| New and Improved Power Ranking (NIPR)$\text { Nipr }=\{\text { all cats }\} ; \text { Bopper }=\{r u n, h r, r b i, t b\} ; \text { Pitchin }=\{w, s v, k, e r a, w h i p\}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Team | NIPR | NIPR <br> Rank | BOPPER | BOPPER Rank | PITCHIN | PITCHIN |
| Bay City Brawlers | -41 | 12 | 59 | 6 | -118 | 14 |
| Boston Poindexters | 63 | 1 | 22 | 7 | 92 | 1 |
| CRYOGENIC TEDS | 26 | 5 | 94 | 2 | 6 | 6 |
| KGG Baseball 2019 | -6 | 7 | -21 | 8 | -5 | 9 |
| Killer Maltese | 18 | 6 | 91 | 3 | -10 | 10 |
| Killer Rabbits | -19 | 9 | -57 | 10 | -15 | 12 |
| Naperville Jellyfish | 40 | 3 | 138 | 1 | -18 | 13 |
| Notorious BE AR D | -25 | 10 | -30 | 9 | -11 | 11 |
| Plano Tiburon | -29 | 11 | -71 | 11 | 9 | 4 |
| PTBNL | -48 | 13 | -140 | 14 | 4 | 7 |
| RBI's all day | -55 | 14 | -122 | 13 | -2 | 8 |
| SATX Elephants | -6 | 8 | -88 | 12 | 38 | 2 |
| Southern Rockets | 54 | 2 | 62 | 5 | 21 | 3 |
| Vatican City Popes | 27 | 4 | 62 | 4 | 9 | 5 |
|  | 20 |  |  |  |  |  |

## NIPR for Special Category Areas

NIPR-1 $=\{$ all cats except your worst $\} ; P Q U A L=\{$ era,whip $\} ; P Q U A N=\{$ win,sv,k $\}$

| Team | NIPR-1 | NIPR-1 Rank | PQUAL | PQUAL Rank | PQUAN | PQUAN Rank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bay City Brawlers | -19 | 11 | -80 | 12 | -144 | 14 |
| Boston Poindexters | 81 | 1 | 252 | 1 | -14 | 11 |
| CRYOGENIC TEDS | 45 | 4 | -13 | 6 | 18 | 5 |
| KGG Baseball 2019 | 1 | 8 | -21 | 8 | 5 | 9 |
| Killer Maltese | 35 | 6 | -36 | 10 | 7 | 8 |
| Killer Rabbits | -10 | 9 | 38 | 4 | -51 | 13 |
| Naperville Meerkats | 69 | 3 | -98 | 14 | 35 | 4 |
| Notorious BE AR D | -19 | 12 | -13 | 7 | -9 | 10 |
| Plano Tiburon | -15 | 10 | 10 | 5 | 9 | 7 |
| PTBNL | -37 | 13 | -94 | 13 | 70 | 1 |
| RBI's all day | -45 | 14 | -30 | 9 | 17 | 6 |
| SATX Elephants | 9 | 7 | 41 | 3 | 36 | 3 |
| Southern Rockets | 70 | 2 | 112 | 2 | -40 | 12 |
| Vatican City Popes | 38 | 5 | -68 | 11 | 60 | 2 |

## NIPR Category Data

Category Z-score * 100. Average is 0 . One stdev better than average is 100 . And 1 stdev worse is -100

| Team | Run | Hr | Rbi | Sb | Tb | w | Sv | K | Era | Whip | NIPR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bay City Brawlers | 141 | 32 | 29 | -49 | 32 | -191 | -4 | -236 | -33 | -127 | -41 |
| Boston Poindexters | 153 | -17 | -61 | 82 | 13 | 42 | -95 | 12 | 258 | 245 | 63 |
| CRYOGENIC TEDS | 26 | 122 | 132 | -148 | 96 | 109 | -24 | -29 | 34 | -59 | 26 |
| KGG Baseball 2019 | -63 | 46 | 1 | 55 | -69 | 17 | 32 | -34 | 24 | -66 | -6 |
| Killer Maltese | 35 | 146 | 60 | -131 | 122 | -74 | 159 | -62 | -85 | 13 | 18 |
| Killer Rabbits | -15 | -86 | -43 | 115 | -81 | -83 | 32 | -101 | -6 | 83 | -19 |
| Naperville Meerkats | 85 | 143 | 202 | -60 | 123 | 192 | -218 | 131 | -149 | -46 | 40 |
| Notorious BE AR D | -42 | -20 | -15 | -82 | -41 | -41 | -29 | 44 | 30 | -57 | -25 |
| Plano Tiburon | -154 | -52 | -45 | -49 | -32 | -74 | 57 | 43 | -37 | 58 | -29 |
| PTBNL | -151 | -118 | -138 | 55 | -155 | -41 | 179 | 72 | -82 | -107 | -48 |
| RBI's all day | -113 | -97 | -151 | -55 | -128 | 109 | -90 | 32 | -31 | -29 | -55 |
| SATX Elephants | -12 | -142 | -98 | 98 | -98 | 34 | -19 | 93 | 18 | 63 | -6 |
| Southern Rockets | 111 | -66 | 69 | 191 | 135 | -66 | 32 | -87 | 127 | 97 | 54 |
| Vatican City Popes | -1 | 108 | 58 | -22 | 84 | 67 | -9 | 121 | -69 | -67 | 27 |

## NIPR Explanation

May 2013
The goal of the NIPR is to give a statistical measure of a team's performance, independent of head-to-head weekly competition. The NIPR measures a team's statistical performance in each category (cat) over the whole season.

For each cat, the NIPR is a team's Z-score for that cat times 100 . I multiply by 100 , so that the NIPR is a whole number. The Z-score is the number of standard deviations either better or worse than average for a cat. An average performance gives a NIPR of 0 , no better or worse than average.

Example: Assume the league average is 9 homers per week and the stdev is 1
If Team $Z$ averages 9 homers per week, their NIPR is 0 .
If team X averages 10 homers per week, then their NIPR for homers is 100.
If Team Y averages 11 homers per week, their NIPR is 200
If Team DOP averages 8 homers per week, their NIPR is -100 .
Other NIPR scores are simply the averages over multiple categories:
NIPR = average(all cats)
NIPR-1 = average( all cats except team's worst)
BOPPER = average(run,hr,rbi,tb)
PQUAN=average(win,k)
PQUAL=average(era,whip)

