Utilizing Batter Pitch Mix Models

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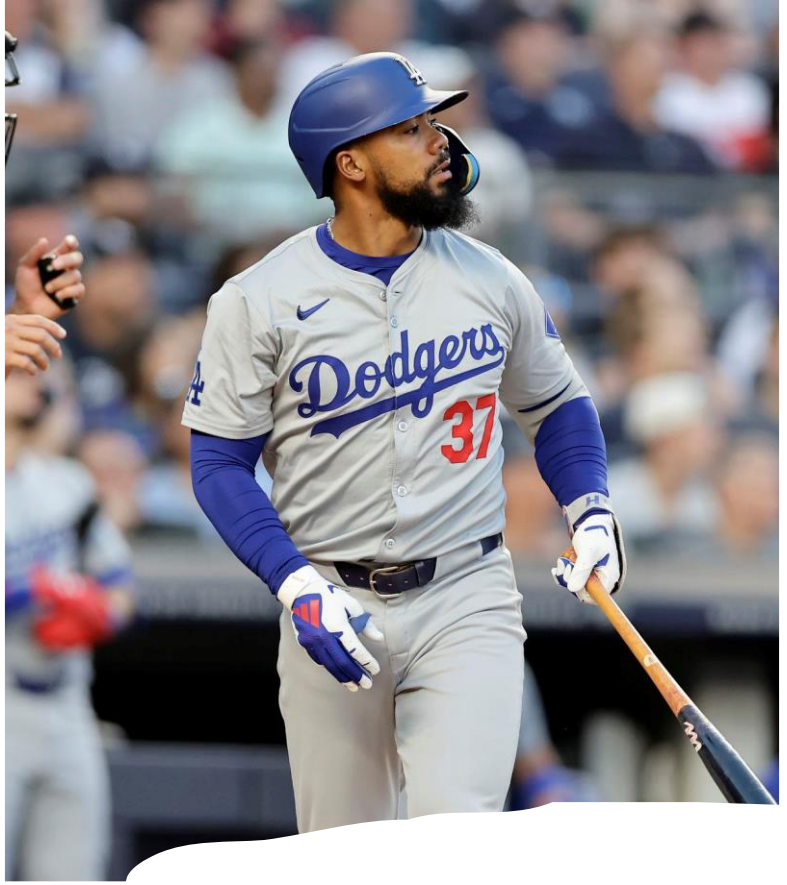
Why Should You Care?

- Our model will help predict expected shifts in pitch mix trends
  - Understand Batter Strengths and Weaknesses
  - Prepare for Matchups
- Batters are not going to see pitches they're good at more than what they're bad at
- The best hitters have the most even usage and need to be prepared to fight everything
- Weaknesses will be exposed until they're corrected

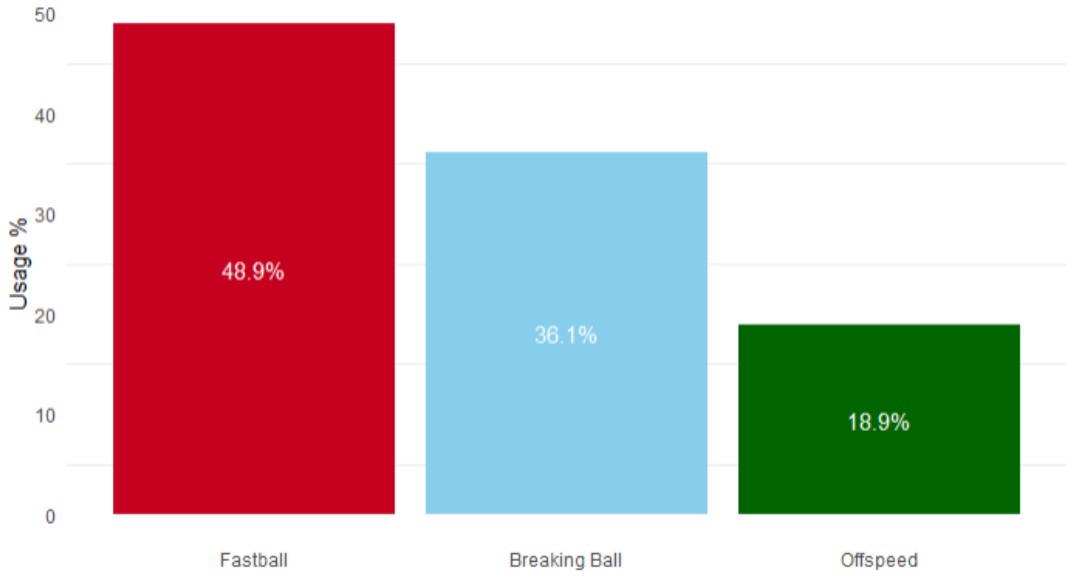


Reds™

Player Examples

Brandon Nimmo (L), New York Mets

Pitch Mix Model:



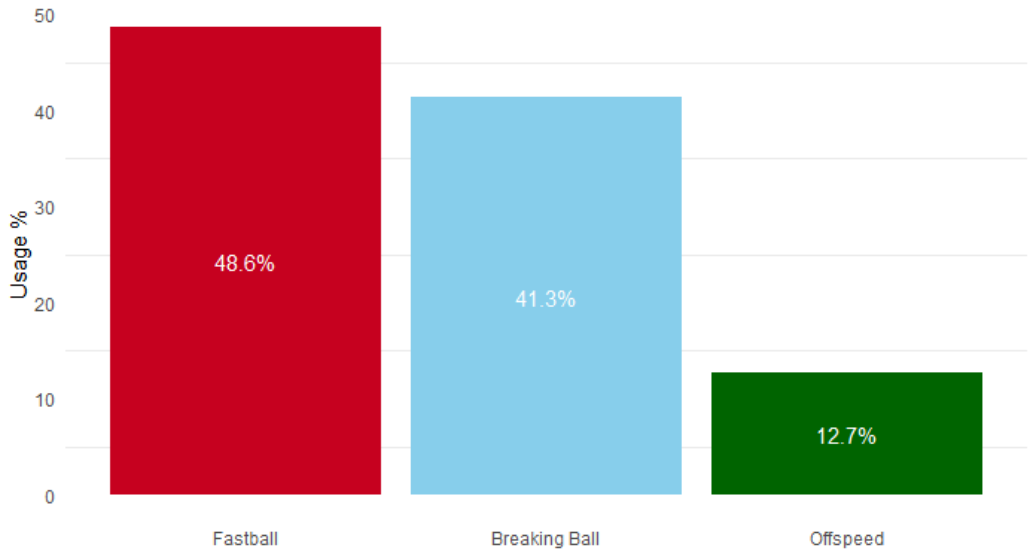
Historical Context (Sorted by xwOBA):

- Good against RHP
- Can expect more LHP matchups and more BB

Side	Pitch Group	Usage %	Max EV	Avg EV	LA	xBA	xwOBA	wOBA
L	OS	3.6	109.9	78.7	-1	0.334	0.436	0.495
R	FB	54.8	112.0	83.0	23	0.334	0.374	0.398
R	BB	30.0	111.9	83.6	10	0.330	0.333	0.360
L	FB	63.6	111.2	82.3	17	0.325	0.329	0.331
R	OS	15.2	110.0	81.6	1	0.316	0.325	0.331
L	BB	32.8	110.2	81.3	15	0.361	0.319	0.381

Teoscar Hernández (R), Los Angeles Dodgers

Pitch Mix Model:



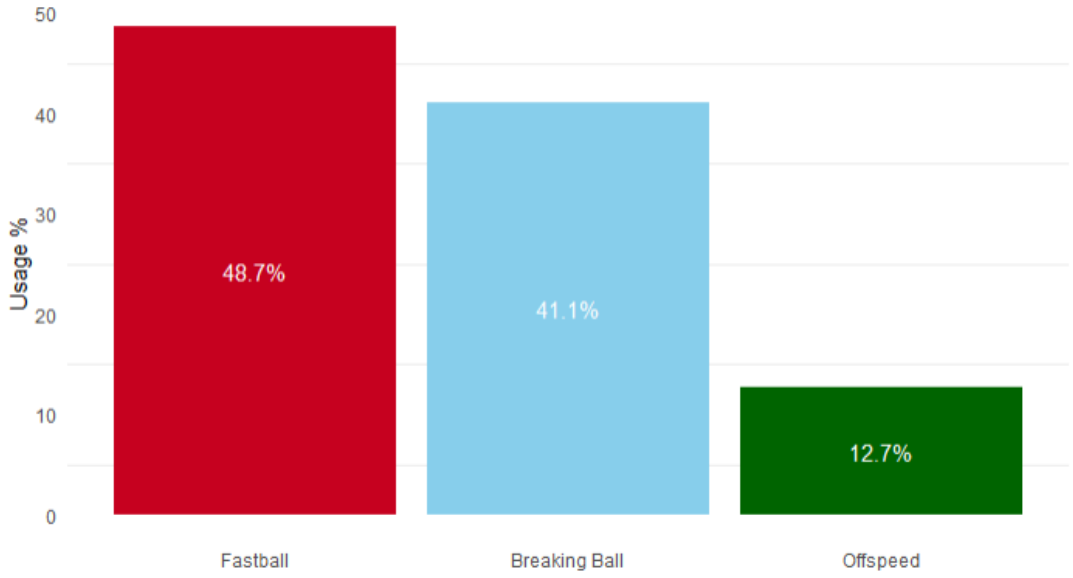
Historical Context (Sorted by xwOBA):

- Very Good FB Hitter
- Will see more RHP BB and LHP OS pitches

Side	Pitch Group	Usage %	Max EV	Avg EV	LA	xBA	xwOBA	wOBA
L	FB	41.9	114.1	86.4	28	0.429	0.479	0.513
R	FB	44.6	112.7	86.0	20	0.391	0.398	0.384
R	OS	7.9	115.7	84.3	4	0.444	0.377	0.450
L	BB	37.7	113.7	84.2	18	0.380	0.322	0.388
R	BB	47.5	114.3	81.6	12	0.346	0.286	0.277
L	OS	20.4	107.4	83.2	13	0.315	0.280	0.300

Spencer Steer (R), Cincinnati Reds

Pitch Mix Model:



Historical Context (Sorted by xwOBA):

- Best against LHP
- Can expect more RHP matchups and more BB

Side	Pitch Group	Usage %	Max EV	Avg EV	LA	xBA	xwOBA	wOBA
L	OS	13.3	104.5	78.8	11	0.354	0.426	0.629
L	FB	48.5	108.4	83.5	28	0.358	0.372	0.361
R	FB	55.9	110.6	83.0	18	0.306	0.329	0.341
R	BB	36.4	108.9	81.0	19	0.331	0.320	0.349
L	BB	38.2	108.9	84.7	13	0.300	0.292	0.379
R	OS	7.7	107.0	81.8	1	0.343	0.252	0.260

Thank you! Questions?