanced Bowl Season

This design would significantly boost the financial landscape for the smaller bowls at some potential expense to the upper middle tier bowls.

## The Wetzel Plan

Dan Wetzel sees the bowls as a parasite on the system that should be cut out of the revenue stream.

## Long term stability

Any fixed tournament is subject to a pressure known as bracket creep. The desire to expand the current two team tournament format is a clear example of this pressure and the expansion of every other tournament over time is evidence of its effect.

A paradigm other than selecting teams for a fixed size tournament is needed to overcome this issue.

Few designs consider long term issues like changes in conference strength or bowl prestige with time.

A robust design would define processes to evaluate parties and procedures to handle changes in designations.

## Old Bowl System

The old bowl system was one of the longest running postseason designs in any league that did not require any format changes. While bowls were added over the
years the structure of the bowl system did not change. It was still one game after the season for an increasing number of teams.

The increase in teams has maxed out as there are now enough bowl opportunities to account for all teams with a winning record and many teams with an even record. Allowing teams with a losing record to participate would spoil the image of bowls being a reward for deserving teams.

## BCS

The BCS has the appearance of running on knee jerk reactions to each controversy with little foresight and long term planning. Each contract cycle is run with a potential for major change after it expires.

At the very least the BCS could be enhanced with a long term strategic plan and concrete measures for success.

## A Tier Based Plus-One

This design would ride a short lived wave of popularity until teams and faces began being attached to teams left out of the semi-finals who had successful runs in their two bowl games.

Eventually the pressures to expand the format would grow to the same level that exists today.

## A Flexible Championship System

By minimizing selection controversy and changing the selection paradigm this design maximized long term stability.

## MWC Proposal

This design would be very subject to bracket creep as faces are assigned to teams left out and further expansions would require a reduction of the regular season.

## Enhanced Bowl Season

This design would rapidly increase pressure to expand as teams getting left out are identified over time.

## The Wetzel Plan

Over time the Wetzel plan would increase the pressure to add more rounds to allow those teams that were close but just missed, who would get faces over the years. The wider the field the faster and stronger this pressure builds.

## Reduce logistical issues for game organizers

Designs including multiple home rounds, variable numbers of games or multiple rounds of bowl selections add to the logistical costs of the system.

It often takes weeks to make arrangements to produce a football game and for fans to make the necessary travel arrangements.

## Old Bowl System

With each bowl organization being responsible for one game (or a few independent games) the logistical issues are as small as any postseason design can get.

The biggest logistical issue is the selection of teams through complicated contract language. Currently the BCS helps facilitate this process for the top bowls.

## BCS

The BCS actually allows a format to reduce the logistical issues with bowl selection, allowing for far more rapid bowl assignments than was possible prior to the BCS.

By bringing all parties to the table on selection Sunday all issues can be resolved at one sitting, eliminating days of one to one communication that was the standard prior to the BCS.

## A Tier Based Plus-One

Adding a limited second round of bowl selections and the travel arrangements to two venues adds a manageable level of logistical issues to the design.

## A Flexible Championship System

The selection and formatting of the tournament would be specified fully so that it is as certain as determining the national championship game as soon as the final standings are compiled.

This design comes at a cost of increased logistical issues due to the flexible number of games and undetermined play-in game locations. This is less than the logistical issues of larger tournament designs using home fields of the favored teams.

## MWC Proposal

This design has increased logistical issues for the teams due to the multiple games but is far from being burdensome.

## Enhanced Bowl Season

This design is very minimal in the logistical overhead.

## The Wetzel Plan

The Wetzel plan would require moving the regular season back a week or creating a turn around of a week between the final regular season games and the first round of the tournament.

## Be legal

Most designs completely ignore this issue. Any design that exerts its principles on any party will fail this criterion.

Conference realignments are a common feature of popular designs that would not be legal. Forcing prominent bowls to join the tournament or any conference to participate would be illegal. Mandating or eliminating conference championship games would be out of line as well.

Basically all parties have the legal right to do business in the manner that best meets their own interest as long as they are not restricting the fair market.

The BCS is a significant improvement over the old bowl system in this regard. Creating a tangible tier structure for the bowls with meaningful at-large bids between tiers would greatly reduce the current restrictions to the fair market.

## Old Bowl System

If the bowls were truly free market selections of all teams they would be above all legal reproach. Extensive use of contractually binding conference tie-ins may present an opportunity to question the legal standing of the bowl system.

## BCS

While some question the legal status of the BCS the only potential issue in the arrangement could be resolved by ending the claim to be an authoritative national championship game.

Rigid bowl tie-ins and egalitarian tournament distributions common for NCAA tournament are far more likely to present real legal issues.

## A Tier Based Plus-One

This design would increase the competition for bowls, open the access to the top bowls and improve the championship access for all teams.

## A Flexible Championship System

This design opens up the bowls at all levels by creating a strong tier system in the lower bowls. This decreases the risk intrinsic to the bowl conference tie-in system.

## MWC Proposal

This design would inherit the legal state of the BCS.

## Enhanced Bowl Season

If conference championships are eliminated this would signal that legal issues may be present.

If the revenue for top grossing conferences is less than the original bowl system issues may be present as well.

## The Wetzel Plan

An egalitarian revenue sharing might run the risk of an NCAA v. Board of Regents of Univ. of Oklahoma style anti-trust suit. Nothing else raises concern.

## Minimize the number of games in the season

Fans, players and TV accountants might argue this ideal is backwards. The primary reason for this ideal is that it is strongly tied to the health of the players.

New Championship System
104

## Old Bowl System

With each team playing a single postseason game this is as minimal as a postseason can be.

## BCS

The BCS inherits its minimal game status from the old bowl status.

## A Tier Based Plus-One

Next to the current system, this design is as minimal as is possible without reducing the length of the regular season.

## A Flexible Championship System

This design stays within the current limits of FCS tournament participants.

## MWC Proposal

This design pushes the envelope of what is likely to be allowed by the NCAA.

## Enhanced Bowl Season

With the claim that only sixteen games total would be played, this design maximizes the number of games that are likely to be allowed.

## The Wetzel Plan

As a populist plan Dan Wetzel, takes the opposite approach, pandering to his audience by maximizing the number of games considerable.

## Respect the established postseason time periods

The current bowl system begins on December $19^{\text {th }}$ and ends on the second Monday in January. This was extended past New Year's Day when the BCS National Championship Game was created with the expressed view that this was a final extension of the bowl season into January.

The December $19^{\text {th }}$ might be more open to negotiation. Allowing two weeks between the end of the season and the first games allows for bowl selections to be made and the necessary logistical issues to be addressed. A bracketed tournament would not have to wait on higher precedence selections to be made before making selections and would be partnered with the other tournament games to work out the logistical issues.

## Old Bowl System

The old bowl system would allow the postseason window to be restored to its pre-BCS boundaries ending on New Year's Day.

## BCS

The BCS has already expanded the postseason time period into January, likely establishing a final limit in this direction.

## A Tier Based Plus-One

The current time periods are maintained.

## A Flexible Championship System

This design maintains the current time periods.

## MWC Proposal

This deign would require a further expansion of the season two weeks into January.

## Enhanced Bowl Season

The current window is expanded nearly to February and far beyond what is likely to be allowed.

## The Wetzel Plan

With only a minor encroachment on the December exam period, this plan is acceptable here.

## Respect the travel costs of the fans

Traveling to multiple venues in consecutive weeks to watch an uncertain number of games is not a cheap proposition for most fans. In basketball's March Madness three weeks of travel are called for in a championship run but each successful trip and half of all trips come with two games. Basketball venues also seat less than football venues, reducing the number of fans involved.

An expansion to two rounds of neutral site games may be possible but anything more than this would not be acceptable at this point.

One could even question whether marketing the bowls to average fans is in the best financial interest of the parties involved in arranging and participating in the bowls.

## Old Bowl System

With only a single game to travel to this is the baseline travel cost that can be produced by a postseason design.

Only by making all games home fields can a tournament achieve better travel costs for the fans.

## BCS

The BCS inherits its cost effectiveness to the fans from the old bowl system.

## A Tier Based Plus-One

This design increases the travel costs of the fans of the top performing teams by doubling the potential number of bowl games for qualified teams.

## A Flexible Championship System

This design is typically as friendly to the travel costs of the fans as a plus-one, occasionally closer to the current system.

Adding a second bowl game for qualified teams would hinder this criterion.

## MWC Proposal

With three neutral site games this design is very cost prohibitive to the average fan.

## Enhanced Bowl Season

While teams are selected for bowls that are more likely to be in driving distance, three or four bowl games is out of the budget for a vast majority of college football fans.

## The Wetzel Plan

By making all rounds home games for the favored teams Dan Wetzel performs better than any plan that attempts to embed bowl games into a tournament.

## Conclusion

This outline of the known constraints and examination of how various postseason options fair in the light of each one gives some idea of the real world difficulties in creating a championship system that meets the unique needs of the NCAA DI FBS.

A detailed study to verify these constraints and the priorities of the principle parties would allow a rubric to be established to systematically evaluate new ideas. This would allow alternatives to more fairly address the real concerns and promote the development of ideas that enhance the true ideals of the NCAA DI FBS postseason parties.

College football deserves the best possible postseason design and only an open and honest examination of all constraints involved will make this possible.

## Playoff Opinions of the BCS Participants

## Ohio State 5-3 (1-2) Against

There may be a day we could get to (a playoff). There would have to be significant changes in the way we do things. There's been a lot of change since the beginning of time in football. I wouldn't discount the fact that in the next 10 years or so, something might get worked out and (there would be) a playoff of sorts.
A lot of times you hear people bemoaning the NCAA rules and this and that, but I haven't seen too many NCAA rules or adjustments that they've made to our games that didn't have sound thought and didn't keep the student-athlete in mind and in the end make it better, so they'll figure it out.

Jim Tressel, November 2008
http://www.recordpub.com/news/sports article/4466598

## USC 6-1 (1-1, AP Title 2003) Present

## Oklahoma 2-5 (1-3) For

l've come full circle, l'm for it.
With the differences in non-conference scheduling, some people have some difficult games, some people don't. And some conferences don't have a championship game, others do.

Bob Stoops, November 2008
http://newsok.com/stoops-says-hes-on-board-for-college-football-playoff/article/3319180

## Florida 5-1 (2-0) For

I think at some point in time [a playoff] might happen. I didn't believe that a few years ago, but I feel now the discussion is out of control. I can't imagine any guy that enjoys football not discussing that wherever he's at. So I imagine at some point that might happen now. It's not my job to figure [out how a playoff would work]. I think it would be hard. I don't know how you do it.

Urban Meyer, January 2009
http://sports.espn.go.com/ncf/bowls08/news/story?id=3816001

## Florida State 1-5 (1-2) Present

## LSU 4-0 (2-0) For

I am for the playoffs. I don't see how it works effectively. It's one of those issues where everyone in the room comes up with a playoff system, and then

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you bring in the presidents and you bring in the bowls and you bring in the TV and suddenly the calendar becomes changed and it becomes more difficult. Pick the top 8 in a 4 team playoff I understand those things. Until it gets done I'm not going to complain. This is a system that has its advantages.

Les Miles, July 2009
http://blogs.orlandosentinel.com/sports_college/2009/07/miles-says-hes-for-a-playoff.html

## Texas 3-1 (1-1) For

In the past, I think the problem has always been a lot of people have talked about a playoff but we don't have a model. Someone says playoff and everybody says what does that mean? Where's the money going to go? What does it mean to the bowls? We don't have direction.

Mack Brown, January 2008
http://www.ocregister.com/articles/playoff-system-bowl-1956755-coaches-think
With many coaches supporting a playoff, Brown encouraged media members to continue the fight. And while he covets a playoff, Brown doesn't want the bowl system to suffer.

Mack Brown, via Adam Rittenberg, January 2009
http://myespn.go.com/blogs/bigten/0-2-1037/Texas--Brown-in-top-form-as-countdown-begins.html

## Miami (FL) 3-1 (1-1) Present

## Michigan 1-3 Against

The system, even though it has things that people question, is better than it was the old way, before the BCS. I think it's set and stable now, where there'll be less and less controversy every year.

Rich Rodriguez, May 2006 (then at West Virginia)
In Division I(-A) football, every game is a playoff. Once you lose one game, you're mostly out. If you lose two, you're definitely out. We got 12 playoff games. Teams take that approach. That's probably why there's so much interest. You stub your toe, you can never get back in.

Rich Rodriguez, August 2006 (then at West Virginia) http://www.bcsfootball.org/bcsfb/background

## Virginia Tech 1-3 (0-1) Present

## Georgia 2-1 For

I think eight is the limit for what I think would be wise. I'd be all for it. I really would. There's just too many good teams out there that you just get one trip and you're out. It's tough. If everybody is thinking national championship or

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bust, you look at a team like Southern Cal, they have one little slip up, they're out. They might be. Maybe not, but they might be.

Mark Richt, November 2008
http://www.savannahnow.com/node/621118


#### Abstract

Alabama 1-2 (1-0) For l've always been an advocate of the plus-one system since 1997 when Michigan and Nebraska got in a situation where they couldn't decide the national championship. I just feel that only having two teams sort of takes a lot of teams out of it.

Nick Saban October 2008 http://www.ajc.com/sports/content/sports/stories/2008/10/29/nick_saban_bcs.html


## Notre Dame 0-3 For

I'm a bowl-plus. I'd like to keep the bowls in place. But I think there's a different opportunity with two more games, however that's manufactured. I just don't think that the schedule is such that you can't do it. And if you keep the bowls in, you take out the financial element. So what's holding it up? It's probably just the logistics of how to make that work after the BCS agreement comes up. I don't see why there can't be two more games at least to finish this up the right way.

Brian Kelly, March 2009
http://myespn.go.com/blogs/bigeast/0-4-42/Q-A-with-Cincinnati-s-Brian-Kelly.html

## Boise State 2-0 For

I think something will probably happen in 10 years. I think there's just so much pressure from the fans and people on the outside. Everybody wants to see some sort of a playoff. I just think there will be some compromise and something will be figured out.

Chris Peterson, March 2008
http://sports.espn.go.com/ncf/columns/story?columnist=schlabach_mark\&id=3409181

## Utah 2-0 For

I'd really like to see a playoff system. I've been a proponent of the playoffs for many years now. It wasn't just this year that put me in that mind-set. I would like to see a level playing field.
We feel like we can play with anyone in the country. I think we demonstrated that during the course of the season. We're not bitter. [There's] a little bit of disappointment that we didn't get a chance to play for it all but it was a great season nonetheless.

Kyle Whittingham, January 2009
http://sports.espn.go.com/ncf/news/story?id=3837017

## West Virginia 2-0 Present

## Wisconsin 2-0 Present

## Nebraska 1-1 (0-1) Present

## Oregon 1-1 For

[The opinions of the coaches] was 80 to 20 [percent] bowls versus playoffs. I would venture to say now it's gone $60-40$ or even $50-50$. The world is moving toward a playoff.
There's so much parity now that a lot of people across the country look at the bowl system, the BCS and say there were several teams as good as the ones that played in the national championship game.

Mike Bellotti, January 2008
http://www.ocregister.com/articles/playoff-system-bowl-1956755-coaches-think

## Penn State 1-1 For

It makes sense that we have a playoff. I don't like to hear the phony reasons why they don't have it, [like] 'The kids are going to spend too much time away from class.' Aw, come on. Look what they do with basketball [NCAA Tournament]. All the other divisions in NCAA football have playoffs. I really think a playoff is fairer.

Joe Paterno, May 2009
http://www.tulsaworld.com/sports/article.aspx?subjectid=202\&articleid=20090604_202_B1_Somewh976561

## Tennessee 1-1 (1-0) Present

## lowa 1-1 Against

If we went to a plus-one I think that's workable. But anything beyond that is sort of unrealistic and not really in the best interest of college football. Just one person's opinion.

Kirk Ferentz January 2009
http://www.tampabay.com/sports/college/article954277.ece
At some point you have to put the welfare of your players first. If we go down the playoff road, then we are not thinking that way.

Kirk Ferentz October 2006
http://badgerherald.com/sports/2006/10/25/to_playoff_or_not_to.php

## Cincinnati 0-2 Present

## Illinois 0-2 Present

## Auburn 1-0 Present

Kansas 1-0 Present

## Louisville 1-0 Present

## Oregon State 1-0 Present

## Washington 1-0 Present

## Colorado 0-1 Against

People always think that people in our spot are in favor of a playoff, I'm not. And l'm not because l've been in that situation before and unfortunately twice we lost our starting quarterback in the semifinals game and did not win the national championship game.
Everyone wants to settle it on the field, but my comment is always that it will not be settled on the field, it will be settled in the training room.

Dan Hawkins, January 2005 (at Boise State)
http://media.www.arbiteronline.com/media/storage/paper890/news/2005/01/04/Sports/Bcs-BadBut.Playoffs.Are.Even.Worse-2217687.shtml

## Georgia Tech 0-1 Present

We feel like we've got a pretty popular game and a system that creates a lot of interest, but we just want to look at ways to make the system better.

Jim Grobe, January 2009
http://www.usatoday.com/sports/college/football/2009-01-13-bcs-coaches_N.htm

## Hawaii 0-1 Present

## Kansas State 0-1 Present

## Maryland 0-1 Present

I think [the BCS is] probably the best system we have right now. I've always been a guy who wanted a playoff. But we had a vote in the coaches meetings of who wanted a playoff and I think there were four of us.

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Coach Tressel got up and spoke and he wasn't for a playoff in college. He said at Youngstown that he didn't have a lot of guys who were going to be No. 1 draft picks [in the NFL]. The more you subject them to injuries, the worse it is. Bobby Bowden was against it, so these are people who have been there.
Some have been successful, some haven't in the final game. And yet they were all pretty vehement on the fact that they didn't want a playoff. I haven't been there, so I'm just going to sit back and say, hey they have been there. If that's how they feel, I'll respect it.

Ralph Friedgen, January 2004
http://archives.starbulletin.com/2004/01/14/sports/story3.html

## Pittsburgh 0-1 Present

## Purdue 0-1 Against

I'm anti-playoff, so the BCS as we see it today is best-case scenario," Purdue coach Joe Tiller said. "College football does have a playoff, and it occurs all year long. Every single game is significant. ... I like the format. It's not perfect, but in college football we don't need a playoff. We've got a very healthy game. It's been very good for the Big Ten.

Joe Tiller, May 2008
http://sports.espn.go.com/ncf/news/story?id=3404982

## Stanford 0-1 Present

## Syracuse 0-1 Present

## Texas A\&M 0-1 Present

## TCU 0-1 Present

This is the thing about the playoffs, who says the playoff system would be any different than the BCS system is now? If you put in an eight-team playoff system and you have six automatic qualifying groups that are in the BCS, there's six teams. Another one of those conferences feel like they have another one (Florida, for instance). There's a seventh.

Show me right now how a playoff system is going to make it easier for Texas Christian University and Boise State, unless you give us an automatic qualifying berth into that playoff system. If you're asking Gary Patterson to jump on the bandwagon, my answer is no right now, because you haven't given me the guidelines of what a playoff system would be about.

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Second thing is, my kids have been here at the Fiesta Bowl for five, six, seven days. It has been an unbelievable experience. I played in Division II, I coached in Division II and I-AA, and been in the playoff system.

Every week you practice at your own place. You practice for seven days, you get on a bus or plane and fly to that place, you go play the game, if you lose, you're done. There is no experience to it. You win, you go back to your place, you practice for seven days, you go play again. Where do we reward the players?

Gary Patterson January 2010
http://www.usatoday.com/sports/columnist/lopresti/2010-01-04-fiesta-bowl_N.htm

## UCLA 0-1 Present

I'm in favor of whatever it takes to make sure the bowls remain a magical deal. I don't ever want players to lose the chance to go and celebrate a season at a bowl game.

Rick Neuheisel, January 2008
http://www.ocregister.com/articles/playoff-system-bowl-1956755-coaches-think

## Wake Forest 0-1 Against

We feel like we've got a pretty popular game and a system that creates a lot of interest, but we just want to look at ways to make the system better.

Jim Grobe, January 2009
http://www.usatoday.com/sports/college/football/2009-01-13-bcs-coaches_N.htm

## Washington State 0-1Present

I am in favor of bowls No. 1, but I am not opposed to a playoff system where potentially after the bowls you can pull six to eight teams together or tie it into it. I still think bowls are the best thing for college sports. If you want to know who the best team in America is, watch the NFL. That's the best team in America. That's why they have the Super Bowl. There's a lot of value to teams finishing the season on a win. l've been involved in the playoffs at Eastern Washington ... you know, it's great, but at the same time, every team loses except at the end.

I think people are losing sight of the big picture. They're college students, the experience at what they learn at this age, from 18 to 23, whatever that experience is they need to carry that on the rest of their lives and make the world a better place. People are losing complete sight of what's No. 1 and who's No. 1 and that's all that matters. That's part of the reason we go in the direction our society is. They get too caught up in one thing, instead of looking at the reality, what are the nuts and bolts that makes up college athletics? People lose sight of it. I don't.

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Would we love to win a national championship? Sure. But that's by no means what we do. I sit here every day dealing with issues with kids that have personal issues, family issues, family members dying in their lives, are they eating right, are they sleeping right? People don't realize that's what makes up all the time in what we're doing. We don't sit here stressing on winning a bowl game or winning a national championship or the rivalry game. There are so many more things that are important for these people, these players.

Paul Wulff, April 2009
http://www3.bustersports.com/blog/pac-10-news/2009/04/07/q-and-a-with-wsu-coach-paul-wulff/

## Summary

If one allows one vote to the head coach of each school for each of their BCS appearances one gets a vote of 38-17 in favor of expanding the BCS, with 49 votes not found on record and three non committal answers on the issue.

If one vote per BCS appearance in the last four years is allowed, the count is 197 with 14 opinions not found.

As University of Oregon head coach Mike Bellotti noted, several coaches in the SEC changed their stand on this issue in favor of a plus-one in the spring of 2008. A few coaches also jumped on the playoff bandwagon after President Obama expressed his desire to see one instituted in November of 2008. Utah's success also might have swayed some minds. Prior to these public changes of opinion the BCS would have been shown significantly more support.

In 2010 the AFCA announced that $73 \%$ of coaches are in favor of the current system ${ }^{9}$.

This much is clear. No one wants to see the bowl tradition further compromised.

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## Tables

Conference Classifications

| Conference | 2006 | 2007 | 2008 | 2009 | AVE | BEST | COMP | TOP 25 | Bowl |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SEC | 0.9681 | 1.0394 | 0.8419 | 0.8740 | 0.9309 | 0.9574 | 1.0188 | 0.8500 | 0.8972 |
| BIG EAST | 0.9527 | 0.7465 | 0.6028 | 0.7900 | 0.7730 | 0.7209 | 0.8045 | 0.6000 | 0.9667 |
| PAC 10 | 0.7792 | 0.7004 | 0.6802 | 0.6958 | 0.7139 | 0.7842 | 0.7452 | 0.6000 | 0.7262 |
| BIG 12 | 0.4917 | 0.7830 | 0.8564 | 0.5995 | 0.6826 | 0.8515 | 0.5433 | 0.8000 | 0.5357 |
| BIG 10 | 0.5796 | 0.6036 | 0.4481 | 0.6094 | 0.5602 | 0.8385 | 0.5146 | 0.7000 | 0.1875 |
| ACC | 0.4528 | 0.6198 | 0.6349 | 0.5280 | 0.5589 | 0.6001 | 0.6961 | 0.6500 | 0.2893 |
| MWC | 0.3512 | 0.4007 | 0.5760 | 0.6459 | 0.4934 | 0.5439 | 0.0549 | 0.4000 | 0.9750 |
| WAC | 0.4775 | 0.2617 | 0.1995 | 0.3776 | 0.3291 | 0.7163 | 0.0000 | 0.2500 | 0.3500 |
| SUN BELT | 0.1250 | 0.3750 | 0.1250 | 0.1253 | 0.1876 | 0.0003 | 0.0000 | 0.0000 | 0.7500 |
| OTHER | 0.0822 | -0.1249 | 0.1250 | 0.3751 | 0.1143 | 0.1573 | 0.0000 | 0.0500 | 0.2500 |
| C-USA | -0.0219 | 0.0456 | 0.2098 | 0.0540 | 0.0719 | 0.0208 | 0.0000 | 0.0000 | 0.2667 |
| MAC | 0.0001 | -0.1250 | -0.0392 | -0.0146 | -0.0447 | 0.0463 | 0.0000 | 0.0500 | -0.2750 |

Conference classifications broken down by years and components.
Values by conferences that do not align with their over all average are highlighted.

## Estimated of 2006-2009 Parameters and Revenue Values

| Conference | Fan Base | Entrants | Bonus | Fixed | Total | Percent |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SEC | $17.22 \%$ | 1.8 | $\$ 3.600$ | $\$ 18.000$ | $\$ 21.600$ | $15.34 \%$ |
| Big 10 | $14.76 \%$ | 1.6 | $\$ 2.700$ | $\$ 18.000$ | $\$ 20.700$ | $14.70 \%$ |
| Big 12 | $13.68 \%$ | 1.7 | $\$ 3.150$ | $\$ 18.000$ | $\$ 21.150$ | $15.02 \%$ |
| ACC | $12.07 \%$ | 1.2 | $\$ 0.900$ | $\$ 18.000$ | $\$ 18.900$ | $13.42 \%$ |
| PAC 10 | $10.90 \%$ | 1.3 | $\$ 1.350$ | $\$ 18.000$ | $\$ 19.350$ | $13.74 \%$ |
| Big East | $6.22 \%$ | 1.0 | $\$ 0.000$ | $\$ 18.000$ | $\$ 18.000$ | $12.78 \%$ |
| C-USA | $6.08 \%$ | 0.1 | $\$ 0.950$ | $\$ 1.900$ | $\$ 2.850$ | $2.02 \%$ |
| MWC | $5.75 \%$ | 0.4 | $\$ 3.800$ | $\$ 1.900$ | $\$ 5.700$ | $4.05 \%$ |
| MAC | $4.01 \%$ | 0.1 | $\$ 0.950$ | $\$ 1.900$ | $\$ 2.850$ | $2.02 \%$ |
| WAC | $3.83 \%$ | 0.3 | $\$ 2.850$ | $\$ 1.900$ | $\$ 4.750$ | $3.37 \%$ |
| Sun Belt | $2.72 \%$ | 0.0 | $\$ 0.000$ | $\$ 1.900$ | $\$ 1.900$ | $1.35 \%$ |
| Notre Dame | $1.54 \%$ | 0.5 | $\$ 1.600$ | $\$ 1.300$ | $\$ 2.900$ | $2.06 \%$ |
| Navy | $0.65 \%$ | 0.0 | $\$ 0.000$ | $\$ 0.100$ | $\$ 0.100$ | $0.07 \%$ |
| Army | $0.58 \%$ | 0.0 | $\$ 0.000$ | $\$ 0.100$ | $\$ 0.100$ | $0.07 \%$ |
| Total | $100.00 \%$ | 10.0 | $\$ 21.850$ | $\$ 119.000$ | $\$ 140.850$ | $100.00 \%$ |

Guaranteed revenue percentages based on the current and proposed systems.
Fan Base is calculated based on an average of the sum of the average home attendance for all conference members from 2005-2008.
Observed participation rates may vary significantly from these estimates.

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## Estimated Revenue Sharing Differences over 2010-2013

|  | Current |  |  | Proposed |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conference | Bonus | Fixed | Total | Bonus | Fixed | Total | Gain |
| SEC | \$4.686 | \$23.431 | \$28.118 | \$12.497 | \$19.162 | \$31.659 | \$3.541 |
| Big 10 | \$3.515 | \$23.431 | \$26.946 | \$11.325 | \$16.425 | \$27.750 | \$0.804 |
| Big 12 | \$4.100 | \$23.431 | \$27.532 | \$11.911 | \$15.223 | \$27.134 | -\$0.398 |
| ACC | \$1.172 | \$23.431 | \$24.603 | \$8.982 | \$13.433 | \$22.415 | -\$2.188 |
| PAC 10 | \$1.757 | \$23.431 | \$25.189 | \$9.568 | \$12.131 | \$21.698 | -\$3.490 |
| Big East | \$0.000 | \$23.431 | \$23.431 | \$7.810 | \$6.921 | \$14.731 | -\$8.700 |
| C-USA | \$1.237 | \$2.473 | \$3.710 | \$0.781 | \$6.767 | \$7.548 | \$3.838 |
| MWC | \$4.947 | \$2.473 | \$7.420 | \$3.124 | \$6.402 | \$9.527 | \$2.107 |
| MAC | \$1.237 | \$2.473 | \$3.710 | \$0.781 | \$4.461 | \$5.242 | \$1.532 |
| WAC | \$3.710 | \$2.473 | \$6.183 | \$2.343 | \$4.261 | \$6.604 | \$0.421 |
| Sun Belt | \$0.000 | \$2.473 | \$2.473 | \$0.000 | \$3.028 | \$3.028 | \$0.555 |
| Notre Dame | \$2.083 | \$1.692 | \$3.775 | \$2.929 | \$1.719 | \$4.647 | \$0.872 |
| Navy | \$0.000 | \$0.130 | \$0.130 | \$0.000 | \$0.721 | \$0.721 | \$0.591 |
| Army | \$0.000 | \$0.130 | \$0.130 | \$0.000 | \$0.644 | \$0.644 | \$0.514 |
| Total | \$28.443 | \$154.907 | \$183.350 | \$72.051 | \$111.299 | \$183.350 | \$0.000 |

No changes in conference membership, automatic qualifications or format are included.
Estimated losses are highlighted.

## Estimated Values of Format Changes

This table reflects the estimated value of A Flexible Championship System.

| Game Type | Old Value | New Value | Est. Games | Revenue |
| :---: | ---: | ---: | ---: | ---: |
| NCG | $\$ 40.850$ | $\$ 53.176$ | 1.00 | $\$ 53.176$ |
| BCS Bowl $/$ WCG | $\$ 25.000$ | $\$ 32.543$ | 4.73 | $\$ 153.842$ |
| Play-in game / First round game | $\$ 15.000$ | $\$ 19.526$ | 0.64 | $\$ 12.426$ |
| Total | $\$ 140.850$ | $\$ 183.350$ | 6.36 | $\$ 219.444$ |

The additional games are estimated to provide an average value of \$36.094.
Direct payments are estimated at $\$ 2.390$ million.
The total remaining shared revenue is $\$ 217.053$ million.
With 10 or 11 teams participating and average number of participants is increased to 10.5 teams.

## Estimated Revenue Sharing Differences over 2014-2023

| Conference | Entrants | Bonus | Fixed | Format | Total |
| :---: | ---: | ---: | ---: | ---: | ---: |
| SEC | 1.8 | $\$ 12.497$ | $\$ 24.393$ | $\$ 5.231$ | $\$ 36.890$ |
| Big 10 | 1.6 | $\$ 11.325$ | $\$ 20.909$ | $\$ 4.484$ | $\$ 32.234$ |
| Big 12 | 1.8 | $\$ 12.497$ | $\$ 19.379$ | $\$ 4.742$ | $\$ 31.876$ |
| ACC | 1.3 | $\$ 9.568$ | $\$ 17.100$ | $\$ 4.253$ | $\$ 26.668$ |
| PAC 10 | 1.4 | $\$ 10.154$ | $\$ 15.442$ | $\$ 3.897$ | $\$ 25.596$ |
| Big East | 1.0 | $\$ 7.810$ | $\$ 8.810$ | $\$ 1.889$ | $\$ 16.621$ |
| C-USA | 0.1 | $\$ 0.781$ | $\$ 8.615$ | $\$ 1.847$ | $\$ 9.396$ |
| MWC | 0.5 | $\$ 3.905$ | $\$ 8.150$ | $\$ 2.529$ | $\$ 12.055$ |
| MAC | 0.1 | $\$ 0.781$ | $\$ 5.679$ | $\$ 1.218$ | $\$ 6.460$ |
| WAC | 0.4 | $\$ 3.124$ | $\$ 5.424$ | $\$ 1.944$ | $\$ 8.548$ |
| Sun Belt | 0.0 | $\$ 0.000$ | $\$ 3.855$ | $\$ 0.827$ | $\$ 3.855$ |
| Notre Dame | 0.5 | $\$ 2.929$ | $\$ 2.188$ | $\$ 0.469$ | $\$ 5.117$ |
| Navy | 0.0 | $\$ 0.000$ | $\$ 0.918$ | $\$ 0.197$ | $\$ 0.918$ |
| Army | 0.0 | $\$ 0.000$ | $\$ 0.820$ | $\$ 0.176$ | $\$ 0.820$ |
| Total | 10.5 | $\$ 75.371$ | $\$ 141.683$ | $\$ 33.703$ | $\$ 217.053$ |

These numbers are expressed in 2010 dollars and do not include any increases in TV revenue per game.
Format represents the increase generated by A Flexible Championship System.
Total is the estimated revenue share for 2014-2023 in 2010-2013 contract dollars.
The Big East is the only conference estimated to lose revenue from this design, due in large part to their smaller membership relative to the other automatic qualifying conferences.

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## Gaps in the BCS Standings

The following table lists all gaps in the top 10 from since the new formula was used in 2004. Values closer than 0.0200 have been omitted.

| Gap | Rank | Lead | Rank | Trail | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.1215 | 6 | Utah | 7 | Georgia | 2004 |
| 0.1018 | 3 | Michigan | 4 | LSU | 2006 |
| 0.1000 | 7 | Oregon | 8 | Ohio State | 2009 |
| 0.0961 | 8 | Kansas | 9 | West Virginia | 2007 |
| 0.0855 | 3 | Auburn | 4 | Texas | 2004 |
| 0.0855 | 3 | Texas | 4 | Alabama | 2008 |
| 0.0800 |  | Average 2.0 |  | Average 2.0 |  |
| 0.0691 | 2 | LSU | 3 | Virginia Tech | 2007 |
| 0.0660 | 5 | Oregon | 6 | Notre Dame | 2005 |
| 0.0629 | 5 | Georgia | 6 | Missouri | 2007 |
| 0.0628 | 3 | Penn State | 4 | Ohio State | 2005 |
| 0.0626 | 9 | Boise State | 10 | Ohio State | 2008 |
| 0.0613 | 8 | Boise State | 9 | Auburn | 2006 |
| 0.0600 |  | Average 1.5 |  | Average 1.5 |  |
| 0.0570 | 4 | Ohio State | 5 | Oregon | 2005 |
| 0.0555 | 2 | Texas | 3 | Cincinnati | 2009 |
| 0.0554 | 1 | Ohio State | 2 | Florida | 2006 |
| 0.0545 | 1 | Alabama | 2 | Texas | 2009 |
| 0.0545 | 2 | Texas | 3 | Penn State | 2005 |
| 0.0538 | 6 | Boise State | 7 | Oregon | 2009 |
| 0.0530 | 5 | Florida | 6 | Boise State | 2009 |
| 0.0464 | 6 | Louisville | 7 | Wisconsin | 2006 |
| 0.0453 | 7 | Texas Tech | 8 | Penn State | 2008 |
| 0.0407 | 8 | Penn State | 9 | Boise State | 2008 |
| 0.0400 |  | Average 1.0 |  | Average 1.0 |  |
| 0.0381 | 7 | Wisconsin | 8 | Boise State | 2006 |
| 0.0373 | 4 | LSU | 5 | USC | 2006 |
| 0.0362 | 5 | USC | 6 | Utah | 2008 |
| 0.0350 | 2 | Oklahoma | 3 | Auburn | 2004 |
| 0.0291 | 9 | Georgia Tech | 10 | lowa | 2009 |
| 0.0290 | 8 | Miami(FL) | 9 | Auburn | 2005 |
| 0.0278 | 1 | Oklahoma | 2 | Florida | 2008 |
| 0.0254 | 7 | Georgia | 8 | Virginia Tech | 2004 |
| 0.0235 | 4 | Alabama | 5 | USC | 2008 |
| 0.0200 | 4 | TCU | 5 | Florida | 2009 |

Selections that would have been used if the cutoff was immediately below them are in bold. Significant average ranking differences are included in italics.

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## Teams Winning Nine FCS Games Since 1998

The following list represents all teams that would have qualified for a second bowl over the past twelve years arranged by current conference membership.

Years in bold would have been added if A Flexible Championship System had been in place.

## ACC: 8 of $\mathbf{1 2}$ teams in $\mathbf{2 9}$ bowls

Virginia Tech 8 (08, 07, 06, 05, 04, 02, 00, 99), Miami (FL) $5(05,03,02,01,00)$, FSU 5 (03, 02, 00, 99, 98), Georgia Tech 4 (07, 05, 03, 02), Boston College 2 (07, 05), Virginia $2(07,98)$, Maryland $2(02,01)$, Wake Forest $(06)$,

## Big 12: 9 of 11 teams in 31 bowls

Texas 10 (09, 08, 07, 05, 04, 03, 02, 01, 00, 99), Oklahoma $8(08,07,06,04,03$, 02, 01, 00), Nebraska 5 (09, 03, 00, 99, 98), Kansas State 4 (03, 00, 99, 98), Colorado 2 (02, 01), Texas Tech (08), Kansas (07), Missouri (07), Texas A\&M (98)

## Big 10: 9 of 12 teams in 32 bowls

Ohio State 8 (09, 08, 07, 06, 05, 03, 02, 98), Michigan $6(06,04,03,02,99,98)$, Penn State 5 (09, 08, 05, 02, 99), Iowa 4 (09, 04, 03, 02), Wisconsin 4 (06, 05, 04, 98), Michigan State $2(08,99)$, Minnesota (03), Purdue (03), Illinois (01)

## Big East: 6 of 8 teams in 13 bowls

Louisville 5 (06, 05, 04, 03, 01), West Virginia 3 (07, 06, 05), Cincinnati 2 (09, 08), Pittsburgh (08), Rutgers (06), Syracuse (01)

## C-USA: 6 of 12 teams in 12 bowls

Marshall 3 (02, 99, 98), Houston 2 (09, 06), East Carolina 2 (08, 99), Tulsa 2 (08, 07), Rice (08), UCF (07), Tulane (98)

## Independent: 1 of $\mathbf{3}$ teams in $\mathbf{5}$ bowls

Notre Dame $5(06,05,02,00,98)$

## MAC: 5 of 13 teams in 8 bowls

C. Michigan $2(09,06)$, Miami (OH) $2(03,98)$, Toledo $2(04,01)$, Temple (09*), Ball St (08)

New Championship System
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MWC: 5 of 9 teams in 18 bowls
TCU 7 (09, 08, 06, 05, 03, 02, 00), BYU 5 ( $09,08,07,06,01$ ), Utah 4 ( $09,08,04$, 03), Colorado State (02), Air Force (98)

PAC 10: 8 of 10 teams in 19 bowls
USC 7 (08, 07, 06, 05, 04, 03, 02), Oregon 5 ( $\mathbf{0 9}, 08,05,01,00$ ), UCLA 2 ( 05 , 98), ASU (07), California (04), Stanford (01), Washington (00), Arizona (98)

SEC: 8 of 12 teams in 37 bowls
Florida 7 ( $09,08,07,06,01,00,99$ ), LSU 7 ( $09,07,06,05,04,03,01$ ), Tennessee 7 ( $09,08,05,02,00$ ), Alabama 5 ( $09,08,05,02^{*}, 99$ ), Georgia 4 ( 07 , $05,03,02$ ), Auburn $3(06,04,00)$, Arkansas $2(06,98)$, Mississippi State $2(03$, 99)

Alabama was ineligible in 2002.

## Sun Belt: 3 of 8 teams in 3 bowls

Troy (09), Middle Tennessee State (09), North Texas (03)

## WAC: $\mathbf{3}$ of 8 teams in 11 bowls

Boise State 7 (09, 08, 07, 06, 04, 03, 02), Hawaii 3 (07, 06, 02), Fresno State (01)


[^0]:    ${ }^{1}$ http://www.lasvegassun.com/blogs/sports/2008/jul/22/media-day-q-byu-coach-bronco-mendenhall/
    ${ }^{2}$ http://www.usatoday.com/sports/college/football/mwest-bcs-proposal.pdf

[^1]:    ${ }^{3}$ http://myespn.go.com/blogs/ncfnation/0-9-128/BCS-Presidential-Oversight-Committee-denies-MWC-s-proposal.html

[^2]:    ${ }^{4}$ http://www.footballbowlassociation.com/index.html

[^3]:    ${ }^{5}$ http://www.mysanantonio.com/sports/QA_with_TCU_football_coach_Gary_Patterson.html

[^4]:    ${ }^{6}$ http://www.ebsfootball.com/index.htm

[^5]:    ${ }^{7} \mathrm{http}: / / b l o g s . o r l a n d o s e n t i n e l . c o m / s p o r t s \_c o l l e g e \_f s u / 2010 / 01 / q u i c k i e-h i g h l i g h t s-f r o m-t h e-j i m b o-f i s h e r-i n t r o d u c t o r y-~$ press-conference.html

[^6]:    ${ }^{8} \mathrm{http}: / / w w w . e b s f o o t b a l l . c o m / d o w n l o a d s / E n h a n c e d B o w l S e a s o n . p d f ~$

[^7]:    ${ }^{9}$ http://www.orlandosentinel.com/sports/college/os-coaches-convention-issue-0113-20100112,0,1073733.story

