Win Values:

Reintroducing a New Method of Evaluating Starting Pitchers

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Introduction

In 2002 I introduced a new methodology to evaluate pitchers. Here I would like to re-introduce the method to a new audience and present the results for the 2003-2015 seasons as well as nearly thirty additional seasons (1945-1973) not previously published.

Win Values is a system to evaluate the contribution a starting pitcher makes to his team. Let me contrast my approach to the approach reflected in a pitcher's Wins Above Average (WAA) figure. WAA looks at a pitcher's ERA for a season and the number of innings he pitched, and together with information on the pitcher's home park estimates the number of runs that the pitcher saved his team over and above what a league average pitcher would have allowed. The final step of converting these saved runs into a number of wins is done by estimating how many additional runs, on average, lead to an additional team win.

WAA is a very compelling stat and has been the backbone of pitcher evaluations for many years. My system takes into account two additional factors in evaluating a starting pitcher. First, I evaluate a starting pitcher's contributions on a game-by-game basis rather than simply evaluating his end-of-season stats. After all, any average such as ERA can obscure as well as reveal information. A team for whom the starting pitcher gives up 0, 1, and 17 runs in three starts is likely to win more games than if the pitcher gives up 6 runs in each game, even though the average runs allowed is the same in the two cases. I am sure that readers will have heard the fable about the man with one foot in boiling water and the other foot in ice cold water who is certainly in agony but quite comfortable “on average”.

Evaluation schemes for hitters are almost always performed using seasonal data rather than game-by-game (play-by-play) data. The reason is that hitters come up to bat 600-700 times over the course of a season. This represents a large enough sample for things to “even out” over the course of the season. Evaluations of hitters based upon seasonal stats are quite consistent with more detailed evaluations based upon play-by-play data. Therefore, it is typically not worth the extra effort to utilize more detailed evaluation methods for hitters.

Pitchers, on the other hand, start only about 30 games a season in today's era. Thirty games is not enough for things to “even out” over the course of a season. It turns out that the evaluation of pitchers using game-by-game data can often be significantly different than the evaluation using seasonal data.

Performing the evaluation on a game-by-game basis requires a great deal of detailed data as well as an entirely new set of machinery. The rules of thumb that apply to seasonal averages (such as the number of runs needed for an additional team win) no longer apply on a game-by-game basis. In addition, depending upon what elements of the game you include in the evaluation, probabilities may need to enter the fray.

For example, if a starting pitcher gives up 3 runs in a nine-inning game, how should we evaluate this outing? There are several possible approaches to answer this question. One approach would be to abstract from his team's actual offensive run support in the game and estimate his team's chance of winning using a league-wide distribution of runs scored for the offensive side of the ledger. This is essentially what Michael Wolverton does in his support-neutral wins methodology.

Alternatively, the current system of assigning wins and losses compares the number of runs the pitcher allowed versus the number of runs his team scored in support. Of course, he is assigned a win if his team scores more runs than he allowed, and a loss if vice versa.

These two approaches are a bit problematic if the pitcher did not pitch a complete game. Suppose a starting pitcher gave up 4 runs in 6 innings. Then calculating support-neutral wins or assigning a win or loss is a bit more complex.

My Win Values system explicitly takes into account how many runs the pitcher's own team actually scored in the game. Clearly WAA or support-neutral wins do not take into account a pitcher's run support. Those systems purposefully abstract run support so as to evaluate a pitcher solely on what he has control over.

While this sentiment is laudable, it does not necessarily lead to the most accurate evaluation of a pitcher's actual contribution to his team's actual winning of baseball games. A few examples may suffice. A pitcher who gives up only 2 runs in a 3-2 win surely contributed significantly more to his team winning the game than a pitcher who gives up only 1 run in a 13-1 win. In the first game, the team that scored only three runs could easily have lost the game with another pitcher on the mound that day. In the second game, the team that scored 13 runs would very likely have won the game with virtually any other pitcher on the mound that day.

Consider the flip side. Suppose a team loses a game 12-0. The starting pitcher should not shoulder a large portion of the blame for losing the game, despite giving up twelve runs. Even with a league-average pitcher on the mound that day (say allowing 4-5 runs), the team would not have come close to winning since it did not manage to score any runs at all.

I have designed Win Values to be the best system of evaluating a starting pitcher's contribution to his team actually winning games. Win Values integrates the pertinent information about the pitcher's performance (how many runs he allowed in how many innings) with the number of runs his team scored that day (how many runs they scored in those same number of innings).

WAA is a better measure of “how well” a pitcher pitched over the course of the season. On the other hand, my new Win Values is a better measure of “how valuable” a pitcher pitched over the course of the season.

Conceptual Framework

Win Values is a system that evaluates a pitcher's runs allowed in a game in light of his team's offensive run support in the game. Let me expositionally proceed first with an extreme view to “fix” the team's run support in the game (RS) and perform a pair of operations. The first operation would be merely to see how many runs the pitcher in question allowed in the game (RA), and then see if RA<RS (i.e., whether the starting pitcher's team won or lost the game). The second operation would be replace the pitcher in question with league-average pitching, and see how often the team would win or lose. The

second operation brings in probabilities since we would need to consider the probability that league-average pitching would allow 0 runs, 1 run, 2 runs, …, 25 runs.

Under this preliminary extreme view, the pitcher's win contribution would be reflected in the difference between his team's actual won or loss (depending upon if RA<RS or RA>RS) and the probability that the team would have won the game with league-average pitching.

For illustrative purposes, suppose that the pitcher pitched a complete game and gave up 2 runs while his team scored 4 runs. Of course his team won the game. Suppose we find that league-average pitching would give up 3 or fewer runs 35% of the time. Then we could say that the pitcher's contribution to his team winning that game is 0.65 wins since his pitching turned a situation in which it was 35% likely to result in a win into a 100% win situation (ignoring ties for the moment).

The astute reader will likely have several questions at this point. What about hypothetical tie games? What if the pitcher did not pitch a complete game? What about the effect of the ballpark? Isn't fixing the team's offensive support too extreme? I will address these questions one by one.

Hypothetical tie games in which the league-average pitching gives up exactly the same number of runs as the team scored is easily handled. The simplest and most straightforward way to handle this situation is to say that the hypothetical game would go into extra innings, and that the team would have a 50% chance of winning the game.

How do we handle the case of a pitcher pitching less than a complete game? Suppose the pitcher pitches 7 innings and leaves the game with his team leading 4-2. Since the game is not yet over, we can't do the operation of simply seeing if the team actually won the game (RA<RS). Now there is more to it than that. Instead of a simple check to see if RA<RS, we need to modify the method to calculate the probability that a team leading 4-2 at the conclusion of the seventh inning will go on to win the game. This may be 80%, say. So even for the first of our two operations, we need to leave the realm of certainties and enter the realm of probabilities. Conceptually calculating these probabilities is not difficult; all it requires is tons of inning-by-inning run scored data.

The second operation of seeing how many runs league-average pitching would allow can also be modified to take into account the number of innings the starting pitcher in question pitched. In the above example, we would like to know the probability distribution of league-average pitching allowing any number of runs (say 0 to 25) through seven innings. We then bring in the probability machinery described above to assess the overall probability of the team winning the game with the score 4-X at the conclusion of the seventh inning, where X ranges from 0 to 25.

Incorporating the effect of the home ballpark is also conceptually straightforward. All that we would need is to calculate all of these probabilities in the context of the home ballpark. The probability of winning a game when scoring 4 runs is apt to be significantly higher if the game was played in the Astrodome than if it was played in Coor's Field.

One of the cornerstones of my new Win Values method is the fact that I explicitly take into account the run support a pitcher is provided in each game. However, I don't want to go overboard on this front. Here's an example why. Suppose a team wins a game 6-5. If I evaluate the starting pitcher's contribution by fixing his run support at exactly six runs, then any pitcher who gives up fewer than six runs will be deemed to have contributed the exact same amount to winning the game. This does not seem reasonable to me.

The question, then, is how within this framework to reflect the notion that a pitcher who wins a game 6-3, say, contributed more to his team win than a pitcher who wins a game 6-5.

My solution is to perform another operation. This one deals with the team's run support in the game. The reason that we feel that the 6-3 game pitcher was more valuable than the 6-5 game pitcher is because there was no guarantee that the team would actually score six runs in that game.

This notion is the kernel of the treatment of a pitcher's run support in the Win Values methodology. Rather than simply take the pitcher's run support as a given fixed entity, I seek a distribution of run support for that game.

Consider the following stylized example. Suppose a team is trailing 1-0 in the bottom of the ninth inning with two outs and a fast runner on first base. The next batter belts a long flyball that may be a home run, may hit off the wall scoring the runner from first base, or may be caught on the warning track. As the ball is flying through the air toward the seats, what are the possible run support figures the home team's starting pitcher may ultimately receive that day?

If the long fly becomes a home run, he will be provided two runs (and be a 2-1 winner). If the ball hits the wall, he will be provided one run (and the game will be tied). If the ball is caught on the warning track, he will be provided no runs (and be a hard-luck 1-0 loser). My idea of “could have been” run support levels attempts to capture these types of real-world possibilities.

I utilize backwards bayesian bootstrapping to derive the probability distribution of run support for each team in each game in a baseball season. The method relies upon bayesian inference and partial game scores. The idea is that a team that scores 7 runs in a game may well have scored 5 runs at the conclusion of the 6th inning. Of course, a team that scores a total of 4 runs in a game will never have scored 5 runs at the conclusion of the 6th inning. Thus, the number of runs that a team scores in partial games (say at the conclusion of the 6th inning) conveys information as to how many final runs it will ultimately score in the game.

Bayes Rule is the general principle that allows the inference to go in either direction so that knowing a game's final score can provide information on how many runs were likely to have scored at the conclusion of any particular inning. This provides the backbone of our notion of runs that “could have” scored since we can then bootstrap the run scoring process going forward again, say, starting at the top of the 7th inning.

This may be confusing, so I will give an example. Consider a team that scores 7 runs in a 9-inning game. Suppose I find that teams that score 7 runs in nine innings have scored 5 runs at the conclusion of the 6th inning 10% of the time. I also know the distribution of final scores of every game in which a team has scored exactly 5 runs at the conclusion of the 6th inning. Say these teams wind up scoring 5 runs in 9 innings 12% of the games, 6 runs 20% of the games, 7 runs 25% of the games, …, and 15 runs 1% of the games.

I can calculate a bootstrapped distribution of final scores for every possible number of runs scored at the conclusion of the 6th inning. To find the ultimate “could have been” distribution of final scores, I would then weight these probability distributions of each possible runs scored outcome by the respective probability of having that many runs scored at the conclusion of the 6th inning (this was the 10% in the case of starting with 5 runs in the example above).

The result of this backwards bayesian bootstrapping is a “smearing” of the run support provided a pitcher in each game. For example, this method may find that a team that actually scored 7 runs in a nine-inning game “could have” scored runs with the following probabilities: 0 runs (1%), 1 run (2%), 2 runs (4%), 3 runs (6%), 4 runs (7%), 5 runs (9%), 6 runs (12%), 7 runs (15%), 8 runs (10%), 9 runs (8%), 10% (7%), 11 runs (6%), 12 runs (5%), 13 runs (4%), 14 runs (3%), and 15 runs (1%). The Win Values system uses this “could have been” smeared probability distribution for the pitcher's possible run support in the game in evaluating his outing.

To summarize, I am re-introducing the Win Values methodology to evaluate a starting pitcher's contribution to his team's chance of winning a game if the score is RS to RA at the conclusion of the Zth inning (the pitcher in question pitched Z innings and gave up RA runs – note that no distinction is made between earned and unearned runs). I will first “smear” the pitcher's run support based upon RS and Z using backward bayesian bootstrapping. That gives a probability distribution that the team could have scored X runs at the conclusion of the Zth inning where X ranges from 0 to 25, say.

Next, using the smeared run support distribution, I will estimate the probability that the team would win a game giving up RA runs at the conclusion of the Zth inning. This gives an estimate of the pitcher's win probability for the game.

I then use the exact same smeared run support distribution for the game compared to how many runs league-average pitching would allow to estimate the league-average win probability for the game. The difference between these two win probabilities is the pitcher's win contribution for that game.

Win Values are calculated in this manner for every starting pitcher for every game for every team in the entire season.

Retrosheet

My research, like much conducted in the modern era, is made possible by the wonderful folks at Retrosheet. The data I used was obtained free of charge from and is copyrighted by Retrosheet. It is impossible to fully thank the Retrosheet members for all they do.

Dave Smith and everyone connected with the organization have contributed (and continue to contribute) an amazing amount to baseball history and baseball research over the years. Retrosheet volunteers track down old game information, encode the information into digital form, create season and team files, develop download programs, maintain the fabulous website, and millions of other invaluable tasks undertaken by the Retrosheet team.

Recently, Retrosheet has undertaken the herculean task of deducing old games for which complete play-by-play information is not available. Deduced game files were created to fill the gap of missing games in seasons for which full play by play exists for the majority of games. It has been frustrating to be limited in analysis by this small group of missing games. Using contemporaneous newspaper reports, the play-by-play elements of each missing game were deduced such as hits, runs, and pitching changes (walks, strikeouts, and fielding plays are also deduced to the extent possible).

Retrosheet has recently released deduced files all the way back to 1945. Hence, my Win Value calculations which depend upon knowing inning-by-inning run-scoring and all pitching changes can now be performed for each league-season from 1945-2015. Again, I am very grateful to the Retrosheet team for making this information available and all support they provided me in this endeavor.

High Level Results

Here is a table of the Win Value League Leaders for each season from 1945-2015. The details of each season will be presented in a subsequent section below.

Year	AL Win Value Leader	NL Win Value Leader
2015	Dallas Keuchel	Zack Greinke
2014	Corey Kluber	Clayton Kershaw
2013	James Shields	Clayton Kershaw
2012	Justin Verlander	Johnny Cueto
2011	Justin Verlander	Ian Kennedy
2010	Felix Hernandez	Ubaldo Jimenez
2009	Zack Greinke	Chris Carpenter
2008	Cliff Lee	Tim Lincecum
2007	Fausto Carmona	Brandon Webb
2006	Johan Santana	Chris Carpenter
2005	Johan Santana	Roger Clemens
2004	Johan Santana	Roger Clemens
2003	Esteban Loaiza	Jason Schmidt
2002	Tim Hudson	Randy Johnson
2001	Mike Mussina	Curt Schilling
2000	Pedro Martinez	Randy Johnson
1999	Pedro Martinez	Randy Johnson
1998	Roger Clemens	Greg Maddux
1997	Roger Clemens	Pedro Martinez
1996	Pat Hentgen	Kevin Brown
1995	Randy Johnson	Greg Maddux
1994	Roger Clemens	Greg Maddux
1993	Kevin Appier	Greg Maddux
1992	Mike Mussina	Greg Maddux
1991	Roger Clemens	Andy Benes
1990	Roger Clemens	Ed Whitson
1989	Bret Saberhagen	Joe Magrane
1988	Frank Viola	Orel Hershiser
1987	Frank Viola	Rick Reuschel

Year	AL Win Value Leader	NL Win Value Leader
1986	Roger Clemens	Mike Scott
1985	Bret Saberhagen	Dwight Gooden
1984	Dave Stieb	Dwight Gooden
1983	Richard Dotson	John Denny
1982	Dave Stieb	Steve Rogers
1981	Steve McCatty	Fernando Valenzuela
1980	Mike Norris	Steve Carlton
1979	Mike Flanagan	Joe Niekro
1978	Ron Guidry	Bob Knepper
1977	Jim Palmer	John Candelaria
1976	Mark Fidrych	Don Sutton
1975	Jim Palmer	Tom Seaver
1974	Gaylord Perry	Phil Niekro
1973	Jim Palmer	Tom Seaver
1972	Gaylord Perry	Steve Carlton
1971	Vida Blue	Tom Seaver
1970	Sam McDowell	Bob Gibson
1969	Denny McLain	Bob Gibson
1968	Luis Tiant	Bob Gibson
1967	Joe Horlen	Gary Nolan
1966	Jim Kaat	Sandy Koufax
1965	Sam McDowell	Sandy Koufax
1964	Dean Chance	Sandy Koufax
1963	Gary Peters	Dick Ellsworth
1962	Hank Aguirre	Bob Purkey
1961	Don Mossi	Joey Jay
1960	Jim Bunning	Bob Friend
1959	Hoyt Wilhelm	Vern Law
1958	Billy Pierce	Red Witt
1957	Jim Bunning	Johnny Podres
1956	Herb Score	Don Newcombe
1955	Billy Pierce	Bob Rush
1954	Mike Garcia	Johnny Antonelli
1953	Billy Pierce	Warren Spahn

Year	AL Win Value Leader	NL Win Value Leader
1952	Bobby Shantz	Ken Raffensberger
1951	Eddie Lopat	Sal Maglie
1950	Early Wynn	Robin Roberts
1949	Mel Parnell	Don Newcombe
1948	Hal Newhouser	Harry Brecheen
1947	Bob Feller	Ewell Blackwell
1946	Bob Feller	Harry Brecheen
1945	Hal Newhouser	Harry Brecheen

Here is the the list of multiple Win Value league leaders from 1945-2015:

8 Roger Clemens
5 Greg Maddux
4 Randy Johnson
3 Billy Pierce
3 Bob Gibson
3 Harry Brecheen
3 Jim Palmer
3 Johan Santana
3 Pedro Martinez
3 Sandy Koufax
3 Tom Seaver
2 Bob Feller
2 Bret Saberhagen
2 Chris Carpenter
2 Clayton Kershaw
2 Dave Stieb
2 Don Newcombe
2 Dwight Gooden
2 Frank Viola
2 Gaylord Perry
2 Hal Newhouser
2 Jim Bunning
2 Justin Verlander
2 Mike Mussina
2 Sam McDowell
2 Steve Carlton
2 Zack Greinke

Here is the list of the 100 best single season Win Values for starting pitchers between 1945-2015.

Rank	Year	League	Pitcher	Win Value (wins above avg)
1	1985	NL	Dwight Gooden	8.63
2	1972	NL	Steve Carlton	8.59
3	1995	NL	Greg Maddux	8.43
4	1997	AL	Roger Clemens	8.22
5	2000	AL	Pedro Martinez	8.02
6	1990	AL	Roger Clemens	7.38
7	1965	NL	Sandy Koufax	7.37
8	2015	NL	Zack Greinke	7.24
9	1968	NL	Bob Gibson	7.23
10	1999	AL	Pedro Martinez	7.22
11	1964	AL	Dean Chance	7.17
12	1966	NL	Sandy Koufax	7.13
13	1975	AL	Jim Palmer	7.12
14	1963	NL	Dick Ellsworth	7.11
15	1997	NL	Pedro Martinez	7.01
16	1946	AL	Bob Feller	6.92
17	1963	NL	Sandy Koufax	6.92
18	1978	AL	Ron Guidry	6.83
19	1946	AL	Hal Newhouser	6.80
20	1971	NL	Tom Seaver	6.76
21	1969	NL	Bob Gibson	6.60
22	1997	NL	Greg Maddux	6.57
23	1972	AL	Gaylord Perry	6.45
24	1977	NL	John Candelaria	6.43
25	1971	AL	Vida Blue	6.42
26	1965	NL	Juan Marichal	6.37
27	1994	NL	Greg Maddux	6.34
28	1995	AL	Randy Johnson	6.34
29	1969	NL	Tom Seaver	6.32
30	1952	AL	Bobby Shantz	6.31

Rank	Year	League	Pitcher	Win Value (wins above avg)
31	2003	AL	Esteban Loaiza	6.30
32	2005	NL	Roger Clemens	6.29
33	2001	NL	Curt Schilling	6.25
34	2009	AL	Zack Greinke	6.25
35	1999	NL	Randy Johnson	6.19
36	1953	NL	Warren Spahn	6.16
37	1945	AL	Hal Newhouser	6.15
38	1968	AL	Luis Tiant	6.13
39	2015	NL	Jake Arrieta	6.12
40	1988	NL	Orel Hershiser	6.08
41	2001	NL	Randy Johnson	6.06
42	1947	NL	Ewell Blackwell	5.95
43	1976	AL	Mark Fidrych	5.95
44	1969	NL	Juan Marichal	5.94
45	1998	AL	Roger Clemens	5.94
46	1993	AL	Kevin Appier	5.91
47	1996	NL	Kevin Brown	5.88
48	1980	NL	Steve Carlton	5.85
49	1949	AL	Mel Parnell	5.82
50	1976	AL	Vida Blue	5.81
51	1989	AL	Bret Saberhagen	5.81
52	1986	AL	Roger Clemens	5.75
53	1953	NL	Robin Roberts	5.72
54	1947	NL	Warren Spahn	5.67
55	1977	NL	Rick Reuschel	5.67
56	2004	AL	Johan Santana	5.67
57	1997	AL	Randy Johnson	5.66
58	2011	AL	Justin Verlander	5.64
59	2008	AL	Cliff Lee	5.62
60	2008	NL	Tim Lincecum	5.62
61	1969	AL	Denny McLain	5.56
62	1973	NL	Tom Seaver	5.56
63	1966	NL	Juan Marichal	5.52

Rank	Year	League	Pitcher	Win Value (wins above avg)
64	2013	NL	Clayton Kershaw	5.52
65	1977	AL	Jim Palmer	5.50
66	1954	NL	Johnny Antonelli	5.47
67	1973	AL	Jim Palmer	5.47
68	1980	AL	Mike Norris	5.47
69	1992	AL	Mike Mussina	5.47
70	2009	NL	Chris Carpenter	5.47
71	1988	AL	Frank Viola	5.46
72	2003	AL	Pedro Martinez	5.44
73	1971	NL	Fergie Jenkins	5.43
74	1987	AL	Frank Viola	5.43
75	1971	AL	Wilbur Wood	5.42
76	2000	NL	Randy Johnson	5.40
77	2000	NL	Kevin Brown	5.39
78	1996	NL	John Smoltz	5.36
79	1998	AL	Pedro Martinez	5.36
80	1964	AL	Whitey Ford	5.35
81	1992	NL	Greg Maddux	5.35
82	1969	NL	Jerry Koosman	5.33
83	1998	NL	Greg Maddux	5.33
84	1998	NL	Kevin Brown	5.31
85	1974	AL	Gaylord Perry	5.30
86	1996	AL	Pat Hentgen	5.30
87	1948	NL	Harry Brecheen	5.26
88	1992	AL	Roger Clemens	5.25
89	2003	NL	Jason Schmidt	5.23
90	2002	NL	Randy Johnson	5.22
91	2014	NL	Clayton Kershaw	5.21
92	1956	AL	Herb Score	5.20
93	1988	AL	Teddy Higuera	5.18
94	1986	AL	Teddy Higuera	5.16
95	1986	NL	Mike Scott	5.15
96	2014	AL	Corey Kluber	5.14

Rank	Year	League	Pitcher	Win Value (wins above avg)
97	1977	NL	Tom Seaver	5.12
98	1988	AL	Roger Clemens	5.11
99	1993	NL	Greg Maddux	5.10
100	1993	NL	Jose Rijo	5.10

Storied seasons take their rightful place atop the single-season Win Values leaderboard. Dwight Gooden in 1985, Steve Carlton in 1972, Greg Maddux in 1995, Roger Clemens in 1997, and Pedro Martinez in 2000 are the five most valuable seasons calculated to date. Sandy Koufax's fantastic 1965 season and Bob Gibson's immortal 1968 season also make the top ten.

It is an important finding that the vast majority of these pitchers' win value figure is less than his WAA figure for his great season. Gooden in 1985 had a 9.8 WAA whereas he accrued “only” 8.63 win values. Carlton in 1972 had a 9.3 WAA whereas he accrued “only” 8.59 win values. Clemens in 1997 had a 9.4 WAA whereas he accrued “only” 8.22 win values. Finally, Pedro in 2000 had a 9.7 WAA whereas he accrued “only” 8.02 win values.

The reason that WAA overvalues great seasons is due to the non-linear nature of the relationship between preventing runs and winning games. If a team scores 6 runs, say, then the “win-factor” of allowing 5, 4, 3, 2, 1, and 0 runs will be highly non-linear. Essentially, these pitchers' great run prevention was overkill. Their teams would have won around the same number of games if they had given up a few more runs over the course of the season. Win Values is able to make this distinction whereas Wins Above Average is not.

Here is the list of the top 100 leaders in Total Win Values from 1945-2015.

Rank of Total Win Values	Pitcher	Total Win Values (wins above avg; 1945-2015)	Pennants Added (1945-2015)	Rank of Pennants Added
1	Roger Clemens	82.37	3.63	1
2	Greg Maddux	65.23	2.91	2
3	Tom Seaver	55.96	2.41	3
4	Randy Johnson	53.96	2.38	4
5	Pedro Martinez	51.60	2.33	5
6	Jim Palmer	45.67	1.96	6
7	Warren Spahn	45.26	1.89	7
8	Bob Gibson	40.40	1.77	8
9	Mike Mussina	39.00	1.56	10
10	Curt Schilling	38.41	1.58	9
11	Tom Glavine	37.95	1.52	12
12	Gaylord Perry	34.67	1.42	15
13	Bert Blyleven	34.64	1.41	16
14	Fergie Jenkins	34.40	1.40	17
15	Roy Halladay	34.18	1.45	13
16	Whitey Ford	34.16	1.34	19
17	Steve Carlton	33.57	1.52	11
18	Nolan Ryan	33.09	1.28	21
19	Kevin Brown	32.06	1.39	18
20	Sandy Koufax	31.01	1.45	14
21	John Smoltz	30.84	1.23	23
22	Tim Hudson	30.65	1.20	24
23	Robin Roberts	30.07	1.30	20
24	Clayton Kershaw	29.29	1.25	22
25	Don Sutton	28.72	1.18	26
26	Bret Saberhagen	28.28	1.15	29
27	Luis Tiant	28.15	1.17	27
28	Roy Oswalt	28.13	1.15	30
29	Johan Santana	28.02	1.19	25
30	Felix Hernandez	27.31	1.08	32

Rank of Total Win Values	Pitcher	Total Win Values (wins above avg; 1945-2015)	Pennants Added (1945-2015)	Rank of Pennants Added
31	David Cone	27.22	1.08	33
32	Kevin Appier	26.82	1.13	31
33	Andy Pettitte	25.90	0.95	42
34	Juan Marichal	25.64	1.15	28
35	Don Drysdale	25.56	0.99	37
36	Jimmy Key	25.31	0.99	38
37	C.C. Sabathia	24.91	1.02	35
38	Ron Guidry	24.55	1.02	36
39	Billy Pierce	24.54	0.98	39
40	Zack Greinke	24.52	1.06	34
41	Phil Niekro	23.66	0.91	45
42	Tommy John	23.65	0.92	44
43	Cole Hamels	23.49	0.92	43
44	Chuck Finley	23.47	0.90	46
45	Dave Stieb	22.84	0.95	41
46	Rick Reuschel	22.01	0.89	47
47	Hal Newhouser	21.61	0.97	40
48	Orel Hershiser	21.24	0.85	51
49	Bob Lemon	20.91	0.80	55
50	Jim Bunning	20.31	0.86	48
51	Carlos Zambrano	19.48	0.77	60
52	Cliff Lee	19.38	0.83	52
53	Steve Rogers	19.28	0.79	58
54	Mark Buehrle	19.23	0.70	70
55	Jack Morris	19.03	0.77	59
56	Mel Parnell	18.99	0.81	54
57	Jon Lester	18.80	0.75	61
58	Dwight Gooden	18.60	0.86	49
59	John Candelaria	18.58	0.73	62
60	Sal Maglie	18.49	0.73	63
61	Vida Blue	18.42	0.85	50
62	Chris Carpenter	18.11	0.79	57

Rank of Total Win Values	Pitcher	Total Win Values (wins above avg; 1945-2015)	Pennants Added (1945-2015)	Rank of Pennants Added
63	Jake Peavy	18.01	0.69	72
64	Bob Welch	17.82	0.67	76
65	Harry Brecheen	17.76	0.73	65
66	Jerry Koosman	17.63	0.80	56
67	Adam Wainwright	17.50	0.69	71
68	Jered Weaver	17.47	0.68	75
69	Al Leiter	17.22	0.68	74
70	Brandon Webb	17.16	0.71	67
71	Frank Viola	17.15	0.81	53
72	Jim Maloney	16.98	0.72	66
73	Justin Verlander	16.84	0.71	69
74	Early Wynn	16.79	0.71	68
75	David Wells	16.69	0.63	79
76	John Tudor	16.51	0.64	77
77	Milt Pappas	16.44	0.59	91
78	Brad Radke	16.21	0.62	82
79	Mark Langston	16.13	0.73	64
80	Mike Garcia	16.03	0.62	81
81	Matt Cain	15.79	0.61	83
82	Dennis Eckersley	15.54	0.63	80
83	John Lackey	15.36	0.59	86
84	Larry Jackson	15.19	0.60	85
85	Max Scherzer	14.97	0.59	92
86	Bartolo Colon	14.87	0.60	84
87	Dennis Martinez	14.87	0.59	87
88	Bob Feller	14.65	0.68	73
89	Johnny Cueto	14.64	0.59	88
90	David Price	14.52	0.56	96
91	Jack McDowell	14.49	0.56	94
92	Andy Messersmith	14.45	0.57	93
93	Sam McDowell	14.15	0.64	78
94	Jon Matlack	14.13	0.59	90

Rank of Total Win Values	Pitcher	Total Win Values (wins above avg; 1945-2015)	Pennants Added (1945-2015)	Rank of Pennants Added
95	Teddy Higuera	13.35	0.59	89
96	Preacher Roe	13.25	0.56	95
97	Virgil Trucks	13.20	0.51	101
98	Mel Stottlemyre	13.05	0.51	100
99	Alex Fernandez	12.77	0.49	104
100	Andy Benes	12.58	0.48	113

We see that the triumvirate of Roger Clemens, Greg Maddux, and Tom Seaver are top three in Total Win Values for the 1945-2015 era. Clemens, perhaps surprisingly, is number one by a large margin.

Note that we only have the back half of Bob Feller's career, so I am also curious to learn how well Feller fares when his complete career is covered. (He checks in at 88th now.)

In addition to the career Win Values, I also present each pitcher's estimated pennants added figure over this time period as well. The idea of measuring a player's performance in terms of how many pennants he would add to his team has been around for a long time. Bill James wrote about it when he compared Don Drysdale to Milt Pappas in one of his books. (Joe Dimino has calculated pennant-added figures for many of the players appearing on Hall of Merit ballots over the years.) Drysdale and Pappas have similar career values yet Drysdale contributed to more pennants than Pappas since Drysdale had an appreciable higher peak. And it is a high peak that contributes to increased pennant chances.

Following the work of others, I performed a series of simulations to attempt to estimate the non-linear relationship between a pitcher's wins above average (which Win Values reflect) and the additional chance his team has in winning the pennant that season. I assumed a conventional spread of underlying qualities of the teams in a league, and then simulated replacing a league-average pitcher with the pitcher in question by successively adding a specific number of wins to the team total for each team in the league.

Based upon these simulations, I estimated the relationship as follows:

Pennant Added = 0.03 * (Win Values ^ 1.25) if Win Values > 1, or

Pennant Added = 0.03 * Win Values if Win Values <= 1.

You will see in the table above that the ranking via Win Values occasionally diverges from the ranking via Pennants Added. The first such divergence concerns Mike Mussina and Curt Schilling. Mussina is ranked slightly ahead of Schilling on total win values, but Schilling leap-frogs Mussina in pennants added since Schilling's peak seasons are more pennant-boosting than Mussina's.

Since I want the focus of this article to be on Win Values, I will simply report the pennant added figures without further comment. This is undoubtedly a topic of future research.

Season-by-Season Results

Here are the top ten Win Values in each league from 1945-2015.

1945 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Hal Newhouser	6.15	25-9	313	195
2	Roger Wolff	4.95	20-10	250	146
3	Nels Potter	4.36	15-11	255	145
4	Steve Gromek	3.70	19-9	251	127
5	Al Hollingsworth	2.92	12-9	173	132
6	Al Benton	2.68	13-8	192	175
7	Dave Ferriss	2.46	21-10	265	115
8	Bob Muncrief	2.09	13-4	146	132
9	Allie Reynolds	2.00	18-12	247	101
10	Thornton Lee	1.76	15-12	228	135

1945 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Harry Brecheen	3.89	15-4	157	150
2	Hank Wyse	3.36	22-10	278	136
3	Red Barrett	2.83	23-12	285	126
4	Ken Burkhart	2.70	18-8	217	130
5	Hank Borowy	2.48	11-2	122	171
6	Preacher Roe	2.47	14-13	235	138
7	Claude Passeau	2.47	17-9	227	149
8	Ed Wright	2.23	8-3	111	154
9	Nick Strincevich	1.94	16-10	228	120
10	Ray Prim	1.74	13-8	165	153

1946 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Feller	6.92	26-15	371	151
2	Hal Newhouser	6.80	26-9	293	190
3	Tex Hughson	4.47	20-11	278	133
4	Bill Bevens	3.83	16-13	250	154
5	Dave Ferriss	3.22	25-6	274	112
6	Spud Chandler	3.11	20-8	257	164
7	Dizzy Trout	2.79	17-13	276	157
8	Mickey Harris	1.67	17-9	223	100
9	Jesse Flores	1.62	9-7	155	151
10	Red Ruffing	1.53	5-1	61	195

1946 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Harry Brecheen	3.62	15-15	231	139
2	Howie Pollet	3.53	21-10	266	165
3	Johnny Sain	3.33	20-14	265	157
4	Schoolboy Rowe	2.71	11-4	136	162
5	Murry Dickson	2.17	15-6	184	120
6	Joe Hatten	2.05	14-11	222	119
7	Johnny Schmitz	1.99	11-11	224	127
8	Ewell Blackwell	1.86	9-13	194	137
9	Vic Lombardi	1.70	13-10	193	117
10	Fritz Ostermueller	1.58	13-10	193	124

1947 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Feller	4.12	20-11	299	130
2	Spec Shea	3.27	14-5	179	115
3	Eddie Lopat	2.41	16-13	253	129
4	Joe Dobson	2.21	18-8	229	131
5	Hal Newhouser	1.99	17-17	285	132
6	Dick Fowler	1.77	12-11	227	136
7	Fred Hutchinson	1.66	18-10	220	125
8	Art Houtteman	1.65	7-2	111	111
9	Spud Chandler	1.63	9-5	128	144
10	Mickey Haefner	1.37	10-14	193	102

1947 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Ewell Blackwell	5.95	22-8	273	168
2	Warren Spahn	5.67	21-10	290	170
3	Dutch Leonard	4.09	17-12	235	149
4	Ralph Branca	3.66	21-12	280	154
5	Larry Jansen	3.15	21-5	248	129
6	Joe Hatten	2.43	17-8	225	113
7	Red Munger	2.42	16-5	224	122
8	Harry Brecheen	1.84	16-11	223	125
9	Harry Taylor	1.74	10-5	162	132
10	Al Brazle	1.64	14-8	168	145

1948 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Hal Newhouser	4.33	21-12	272	145
2	Gene Bearden	3.74	20-7	230	168
3	Mel Parnell	3.37	15-8	212	139
4	Ray Scarborough	3.08	15-8	185	154
5	Joe Dobson	2.99	16-10	245	123
6	Bob Feller	2.89	19-15	280	114
7	Bob Lemon	2.76	20-14	294	144
8	Vic Raschi	2.04	19-8	223	106
9	Joe Coleman	1.86	14-13	216	106
10	Eddie Lopat	1.65	17-11	227	112

1948 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Harry Brecheen	5.26	20-7	233	182
2	Johnny Sain	4.42	24-15	315	149
3	Rex Barney	2.76	15-13	247	129
4	Preacher Roe	2.65	12-8	178	152
5	Johnny Schmitz	2.47	18-13	242	147
6	Dutch Leonard	2.35	12-17	226	156
7	Johnny Vander Meer	2.27	17-14	232	115
8	Elmer Riddle	1.93	12-10	191	117
9	Rip Sewell	1.75	13-3	122	118
10	Russ Meyer	1.58	10-10	165	106

1949 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mel Parnell	5.82	25-7	295	158
2	Virgil Trucks	3.98	19-11	275	148
3	Ellis Kinder	3.65	23-6	252	130
4	Mike Garcia	3.33	14-5	176	170
5	Bob Lemon	3.00	22-10	280	133
6	Hal Newhouser	2.53	18-11	292	124
7	Vic Raschi	2.28	21-10	275	121
8	Fred Hutchinson	2.08	15-7	189	141
9	Bill Wight	2.08	15-13	245	126
10	Chuck Stobbs	1.71	11-6	152	109

1949 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Don Newcombe	4.30	17-8	244	130
2	Howie Pollet	4.21	20-9	231	149
3	Ken Heintzelman	3.73	17-10	250	130
4	Russ Meyer	3.64	17-8	213	127
5	Preacher Roe	3.50	15-6	213	148
6	Ken Raffensberger	2.60	18-17	284	124
7	Harry Brecheen	2.16	14-11	215	123
8	Red Munger	2.12	15-8	188	107
9	Warren Spahn	1.81	21-14	302	124
10	Cliff Chambers	1.54	13-7	177	106

1950 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Early Wynn	2.91	18-8	214	135
2	Mel Parnell	2.84	18-10	249	137
3	Ned Garver	2.66	13-18	260	146
4	Art Houtteman	2.47	19-12	275	132
5	Bob Feller	2.43	16-11	247	126
6	Dizzy Trout	2.20	13-5	185	125
7	Vic Raschi	2.04	21-8	257	108
8	Bob Lemon	1.97	23-11	288	112
9	Whitey Ford	1.85	9-1	112	153
10	Bill Wight	1.60	10-16	206	125

1950 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Robin Roberts	4.35	20-11	304	133
2	Sal Maglie	3.17	18-4	206	152
3	Max Lanier	3.11	11-9	181	137
4	Jim Hearn	3.08	11-4	134	166
5	Ewell Blackwell	3.02	17-15	261	143
6	Preacher Roe	2.92	19-11	251	124
7	Larry Jansen	2.39	19-13	275	136
8	Bubba Church	1.85	8-6	142	148
9	Bob Rush	1.75	13-20	255	113
10	Frank Hiller	1.65	12-5	153	119

1951 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Eddie Lopat	3.30	21-9	235	132
2	Early Wynn	3.19	20-13	274	126
3	Saul Rogovin	2.97	12-8	217	146
4	Ned Garver	2.68	20-12	246	118
5	Allie Reynolds	2.46	17-8	221	126
6	Billy Pierce	2.44	15-14	240	133
7	Mel Parnell	2.20	18-11	221	137
8	Mike Garcia	1.95	20-13	254	120
9	Bob Lemon	1.84	17-14	263	108
10	Bob Porterfield	1.83	9-8	136	118

1951 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Eddie Lopat	3.30	21-9	235	132
2	Early Wynn	3.19	20-13	274	126
3	Saul Rogovin	2.97	12-8	217	146
4	Ned Garver	2.68	20-12	246	118
5	Allie Reynolds	2.46	17-8	221	126
6	Billy Pierce	2.44	15-14	240	133
7	Mel Parnell	2.20	18-11	221	137
8	Mike Garcia	1.95	20-13	254	120
9	Bob Lemon	1.84	17-14	263	108
10	Bob Porterfield	1.83	9-8	136	118

1952 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bobby Shantz	6.31	24-7	280	159
2	Bob Lemon	3.32	22-11	310	134
3	Mike Garcia	3.24	22-11	292	141
4	Billy Pierce	3.08	15-12	255	142
5	Bob Porterfield	3.03	13-14	231	131
6	Allie Reynolds	3.02	20-8	244	161
7	Joe Dobson	2.77	14-10	201	145
8	Mel Parnell	2.75	12-12	214	109
9	Harry Byrd	2.43	15-15	228	119
10	Vic Raschi	2.08	16-6	223	119

1952 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Ken Raffensberger	4.33	17-13	247	133
2	Robin Roberts	4.23	28-7	330	141
3	Warren Hacker	3.87	15-9	185	149
4	Karl Drews	3.03	14-15	229	135
5	Bob Rush	2.56	17-13	250	143
6	Curt Simmons	2.41	14-8	201	130
7	Sal Maglie	2.28	18-8	216	127
8	Warren Spahn	1.96	14-19	290	122
9	Preacher Roe	1.95	11-2	159	118
10	Carl Erskine	1.87	14-6	207	136

1953 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Billy Pierce	3.77	18-12	271	147
2	Bob Porterfield	3.62	22-10	255	116
3	Mel Parnell	3.57	21-8	241	136
4	Virgil Trucks	3.50	20-10	264	139
5	Mickey McDermott	2.81	18-10	206	138
6	Mike Garcia	2.42	18-9	272	115
7	Eddie Lopat	2.38	16-4	178	152
8	Sandy Consuegra	1.77	7-5	129	140
9	Bob Keegan	1.66	7-5	99	147
10	Whitey Ford	1.37	18-6	207	123

1953 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Warren Spahn	6.16	23-7	266	188
2	Robin Roberts	5.72	23-16	347	153
3	Harvey Haddix	4.31	20-9	253	139
4	Vinegar Bend Mizell	3.11	13-11	224	122
5	Curt Simmons	2.97	16-13	238	131
6	Ruben Gomez	2.51	13-11	204	128
7	Carl Erskine	2.16	20-6	247	121
8	Gerry Staley	1.80	18-9	230	106
9	Fred Baczewski	1.78	11-4	148	120
10	Bob Buhl	1.72	13-8	154	133

1954 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mike Garcia	3.72	19-8	259	140
2	Early Wynn	3.22	23-11	271	135
3	Bob Lemon	2.84	23-7	258	136
4	Virgil Trucks	2.69	19-12	265	135
5	Steve Gromek	2.60	18-16	253	136
6	Bob Keegan	2.22	16-9	210	122
7	Jack Harshman	2.09	14-8	177	128
8	Ned Garver	1.93	14-11	246	133
9	Joe Coleman	1.77	13-17	221	102
10	Bob Feller	1.76	13-3	140	120

1954 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Johnny Antonelli	5.47	21-7	259	178
2	Ruben Gomez	3.71	17-9	222	142
3	Robin Roberts	3.68	23-15	337	136
4	Warren Spahn	3.14	21-12	283	119
5	Sal Maglie	2.91	14-6	218	125
6	Lew Burdette	2.90	15-14	238	136
7	Gene Conley	2.59	14-9	194	127
8	Bob Rush	1.98	13-15	236	111
9	Don Liddle	1.80	10-4	106	97
10	Harvey Haddix	1.66	18-13	260	115

1955 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Billy Pierce	4.25	15-10	206	200
2	Billy Hoeft	3.33	16-7	220	130
3	Frank Sullivan	3.05	18-13	260	149
4	Early Wynn	3.04	17-11	230	142
5	Whitey Ford	2.86	18-7	254	144
6	Dick Donovan	2.03	15-9	187	118
7	Jack Harshman	1.92	11-7	179	117
8	Bob Turley	1.90	17-13	247	123
9	George Susce	1.87	9-7	144	142
10	Herb Score	1.79	16-10	227	141

1955 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Rush	2.94	13-11	234	118
2	Don Newcombe	2.26	20-5	234	128
3	Willard Schmidt	2.22	7-6	130	146
4	Robin Roberts	1.92	23-14	305	121
5	Warren Spahn	1.62	17-14	246	115
6	Billy Loes	1.53	10-4	128	114
7	Bob Friend	1.53	14-9	200	144
8	Joe Nuxhall	1.43	17-12	257	121
9	Sam Jones	1.30	14-20	242	101
10	Carl Erskine	1.29	11-8	195	108

1956 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Herb Score	5.20	20-9	249	166
2	Whitey Ford	4.86	19-6	226	157
3	Early Wynn	4.83	20-9	278	154
4	Jack Harshman	3.55	15-11	227	132
5	Bob Lemon	3.46	20-14	255	139
6	Billy Pierce	3.27	20-9	276	123
7	Frank Lary	3.01	21-13	294	132
8	Tom Brewer	2.43	19-9	244	132
9	Frank Sullivan	1.43	14-7	242	135
10	Don Larsen	1.43	11-5	180	119

1956 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Don Newcombe	4.38	27-7	268	131
2	Warren Spahn	4.01	20-11	281	125
3	Johnny Antonelli	3.89	20-13	258	132
4	Sal Maglie	3.52	13-5	191	139
5	Lew Burdette	2.57	19-10	256	129
6	Murry Dickson	1.85	13-11	219	114
7	Bob Rush	1.67	13-10	240	120
8	Vinegar Bend Mizell	1.60	14-14	209	103
9	Ron Kline	1.51	14-18	264	111
10	Roger Craig	1.12	12-11	199	108

1957 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jim Bunning	4.03	20-8	267	144
2	Frank Sullivan	3.77	14-11	241	146
3	Billy Pierce	3.00	20-12	257	115
4	Tom Sturdivant	2.85	16-6	202	142
5	Bob Turley	2.52	13-6	176	133
6	Dick Donovan	2.42	16-6	221	135
7	Paul Foytack	1.88	14-11	212	123
8	Jim Wilson	1.84	15-8	202	108
9	Connie Johnson	1.65	14-11	242	112
10	Whitey Ford	1.09	11-5	129	140

1957 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Johnny Podres	3.68	12-9	196	155
2	Don Drysdale	3.45	17-9	221	153
3	Jack Sanford	2.96	19-8	237	124
4	Bob Buhl	2.57	18-7	217	128
5	Warren Spahn	2.42	21-11	271	130
6	Brooks Lawrence	1.47	16-13	250	116
7	Sam Jones	1.37	12-9	183	110
8	Ruben Gomez	1.30	15-13	238	104
9	Curt Simmons	1.29	12-11	212	111
10	Bob Friend	1.28	14-18	277	113

1958 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Billy Pierce	3.25	17-11	245	137
2	Bob Turley	3.23	21-7	245	119
3	Frank Lary	3.15	16-15	260	139
4	Whitey Ford	3.13	14-7	219	177
5	Dick Donovan	2.95	15-14	248	122
6	Camilo Pascual	1.73	8-12	177	121
7	Arnie Portocarrero	1.59	15-11	205	110
8	Cal McLish	1.42	16-8	226	124
9	Paul Foytack	1.25	15-13	230	117
10	Ike Delock	1.21	14-8	160	119

1958 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Red Witt	3.85	9-2	106	241
2	Sam Jones	3.57	14-13	250	144
3	Bob Purkey	3.48	17-11	250	117
4	Robin Roberts	3.09	17-14	270	123
5	Joey Jay	2.94	7-5	97	167
6	Warren Spahn	2.75	22-11	290	116
7	Carl Willey	2.33	9-7	140	132
8	Vinegar Bend Mizell	2.24	10-14	190	122
9	Bob Friend	1.87	22-14	274	105
10	Stan Williams	1.60	9-7	119	104

1959 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Hoyt Wilhelm	3.57	15-11	226	173
2	Bob Shaw	3.20	18-6	231	141
3	Don Mossi	3.00	17-9	228	121
4	Camilo Pascual	2.70	17-10	239	149
5	Billy O'Dell	2.42	10-12	199	129
6	Early Wynn	2.07	22-10	256	120
7	Bud Daley	2.05	16-13	216	127
8	Milt Pappas	1.60	15-9	209	116
9	Jim Bunning	1.52	17-13	250	104
10	Art Ditmar	1.39	13-9	202	126

1959 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Vern Law	3.41	18-9	266	129
2	Roger Craig	3.05	11-5	153	205
3	Johnny Antonelli	2.92	19-10	282	123
4	Warren Spahn	2.85	21-15	292	119
5	Don Drysdale	2.74	17-13	271	122
6	Larry Jackson	2.56	14-13	256	128
7	Sam Jones	2.50	21-15	271	134
8	Harvey Haddix	2.06	12-12	224	123
9	Don Newcombe	2.05	13-8	222	129
10	Bob Buhl	1.96	15-9	198	123

1960 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jim Bunning	3.02	11-14	252	143
2	Ray Herbert	2.06	14-15	253	122
3	Milt Pappas	1.96	15-11	206	114
4	Billy Stafford	1.88	3-1	60	161
5	Billy Muffett	1.75	6-4	125	125
6	Jack Kralick	1.74	8-6	151	132
7	Frank Baumann	1.67	13-6	185	144
8	Whitey Ford	1.55	12-9	193	117
9	Art Ditmar	1.34	15-9	200	118
10	Chuck Estrada	1.26	18-11	209	107

1960 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Friend	3.64	18-12	276	125
2	Don Drysdale	3.38	15-14	269	139
3	Ernie Broglio	3.32	21-9	226	148
4	Vern Law	3.16	20-9	272	122
5	Larry Jackson	3.01	18-13	282	117
6	Curt Simmons	2.68	7-4	156	133
7	Mike McCormick	2.63	15-12	253	130
8	Johnny Podres	2.26	14-12	228	128
9	Bob Buhl	2.06	16-9	239	111
10	Stan Williams	2.06	14-10	207	132

1961 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Don Mossi	2.89	15-7	240	139
2	Frank Lary	2.82	23-9	275	127
3	Jack Kralick	2.81	13-11	242	117
4	Juan Pizarro	2.81	14-7	195	128
5	Jim Bunning	2.70	17-11	268	129
6	Milt Pappas	2.56	13-9	178	126
7	Dick Donovan	2.54	10-10	169	163
8	Ken McBride	2.46	12-15	242	123
9	Whitey Ford	2.40	25-4	283	115
10	Bill Monbouquette	2.31	14-14	236	122

1961 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Joey Jay	3.94	21-10	247	114
2	Warren Spahn	3.63	21-13	263	122
3	Larry Jackson	3.08	14-11	211	117
4	Bob Gibson	2.70	13-12	211	136
5	Ray Sadecki	2.38	14-10	223	118
6	Johnny Podres	2.23	18-5	183	114
7	Mike McCormick	1.86	13-16	250	118
8	Jim O'Toole	1.71	19-9	253	130
9	Don Cardwell	1.60	15-14	259	109
10	Tom Sturdivant	1.58	5-2	86	140

1962 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Hank Aguirre	4.01	16-8	216	185
2	Whitey Ford	3.28	17-8	258	130
3	Camilo Pascual	3.27	20-11	258	123
4	Ray Herbert	3.05	20-9	237	120
5	Bill Monbouquette	2.82	15-13	235	124
6	Dick Donovan	2.61	20-10	251	107
7	Robin Roberts	2.34	10-9	191	133
8	Jim Kaat	2.24	18-14	269	130
9	Ralph Terry	2.14	23-12	299	118
10	Jim Bunning	2.06	19-10	258	114

1962 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Purkey	4.51	23-5	288	143
2	Bob Friend	3.94	18-14	262	129
3	Bob Gibson	3.81	15-13	234	151
4	Ernie Broglio	3.76	12-9	222	144
5	Bob Shaw	3.18	15-9	225	135
6	Sandy Koufax	3.18	14-7	184	143
7	Warren Spahn	3.14	18-14	269	125
8	Don Drysdale	2.75	25-9	314	128
9	Billy O'Dell	2.46	19-14	281	109
10	Joey Jay	2.21	21-14	273	107

1963 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Gary Peters	4.85	19-8	243	150
2	Jim Bouton	3.39	21-7	249	140
3	Whitey Ford	2.95	24-7	269	129
4	Al Downing	2.88	13-5	176	138
5	Camilo Pascual	2.76	21-9	248	148
6	Juan Pizarro	2.72	16-8	215	146
7	Jack Kralick	2.24	14-13	223	120
8	John Buzhardt	2.13	9-4	126	144
9	Milt Pappas	1.99	16-9	217	114
10	Steve Barber	1.98	20-13	259	126

1963 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dick Ellsworth	7.11	22-10	291	167
2	Sandy Koufax	6.92	25-5	311	159
3	Warren Spahn	3.68	23-7	260	124
4	Juan Marichal	3.23	25-8	321	133
5	Jim Maloney	3.18	23-7	250	120
6	Bob Friend	2.96	17-16	269	140
7	Joe Nuxhall	2.24	15-8	217	128
8	John Tsitouris	2.09	12-8	191	105
9	Larry Jackson	1.92	14-18	275	138
10	Jim O'Toole	1.76	17-14	234	116

1964 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dean Chance	7.17	20-9	278	200
2	Whitey Ford	5.35	17-6	245	170
3	Joe Horlen	4.37	13-9	211	184
4	Juan Pizarro	3.52	19-9	239	135
5	Robin Roberts	3.28	13-7	204	124
6	Wally Bunker	3.17	19-5	214	134
7	Gary Peters	3.04	20-8	274	138
8	Dave Wickersham	2.32	19-12	254	107
9	Sam McDowell	2.28	11-6	173	135
10	Jim Kaat	2.19	17-11	243	112

1964 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Sandy Koufax	5.00	19-5	223	186
2	Bob Gibson	4.50	19-12	287	127
3	Larry Jackson	4.15	24-11	298	118
4	Juan Marichal	3.72	21-8	269	143
5	Don Drysdale	3.59	18-16	321	147
6	Chris Short	3.55	17-9	221	158
7	Jim O'Toole	3.43	17-7	220	136
8	Jim Maloney	3.00	15-10	216	133
9	Bob Bruce	2.45	15-9	202	125
10	Jim Bunning	1.96	19-8	284	132

1965 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Sam McDowell	4.41	17-11	273	161
2	Mel Stottlemyre	3.57	20-9	291	129
3	Steve Barber	3.07	15-10	221	129
4	Pete Richert	2.67	15-12	194	133
5	Denny McLain	2.65	16-6	220	134
6	Mudcat Grant	2.55	21-7	270	108
7	Sonny Siebert	2.30	16-8	189	144
8	Milt Pappas	2.04	13-9	221	133
9	Fred Newman	2.04	14-16	261	115
10	Dave McNally	1.76	11-6	199	121

1965 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Sandy Koufax	7.37	26-8	336	160
2	Juan Marichal	6.37	22-13	295	169
3	Jim Maloney	4.89	20-9	255	148
4	Jim Bunning	3.46	19-9	291	132
5	Bob Shaw	3.19	16-9	235	137
6	Vern Law	2.98	17-9	217	163
7	Don Drysdale	2.84	23-12	308	118
8	Claude Osteen	2.79	15-15	287	117
9	Chris Short	2.77	18-11	297	122
10	Bob Gibson	2.77	20-12	299	126

1966 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jim Kaat	3.02	25-13	305	131
2	Sonny Siebert	2.97	16-8	241	123
3	Gary Peters	2.74	12-10	205	160
4	Tommy John	2.47	14-11	223	121
5	Jim Perry	2.36	11-7	184	142
6	Lee Stange	2.29	8-9	169	115
7	Jim Nash	2.16	12-1	127	166
8	Earl Wilson	2.10	18-11	264	118
9	Steve Hargan	2.09	13-10	192	139
10	Steve Barber	1.84	10-5	133	147

1966 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Sandy Koufax	7.13	27-9	323	190
2	Juan Marichal	5.52	25-6	307	167
3	Jim Bunning	4.53	19-14	314	150
4	Jim Maloney	3.87	16-8	225	140
5	Bob Gibson	3.63	21-12	280	148
6	Gaylord Perry	3.05	21-8	256	124
7	Al Jackson	2.73	13-15	233	144
8	Bobby Bolin	2.45	11-10	224	129
9	Bob Veale	2.01	16-12	268	118
10	Mike Cuellar	1.62	12-10	227	155

1967 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Joe Horlen	3.51	19-7	258	146
2	Jim Merritt	3.10	13-7	228	138
3	Jim Lonborg	2.67	22-9	273	112
4	Steve Hargan	2.30	14-13	223	126
5	Gary Peters	2.07	16-11	260	132
6	Catfish Hunter	1.80	13-17	260	114
7	Dean Chance	1.67	20-14	284	128
8	Lee Stange	1.66	8-10	182	127
9	Cisco Carlos	1.62	2-0	42	352
10	Phil Ortega	1.60	10-10	220	105

1967 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Gary Nolan	3.97	14-8	227	147
2	Gaylord Perry	3.66	15-17	293	128
3	Fergie Jenkins	3.50	20-13	289	127
4	Mike McCormick	3.09	22-10	262	118
5	Dick Hughes	2.98	16-6	222	123
6	Chris Short	2.81	9-11	199	143
7	Jim Bunning	2.69	17-15	302	149
8	Tom Seaver	2.69	16-13	251	122
9	Jim Maloney	2.66	15-11	196	116
10	Mel Queen	2.46	14-8	196	137

1968 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Luis Tiant	6.13	21-9	258	186
2	Denny McLain	4.59	31-6	336	154
3	Dave McNally	4.10	22-10	273	150
4	Stan Bahnsen	3.78	17-12	267	140
5	Tommy John	3.44	10-5	177	161
6	Sam McDowell	2.95	15-14	269	165
7	Mel Stottlemyre	2.57	21-12	279	117
8	Joe Horlen	2.49	12-14	224	135
9	Jim Nash	2.41	13-13	229	122
10	Ray Culp	2.18	16-6	216	110

1968 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Gibson	7.23	22-9	305	258
2	Tom Seaver	3.85	16-12	278	137
3	Fergie Jenkins	3.50	20-15	308	121
4	Jerry Koosman	3.46	19-12	264	145
5	Steve Blass	3.32	18-6	220	137
6	Don Drysdale	2.84	14-12	239	128
7	Bill Hands	2.50	16-10	259	110
8	Bob Veale	2.36	13-14	245	141
9	Phil Niekro	2.16	14-12	257	116
10	Bobby Bolin	1.78	10-5	177	151

1969 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Denny McLain	5.56	24-9	325	134
2	Mike Cuellar	4.54	23-11	291	150
3	Mel Stottlemyre	3.67	20-14	303	123
4	Sam McDowell	3.57	18-14	285	128
5	Fritz Peterson	3.39	17-16	272	137
6	Jim Perry	3.28	20-6	262	130
7	Blue Moon Odom	2.80	15-6	231	118
8	Andy Messersmith	2.71	16-11	250	138
9	Jim Palmer	2.46	16-4	181	153
10	Dick Bosman	2.23	14-5	193	158

1969 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Gibson	6.60	20-13	314	164
2	Tom Seaver	6.32	25-7	273	166
3	Juan Marichal	5.94	21-11	300	167
4	Jerry Koosman	5.33	17-9	241	161
5	Steve Carlton	4.69	17-11	236	165
6	Bill Singer	4.39	20-12	316	142
7	Bill Hands	4.30	20-14	300	162
8	Phil Niekro	3.85	23-13	284	141
9	Larry Dierker	3.78	20-13	305	152
10	Fergie Jenkins	3.18	21-15	311	126

1970 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Sam McDowell	4.77	20-12	305	134
2	Jim Palmer	3.84	20-10	305	134
3	Steve Hargan	2.77	11-3	143	135
4	Dick Bosman	2.70	16-12	231	118
5	Jim Perry	2.63	24-12	279	125
6	Ray Culp	2.63	17-14	251	131
7	Clyde Wright	2.37	22-12	261	128
8	Marty Pattin	2.17	14-12	233	111
9	Fritz Peterson	2.09	20-11	260	122
10	Dave McNally	1.91	24-9	296	113

1970 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Gibson	4.19	23-7	294	133
2	Tom Seaver	3.62	18-12	291	143
3	Fergie Jenkins	3.52	22-16	313	132
4	Jerry Koosman	3.13	12-7	212	128
5	Pat Jarvis	2.63	16-16	254	118
6	Ken Holtzman	2.48	17-11	288	132
7	Gaylord Perry	2.22	23-13	329	125
8	Gary Nolan	2.21	18-7	251	128
9	Bill Hands	2.14	18-15	265	121
10	Carl Morton	1.99	18-11	285	114

1971 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Vida Blue	6.42	24-8	312	183
2	Wilbur Wood	5.42	22-13	334	189
3	Dick Drago	3.64	17-11	241	114
4	Mickey Lolich	2.84	25-14	376	124
5	Mike Hedlund	2.81	15-8	206	126
6	Bert Blyleven	2.71	16-15	278	126
7	Jim Palmer	2.69	20-9	282	126
8	Sonny Siebert	2.59	16-10	235	128
9	Joe Coleman	2.46	20-9	286	115
10	Dave McNally	2.40	21-5	224	117

1971 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Tom Seaver	6.76	20-10	286	194
2	Fergie Jenkins	5.43	24-13	325	141
3	Dave Roberts	3.69	14-17	270	157
4	Don Wilson	3.65	16-10	268	138
5	Don Gullett	3.34	16-6	218	124
6	Larry Dierker	2.57	12-6	159	124
7	Don Sutton	2.55	17-12	265	127
8	Steve Blass	2.49	15-8	240	121
9	Al Downing	2.09	20-9	262	121
10	Rick Wise	1.98	17-14	272	123

1972 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Gaylord Perry	6.45	24-16	343	168
2	Mickey Lolich	4.02	22-14	327	127
3	Jim Palmer	3.68	21-10	274	149
4	Nolan Ryan	3.21	19-16	284	128
5	Catfish Hunter	2.98	21-7	295	140
6	Wilbur Wood	2.96	24-17	377	126
7	Roger Nelson	2.84	11-6	173	145
8	Luis Tiant	2.25	15-6	179	169
9	Mike Cuellar	2.12	18-12	248	120
10	Blue Moon Odom	1.80	15-6	194	115

1972 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Steve Carlton	8.59	27-10	346	182
2	Don Sutton	4.18	19-9	273	162
3	Claude Osteen	3.86	20-11	252	127
4	Bob Gibson	3.49	19-11	278	139
5	Tom Seaver	3.37	21-12	262	115
6	Jon Matlack	2.53	15-10	244	145
7	Steve Blass	2.51	19-8	250	135
8	Fergie Jenkins	2.43	20-12	289	118
9	Clay Kirby	2.32	12-14	239	105
10	Ron Bryant	2.03	14-7	214	121

1973 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jim Palmer	5.47	22-9	296	155
2	Bert Blyleven	4.23	20-17	325	156
3	Nolan Ryan	3.99	21-16	326	123
4	Luis Tiant	3.71	20-13	272	120
5	Bill Lee	3.64	17-11	285	146
6	Bill Singer	2.91	20-14	316	109
7	Joe Coleman	2.68	23-15	288	115
8	Dave McNally	2.26	17-17	266	116
9	Doc Medich	2.06	14-9	235	125
10	Stan Bahnsen	1.91	18-21	282	113

1973 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Tom Seaver	5.56	19-10	290	175
2	Don Sutton	4.36	18-10	256	144
3	Steve Rogers	4.21	10-5	134	245
4	Wayne Twitchell	3.54	13-9	223	152
5	Rick Reuschel	2.68	14-15	237	131
6	Jerry Koosman	2.67	14-15	263	128
7	Dave Roberts	2.66	17-11	249	126
8	Reggie Cleveland	2.41	14-10	224	122
9	Steve Renko	2.11	15-11	250	135
10	Ron Bryant	1.91	24-12	270	109

1974 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Gaylord Perry	5.30	21-13	322	144
2	Fergie Jenkins	4.77	25-12	328	126
3	Luis Tiant	4.71	22-13	311	132
4	Catfish Hunter	3.72	25-12	318	134
5	Nolan Ryan	3.62	22-16	333	119
6	Jim Kaat	3.61	21-13	277	128
7	Bert Blyleven	3.21	17-17	281	140
8	Al Fitzmorris	3.16	13-6	190	137
9	Steve Busby	3.15	22-14	292	113
10	Bart Johnson	2.94	10-4	122	136

1974 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Phil Niekro	4.71	20-13	302	159
2	Jon Matlack	3.95	13-15	265	148
3	Jim Barr	3.77	13-9	240	139
4	Buzz Capra	3.77	16-8	217	166
5	Lynn McGlothen	3.41	16-12	237	133
6	Andy Messersmith	3.30	20-6	292	132
7	Larry Dierker	2.66	11-10	224	120
8	Jim Lonborg	2.48	17-13	283	118
9	Tommy John	2.43	13-3	153	132
10	Jim Rooker	1.87	15-11	263	125

1975 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jim Palmer	7.12	23-11	323	168
2	Jim Kaat	3.44	20-14	304	125
3	Catfish Hunter	3.42	23-14	328	143
4	Steve Busby	3.07	18-12	260	125
5	Frank Tanana	2.89	16-9	257	136
6	Bert Blyleven	2.41	15-10	276	128
7	Dennis Eckersley	2.25	13-7	187	146
8	Mike Torrez	2.15	20-9	271	115
9	Roger Moret	2.12	14-3	145	113
10	Ed Figueroa	1.90	16-13	245	122

1975 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Tom Seaver	4.73	22-9	280	146
2	Andy Messersmith	4.49	19-14	322	149
3	John Montefusco	4.31	15-9	244	132
4	Randy Jones	3.81	20-12	285	155
5	Jerry Reuss	3.75	18-11	237	140
6	Don Sutton	2.99	16-13	254	119
7	Don Gullet	2.76	15-4	160	149
8	Burt Hooton	2.49	18-9	235	112
9	Doug Rau	1.93	15-9	258	110
10	Bob Forsch	1.86	15-10	230	132

1976 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mark Fidrych	5.95	19-9	250	159
2	Vida Blue	5.81	18-13	298	143
3	Frank Tanana	4.79	19-10	288	137
4	Jim Palmer	4.63	22-13	315	130
5	Bert Blyleven	4.05	13-16	298	125
6	Luis Tiant	3.51	21-12	279	128
7	Mike Torrez	2.48	16-12	266	134
8	Wayne Garland	2.19	20-7	232	123
9	Bill Travers	1.88	15-16	240	124
10	Dock Ellis	1.87	17-8	212	107

1976 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Don Sutton	3.74	21-10	268	111
2	Doug Rau	3.65	16-12	231	132
3	Jerry Koosman	3.62	21-10	247	123
4	Tom Seaver	3.40	14-11	271	127
5	Ray Burris	3.22	15-13	249	124
6	John Montefusco	3.12	16-14	253	128
7	Randy Jones	2.87	22-14	315	120
8	Steve Carlton	2.50	20-7	253	113
9	John Denny	2.44	11-9	207	140
10	J.R. Richard	2.35	20-15	291	116

1977 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jim Palmer	5.50	20-11	319	131
2	Frank Tanana	4.13	15-9	241	155
3	Dennis Leonard	3.60	20-12	293	133
4	Nolan Ryan	3.48	19-16	299	142
5	Bert Blyleven	3.34	14-12	234	150
6	Ron Guidry	3.23	16-7	211	140
7	Dennis Eckersley	2.53	14-13	247	112
8	Gaylord Perry	2.40	15-12	238	122
9	Doyle Alexander	2.39	17-11	237	112
10	Dave Rozema	2.35	15-7	218	139

1977 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	John Candelaria	6.43	20-5	231	170
2	Rick Reuschel	5.67	20-10	252	158
3	Tom Seaver	5.12	21-6	261	150
4	Steve Carlton	4.35	23-10	283	152
5	Tommy John	3.28	20-7	220	138
6	J.R. Richard	3.26	18-12	267	120
7	Bob Forsch	2.95	20-7	217	111
8	Don Sutton	2.51	14-8	240	120
9	Burt Hooton	2.33	12-7	223	146
10	Steve Rogers	2.17	17-16	302	123

1978 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Ron Guidry	6.83	25-3	274	208
2	Mike Caldwell	4.99	22-9	293	160
3	Jon Matlack	4.95	15-13	270	166
4	Dave Goltz	4.48	15-10	220	154
5	Jim Palmer	4.02	21-12	296	142
6	Fergie Jenkins	3.26	18-8	249	124
7	Dennis Eckersley	3.12	20-8	268	138
8	Larry Gura	3.11	16-4	222	141
9	Luis Tiant	2.82	13-8	212	125
10	Ed Figueroa	2.55	20-9	253	122

1978 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bob Knepper	3.95	17-11	260	131
2	Vida Blue	3.63	18-10	258	124
3	Steve Rogers	3.51	13-10	219	143
4	Burt Hooton	3.49	19-10	236	130
5	Craig Swan	3.33	9-6	207	144
6	Phil Niekro	2.76	19-18	334	141
7	Ross Grimsley	2.36	20-11	263	116
8	Pete Vuckovich	2.35	12-12	198	139
9	Dick Ruthven	2.10	15-11	232	111
10	Don Robinson	2.02	14-6	228	107

1979 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mike Flanagan	4.46	23-9	266	130
2	Dennis Eckersley	4.16	17-10	247	148
3	Tommy John	3.92	21-9	276	138
4	Ron Guidry	3.82	18-8	236	147
5	Jerry Koosman	3.70	20-13	264	130
6	Jack Morris	3.43	17-7	198	132
7	Mike Caldwell	2.71	16-6	235	127
8	Steve Comer	2.29	17-12	242	113
9	Jim Slaton	2.13	15-9	213	115
10	Geoff Zahn	2.05	13-7	169	123

1979 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Joe Niekro	3.43	21-11	264	117
2	J.R. Richard	3.37	18-13	292	130
3	John Fulgham	2.82	10-6	146	149
4	Tom Seaver	2.20	16-6	215	119
5	John Candelaria	2.11	14-9	207	121
6	Silvio Martinez	2.02	15-8	207	115
7	Jim Bibby	1.99	12-4	138	138
8	David Palmer	1.96	10-2	123	139
9	Gaylord Perry	1.95	12-11	233	116
10	Dan Schatzeder	1.84	10-5	162	130

1980 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mike Norris	5.47	22-9	284	149
2	Britt Burns	4.05	15-13	238	142
3	Steve Stone	3.42	25-7	251	123
4	Tommy John	3.16	22-9	265	115
5	Matt Keough	2.97	16-13	250	130
6	Rudy May	2.66	15-5	175	160
7	Scott McGregor	2.48	20-8	252	119
8	Jim Clancy	2.44	13-16	251	131
9	Moose Haas	2.21	16-15	252	125
10	Floyd Bannister	2.21	9-13	218	119

1980 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Steve Carlton	5.85	24-9	304	162
2	Don Sutton	4.40	13-5	212	159
3	Vern Ruhle	3.14	12-4	159	139
4	Scott Sanderson	2.96	16-11	211	115
5	Jerry Reuss	2.89	18-6	229	140
6	J.R. Richard	2.67	10-4	114	173
7	Vida Blue	2.67	14-10	224	119
8	Jim Bibby	2.26	19-6	238	110
9	Bill Gullickson	2.24	10-5	141	119
10	Frank Pastore	2.20	13-7	185	110

1981 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Steve McCatty	2.98	14-7	186	150
2	Jack Morris	2.86	14-7	198	124
3	Dave Righetti	2.65	8-4	105	175
4	Milt Wilcox	2.40	12-9	166	125
5	Dave Stieb	2.27	11-10	184	124
6	Larry Gura	2.13	11-8	172	133
7	Ron Guidry	2.08	11-5	127	129
8	Jim Beattie	2.04	3-2	67	130
9	Bert Blyleven	2.01	11-7	159	126
10	Dennis Martinez	1.91	14-5	179	109

1981 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Fernando Valenzuela	3.55	13-7	192	134
2	Bob Knepper	2.84	9-5	157	151
3	Steve Carlton	2.69	13-4	190	150
4	Nolan Ryan	2.66	11-5	149	195
5	Tom Seaver	2.55	14-2	166	140
6	Burt Hooton	2.53	11-6	142	146
7	Jerry Reuss	2.42	10-4	153	144
8	Vida Blue	1.91	8-6	125	140
9	Mario Soto	1.51	12-9	175	108
10	Bill Gullickson	1.46	7-9	157	125

1982 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dave Stieb	4.00	17-14	288	138
2	Jim Palmer	3.34	15-5	227	129
3	Rick Sutcliffe	3.11	14-8	216	138
4	Jim Clancy	3.00	16-14	267	121
5	Luis Leal	2.93	12-15	250	114
6	Dan Petry	2.28	15-9	246	126
7	Dennis Eckersley	2.12	13-13	224	116
8	Ed Whitson	1.80	4-2	108	125
9	Geoff Zahn	1.79	18-8	229	109
10	Ron Guidry	1.74	14-8	220	105

1982 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Steve Rogers	5.07	19-8	277	152
2	Joe Niekro	4.44	17-12	270	135
3	Steve Carlton	4.09	23-11	296	118
4	Joaquin Andujar	3.68	15-10	266	147
5	Fernando Valenzuela	3.14	19-13	285	121
6	Tim Lollar	2.91	16-9	233	110
7	John Candelaria	2.65	12-7	175	126
8	Mario Soto	2.61	14-13	258	133
9	Bob Forsch	2.45	15-9	233	104
10	Bruce Berenyi	2.05	9-18	222	110

1983 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Richard Dotson	3.65	22-7	240	130
2	Scott McGregor	3.53	18-7	260	125
3	Ron Guidry	3.21	21-9	250	114
4	Jack Morris	2.89	20-13	294	117
5	Charlie Hough	2.68	15-13	252	126
6	Rick Honeycutt	2.67	14-8	175	166
7	LaMarr Hoyt	2.43	24-10	261	115
8	Moose Haas	2.27	13-3	179	115
9	Matt Young	2.17	11-15	204	131
10	Dave Stieb	2.03	17-12	278	142

1983 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	John Denny	3.95	19-6	243	151
2	Mario Soto	3.37	17-13	274	141
3	Joe Price	3.15	10-6	144	133
4	Bob Welch	2.90	15-12	204	136
5	Atlee Hammaker	2.75	10-9	172	158
6	John Candelaria	2.19	15-8	198	115
7	Pascual Perez	2.11	15-8	215	113
8	Nolan Ryan	2.10	14-9	196	114
9	Charlie Lea	2.04	16-11	222	115
10	Rick Rhoden	1.81	13-13	244	120

1984 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dave Stieb	4.91	16-8	267	145
2	Mike Boddicker	3.98	20-11	261	139
3	Doyle Alexander	3.74	17-6	262	131
4	Frank Viola	3.10	18-12	258	131
5	Bud Black	3.09	17-12	257	129
6	Bert Blyleven	3.06	19-7	245	143
7	Mike Witt	3.01	15-11	247	115
8	Mark Langston	2.84	17-10	225	118
9	Storm Davis	2.82	14-9	225	124
10	Jim Beattie	2.56	12-16	211	117

1984 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dwight Gooden	4.64	17-9	218	136
2	Rick Sutcliffe	3.55	16-1	150	145
3	Rick Rhoden	3.11	14-9	238	133
4	Mario Soto	2.70	18-7	237	107
5	Dennis Eckersley	2.42	10-8	160	129
6	Steve Trout	2.19	13-7	190	115
7	Joaquin Andujar	2.17	20-14	261	104
8	Orel Hershiser	2.16	11-8	190	133
9	John Tudor	2.15	12-11	212	110
10	Rick Mahler	2.12	13-10	222	124

1985 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bret Saberhagen	4.62	20-6	235	145
2	Charlie Leibrandt	4.17	17-9	238	155
3	Jimmy Key	3.94	14-6	213	140
4	Charlie Hough	3.45	14-16	250	128
5	Mike Moore	3.44	17-10	247	122
6	Dave Stieb	3.42	14-13	265	170
7	Doyle Alexander	3.27	17-10	261	122
8	Jack Morris	3.12	16-11	257	122
9	Dan Petry	3.04	15-13	239	121
10	Tom Seaver	2.81	16-11	239	136

1985 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dwight Gooden	8.63	24-4	277	227
2	John Tudor	4.81	21-8	275	183
3	Orel Hershiser	3.54	19-3	240	172
4	Rick Reuschel	3.23	14-8	194	158
5	Danny Cox	2.61	18-9	241	123
6	Fernando Valenzuela	2.59	17-10	272	142
7	Bob Welch	2.54	14-4	167	151
8	Ron Darling	2.19	16-6	248	119
9	Dennis Eckersley	2.16	11-7	169	130
10	Andy Hawkins	2.10	18-8	229	113

1986 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	5.75	24-4	254	168
2	Teddy Higuera	5.16	20-11	248	155
3	Mike Witt	4.22	18-10	269	145
4	Kirk McCaskill	2.61	17-10	246	123
5	Jack Morris	2.33	21-8	267	126
6	Charlie Hough	2.32	17-10	230	114
7	Danny Jackson	2.26	11-12	186	133
8	Jimmy Key	2.18	14-11	232	118
9	Bruce Hurst	2.10	13-8	174	139
10	Don Sutton	1.96	15-11	207	110

1986 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mike Scott	5.15	18-10	275	162
2	Rick Rhoden	3.73	15-12	254	135
3	Mike Krukow	3.25	20-9	245	116
4	Ron Darling	3.24	15-6	237	126
5	Bob Ojeda	3.02	18-5	217	138
6	Dwight Gooden	2.72	17-6	250	125
7	John Tudor	2.51	13-7	219	125
8	Fernando Valenzuela	2.48	21-11	269	110
9	Bill Gullickson	2.30	15-12	245	115
10	Don Carman	2.10	10-5	134	120

1987 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Frank Viola	5.43	17-10	252	160
2	Jimmy Key	4.87	17-8	261	163
3	Roger Clemens	4.73	20-9	282	153
4	Bret Saberhagen	3.49	18-10	257	136
5	Jack Morris	2.98	18-11	266	125
6	Doyle Alexander	2.90	9-0	88	277
7	Rick Rhoden	2.83	16-10	182	114
8	Floyd Bannister	2.71	16-11	229	128
9	Teddy Higuera	2.64	18-10	262	119
10	Bert Blyleven	2.48	15-12	267	116

1987 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Rick Reuschel	3.80	13-9	227	131
2	Mike Scott	3.55	16-13	248	121
3	Bob Welch	2.94	15-9	252	123
4	Mike Dunne	2.91	13-6	163	136
5	Orel Hershiser	2.63	16-16	265	130
6	Rick Sutcliffe	2.53	18-10	237	116
7	Nolan Ryan	2.41	8-16	212	142
8	Dwight Gooden	1.97	15-7	180	118
9	Dennis Martinez	1.85	11-4	145	128
10	Pascual Perez	1.82	7-0	70	183

1988 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Frank Viola	5.46	24-7	255	154
2	Teddy Higuera	5.18	16-9	227	162
3	Roger Clemens	5.11	18-12	264	141
4	Mark Gubicza	3.70	20-8	270	148
5	Mark Langston	3.59	15-11	261	125
6	Allan Anderson	3.22	16-9	202	167
7	Greg Swindell	3.01	18-14	242	129
8	Jeff Robinson	2.97	13-6	172	128
9	Tom Candiotti	2.68	14-8	217	126
10	Charlie Leibrandt	2.65	13-12	243	125

1988 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Orel Hershiser	6.08	23-8	267	148
2	Danny Jackson	4.33	23-8	261	132
3	David Cone	3.56	20-3	231	145
4	Greg Maddux	3.46	18-8	249	114
5	John Tudor	3.20	10-8	198	148
6	Mike Scott	2.64	14-8	219	114
7	Tim Leary	2.46	17-11	229	115
8	Pascual Perez	2.37	12-8	188	148
9	Rick Reuschel	2.00	19-11	245	105
10	Eric Show	1.92	16-11	235	104

1989 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Bret Saberhagen	5.81	23-6	262	178
2	Bert Blyleven	4.12	17-5	241	140
3	Chuck Finley	3.99	16-9	200	149
4	Kirk McCaskill	3.43	15-10	212	130
5	Greg Swindell	3.12	13-6	184	118
6	Mike Moore	2.99	19-11	242	141
7	Roger Clemens	2.95	17-11	253	131
8	Tom Candiotti	2.90	13-10	206	128
9	Nolan Ryan	2.80	16-10	239	124
10	Bob Milacki	2.40	14-12	243	102

1989 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Joe Magrane	4.09	18-9	235	125
2	Bruce Hurst	3.49	15-11	245	130
3	Mark Langston	3.33	12-9	177	148
4	Doug Drabek	3.29	14-12	244	120
5	Scott Garrelts	2.85	14-5	193	148
6	Greg Maddux	2.61	19-12	238	128
7	Orel Hershiser	2.56	15-15	257	148
8	Jose DeLeon	2.52	16-12	245	119
9	Rick Reuschel	2.27	17-8	208	115
10	Ed Whitson	2.27	16-11	227	132

1990 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	7.38	21-6	228	212
2	Dave Stewart	4.74	22-11	267	145
3	Chuck Finley	4.21	18-9	236	159
4	Dave Stieb	3.83	18-6	209	135
5	Erik Hanson	3.53	18-9	236	122
6	Bob Welch	3.00	27-6	238	126
7	Mike Boddicker	2.82	17-8	228	122
8	Ben McDonald	2.53	8-5	119	157
9	Greg Hibbard	2.44	14-9	211	121
10	Kevin Appier	2.24	12-8	186	139

1990 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Ed Whitson	3.28	14-9	229	147
2	Zane Smith	3.22	12-9	215	143
3	Tom Browning	3.14	15-9	228	104
4	Frank Viola	3.01	20-12	250	141
5	Danny Darwin	2.98	11-4	163	168
6	Jose Rijo	2.96	14-8	197	147
7	Doug Drabek	2.87	22-6	231	131
8	Ramon Martinez	2.50	20-6	234	126
9	Mike Harkey	1.92	12-6	174	125
10	John Tudor	1.90	12-4	146	159

1991 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	4.77	18-10	271	164
2	Tom Candiotti	4.47	13-13	238	158
3	Mark Langston	4.46	19-8	246	137
4	Jim Abbott	3.97	18-11	243	142
5	Kevin Tapani	3.48	16-9	244	143
6	Jack McDowell	3.44	17-10	254	117
7	Scott Erickson	3.36	20-8	204	135
8	Mike Moore	3.27	17-8	210	130
9	Nolan Ryan	3.20	12-6	173	139
10	Bret Saberhagen	2.96	13-8	196	134

1991 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Andy Benes	3.90	15-11	223	126
2	Dennis Martinez	3.79	14-11	222	151
3	Pete Harnisch	3.65	12-9	217	130
4	Tom Glavine	3.48	20-11	247	152
5	Tim Belcher	2.94	10-9	209	137
6	Greg Harris	2.78	9-5	133	170
7	Mike Morgan	2.42	14-10	236	129
8	Jose Rijo	2.37	15-6	204	152
9	John Smiley	2.32	20-8	208	116
10	Terry Mulholland	2.02	16-13	232	102

1992 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mike Mussina	5.47	18-5	241	159
2	Roger Clemens	5.25	18-11	247	175
3	Kevin Appier	4.92	15-8	208	165
4	Juan Guzman	4.86	16-5	181	155
5	John Smiley	4.24	16-9	241	126
6	Frank Viola	3.58	13-12	238	123
7	Charles Nagy	3.52	17-10	252	132
8	Cal Eldred	3.21	11-2	100	214
9	Jack McDowell	3.08	20-10	261	122
10	Dave Fleming	2.78	17-10	228	117

1992 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Greg Maddux	5.35	20-11	268	165
2	Bob Tewksbury	4.14	16-5	233	157
3	Doug Drabek	2.78	15-11	257	124
4	Dennis Martinez	2.64	16-11	226	141
5	Tom Glavine	2.50	20-8	225	133
6	Mike Morgan	2.40	16-8	240	142
7	Curt Schilling	2.39	14-11	226	149
8	Bill Swift	2.36	10-4	165	159
9	Sid Fernandez	2.26	14-11	215	128
10	Jose Rijo	2.18	15-10	211	141

1993 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Kevin Appier	5.91	18-8	239	179
2	Mark Langston	4.37	16-11	256	142
3	Ben McDonald	3.65	13-14	220	132
4	Jimmy Key	3.50	18-6	237	139
5	Alex Fernandez	3.48	18-9	247	134
6	Randy Johnson	3.46	19-8	255	136
7	Erik Hanson	3.42	11-12	215	127
8	Jack McDowell	3.38	22-10	257	125
9	Danny Darwin	3.27	15-11	229	142
10	David Cone	3.19	11-14	254	138

1993 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Greg Maddux	5.10	20-10	267	170
2	Jose Rijo	5.09	14-9	257	162
3	Steve Avery	4.16	18-6	223	137
4	Tom Glavine	4.02	22-6	239	126
5	Bill Swift	3.69	21-8	233	139
6	Pete Harnisch	3.00	16-9	218	130
7	Tom Candiotti	2.54	8-10	214	123
8	John Burkett	2.43	22-7	232	107
9	Mark Portugal	2.35	18-4	208	140
10	Jeff Fassero	2.21	12-5	150	183

1994 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	4.07	9-7	171	177
2	Mike Mussina	3.89	16-5	176	164
3	David Cone	3.88	16-5	172	171
4	Randy Johnson	3.86	13-6	172	153
5	Pat Hentgen	3.44	13-8	175	142
6	Kevin Appier	2.73	7-6	155	131
7	Steve Ontiveros	2.65	6-4	115	167
8	Jimmy Key	2.55	17-4	168	140
9	Mark Clark	2.26	11-3	127	124
10	Tom Gordon	2.04	11-7	155	115

1994 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Greg Maddux	6.34	16-6	202	272
2	Bret Saberhagen	3.28	14-4	177	153
3	Jeff Fassero	2.53	8-6	139	142
4	Doug Drabek	2.28	12-6	165	139
5	Butch Henry	2.19	8-3	107	174
6	Zane Smith	2.13	10-8	157	132
7	Steve Trachsel	2.04	9-7	146	130
8	Marvin Freeman	1.98	10-2	113	178
9	Kent Mercker	1.84	9-4	112	123
10	Bobby Jones	1.81	12-7	160	133

1995 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Randy Johnson	6.34	18-2	214	191
2	Mike Mussina	4.41	19-9	222	145
3	Tim Wakefield	4.11	16-8	195	165
4	Kenny Rogers	4.07	17-7	208	143
5	David Cone	3.20	18-8	229	131
6	Kevin Appier	3.16	15-10	201	123
7	Dennis Martinez	2.99	12-5	187	153
8	David Wells	2.85	16-8	130	142
9	Roger Pavlik	2.63	10-10	192	111
10	Mark Gubicza	2.56	12-14	213	128

1995 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Greg Maddux	8.43	19-2	210	262
2	Tom Glavine	3.81	16-7	199	139
3	Hideo Nomo	3.46	13-6	191	149
4	Pete Schourek	3.45	18-7	190	128
5	Jaime Navarro	2.62	14-6	200	125
6	Frank Castillo	2.52	11-10	188	128
7	Jason Isringhausen	2.34	9-2	93	144
8	Butch Henry	2.32	7-9	127	151
9	Pedro Martinez	2.18	14-10	195	122
10	Denny Neagle	2.12	13-8	210	125

1996 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Pat Hentgen	5.30	20-10	266	156
2	Charles Nagy	4.86	17-5	222	144
3	Juan Guzman	4.26	11-8	188	171
4	Alex Fernandez	4.14	16-10	258	137
5	Ken Hill	3.87	16-10	251	145
6	Kevin Appier	3.86	14-11	211	138
7	Ben McDonald	3.47	12-10	221	133
8	Andy Pettitte	3.30	21-8	221	128
9	Roger Clemens	3.07	10-13	243	140
10	Tim Belcher	2.41	15-11	239	128

1996 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Kevin Brown	5.88	17-11	233	215
2	John Smoltz	5.36	24-8	254	150
3	Greg Maddux	4.79	15-11	245	162
4	Denny Neagle	4.01	16-9	221	125
5	Tom Glavine	3.57	15-10	235	148
6	Al Leiter	2.98	16-12	215	139
7	Steve Trachsel	2.88	13-9	205	143
8	Hideo Nomo	2.50	16-11	228	121
9	Jeff Fassero	2.41	15-11	232	131
10	Curt Schilling	2.33	9-10	183	135

1997 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	8.22	21-7	264	225
2	Randy Johnson	5.66	20-4	213	197
3	David Cone	4.06	12-6	195	158
4	Andy Pettitte	3.54	18-7	240	154
5	Justin Thompson	3.33	15-11	223	152
6	Kevin Appier	3.13	9-13	236	139
7	Pat Hentgen	3.00	15-10	264	125
8	Mike Mussina	2.86	15-8	225	138
9	Brad Radke	2.70	20-10	240	120
10	Scott Erickson	2.53	16-7	222	119

1997 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Pedro Martinez	7.01	17-8	241	221
2	Greg Maddux	6.57	19-4	233	191
3	Denny Neagle	4.12	20-5	233	142
4	Kevin Brown	4.07	16-8	237	150
5	Curt Schilling	4.06	17-11	254	143
6	Darryl Kile	3.90	19-7	256	156
7	Ismael Valdes	3.68	10-11	197	145
8	Shawn Estes	3.32	19-5	201	129
9	Tom Glavine	3.26	14-7	240	142
10	John Smoltz	2.83	15-12	256	139

1998 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	5.94	20-6	235	176
2	Pedro Martinez	5.36	19-7	234	163
3	David Wells	2.89	18-4	214	126
4	David Cone	2.66	20-7	208	123
5	Kenny Rogers	2.65	16-8	239	144
6	Rolando Arrojo	2.58	14-12	202	135
7	Chuck Finley	2.52	11-9	223	139
8	Jamie Moyer	2.34	15-9	234	131
9	Orlando Hernandez	2.31	12-4	141	140
10	Mike Mussina	2.27	13-10	206	131

1998 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Greg Maddux	5.33	18-9	251	187
2	Kevin Brown	5.31	18-7	257	164
3	Tom Glavine	4.73	20-6	229	168
4	Al Leiter	4.00	17-6	193	167
5	Curt Schilling	3.82	15-14	269	133
6	Randy Johnson	3.43	10-1	84	317
7	John Smoltz	3.25	17-3	168	144
8	Andy Ashby	3.08	17-9	227	117
9	Rick Reed	3.04	16-11	212	119
10	Pete Harnisch	2.62	14-7	209	136

1999 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Pedro Martinez	7.22	23-4	213	241
2	Brad Radke	3.60	12-14	219	136
3	Jamie Moyer	2.97	14-8	228	123
4	Bret Saberhagen	2.72	10-6	119	169
5	Mike Mussina	2.55	18-7	203	134
6	Dave Burba	2.21	15-9	220	119
7	Jose Rosado	2.17	10-14	208	130
8	David Cone	2.13	12-9	193	138
9	Joe Mays	2.08	6-11	171	117
10	Orlando Hernandez	2.02	17-9	214	115

1999 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Randy Johnson	6.19	17-9	272	184
2	Kevin Millwood	4.94	18-7	228	168
3	Mike Hampton	4.34	22-4	239	152
4	Jose Lima	3.61	21-10	246	123
5	Kevin Brown	3.33	18-9	252	143
6	John Smoltz	2.88	11-8	186	141
7	Curt Schilling	2.81	15-6	180	133
8	Omar Daal	2.75	16-9	215	125
9	Pete Harnisch	2.36	16-10	198	127
10	Todd Ritchie	1.99	15-9	173	131

2000 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Pedro Martinez	8.02	18-6	217	292
2	David Wells	3.33	20-8	230	121
3	Mike Mussina	2.46	11-15	238	126
4	Bartolo Colon	2.44	15-8	188	129
5	Tim Hudson	2.25	20-6	202	115
6	Albie Lopez	2.19	11-13	185	120
7	James Baldwin	2.14	14-7	178	107
8	Frank Castillo	2.13	10-5	138	139
9	Roger Clemens	2.08	13-8	204	130
10	Chuck Finley	2.05	16-11	218	120

2000 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Randy Johnson	5.40	19-7	249	175
2	Kevin Brown	5.39	13-6	230	170
3	Greg Maddux	4.46	19-9	249	151
4	Jeff D'Amico	3.61	12-7	162	171
5	Tom Glavine	3.34	21-9	241	133
6	Darryl Kile	3.15	20-9	232	118
7	Mike Hampton	2.90	15-10	218	141
8	Chan Ho Park	2.78	18-10	226	135
9	Al Leiter	2.61	16-8	208	138
10	Brian Anderson	2.40	11-7	213	114

2001 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Mike Mussina	4.27	17-11	229	142
2	Jamie Moyer	4.05	20-6	210	123
3	Freddy Garcia	3.98	18-6	239	138
4	Joe Mays	3.76	17-13	234	143
5	Pedro Martinez	3.48	7-3	117	189
6	Tim Hudson	3.37	18-9	235	129
7	Mark Mulder	3.24	21-8	229	126
8	Steve Sparks	2.88	14-9	232	122
9	Roger Clemens	2.83	20-3	220	128
10	Roy Halladay	2.60	5-3	105	150

2001 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Curt Schilling	6.25	22-6	257	154
2	Randy Johnson	6.06	21-6	250	184
3	Matt Morris	4.08	22-8	216	137
4	Greg Maddux	3.91	17-11	233	144
5	Darryl Kile	3.90	16-11	227	140
6	Chan Ho Park	3.47	15-11	234	115
7	John Burkett	2.93	12-12	219	145
8	Jon Lieber	2.91	20-6	232	112
9	Kerry Wood	2.74	12-6	174	126
10	Wade Miller	2.71	16-8	212	134

2002 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Tim Hudson	4.75	15-9	238	156
2	Barry Zito	4.40	23-5	229	169
3	Derek Lowe	4.27	21-8	220	171
4	Pedro Martinez	4.11	20-4	199	196
5	Jarrod Washburn	3.96	18-6	206	138
6	Roy Halladay	3.63	19-7	239	152
7	Mark Mulder	3.60	19-7	207	134
8	Bartolo Colon	2.78	10-4	116	172
9	Kenny Rogers	2.73	13-8	211	128
10	Jamie Moyer	2.51	13-8	231	127

2002 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Randy Johnson	5.22	24-5	260	190
2	Greg Maddux	4.15	16-6	199	157
3	Curt Schilling	3.90	23-7	259	136
4	Roy Oswalt	3.62	19-9	233	142
5	Odalis Perez	2.95	15-10	222	126
6	Randy Wolf	2.92	11-9	211	118
7	Kevin Millwood	2.89	18-8	217	127
8	Wade Miller	2.70	15-4	165	130
9	Tom Glavine	2.42	18-11	225	139
10	A.J. Burnett	2.31	12-9	204	121

2003 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Esteban Loaiza	6.30	21-9	226	159
2	Pedro Martinez	5.44	14-4	187	211
3	Roy Halladay	4.59	22-7	266	145
4	Tim Hudson	3.97	16-7	240	165
5	Mark Mulder	3.66	15-9	187	142
6	Jamie Moyer	3.63	21-7	215	132
7	Mike Mussina	3.25	17-8	215	130
8	Barry Zito	3.11	14-12	232	135
9	Johan Santana	2.89	12-3	158	148
10	C.C. Sabathia	2.26	13-9	198	122

2003 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Jason Schmidt	5.23	17-5	208	180
2	Mark Prior	4.73	18-6	211	179
3	Kerry Wood	3.58	14-11	211	136
4	Kevin Brown	3.57	14-9	211	169
5	Livan Hernandez	3.14	15-10	233	141
6	Javier Vazquez	2.96	13-12	231	139
7	Brandon Webb	2.63	10-9	181	165
8	Carlos Zambrano	2.63	13-11	214	139
9	Dontrelle Willis	2.56	14-6	161	127
10	Hideo Nomo	2.30	16-13	218	131

2004 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Johan Santana	5.67	20-6	228	182
2	Curt Schilling	3.75	21-6	227	148
3	Brad Radke	3.55	11-8	220	136
4	Pedro Martinez	2.99	16-9	217	124
5	Tim Hudson	2.68	12-6	189	129
6	Rich Harden	2.29	11-7	190	114
7	Freddy Garcia	2.23	13-11	210	121
8	Kelvim Escobar	1.93	11-12	208	113
9	Kenny Rogers	1.93	18-9	212	105
10	Zack Greinke	1.81	8-11	145	120

2004 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	4.34	18-4	214	145
2	Jason Schmidt	4.20	18-7	225	136
3	Randy Johnson	3.83	16-14	246	176
4	Carlos Zambrano	3.23	16-8	210	160
5	Oliver Perez	3.09	12-10	196	143
6	Chris Carpenter	3.05	15-5	182	122
7	Jake Peavy	2.92	15-6	166	171
8	Carl Pavano	2.81	18-8	222	137
9	Ben Sheets	2.78	12-14	237	162
10	Odalis Perez	2.64	7-6	196	126

2005 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Johan Santana	4.74	16-7	232	155
2	Roy Halladay	4.73	12-4	142	185
3	Mark Buehrle	3.85	16-8	237	144
4	Jose Contreras	3.20	15-7	205	125
5	Bartolo Colon	3.07	21-8	223	122
6	Jon Garland	2.93	18-10	221	128
7	Kevin Millwood	2.65	9-11	192	147
8	John Lackey	2.45	14-5	209	123
9	Joe Blanton	2.38	12-12	201	124
10	Jarrod Washburn	2.26	8-8	177	133

2005 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Roger Clemens	6.29	13-8	211	226
2	Chris Carpenter	4.82	21-5	242	150
3	Roy Oswalt	4.78	20-12	242	144
4	Andy Pettitte	4.52	17-9	222	177
5	Carlos Zambrano	3.98	14-6	223	135
6	Dontrelle Willis	3.77	22-10	236	152
7	Pedro Martinez	3.46	15-8	217	146
8	Jake Peavy	3.13	13-7	203	134
9	John Smoltz	2.92	14-7	230	139
10	Jorge Sosa	2.59	13-3	134	166

2006 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Johan Santana	3.73	19-6	234	162
2	Roy Halladay	3.18	16-5	220	143
3	Jered Weaver	3.03	11-2	123	177
4	Chien-Ming Wang	2.97	19-6	218	125
5	Francisco Liriano	2.75	12-3	121	208
6	Curt Schilling	2.52	15-7	204	120
7	Nate Robertson	2.31	13-13	209	118
8	Scott Kazmir	2.31	10-8	145	141
9	Barry Zito	2.05	16-10	221	116
10	C.C. Sabathia	1.95	12-11	193	139

2006 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Chris Carpenter	4.41	15-8	222	144
2	Roy Oswalt	4.19	15-8	221	150
3	Brandon Webb	3.98	16-8	235	152
4	John Smoltz	3.43	16-9	232	128
5	Anibal Sanchez	3.37	10-3	114	153
6	Carlos Zambrano	3.16	16-7	214	136
7	Bronson Arroyo	3.11	14-11	241	142
8	Jason Schmidt	2.77	11-9	213	126
9	Roger Clemens	2.62	7-6	113	194
10	Derek Lowe	2.41	16-8	218	124

2007 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Fausto Carmona	4.27	19-8	215	148
2	C.C. Sabathia	4.07	19-7	241	141
3	John Lackey	3.65	19-9	224	150
4	Josh Beckett	3.62	20-7	201	145
5	Kelvim Escobar	3.61	18-7	196	133
6	Erik Bedard	3.14	13-5	182	146
7	Javier Vazquez	2.86	15-8	217	126
8	Shaun Marcum	2.63	12-6	159	108
9	Justin Verlander	2.22	18-6	202	125
10	Gil Meche	2.11	9-13	216	125

2007 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Brandon Webb	4.29	18-10	236	158
2	Jake Peavy	4.03	19-6	223	158
3	Roy Oswalt	4.01	14-7	212	140
4	Brad Penny	3.71	16-4	208	147
5	Cole Hamels	3.47	15-5	183	135
6	Aaron Harang	3.15	16-6	232	124
7	Ted Lilly	2.90	15-8	207	121
8	Carlos Zambrano	2.74	18-13	216	117
9	John Smoltz	2.73	14-8	206	140
10	Chris Young	2.73	9-8	173	128

2008 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Cliff Lee	5.62	22-3	223	167
2	Jon Lester	3.92	16-6	210	144
3	Daisuke Matsuzaka	3.75	18-3	168	160
4	John Danks	3.72	12-9	195	138
5	Joe Saunders	3.57	17-7	198	131
6	Roy Halladay	3.44	20-11	246	152
7	Ervin Santana	3.05	16-7	219	127
8	Justin Duchscherer	2.63	10-8	142	162
9	John Lackey	2.62	12-5	163	119
10	Mike Mussina	2.58	20-9	200	131

2008 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Tim Lincecum	5.62	18-5	227	168
2	Johan Santana	4.65	16-7	234	166
3	Brandon Webb	4.27	22-7	227	140
4	Ryan Dempster	4.18	17-6	207	154
5	C.C. Sabathia	3.53	11-2	131	255
6	Ben Sheets	3.13	13-9	198	137
7	Dan Haren	3.10	16-8	216	138
8	Cole Hamels	3.08	14-10	227	141
9	Matt Cain	2.88	8-14	218	117
10	Edinson Volquez	2.65	17-6	196	137

2009 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Zack Greinke	6.25	16-8	229	205
2	Felix Hernandez	3.95	19-5	239	171
3	Jon Lester	3.83	15-8	203	136
4	C.C. Sabathia	3.18	19-8	230	137
5	Roy Halladay	3.09	17-10	239	159
6	Justin Verlander	2.92	19-9	240	131
7	Scott Feldman	2.88	17-8	190	114
8	John Danks	2.43	13-11	200	124
9	Josh Beckett	2.34	17-6	212	121
10	Edwin Jackson	2.27	13-9	214	125

2009 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Chris Carpenter	5.47	17-4	193	182
2	Tim Lincecum	5.07	15-7	225	171
3	Matt Cain	4.04	14-8	218	147
4	Jair Jurrjens	3.68	14-10	215	159
5	Ted Lilly	3.47	12-9	177	144
6	Clayton Kershaw	3.45	8-8	171	143
7	Ubaldo Jimenez	3.44	15-12	218	136
8	Dan Haren	3.38	14-10	229	142
9	Wandy Rodriguez	3.05	14-12	206	136
10	Jason Marquis	3.04	15-13	216	116

2010 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Felix Hernandez	4.80	13-12	250	174
2	C.C. Sabathia	4.10	21-7	238	136
3	Clay Buchholz	3.85	17-7	174	187
4	Jon Lester	3.46	19-9	208	134
5	C.J. Wilson	3.38	15-8	204	134
6	Cliff Lee	3.15	12-9	212	133
7	Trevor Cahill	2.23	18-8	197	138
8	David Price	2.12	19-6	209	144
9	Andy Pettitte	2.01	11-3	129	132
10	Colby Lewis	2.01	12-13	201	121

2010 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Ubaldo Jimenez	4.92	19-8	222	161
2	Roy Halladay	4.68	21-10	251	167
3	Josh Johnson	3.71	11-6	184	180
4	Roy Oswalt	3.64	13-13	212	145
5	Johan Santana	3.62	11-9	199	131
6	Mat Latos	3.46	14-10	185	126
7	Adam Wainwright	3.16	20-11	230	160
8	Cole Hamels	3.01	12-11	209	133
9	Daniel Hudson	2.85	7-1	80	251
10	Ted Lilly	2.85	10-12	194	113

2011 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Justin Verlander	5.64	24-5	251	172
2	Jered Weaver	5.09	18-8	236	156
3	Josh Beckett	4.22	13-7	193	149
4	James Shields	4.12	16-12	249	134
5	C.C. Sabathia	3.41	19-8	237	143
6	Dan Haren	3.09	16-10	238	119
7	C.J. Wilson	2.78	16-7	223	150
8	Ricky Romero	2.73	15-11	225	146
9	Ivan Nova	2.61	16-4	165	116
10	Doug Fister	2.46	11-13	216	138

2011 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Ian Kennedy	4.75	21-4	222	137
2	Roy Halladay	4.49	19-6	234	163
3	Cliff Lee	4.41	17-8	233	160
4	Cole Hamels	4.12	14-9	216	137
5	Clayton Kershaw	4.07	21-5	233	161
6	Tim Lincecum	3.07	13-14	217	127
7	Jair Jurrjens	2.64	13-6	152	129
8	Johnny Cueto	2.52	9-5	156	171
9	Tim Hudson	2.43	16-10	215	119
10	Josh Collmenter	1.81	10-10	154	117

2012 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Justin Verlander	4.34	17-8	238	161
2	David Price	4.19	20-5	211	150
3	Matt Harrison	3.08	18-11	213	133
4	Felix Hernandez	2.88	13-9	232	124
5	Chris Sale	2.84	17-8	192	140
6	Brandon Morrow	2.66	10-7	125	143
7	Jarrod Parker	2.42	13-8	181	112
8	Yu Darvish	2.41	16-9	191	112
9	Jered Weaver	2.26	20-5	189	135
10	Hiroki Kuroda	2.05	16-11	220	127

2012 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Johnny Cueto	3.88	19-9	217	148
2	Clayton Kershaw	3.68	14-9	228	150
3	Kyle Lohse	3.58	16-3	211	133
4	Cole Hamels	3.35	17-6	215	132
5	Kris Medlen	3.29	10-1	138	256
6	R.A. Dickey	3.09	20-6	234	139
7	Gio Gonzalez	2.79	21-8	199	138
8	Stephen Strasburg	2.73	15-6	159	126
9	Yovani Gallardo	2.73	16-9	204	112
10	A.J. Burnett	2.38	16-10	202	107

2013 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	James Shields	4.43	13-9	229	131
2	Max Scherzer	4.35	21-3	214	144
3	Anibal Sanchez	3.36	14-8	182	162
4	Clay Buchholz	3.34	12-1	108	237
5	Yu Darvish	3.27	13-9	210	145
6	Hisashi Iwakuma	3.05	14-6	220	138
7	Chris Sale	2.88	11-14	214	137
8	Chris Tillman	2.81	16-7	206	110
9	Alex Cobb	2.73	11-3	143	139
10	Felix Hernandez	2.67	12-10	204	121

2013 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Clayton Kershaw	5.52	16-9	236	194
2	Zack Greinke	3.43	15-4	178	135
3	Jose Fernandez	3.31	12-6	173	176
4	Matt Harvey	3.13	9-5	178	157
5	Francisco Liriano	2.98	16-8	161	118
6	Patrick Corbin	2.98	14-8	208	113
7	Jhoulys Chacin	2.78	14-10	197	129
8	Cliff Lee	2.49	14-8	223	131
9	Jorge de la Rosa	2.44	16-6	168	128
10	Adam Wainwright	2.28	19-9	242	127

2014 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Corey Kluber	5.14	18-9	236	160
2	Felix Hernandez	3.92	15-6	236	170
3	Chris Sale	3.51	12-4	174	173
4	Jon Lester	3.19	16-11	220	158
5	Max Scherzer	3.04	18-5	220	123
6	Alex Cobb	2.66	10-9	166	130
7	Garrett Richards	2.54	13-4	169	138
8	Chris Tillman	2.22	13-6	207	118
9	Danny Duffy	2.20	9-12	149	156
10	Sonny Gray	2.07	14-10	219	120

2014 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Clayton Kershaw	5.21	21-3	198	197
2	Johnny Cueto	5.10	20-9	244	163
3	Adam Wainwright	4.89	20-9	227	153
4	Jake Arrieta	3.37	10-5	157	150
5	Doug Fister	3.13	16-6	164	155
6	Tanner Roark	3.00	15-10	199	131
7	Cole Hamels	2.76	9-9	205	152
8	Henderson Alvarez	2.63	12-7	187	140
9	Lance Lynn	2.35	15-10	204	133
10	Jordan Zimmermann	2.13	14-5	200	141

2015 AL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Dallas Keuchel	4.83	20-8	232	162
2	David Price	3.45	18-5	220	161
3	Felix Hernandez	2.72	18-9	202	107
4	Yovani Gallardo	2.50	13-11	184	124
5	Sonny Gray	2.19	14-7	208	147
6	Carlos Carrasco	2.10	14-12	184	118
7	Marco Estrada	2.04	13-8	181	126
8	Wei-Yin Chen	1.95	11-8	191	124
9	Chris Sale	1.95	13-11	209	113
10	Cody Anderson	1.82	7-3	91	140

2015 NL Win Values

Rank	Pitcher	Win Value	W-L	IP	ERA+
1	Zack Greinke	7.24	19-3	223	225
2	Jake Arrieta	6.12	22-6	229	222
3	Clayton Kershaw	4.02	16-7	233	175
4	Max Scherzer	3.46	14-12	229	144
5	John Lackey	3.41	13-10	218	143
6	Gerrit Cole	3.41	19-8	208	148
7	Madison Bumgarner	3.34	18-9	218	130
8	Matt Harvey	3.04	13-8	189	136
9	Jaime Garcia	2.76	10-6	130	161
10	Jacob DeGrom	2.70	14-8	191	145

Win Values relative to Replacement Level

By construction, Win Values is a measurement of a pitcher's performance over and above league-average pitching. As such, several pitchers with meteoric but short careers appear on the top 100 career Win Values list. Also, several pitchers who pitched relatively few innings in a season have appeared on the seasonal top-ten Win Value leader tables.

Bill James argued many years ago that measuring performance relative to league average is using a standard that is too high. League-average players provide plenty of value to their teams. Think of the pyramidal distribution (the right end of a bell curve) of talent among professional baseball players. Major league league-average players are rare and valuable.

In many contexts measuring performance relative to a replacement-level is appropriate, where the replacement-level is the quality of performance that a major league team could be expected to receive from freely available talent (think good triple-A players). If a major league player performs consistently below this level, he will be replaced. On the other hand, if a major league player performs above this replacement-level, even if it is below the major league average level, he would typically not be replaced (and could well receive a hefty contract).

This may be especially true for pitchers as good major league pitchers seem always to be in short supply. Many pitchers have made good careers out of being “innings eaters” even if they rarely soar to the heights of above-average performance.

Replacement level is difficult to measure precisely. However, using the WAA and WAR figures from Baseball-Reference.com, I estimate that the difference between the two is around .075 per nine innings for a starting pitcher. So a league-average starting pitcher (WAA=0.0) who pitches 240 innings in a season would have a WAR of roughly 2.0.

Using the .075 figure, the following table displays each pitcher's total win values relative to replacement level alongside his previously displayed total win values relative to league average. Note that in the interests of brevity, I will not re-present all of the 1945-2015 seasonal top-ten lists of win value leaders relative to replacement level.

Here is a list of the top 100 pitchers according to total win values relative to replacement level from 1945-2015.

Rank of Total Win Values relative to Replacement Level	Pitcher	Games Started (1945-2015)	Innings Pitched in Starts (1945-2015)	Avg Innings Pitched per Start (1945-2015)	Total Win Values (wins above average)	Total Win Values (wins above replacement)
1	Roger Clemens	707	4,914	6.95	82.37	123.32
2	Greg Maddux	740	5,001	6.76	65.23	106.91
3	Tom Seaver	647	4,776	7.38	55.96	95.76
4	Randy Johnson	603	4,103	6.80	53.96	88.15
5	Warren Spahn	663	5,090	7.68	45.26	87.68
6	Jim Palmer	521	3,857	7.40	45.67	77.81
7	Gaylord Perry	690	5,157	7.47	34.67	77.65
8	Nolan Ryan	773	5,326	6.89	33.09	77.47
9	Steve Carlton	709	5,165	7.28	33.57	76.61
10	Bert Blyleven	685	4,957	7.24	34.64	75.95
11	Tom Glavine	682	4,413	6.47	37.95	74.73
12	Pedro Martinez	409	2,720	6.65	51.60	74.27
13	Don Sutton	756	5,248	6.94	28.72	72.45
14	Bob Gibson	482	3,796	7.88	40.40	72.03
15	Fergie Jenkins	594	4,359	7.34	34.40	70.73
16	Mike Mussina	536	3,559	6.64	39.00	68.66
17	Robin Roberts	609	4,567	7.50	30.07	68.13
18	Phil Niekro	716	5,150	7.19	23.66	66.58
19	Curt Schilling	436	3,079	7.06	38.41	64.07
20	Tommy John	700	4,622	6.60	23.65	62.17
21	Whitey Ford	438	3,038	6.94	34.16	59.48
22	Kevin Brown	476	3,238	6.80	32.06	59.04
23	John Smoltz	481	3,212	6.68	30.84	57.61
24	Tim Hudson	479	3,123	6.52	30.65	56.68
25	Roy Halladay	390	2,693	6.91	34.18	56.62
26	Luis Tiant	484	3,348	6.92	28.15	56.05
27	Juan Marichal	457	3,476	7.61	25.64	54.61
28	Andy Pettitte	521	3,300	6.33	25.90	53.40
29	Don Drysdale	465	3,338	7.18	25.56	53.38

Rank of Total Win Values relative to Replacement Level	Pitcher	Games Started (1945-2015)	Innings Pitched in Starts (1945-2015)	Avg Innings Pitched per Start (1945-2015)	Total Win Values (wins above average)	Total Win Values (wins above replacement)
30	Rick Reuschel	529	3,504	6.62	22.01	51.21
31	David Cone	419	2,831	6.76	27.22	50.81
32	Jim Bunning	519	3,620	6.97	20.31	50.48
33	Jack Morris	527	3,746	7.11	19.03	50.25
34	Billy Pierce	433	3,079	7.11	24.54	50.20
35	C.C. Sabathia	452	2,988	6.61	24.91	49.81
36	Sandy Koufax	314	2,202	7.01	31.01	49.36
37	Chuck Finley	467	3,073	6.58	23.47	49.08
38	Bret Saberhagen	371	2,492	6.72	28.28	49.05
39	Jerry Koosman	527	3,682	6.99	17.63	48.31
40	Kevin Appier	402	2,571	6.40	26.82	48.25
41	Early Wynn	517	3,724	7.20	16.79	47.82
42	Orel Hershiser	466	3,058	6.56	21.24	46.72
43	Roy Oswalt	341	2,209	6.48	28.13	46.54
44	Mark Buehrle	493	3,248	6.59	19.23	46.30
45	Jimmy Key	389	2,509	6.45	25.31	46.22
46	Felix Hernandez	334	2,262	6.77	27.31	46.16
47	Dennis Martinez	562	3,731	6.64	14.87	45.96
48	Vida Blue	473	3,292	6.96	18.42	45.85
49	Frank Tanana	616	4,136	6.71	11.23	45.70
50	Jamie Moyer	638	3,947	6.19	12.09	44.98
51	Jim Kaat	625	4,138	6.62	9.90	44.38
52	Ron Guidry	323	2,308	7.15	24.55	43.78
53	Johan Santana	284	1,862	6.56	28.02	43.54
54	David Wells	489	3,172	6.49	16.69	43.12
55	Dave Stieb	412	2,425	5.89	22.84	43.05
56	Bob Welch	462	3,013	6.52	17.82	42.93
57	Steve Rogers	393	2,828	7.20	19.28	42.85
58	Bob Lemon	350	2,630	7.51	20.91	42.83
59	Clayton Kershaw	242	1,608	6.64	29.29	42.69

Rank of Total Win Values relative to Replacement Level	Pitcher	Games Started (1945-2015)	Innings Pitched in Starts (1945-2015)	Avg Innings Pitched per Start (1945-2015)	Total Win Values (wins above average)	Total Win Values (wins above replacement)
60	Milt Pappas	465	3,082	6.63	16.44	42.12
61	Dwight Gooden	410	2,746	6.70	18.60	41.48
62	Zack Greinke	323	2,035	6.30	24.52	41.48
63	Frank Viola	420	2,835	6.75	17.15	40.78
64	Mark Langston	428	2,916	6.81	16.13	40.43
65	Larry Jackson	429	3,014	7.03	15.19	40.31
66	Cole Hamels	306	2,011	6.57	23.49	40.25
67	Bartolo Colon	466	2,964	6.36	14.87	39.57
68	Mickey Lolich	496	3,504	7.06	9.83	39.03
69	Claude Osteen	488	3,363	6.89	10.50	38.53
70	John Candelaria	356	2,283	6.41	18.58	37.61
71	Cliff Lee	324	2,151	6.64	19.38	37.31
72	Jim Perry	447	2,956	6.61	12.51	37.14
73	Hal Newhouser	244	1,832	7.51	21.61	36.88
74	Jake Peavy	356	2,254	6.33	18.01	36.79
75	Brad Radke	377	2,448	6.49	16.21	36.61
76	Al Leiter	382	2,325	6.09	17.22	36.60
77	Kenny Rogers	474	2,972	6.27	11.75	36.52
78	Bob Friend	497	3,379	6.80	8.18	36.34
79	Catfish Hunter	476	3,405	7.15	7.96	36.34
80	Chris Carpenter	332	2,171	6.54	18.11	36.20
81	Dennis Eckersley	361	2,478	6.86	15.54	36.19
82	John Lackey	387	2,480	6.41	15.36	36.03
83	Carlos Zambrano	302	1,906	6.31	19.48	35.36
84	Mel Stottlemyre	356	2,655	7.46	13.05	35.18
85	Dave McNally	396	2,683	6.78	12.18	34.54
86	Justin Verlander	318	2,112	6.64	16.84	34.44
87	Mike Cuellar	379	2,688	7.09	11.86	34.26
88	Bob Feller	309	2,350	7.61	14.65	34.23
89	Curt Simmons	462	3,165	6.85	7.75	34.13

Rank of Total Win Values relative to Replacement Level	Pitcher	Games Started (1945-2015)	Innings Pitched in Starts (1945-2015)	Avg Innings Pitched per Start (1945-2015)	Total Win Values (wins above average)	Total Win Values (wins above replacement)
90	Fernando Valenzuela	424	2,889	6.81	10.00	34.08
91	Charlie Hough	440	2,999	6.82	8.92	33.91
92	Jon Lester	284	1,800	6.34	18.80	33.80
93	Sam McDowell	346	2,338	6.76	14.15	33.63
94	Andy Benes	387	2,485	6.42	12.58	33.29
95	Jon Matlack	318	2,261	7.11	14.13	32.97
96	Mel Parnell	232	1,668	7.19	18.99	32.89
97	Jered Weaver	291	1,846	6.34	17.47	32.85
98	Mike Flanagan	404	2,607	6.45	11.01	32.74
99	Doyle Alexander	464	3,115	6.71	6.49	32.45
100	Mike Garcia	281	1,951	6.94	16.03	32.29

Roger Clemens, Greg Maddux, and Tom Seaver are the top three starting pitchers in the 1945-2015 era in total win values relative to replacement level just as they were the top three in total win values relative to league average. However, there are some interesting differences in the rankings between the two tables.

Pedro Martinez comes in 12th in total win values relative to replacement due to his short career whereas he was 5th in total win values relative to league average performance.

Pitchers with very long careers who crack the top ten via this metric include Gaylord Perry (7th up from 12th), Nolan Ryan (8th up from 18th), Steve Carlton (9th up from 17th), and Bert Blyleven (10th up from 13th).

Remember that all figures displayed in this article are solely based upon games started. Several pitchers in the table above (as well as previous tables) also accrued significant value via relief appearances which is not reflected in these tables.

You may notice that the above table does not display pennants added figures. There are two reasons for that. First, I have not yet performed simulations to derive estimates of the relationship between a pitcher's wins-above-replacement-level and his contribution to his team winning a pennant. Second, I am somewhat hesitant to do so since I believe that it may be proper to only consider above league-average performance to actually helping a team win the pennant.

It would be strange to say that the below-average left-fielder, shortstop, or starting pitcher helped his team win the pennant. For now I will stick to the pennant-added figures presented previously (based upon measuring value relative to league-average).

Concluding Remarks

In this article I have re-introduced at new stat called Win Values that I developed to evaluate the contribution a starting pitcher makes to his team over the course of a season. Win Values are calculated on a game-by-game basis and take into account not only the number of runs the pitcher allowed but also the number of runs his own team scored. Only by considering both sides of the equation can we properly derive how valuable a pitcher's performance was in helping his team win the game.

A pitcher's win value figure is an estimate of how many wins he contributed to his team over the course of a season relative to league-average pitching. A pitcher who wins a game 3-2 is deemed to be more valuable than a pitcher who wins a game 13-1 since the team who won 3-2 was fairly likely to have lost the game scoring only 3 runs with league-average pitching whereas the team who won 13-1 was extremely likely to have won the game scoring 13 runs no matter who was pitching for them that day.

The very best Win Value seasons from 1945-2015 were presented. Dwight Gooden in 1985, Steve Carlton in 1972, Greg Maddux in 1995, Roger Clemens in 1997, and Pedro Martinez in 2000 are the five most valuable seasons calculated to date. Sandy Koufax's fantastic 1965 season and Bob Gibson's immortal 1968 season also make the top ten.

The most valuable starting pitchers appear at the top of the Total Win Values relative to league average listing from 1945-2015. The top five were Roger Clemens, Greg Maddux, Tom Seaver, Randy Johnson, and Pedro Martinez.

When value is measured relative to replacement level, the top five remains unchanged except that Warren Spahn and his longevity replace Pedro Martinez in the top five.

Topics for future win value research are numerous. To name but one, currently the win value methodology essentially assumes league-average defense behind each pitcher in the league. Perhaps a way to allocate the run prevention credit between pitchers and fielders within the win value framework can be developed.

Finally, I would like once again to thank the wonderful folks at Retrosheet for all they have done in making historical data available to baseball fans and researchers alike. They have done an outstanding job in preparing complete seasons going all the way back to 1945.

At the pace they are going, I hope that they are able to soon release other prior seasons. Of course, when additional seasons are released, I will be able to derive the Win Values for all starting pitchers appearing in those seasons. Accordingly, I look forward some day to deriving Win Values for all-time greats such as Walter Johnson, Lefty Grove, Pete Alexander, Christy Mathewson, and others.