| 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 | -55 | 13 | 34 | 5 | -130 | 14 |
| Boston Poindexters | 0 | 8 | -43 | 11 | 23 | 5 |
| CRYOGENIC TEDS | -18 | 11 | 18 | 7 | -25 | 11 |
| KGG Baseball 2019 | -19 | 12 | -111 | 13 | 53 | 2 |
| Killer Maltese | 28 | 3 | 47 | 4 | 50 | 3 |
| Killer Rabbits | 10 | 6 | -23 | 9 | 28 | 4 |
| Naperville Jellyfish | 55 | 1 | 164 | 1 | -8 | 9 |
| Notorious BE AR D | 5 | 7 | 78 | 3 | -24 | 10 |
| Plano Tiburon | 18 | 5 | 12 | 8 | 15 | 6 |
| PTBNL | -11 | 10 | -81 | 12 | 9 | 7 |
| RBI's all day | -87 | 14 | -174 | 14 | -32 | 13 |
| SATX Elephants | 24 | 4 | -36 | 10 | 66 | 1 |
| Southern Rockets | 51 | 2 | 84 | 2 | 5 | 8 |
| Vatican City Popes | -1 | 9 | 32 | 6 | -30 | 12 |
|  | 7 |  |  |  |  |  |

## 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 | -37 | 13 | -98 | 13 | -152 | 14 |
| Boston Poindexters | 10 | 9 | 45 | 6 | 8 | 7 |
| CRYOGENIC TEDS | -6 | 12 | -15 | 8 | -32 | 12 |
| KGG Baseball 2019 | 1 | 11 | 62 | 4 | 48 | 3 |
| Killer Maltese | 48 | 3 | 133 | 1 | -6 | 10 |
| Killer Rabbits | 20 | 7 | 60 | 5 | 8 | 8 |
| Naperville Meerkats | 80 | 1 | -85 | 10 | 43 | 4 |
| Notorious BE AR D | 21 | 6 | -39 | 9 | -14 | 11 |
| Plano Tiburon | 33 | 5 | 16 | 7 | 14 | 5 |
| PTBNL | 7 | 10 | -118 | 14 | 93 | 1 |
| RBI's all day | -73 | 14 | -86 | 12 | 5 | 9 |
| SATX Elephants | 36 | 4 | 86 | 3 | 53 | 2 |
| Southern Rockets | 74 | 2 | 126 | 2 | -75 | 13 |
| Vatican City Popes | 11 | 8 | -86 | 11 | 8 | 6 |

## 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 | 108 | 46 | -35 | -35 | 19 | -181 | -66 | -208 | 20 | -216 | -55 |
| Boston Poindexters | 41 | -76 | -50 | 61 | -85 | 53 | -66 | 35 | 81 | 9 | 0 |
| CRYOGENIC TEDS | -60 | 70 | 6 | -132 | 57 | 11 | -66 | -42 | 46 | -75 | -18 |
| KGG Baseball 2019 | -194 | -35 | -58 | -11 | -156 | 53 | 49 | 40 | 71 | 53 | -19 |
| Killer Maltese | -26 | 110 | 21 | -156 | 81 | -96 | 151 | -73 | 118 | 148 | 28 |
| Killer Rabbits | -82 | -60 | 18 | 49 | 31 | 53 | -27 | -3 | 44 | 75 | 10 |
| Naperville Meerkats | 147 | 159 | 218 | -59 | 133 | 181 | -168 | 115 | -137 | -33 | 55 |
| Notorious BE AR D | 80 | 94 | 67 | -144 | 71 | 53 | -104 | 10 | -42 | -36 | 5 |
| Plano Tiburon | -54 | -3 | 78 | 61 | 27 | -117 | 139 | 22 | -47 | 78 | 18 |
| PTBNL | -49 | -92 | -130 | 170 | -55 | -11 | 151 | 138 | -178 | -58 | -11 |
| RBI's all day | -105 | -213 | -171 | -11 | -208 | 96 | -66 | -17 | -129 | -44 | -87 |
| SATX Elephants | 63 | -68 | -92 | 49 | -49 | 32 | -2 | 130 | 98 | 74 | 24 |
| Southern Rockets | 141 | -19 | 89 | 146 | 123 | -139 | 75 | -162 | 122 | 130 | 51 |
| Vatican City Popes | -10 | 86 | 40 | 13 | 11 | 11 | -2 | 15 | -67 | -106 | -1 |

## 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)

