| New and Improved Power Ranking (NIPR)$\text { Nipr }=\{a l l \text { cats }\} ; \text { Bopper }=\{r u n, h r, r b i, t b\} ; \text { Pitchin }=\{w, s v, k, e r a, w h i p\}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Team | NIPR | NIPR <br> Rank | BOPPER | BOPPER Rank | PITCHIN | PITCHIN <br> Rank |
| Bay City Brawlers | -46 | 13 | 96 | 2 | -155 | 14 |
| Boston Poindexters | 19 | 4 | -27 | 9 | 40 | 2 |
| CRYOGENIC TEDS | 17 | 5 | 81 | 4 | -6 | 12 |
| KGG Baseball 2019 | -22 | 10 | -70 | 11 | 13 | 8 |
| Killer Maltese | 46 | 2 | 89 | 3 | 51 | 1 |
| Killer Rabbits | -38 | 12 | -37 | 10 | -68 | 13 |
| Naperville Jellyfish | 60 | 1 | 159 | 1 | -2 | 10 |
| Notorious BE AR D | 6 | 8 | 41 | 5 | 6 | 9 |
| Plano Tiburon | 10 | 7 | -20 | 8 | 33 | 3 |
| PTBNL | -9 | 9 | -90 | 12 | 26 | 5 |
| RBI's all day | -66 | 14 | -147 | 14 | -5 | 11 |
| SATX Elephants | -23 | 11 | -109 | 13 | 30 | 4 |
| Southern Rockets | 31 | 3 | 19 | 6 | 17 | 7 |
| Vatican City Popes | 16 | 6 | 13 | 7 | 20 | 6 |
|  | 11 |  |  |  |  |  |

## 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 | -25 | 13 | -164 | 14 | -149 | 14 |
| Boston Poindexters | 31 | 5 | 127 | 3 | -19 | 11 |
| CRYOGENIC TEDS | 33 | 4 | -16 | 8 | 0 | 8 |
| KGG Baseball 2019 | -13 | 11 | -1 | 7 | 22 | 7 |
| Killer Maltese | 68 | 2 | 128 | 2 | -1 | 9 |
| Killer Rabbits | -19 | 12 | -123 | 13 | -30 | 12 |
| Naperville Meerkats | 86 | 1 | -71 | 12 | 44 | 3 |
| Notorious BE AR D | 22 | 8 | 36 | 5 | -13 | 10 |
| Plano Tiburon | 22 | 7 | 41 | 4 | 28 | 5 |
| PTBNL | 1 | 9 | -60 | 11 | 83 | 1 |
| RBI's all day | -53 | 14 | -50 | 10 | 25 | 6 |
| SATX Elephants | -8 | 10 | 28 | 6 | 31 | 4 |
| Southern Rockets | 50 | 3 | 145 | 1 | -69 | 13 |
| Vatican City Popes | 26 | 6 | -20 | 9 | 47 | 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 | 214 | 78 | 44 | -77 | 50 | -203 | -14 | -229 | -87 | -240 | -46 |
| Boston Poindexters | 55 | -37 | -64 | 99 | -63 | 20 | -91 | 15 | 146 | 108 | 19 |
| CRYOGENIC TEDS | 41 | 96 | 65 | -121 | 122 | 76 | -45 | -30 | 25 | -56 | 17 |
| KGG Baseball 2019 | -105 | -19 | -61 | -6 | -96 | 48 | 17 | 1 | 11 | -14 | -22 |
| Killer Maltese | 64 | 147 | 25 | -147 | 120 | -92 | 171 | -82 | 112 | 144 | 46 |
| Killer Rabbits | -50 | -106 | -24 | 108 | 29 | -22 | -6 | -63 | -206 | -40 | -38 |
| Naperville Meerkats | 109 | 147 | 239 | -24 | 142 | 173 | -168 | 127 | -112 | -30 | 60 |
| Notorious BE AR D | 23 | 73 | 37 | -138 | 33 | 34 | -106 | 32 | 56 | 16 | 6 |
| Plano Tiburon | -100 | -14 | 19 | 11 | 16 | -78 | 117 | 45 | 14 | 67 | 10 |
| PTBNL | -68 | -94 | -100 | 134 | -96 | -36 | 171 | 114 | -71 | -49 | -9 |
| RBI's all day | -159 | -117 | -128 | -50 | -184 | 104 | -68 | 38 | -65 | -35 | -66 |
| SATX Elephants | -14 | -134 | -155 | 55 | -132 | 6 | -6 | 93 | 34 | 22 | -23 |
| Southern Rockets | 64 | -88 | 53 | 152 | 50 | -119 | 48 | -135 | 138 | 152 | 31 |
| Vatican City Popes | -73 | 67 | 50 | 3 | 9 | 90 | -21 | 73 | 5 | -45 | 16 |

## 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)

