



Analyzing Prospect Management Using Projected WAR

1. Mex Tables
2. What We Want to Achieve
3. Prospect Classification
4. Creating the Table
5. Scaling the Table
6. Scaled Tables by Year
7. WAR Ranking by Org
8. How Prospect Management Impacts Big League Success

(1) Mex Tables



What are they?

- The Hitters Mex and Pitchers Mex tables contain projections for prospects around the league, calculated via the Mex model
- Values in the table include a prospect's projected WAR and player (asset) value, as well as amateur values from the amateur model
- Opted to use projected WAR for this analysis

	A^B_C name_display_fl	A^B_C current_competition_level	📅 date	1.2 projwar	1.2 player_value	1.2 amprojwar
1	Jack Leiter	AA	2022-11-01	6.9128591485060...	51099216.30151558	13.296
2	Jack Leiter	AA	2023-04-01	6.7893794037489...	48829823.48097457	13.296
3	Jack Leiter	AAA	2023-11-01	5.7518868503008...	41821410.38305909	13.296
4	Jack Leiter	AAA	2024-04-01	5.4081773301686...	38604840.53420333	13.296

(2) What We Want to Achieve



Questions

1. How are organizations adding/losing overall value in the way they draft, develop, and handle prospects?
2. Which teams have found consistent success in one (or multiple) areas across 2022-2024?
3. How do the Rangers stack up against the competition?

Plan

We'll look at projected WAR from six mex model runs from 2022-2024 – one at the start and end of each year – and classify each prospect into a specific subgroup to find how each org is changing their overall WAR by year

(3) Prospect Classification



Prospect Subgroups

1. **Full Year** | Player was in both runs on the year and stayed with the focus organization
2. **Traded** | Player was in both runs but was with the focus organization to start and a different org to end
3. **Acquired** | Player was in both runs but was with a different organization to start and the focus org to end
4. **Called Up** | Player was only in the START run but graduated out of the mex model due to >100 days of big league service
5. **Released** | Player was only in the START run but did not appear in the end run for any organization
6. **Drafted** | Player was only in the END run because they were drafted that year
7. **Late Bloomers** | Player was only in the END run but they were with the focus organization at the start of the year

(4) Creating the Table



Initial Table

- The first table used the raw projected WAR values for each player
- Found differences from start to end value for each player
- Aggregated by organization and subgroup to find overall change

(5) Scaling the Table



How To Solve This Issue

To resolve the non-zero net WAR change, we scale each run to a common value

Steps:

1. Find average WAR/player across the six runs
 - 0.5 for hitters, 0.29 for pitchers
2. Multiply this average by the # of rows in a run to get the “expected overall WAR”
3. Take the proportion of the “expected overall WAR” to the “true overall WAR” as the scaling constant
4. Multiply each value in a run by this constant to scale to a common value

$$\frac{\text{expWAR}}{\text{trueWAR}} = \text{Scaling Constant}$$

Example with 2022 Hitters

- 4/1/2022 Run –
 - True WAR: 765.6
 - # Players: 2379
 - Expected WAR: $2379 * 0.5 = 1189.5$
 - Scaling Constant = $1189.5 / 765.6 = 1.55$
- 11/1/2022 Run –
 - True WAR: 1211.4
 - # Players: 1873
 - Expected WAR: $1873 * 0.5 = 936.5$
 - Scaling Constant = $936.5 / 1211.4 = 0.77$

How will this affect individual players?

- When the scaling constants are as extreme as in 2022, the new scaled values for individual players can misrepresent their true WAR change across the course of a year.
- E.g. Evan Carter in 2022

	Start WAR	End WAR	WAR Change
True	5.05	7.34	+2.29
Constant	x 1.55	x 0.77	
Scaled	7.83	5.65	-2.18

- Carter truly improved by 2.3 projected WAR in 2022, but after scaling, it shows he LOST 2.2 WAR. What gives?

The Key Factor

To understand the breakdowns of individual players on the following slides, the following must be understood about the individual player WARs after scaling:

“THE WAR VALUE FOR EACH PLAYER DOES NOT REPRESENT THEIR TRUE WAR, BUT RATHER THE PROPORTION OF WAR THEY CONTRIBUTE TO THE SYSTEM AS A WHOLE.”

If a full year player loses WAR, it is because their piece of the pie got smaller from start to end, not because they got worse (As was the case with Evan Carter).

$$\frac{5.05}{765.6} = 0.66\% \quad \rightarrow \quad \frac{7.34}{1211.4} = 0.61\%$$

(6) Scaled Tables By Year



Summary

- The following slides contain the hitters and pitchers WAR tables for 2022, 2023, and 2024
- The teams will be ranked by **WAR Change/Player** rather than overall WAR change
 - Since all tables on the same scale and differing # of players in each run
- Breakdowns of the top, bottom, and most extreme teams based on the primary contributors to their gains/losses are included
- Breakdowns for the Rangers in each year will be covered as well

2022 Hitters

Top Team: AZ

- Biggest positive contributor(s) in both runs –
 - PD WAR Change (+6.01)
 - Primary cause(s) – **Corbin Carroll (+9.9)**
- Biggest positive contributor(s) in one run –
 - Late Bloomers WAR Change (+20.16)
 - Primary cause(s) – **Jordan Lawlar (+15.04)**

Bottom Team: DET

- Biggest negative contributor(s) in both runs –
 - PD WAR Change (-10.13)
 - Primary cause(s) – JD McLaughlin (-2.22), Ryan Kreidler (-1.89), Daniel Cabrera (-1.35)
- Biggest negative contributor(s) in one run –
 - Called Up WAR Change (-60.81)
 - Primary cause(s) – **Spencer Torkelson (-29.74), Riley Greene (-29.53)**

2022 Hitters

Extremes:

- Most extreme trade change: SD (-9.08)
 - Primary cause(s) – Robert Hassell (-4.76), **Esteury Ruiz (-2.66)**
- Most extreme acquire change: CIN (+7.55)
 - Primary cause(s) – **Noelvi Marte (+3.05)**, **Spencer Steer (+2.73)**, **Christian Encarnacion-Strand (+1.78)**
- Most extreme PD change: NYM (-26.58)
 - Primary cause(s) – **Francisco Alvarez (-15.78)**, Khalil Lee (-4.32)
- Most extreme called up change: DET (-60.81)
- Most extreme drafted change: BAL (+10.83)
 - **Jackson Holliday (+4.32)**, Dylan Beavers (+2.24), Max Wagner (+1.92)
- Most extreme late bloomers change: AZ (+20.16)
- Most extreme released change: TEX (-14.16)

2022 Hitters

Rangers:

#22 Full Year:

PV Change by Player (In \$ Millions)				
Full Year - TEX				
Player	Start Value	EOS Value	PV Change	Games Played
Bubba Thompson	0.80	2.51	1.71	131
Ezequiel Duran	0.30	1.93	1.64	137
Alejandro Osuna	0.77	1.83	1.06	96
Aaron Zavala	2.76	3.80	1.04	111

Dustin Harris	2.53	0.85	-1.68	86
Josh Jung	3.66	1.63	-2.03	57
Evan Carter	7.85	5.68	-2.18	104
Luisangel Acuna	5.00	2.62	-2.37	92
TOTAL	44.70	35.30	-9.39	3731

* MLB Rank

#19 Traded:

PV Change by Player (In \$ Millions)					
Traded - TEX					
Player	Start Value	PV Change (PreTrade)	Games Played (PreTrade)	Value at Trade	
Steele Walker	0.95	-0.4	54	0.55	
Nash Knight	0.01	0.0	31	0.00	
Jose Acosta	0.02	0.0	21	0.02	
TOTAL	0.98	-0.4	106	0.58	

#17 Acquired:

PV Change by Player (In \$ Millions)				
Acquired - TEX				
Player	Value at Acquired	PV Change (PostAcquire)	Games Played (PostAcquire)	End Value
Jeferson Espinal	0.29	-0.25	25	0.04
TOTAL	0.29	-0.25	25	0.04

#29 Drafted (+0.07) –

- Griffin Cheney (+0.04), Josh Hatcher (+0.03)

#19 Called Up (-1.92) –

- Josh Smith (-1.92)**

#6 Late Bloomers (+11.03) –

- Yeison Morrobel (+2.13), Maximo Acosta (+1.76), Ian Moller (+1.57)

#30 Released (-14.16) –

- Jose Felix (-5.12), Bayron Lora (-3.83)



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

2023 Hitters

Top Team: SEA

- Biggest positive contributor(s) in both runs –
 - Acquired WAR Change (+3.58)
 - Primary cause(s) – Dominic Canzone (+2.17), Ryan Bliss (+1.4)
- Biggest positive contributor(s) in one run –
 - Drafted WAR Change (+9.5)
 - Primary cause(s) – **Colt Emerson (+5.33)**, Tai Peete (+2.4), Aidan Smith (+1.3)

Bottom Team: MIA

- Biggest negative contributor(s) in both runs –
 - PD WAR Change (-10.09)
 - Primary cause(s) – Yiddi Cappe (-1.62), Jacob Amaya (-1.33), Peyton Burdick (-1.32)
- Biggest negative contributor(s) in one run –
 - Released WAR Change (-0.98)
- **There weren't any categories that dramatically fell off, but they had no category which really improved**

2023 Hitters

Extremes:

- Most extreme trade change: HOU (-7.01)
 - Primary cause(s) – **Ryan Clifford (-3.58)**, **Drew Gilbert (-1.88)**, Korey Lee (-1)
- Most extreme acquire change: NYM (+8.07)
 - Primary cause(s) – **Ryan Clifford (+3.58)**, **Luisangel Acuna (+2.01)**, **Drew Gilbert (+1.88)**
- Most extreme PD change: CLE (-19.11)
 - Primary cause(s) – Jake Fox (-2.38), Joseph Naranjo (-2.27), Angel Genao (-1.96)
- Most extreme called up change: NYM (-23.4)
 - Primary cause(s) – **Francisco Alvarez (-12.27)**, **Brett Baty (-8.16)**, **Mark Vientos (-2.97)**
- Most extreme drafted change: SEA (+9.5)
- Most extreme late bloomers change: COL (+14.27)
 - Primary cause(s) – Adael Amador (+7.89)
- Most extreme released change: TEX (-4.52)

2023 Hitters

Rangers:

#28 Full Year:

PV Change by Player (In \$ Millions)				
Full Year - TEX				
Player	Start Value	EOS Value	PV Change	Games Played
Evan Carter	6.81	8.53	1.71	130
Abimelec Ortiz	0.20	1.53	1.33	109
Tucker Mitchell	0.06	0.30	0.24	73
Josh Hatcher	0.03	0.14	0.11	98
Ian Moller	1.56	0.12	-1.45	95
Danyer Cueva	1.69	0.12	-1.57	100
Cody Freeman	2.58	0.61	-1.98	95
Aaron Zavala	4.44	0.34	-4.10	94
TOTAL	37.39	20.20	-17.19	3742

#29 Traded:

PV Change by Player (In \$ Millions)				
Traded - TEX				
Player	Start Value	PV Change (PreTrade)	Games Played (PreTrade)	Value at Trade
Luisangel Acuna	2.88	-0.87	84	2.01
Thomas Saggese	3.09	-0.12	93	2.97
TOTAL	5.97	-1.00	177	4.98

Acquired: N/A

#5 Drafted (+6.45) –

- **Wyatt Langford (+5.65), Quincy Scott (+0.8)**

#19 Called Up (-3.96) –

- **Ezequiel Duran (-2.05), Josh Jung (-1.91)**

#15 Late Bloomers (+5.28) –

- Anthony Gutierrez (+2.38), Chandler Pollard (+0.99), Tommy Specht (+0.6)

#30 Released (-4.52) –

- **Bubba Thompson (-2.87)**



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

2024 Hitters

Top Team: MIA

- Biggest positive contributor(s) in both runs –
 - Acquired WAR Change (+21.08)
 - Primary cause(s) – **Deyvison De Los Santos (+4.11), Jakob Marsee (+3.22), Graham Pauley (+2.79)**
- Biggest positive contributor(s) in one run –
 - Drafted WAR Change (+13.85)
 - Primary cause(s) – Carter Johnson (+3.79) , PJ Morlando (+3.21), Gage Miller (+2.25)

Bottom Team: TEX

- Biggest negative contributor(s) in both runs –
 - PD WAR Change (-3.31)
 - Primary cause(s) – Jonathan Ornelas (-0.65), Abimelec Ortiz (-0.54), Chandler Pollard (-0.46)
- Biggest negative contributor(s) in one run –
 - Called Up WAR Change (-13.84)
 - Primary cause(s) – **Evan Carter (-7.87), Wyatt Langford (-5.96)**

2024 Hitters

Extremes:

- Most extreme trade change: SD (-12.41)
 - Primary cause(s) – **Jacob Marsee (-3.22)**, **Graham Pauley (-2.79)**, **Homer Bush (-2.61)**
- Most extreme acquire change: MIA (+21.08)
- Most extreme PD change: WSH (+17.62)
 - Primary cause(s) – **James Wood (+6.92)**, **Trey Lipscomb (+4.34)**, **Dylan Crews (+3.32)**
- Most extreme called up change: OAK (-15.75)
 - Primary cause(s) – Zack Gelof (-6.78), Tyler Soderstrom (-5.61)
- Most extreme drafted change: AZ (+17.16)
 - Primary cause(s) – Slade Caldwell (+6.02), Ryan Waldschmidt (+2.77), Ivan Luciano (+2.65)
- Most extreme late bloomers change: PHI (+19.14)
 - Primary cause(s) – Devin Saltiban (+4.42), Kehden Hettiger (+4.24), Starlyn Caba (+2.81)
- Most extreme released change: BAL (-1.46)

2024 Hitters

Rangers:

#28 Full Year:

PV Change by Player (In \$ Millions)				
Full Year - TEX				
Player	Start Value	EOS Value	PV Change	Games Played
Justin Foscue	1.27	2.12	0.86	53
Gleider Figuereo	0.33	0.84	0.51	102
Sebastian Walcott	5.08	5.19	0.11	102
Ian Moller	0.04	0.11	0.07	78
Aaron Zavala	0.31	0.36	0.05	100
Anthony Gutierrez	2.26	1.80	-0.46	76
Chandler Pollard	0.95	0.48	-0.46	77
Abimelec Ortiz	1.44	0.90	-0.54	96
Jonathan Ornelas	1.03	0.38	-0.65	88
TOTAL	20.00	16.85	-3.15	3027

#13 Traded:

PV Change by Player (In \$ Millions)					
Traded - TEX					
Player	Start Value	PV Change (PreTrade)	Games Played (PreTrade)	Value at Trade	
Liam Hicks	0.44	-0.24	80	0.20	
Davis Wendzel	0.38	0.08	54	0.46	
TOTAL	0.82	-0.16	134	0.66	

Acquired: N/A

#7 Drafted (+13.02) –

- **Malcolm Moore (+4), Devin Fitz-Gerald (+2.56), Josh Springer (+2.16)**

#3 Called Up (-13.84) –

- **Evan Carter (-7.87), Wyatt Langford (-5.96)**

#22 Late Bloomers (+9.67) –

- Echedry Vargas (+1.96), Maxton Martin (+0.98), Arturo Disla (+0.85)

#9 Released (-0.32) –

- Geisel Cepeda (-0.12), Benjamin Blackwell (-0.07), JoJo Blackmon (-0.06)



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

2022 Pitchers

Top Team: DET

- Biggest positive contributor(s) in both runs –
 - PD WAR Change (+3.91)
 - Primary cause(s) – Wilmer Flores (+1.29), Garrett Hill (+0.86)
- Biggest positive contributor(s) in one run –
 - Late Bloomers WAR Change (+12.7)
 - Primary cause(s) – **Ty Madden (+3.19)**, **Jackson Jobe (+3.1)**

Bottom Team: SEA

- Biggest negative contributor(s) in both runs –
 - PD WAR Change (-9.19)
 - Primary cause(s) – Emerson Hancock (-3.86), Taylor Dollard (-2.43), Isaiah Campbell (-2.08)
- Biggest negative contributor(s) in one run –
 - Called Up WAR Change (-7.37)
 - Primary cause(s) – **George Kirby (-4.77)**, **Matt Brash (-2.42)**

2022 Pitchers

Extremes:

- Most extreme trade change: NYY (-9.86)
 - Primary cause(s) – **Ken Waldichuk (-3.93)**, **Hayden Wesneski (-3.37)**
- Most extreme acquire change: BAL (+5.62)/OAK (+5.61)
 - BAL Primary cause(s) – Cade Povich (+3.08), Chayce McDermott (+1.38)
 - OAK Primary cause(s) – **Ken Waldichuk (+3.93)**, **JP Sears (+0.89)**
- Most extreme PD change: KC (-21.71)
 - Primary cause(s) – Asa Lacy (-7.43), Will Klein (-3.36)
- Most extreme called up change: CIN (-21.99)
 - Primary cause(s) – **Hunter Greene (-9.47)**, **Nick Lodolo (-6.03)**, **Graham Ashcraft (-2.89)**
- Most extreme drafted change: MIA (+7.54)
 - Primary cause(s) – Jacob Miller (+2.01), Karson Milbrandt (+1.51), Joshua White (+1.31)
- Most extreme late bloomers change: CLE (+16.45)
 - Primary cause(s) – **Gavin Williams (+4.23)**, **Tanner Bibee (+2.53)**
- Most extreme released change: LAA (-4.54)

2022 Pitchers

Rangers:

#29 Full Year:

PV Change by Player (In \$ Millions)				
Full Year - TEX				
Player	Start Value	EOS Value	PV Change	Games Played
Cole Ragans	0.21	2.09	1.88	27
Marc Church	1.15	1.96	0.81	37
Ricky Vanasco	0.02	0.20	0.18	23
Fernery Ozuna	0.04	0.19	0.15	49

Avery Weems	2.25	0.47	-1.78	26
Chase Lee	3.05	1.02	-2.03	51
Cody Bradford	3.98	0.69	-3.28	27
Cole Winn	8.75	3.30	-5.45	28
TOTAL	39.20	19.93	-19.27	1516

#4 Traded:

PV Change by Player (In \$ Millions)					
Traded - TEX					
Player	Start Value	PV Change (PreTrade)	Games Played (PreTrade)	Value at Trade	
Eris Filpo	0.01		0	3	0.01
TOTAL	0.01		0	3	0.01

#9 Acquired:

PV Change by Player (In \$ Millions)					
Acquired - TEX					
Player	Value at Acquired	PV Change (PostAcquire)	Games Played (PostAcquire)	End Value	
Yohanse Morel	0.04	0.04	23	0.08	
Drew Strotman	0.25	-0.01	3	0.24	
Antoine Kelly	0.98	-0.10	7	0.87	
TOTAL	1.27	-0.08	33	1.19	

Drafted – N/A

#13 Called Up (-2.68) –

- Glenn Otto (-2.68)

#3 Late Bloomers (+11.96) –

- Jack Leiter (+5.53), Mitch Bratt (+1.84)

#2 Released (-0.5) –

- No one of significance



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

2023 Pitchers

Top Team: PIT

- Biggest positive contributor(s) in both runs –
 - PD WAR Change (+5.39)
 - Primary cause(s) – **Quinn Priester (+2.3), Jared Jones (+2.13)**, Anthony Solometo (+1.41)
- Biggest positive contributor(s) in one run –
 - Drafted WAR Change (+18.86)
 - Primary cause(s) – **Paul Skenes (+15.57)**

Bottom Team: LAA

- Biggest negative contributor(s) in both runs –
 - PD WAR Change (-5.79)
 - Primary cause(s) – Andrew Peters (-1.08), Eric Torres (-1.06), Luke Murphy (-1.06)
- Biggest negative contributor(s) in one run –
 - Called Up WAR Change (-12.27)
 - Primary cause(s) – **Chase Silseth (-4.51), Ben Joyce (-4), Sam Bachman (-3.1)**

2023 Pitchers

Extremes:

- Most extreme trade change: LAD (-3.8)
 - Primary cause(s) – Nicholas Nastrini (-1.68), Nick Robertson (-0.74), Jordan Leasure (-0.6)
- Most extreme acquire change: STL (+5.4)
 - Primary cause(s) – Drew Rom (+2.75), **TK Roby (+1.15)**, Adam Kloffenstein (+1.01)
- Most extreme PD change: PHI (-12.42)
 - Primary cause(s) – Andrew Painter (-5.19), Christian McGowan (-1.52), Griff McGarry (-1.45)
- Most extreme called up change: MIA (-14.57)
 - Primary cause(s) – **Eury Perez (-6.6)**, Max Meyer (-5.25), Andrew Nardi (-2.2)
- Most extreme drafted change: PIT (+18.86)
- Most extreme late bloomers change: NYY (+14.17)
 - Primary cause(s) – **Drew Thorpe (+4.34)**, **Chase Hampton (+2.63)**
- Most extreme released change: PIT (-3.01)

2023 Pitchers

Rangers:

#23 Full Year:

PV Change by Player (In \$ Millions)				
Full Year - TEX				
Player	Start Value	EOS Value	PV Change	Games Played
Cody Bradford	0.73	3.46	2.72	34
Aidan Curry	0.20	0.69	0.49	21
Jose Corniell	0.37	0.82	0.45	23
Grant Anderson	0.14	0.49	0.34	51

Marc Church	1.85	0.92	-0.94	43
Owen White	1.84	0.51	-1.33	27
Jack Leiter	6.02	4.55	-1.47	20
Cole Winn	3.10	1.46	-1.64	29
TOTAL	28.91	22.74	-6.18	1478

#22 Traded:

PV Change by Player (In \$ Millions)				
Traded - TEX				
Player	Start Value	PV Change (PreTrade)	Games Played (PreTrade)	Value at Trade
TK Roby	1.17	-0.02	10	1.15
TOTAL	1.17	-0.02	10	1.15

#13 Acquired:

PV Change by Player (In \$ Millions)				
Acquired - TEX				
Player	Value at Acquired	PV Change (PostAcquire)	Games Played (PostAcquire)	End Value
Reid Birlingmair	0.01	0.01	25	0.02
Seth Nordlin	0.05	0.00	16	0.05
Joshua Dye	0.06	-0.03	7	0.03
Luis Valdez	0.22	-0.03	6	0.18
TOTAL	0.33	-0.05	54	0.28

#15 Drafted (+1.75) –

- Skylar Hales (+0.94), Paul Bonzagni (+0.81)

#21 Called Up (-2.32) –

- Cole Ragans (-2.32)

#5 Late Bloomers (+8.61) –

- Brock Porter (+3.03), Kumar Rocker (+2.46)

#12 Released (-0.98) –

- Ricky Vanasco (-0.23), Bradford Webb (-0.22)



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

2024 Pitchers

Top Team: LAA

- Biggest positive contributor(s) in both runs –
 - PD WAR Change (+7.64)
 - Primary cause(s) – Caden Dana (+3.99), Camden Minacci (+1.74), Barrett Kent (+1.32)
- Biggest positive contributor(s) in one run –
 - Drafted WAR Change (+13.54)
 - Primary cause(s) – **Ryan Johnson (+4.85)**, **Chris Cortez (+1.92)**, **Dylan Jordan (+1.66)**

Bottom Team: PIT

- Biggest negative contributor(s) in both runs –
 - Traded WAR Change (-1.47)
 - Primary cause(s) – Patrick Reilly (-1.27)
- Biggest negative contributor(s) in one run –
 - Called Up WAR Change (-23.61)
 - Primary cause(s) – **Paul Skenes (-14.28)**, **Quinn Priester (-4.63)**, **Jared Jones (-2.55)**

2024 Pitchers

Extremes:

- Most extreme trade change: SD (-5.72)
 - Primary cause(s) – **Dylan Lesko (-2.88), Robby Snelling (-2.62)**
- Most extreme acquire change: TB (+3.96)
 - Primary cause(s) – **Dylan Lesko (+2.88), Paul Gervase (+0.78)**
- Most extreme PD change: LAA (+7.64)
- Most extreme called up change: PIT (-23.61)
- Most extreme drafted change: CIN (+18.84)
 - **Chase Burns (+11.42), Luke Holman (+3.83)**
- Most extreme late bloomers change: TB (+21.64)
 - Primary cause(s) – Jackson Baumeister (+2.10), Jeremy Pilon (+1.97), Owen Wild (+1.84)
- Most extreme released change: CIN (-4.26)

2024 Pitchers

Rangers:

#8 Full Year:

PV Change by Player (In \$ Millions)				
Full Year - TEX				
Player	Start Value	EOS Value	PV Change	Games Played
Mitch Bratt	1.36	2.32	0.96	21
Jose Gonzalez	0.02	0.94	0.92	19
Kumar Rocker	2.23	3.03	0.80	8
Kohl Drake	0.56	1.10	0.54	19
David Davalillo	0.02	0.51	0.49	19
Skylar Hales	0.86	1.33	0.47	36
Winston Santos	0.21	0.64	0.43	20
Luis Ramirez	0.52	0.24	-0.29	24
Thomas Ireland	0.42	0.09	-0.33	16
Marc Church	0.77	0.43	-0.34	10
Brock Porter	2.71	2.33	-0.38	8
DJ McCarty	0.67	0.26	-0.41	19
Jose Corniell	0.70	0.18	-0.51	0
TOTAL	16.74	20.19	3.45	1028

#25 Traded:

PV Change by Player (In \$ Millions)				
Traded - TEX				
Player	Start Value	PV Change (PreTrade)	Games Played (PreTrade)	Value at Trade
Chase Lee	0.76	-0.21	11	0.55
Tyler Owens	0.17	-0.02	26	0.15
Joseph Montalvo	0.27	0.02	13	0.29
Anthony Hoopii-Tuionetaoa	0.05	0.04	10	0.09
TOTAL	1.25	-0.17	60	1.08

#10 Acquired:

PV Change by Player (In \$ Millions)				
Acquired - TEX				
Player	Value at Acquired	PV Change (PostAcquire)	Games Played (PostAcquire)	End Value
Josh Mollerus	0.45	-0.03	14	0.42
TOTAL	0.45	-0.03	14	0.42

#24 Drafted (+5.45) –

- Dalton Pence (+1.36), David Hagaman (+1.16), Garrett Horn (+0.8)

#7 Called Up (-9.87) –

- **Jack Leiter (-3.92), Cody Bradford (-3.17), Cole Winn (-1.26)**

#11 Late Bloomers (+11.31) –

- **Alejandro Rosario (+2.71), Ryan Lobus (+1.06), Case Matter (+0.97)**

#21 Released (-1.42) –

- Antoine Kelly (-0.51)



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

Internal WAR Change for Rangers

Internal Player Value Change by Year (Hitters)

2022-2024

Organization	Year	Traded Loss	Acquired Gain	Player Dev Change	Released Loss	Late Bloomers Gain	# Players Start Season	# Players End Season	System PV Start	Rank	System PV End	Rank	System PV Change	Rank	Start PV/Player	Rank	End PV/Player	Rank	PV Change/Player	PV Rank
TEX	2022	-0.58	0.29	-10.05	-14.16	11.03	94	61	59.84	1	46.37	3	-13.47	28	0.64	2	0.76	3	0.12	12
TEX	2023	-4.98	0.00	-18.19	-4.52	5.28	75	56	47.88	2	25.48	15	-22.40	30	0.64	1	0.46	16	-0.18	30
TEX	2024	-0.66	0.00	-3.31	-0.32	9.67	49	88	21.14	15	26.52	27	5.38	28	0.43	13	0.30	27	-0.13	27

Internal Player Value Change by Year (Pitchers)

2022-2024

Organization	Year	Traded Loss	Acquired Gain	Player Dev Change	Released Loss	Late Bloomers Gain	# Players Start Season	# Players End Season	System PV Start	Rank	System PV End	Rank	System PV Change	Rank	Start PV/Player	Rank	End PV/Player	Rank	PV Change/Player	PV Rank
TEX	2022	-0.01	1.27	-19.36	-0.50	11.96	101	86	39.71	1	33.07	2	-6.64	23	0.39	4	0.38	3	-0.01	21
TEX	2023	-1.15	0.33	-6.25	-0.98	8.61	91	88	31.06	3	31.62	1	0.56	15	0.34	3	0.36	4	0.02	15
TEX	2024	-1.09	0.45	3.27	-1.42	11.31	69	119	19.41	3	31.92	4	12.51	13	0.28	5	0.27	8	-0.01	15



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

(7) WAR Ranking by Org



Summary

- The following slides contain projected WAR rankings for all 30 clubs from 2022-2024 in each of the following categories:
 - Player Development (PD + Late Bloomers)
 - Transactions (Acquisitions – Trades)
 - Graduated (Called Up)
 - Drafted
- Breakdowns of teams consistently in the Top 10/Bottom 10 of each category are included

Hitters PD WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	2.02	14	-5.31	22	13.11	22
AZ	26.17	1	-2.10	20	7.11	29
BAL	5.81	5	9.13	6	23.20	6
BOS	5.79	6	-12.20	29	19.30	13
CHC	2.49	12	2.32	15	14.90	20
CIN	5.50	8	17.22	1	20.27	10
CLE	1.33	15	-10.07	27	22.90	7
COL	0.87	19	8.06	7	7.55	28
CWS	5.50	8	-5.89	23	16.73	17
DET	-1.06	21	-11.59	28	26.67	2
HOU	1.23	16	-0.48	17	26.59	3
KC	5.65	7	-1.30	19	10.82	25
LAA	3.21	10	6.56	10	19.52	12
LAD	-4.80	26	-2.43	21	22.15	8
MIA	2.85	11	-9.73	26	10.42	26
MIL	-1.86	24	0.77	16	23.62	5
MIN	6.88	4	-9.33	25	19.60	11
NYM	-21.26	30	9.91	3	11.28	24
NYY	-1.61	22	5.10	13	15.92	19
OAK	-8.20	28	9.72	4	17.43	15
PHI	1.13	17	6.68	9	17.85	14
PIT	-15.62	29	5.85	12	11.54	23
SD	7.21	3	7.40	8	17.09	16
SEA	-0.51	20	3.03	14	30.09	1
SF	-1.62	23	6.43	11	16.06	18
STL	-5.95	27	11.72	2	8.53	27
TB	-4.65	25	9.25	5	20.65	9
TEX	0.98	18	-12.92	30	6.36	30
TOR	2.43	13	-5.97	24	13.67	21
WSH	7.90	2	-0.65	18	26.41	4

Hitters Player Dev (PD + Late Bloomers)

Teams in Top 10 every year: BAL, CIN

Teams in Top 10 at least two years: LAA, SD, TB, WSH

Teams in Bottom 10 every year: None

Teams in Bottom 10 at least two years: ATL, AZ, DET, LAD, MIA, NYM, PIT, STL, TEX, TOR



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

Pitchers PD WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	-1.78	17	2.61	12	8.29	27
AZ	-8.46	27	8.37	3	9.94	21
BAL	-2.79	19	-2.40	23	14.73	11
BOS	5.64	5	4.69	7	9.08	24
CHC	1.62	13	6.83	6	7.99	28
CIN	-1.62	16	3.64	11	14.75	10
CLE	3.80	10	-8.45	29	16.93	4
COL	2.86	12	4.03	9	20.23	2
CWS	4.96	7	2.12	14	15.13	8
DET	16.61	1	-1.45	21	10.80	18
HOU	-0.24	15	1.18	16	9.99	20
KC	-15.44	30	-0.17	20	10.35	19
LAA	3.78	11	-3.44	24	14.06	14
LAD	-3.48	20	3.74	10	18.71	3
MIA	-3.97	22	-5.48	27	8.82	25
MIL	5.47	6	4.58	8	16.85	5
MIN	-4.85	23	0.30	18	9.45	23
NYM	7.97	3	7.55	5	16.70	7
NYY	-4.94	24	12.79	2	12.77	15
OAK	-3.87	21	-5.06	26	14.65	12
PHI	9.35	2	-10.36	30	5.33	30
PIT	-9.36	28	14.17	1	16.76	6
SD	7.76	4	8.26	4	9.78	22
SEA	-6.27	25	1.64	15	12.27	17
SF	-2.17	18	-4.28	25	8.69	26
STL	4.80	8	0.54	17	12.56	16
TB	0.64	14	-6.63	28	27.28	1
TEX	-7.39	26	2.36	13	14.57	13
TOR	3.98	9	-0.12	19	5.88	29
WSH	-13.58	29	-2.01	22	14.82	9

Pitchers Player Dev (PD + Late Bloomers)

Teams in Top 10 every year: MIL, NYM

Teams in Top 10 at least two years: BOS, CLE, COL, CWS, LAD, PIT, SD

Teams in Bottom 10 every year: MIA

Teams in Bottom 10 at least two years: AZ, KC, MIN, OAK, PHI, SF, WSH



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

Hitters Transactional WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	-1.48	24	0.04	12	-1.03	17
AZ	-0.48	19	-3.80	26	-5.11	26
BAL	-1.02	23	-1.13	23	-5.14	27
BOS	2.16	7	0.00	14	-5.16	28
CHC	0.00	12	-0.75	22	-0.85	16
CIN	7.54	1	-1.26	24	0.70	10
CLE	-0.13	16	6.87	2	-0.68	14
COL	0.00	12	0.01	13	0.23	11
CWS	0.00	12	3.76	4	3.23	5
DET	0.58	11	1.50	7	5.26	4
HOU	-0.72	21	-7.01	30	-4.09	25
KC	2.05	8	0.12	9	-1.55	19
LAA	5.67	2	-3.33	25	1.12	6
LAD	-0.80	22	-0.33	19	-6.14	29
MIA	2.27	6	-3.84	27	20.75	1
MIL	2.96	5	0.07	11	-1.56	20
MIN	-4.60	28	0.00	14	-1.73	21
NYM	0.00	12	8.07	1	-3.04	23
NYY	-0.39	18	0.00	14	-3.94	24
OAK	4.44	4	-0.52	20	1.11	7
PHI	-6.15	29	-0.55	21	-0.77	15
PIT	1.35	10	1.82	6	-1.12	18
SD	-8.52	30	0.00	14	-12.36	30
SEA	-2.89	27	3.50	5	-2.63	22
SF	1.84	9	0.08	10	1.07	8
STL	-2.10	26	5.35	3	-0.11	12
TB	-0.48	20	-4.46	28	8.06	3
TEX	-0.29	17	-4.97	29	-0.66	13
TOR	-1.80	25	-0.08	18	15.78	2
WSH	5.09	3	0.66	8	1.00	9

Hitters

Transactions (Acquisitions – Trades)

Teams in Top 10 every year: SF, WSH

Teams in Top 10 at least two years: CIN, CWS, DET, KC, LAA, MIA, OAK, PIT

Teams in Bottom 10 every year: BAL, HOU

Teams in Bottom 10 at least two years: AZ, LAD, MIN, PHI, SD, SEA, TB

Pitchers

Transactions (Acquisitions – Trades)

Pitchers Transactional WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	-0.49	22	-1.39	24	0.00	13
AZ	-0.01	14	0.59	8	0.00	13
BAL	5.48	2	-2.93	29	0.12	11
BOS	-0.94	24	1.09	6	-0.06	19
CHC	2.69	3	-1.83	26	0.19	10
CIN	0.15	12	-2.52	27	0.00	13
CLE	-0.04	16	-0.73	18	-0.06	19
COL	0.05	13	1.83	5	0.76	7
CWS	-0.43	20	4.14	3	-0.21	22
DET	0.37	10	0.51	10	1.39	4
HOU	-1.78	28	0.00	14	0.00	13
KC	2.41	4	-0.20	16	-2.48	29
LAA	0.23	11	-2.92	28	0.77	6
LAD	-1.39	26	-3.80	30	-0.45	24
MIA	-0.04	15	-0.86	21	2.81	3
MIL	0.68	7	-0.21	17	-0.55	25
MIN	-4.40	29	0.19	12	-0.04	18
NYM	-0.39	19	0.54	9	-2.24	28
NYY	-7.68	30	-0.75	19	0.21	9
OAK	5.54	1	4.15	2	2.94	2
PHI	0.51	9	-0.16	15	0.56	8
PIT	0.52	8	1.04	7	-1.47	27
SD	-0.44	21	-1.12	23	-5.72	30
SEA	-0.05	17	0.37	11	-0.02	17
SF	-0.69	23	0.01	13	-0.19	21
STL	-0.09	18	5.40	1	0.01	12
TB	-1.45	27	-0.95	22	3.57	1
TEX	1.26	6	-0.82	20	-0.63	26
TOR	-1.35	25	-1.53	25	-0.22	23
WSH	1.78	5	2.33	4	1.02	5

Teams in Top 10 every year: DET, OAK, WSH

Teams in Top 10 at least two years: CHC, COL, PHI, PIT

Teams in Bottom 10 every year: LAD, SD, TOR

Teams in Bottom 10 at least two years: ATL, CWS, SF, TB, TEX

*MLB Data only

Top Teams wRC+ Change

Org	2022 wRC+	2024 wRC+	Trend
CHC	106	94	Better
COL	106	118	Worse
DET	101	89	Better
OAK	115	109	Better
PHI	98	90	Better
PIT	114	99	Better
WSH	122	105	Better

Bottom Teams wRC+ Change

Org	2022 wRC+	2024 wRC+	Trend
ATL	83	90	Worse
CWS	97	114	Worse
LAD	75	96	Worse
SD	96	98	Worse
SF	100	105	Worse
TB	91	99	Worse
TEX	106	99	Better
TOR	100	109	Worse

Hitters Graduated WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	-6.12	11	0.00	29	0.00	30
AZ	-12.66	4	-18.34	3	-0.11	29
BAL	-11.04	6	-15.19	5	-9.32	7
BOS	-2.10	18	-8.06	14	-5.96	10
CHC	-1.77	20	-1.24	22	-8.76	8
CIN	-0.84	22	-11.59	9	-10.86	6
CLE	-6.41	10	-13.45	6	-2.76	20
COL	-0.56	24	-10.90	11	-5.33	12
CWS	-5.12	13	-3.35	20	-1.19	25
DET	-60.81	1	-1.15	23	-4.79	15
HOU	-2.56	16	-2.62	21	-0.30	28
KC	-44.03	2	-13.24	7	-2.37	23
LAA	0.00	25	-11.27	10	-5.19	13
LAD	0.00	25	-7.19	15	-0.40	27
MIA	-1.21	21	0.00	29	-2.54	21
MIL	0.00	25	-10.28	12	-14.07	2
MIN	-4.51	14	-4.44	18	-0.49	26
NYM	0.00	25	-23.40	1	-1.93	24
NYY	0.00	25	-23.01	2	-11.37	4
OAK	-8.83	8	-17.71	4	-15.75	1
PHI	-4.04	15	-0.80	25	-3.04	17
PIT	-11.80	5	-7.18	16	-5.40	11
SD	-7.14	9	-0.82	24	-4.22	16
SEA	-30.77	3	-0.03	27	-2.43	22
SF	-0.70	23	-8.26	13	-5.98	9
STL	-9.09	7	-11.91	8	-11.09	5
TB	-2.42	17	-4.71	17	-2.88	19
TEX	-1.92	19	-3.96	19	-13.84	3
TOR	0.00	25	-0.03	27	-2.96	18
WSH	-6.11	12	-0.31	26	-4.89	14

Hitters Graduated (Called Up)

Teams in Top 10 every year: BAL, OAK, STL

Teams in Top 10 at least two years: AZ, CIN, CLE, KC, NYY

Teams in Bottom 10 every year: MIA

Teams in Bottom 10 at least two years: ATL, CHC, CWS, HOU, LAD, NYM, SEA, TOR

*MLB Data only

Top Teams wRC+ Change			
Org	2022 wRC+	2024 wRC+	Trend
AZ	92	113	Better
BAL	95	114	Better
CIN	86	90	Better
CLE	95	96	Better
KC	92	98	Better
NYY	112	119	Better
OAK	81	100	Better
STL	115	97	Worse

Bottom Teams wRC+ Change			
Org	2022 wRC+	2024 wRC+	Trend
ATL	113	100	Worse
CHC	97	96	Worse
CWS	96	73	Worse
HOU	112	108	Worse
LAD	120	116	Worse
MIA	91	82	Worse
NYM	117	113	Worse
SEA	106	93	Worse
TOR	115	97	Worse



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

Pitchers

Graduated (Called Up)

Teams in Top 10 every year: None

Teams in Top 10 at least two years: ATL, AZ, LAA, LAD, MIA, MIL

Teams in Bottom 10 every year: NYM, PHI, TOR

Teams in Bottom 10 at least two years: BOS, COL, CWS, HOU, NYY, SD

Pitchers Graduated WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	-3.90	10	-3.98	15	-9.82	7
AZ	-1.31	19	-8.30	5	-13.49	2
BAL	-2.58	14	-5.94	9	-3.21	18
BOS	-0.75	23	-6.78	7	-2.21	25
CHC	-1.04	20	-2.91	19	-7.51	10
CIN	-21.99	1	-5.30	11	-2.14	26
CLE	-3.05	12	-11.95	4	-2.05	27
COL	-0.92	21	-1.29	23	-5.18	13
CWS	-0.02	29	-0.35	28	-10.39	5
DET	-7.91	3	-5.09	12	-2.28	24
HOU	-0.26	27	-6.10	8	-3.06	20
KC	-4.68	9	-2.26	22	-4.31	15
LAA	-11.35	2	-12.27	2	-2.38	23
LAD	-0.71	24	-7.73	6	-9.04	8
MIA	-5.87	7	-14.57	1	-1.43	28
MIL	-4.71	8	-1.09	24	-10.92	4
MIN	-6.88	6	-3.32	17	-3.08	19
NYM	-0.43	25	-0.40	27	-2.39	22
NYY	-0.41	26	-0.18	29	-3.90	16
OAK	-2.06	16	-12.06	3	-7.14	11
PHI	-0.84	22	-0.68	26	-2.44	21
PIT	-1.60	17	-2.49	20	-23.61	1
SD	-0.16	28	-0.99	25	-4.78	14
SEA	-7.37	4	-3.46	16	-3.82	17
SF	-1.55	18	-3.07	18	-11.71	3
STL	-2.20	15	-4.69	13	-8.83	9
TB	-6.93	5	-4.11	14	-0.95	30
TEX	-2.68	13	-2.32	21	-9.87	6
TOR	0.00	30	0.00	30	-1.21	29
WSH	-3.52	11	-5.57	10	-5.85	12

Hitters Drafted

Hitters Drafted WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	6.82	4	1.22	27	2.24	28
AZ	0.82	25	4.14	11	17.16	1
BAL	10.83	1	4.45	10	16.55	2
BOS	8.30	2	4.94	8	7.92	20
CHC	0.03	30	5.26	6	13.94	4
CIN	1.66	23	1.36	26	8.43	18
CLE	0.50	27	3.34	17	9.49	15
COL	4.57	9	2.26	19	11.79	10
CWS	1.37	24	2.04	21	6.22	25
DET	3.19	16	8.71	2	7.99	19
HOU	5.58	5	1.02	29	4.49	27
KC	3.89	14	1.67	23	10.56	13
LAA	4.50	11	7.09	3	5.06	26
LAD	3.39	15	3.49	16	6.86	22
MIA	2.72	18	1.50	24	13.85	5
MIL	4.89	8	4.02	12	6.29	24
MIN	7.70	3	6.86	4	11.71	11
NYM	2.54	19	0.06	30	8.66	16
NYY	2.29	21	3.58	15	1.52	29
OAK	2.42	20	4.02	12	16.28	3
PHI	4.53	10	2.12	20	12.09	8
PIT	5.19	7	5.12	7	12.03	9
SD	4.01	13	3.00	18	6.96	21
SEA	5.53	6	9.49	1	1.15	30
SF	0.54	26	2.02	22	8.64	17
STL	3.08	17	1.37	25	11.56	12
TB	1.74	22	3.91	14	9.55	14
TEX	0.07	29	6.45	5	13.02	7
TOR	4.43	12	1.07	28	6.69	23
WSH	0.46	28	4.66	9	13.64	6

Teams in Top 10 every year: BAL, PIT

Teams in Top 10 at least two years: BOS, CHC, COL, MIN, PHI, SEA, TEX, WSH

Teams in Bottom 10 every year: CWS

Teams in Bottom 10 at least two years: ATL, CIN, HOU, NYY, SF, TOR



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

Pitchers Drafted

Pitchers Drafted WAR Ranking by Organization						
Org	2022	2022 Rank	2023	2023 Rank	2024	2024 Rank
ATL	6.72	2	9.44	3	12.36	10
AZ	2.34	16	3.28	5	7.35	18
BAL	2.16	17	1.94	14	5.26	25
BOS	0.00	28	0.53	26	12.65	9
CHC	1.40	20	1.70	16	4.63	27
CIN	3.29	8	0.66	25	18.84	1
CLE	0.00	28	1.30	20	16.73	3
COL	3.20	9	6.21	4	10.44	14
CWS	2.82	14	2.71	9	16.23	4
DET	4.24	5	0.79	24	12.73	8
HOU	2.16	17	1.48	19	7.09	19
KC	3.06	12	1.64	17	14.35	5
LAA	6.23	3	2.92	6	13.54	7
LAD	0.87	23	0.96	23	4.19	28
MIA	7.54	1	9.47	2	6.49	23
MIL	3.15	10	0.00	27	11.73	12
MIN	0.94	22	2.19	13	6.62	22
NYM	3.36	7	2.90	7	7.91	16
NYY	2.39	15	0.00	27	13.64	6
OAK	3.57	6	0.00	27	7.73	17
PHI	2.84	13	1.01	22	3.17	29
PIT	1.02	21	18.86	1	12.19	11
SD	0.65	25	2.48	10	10.03	15
SEA	0.05	27	1.21	21	11.04	13
SF	4.86	4	1.64	17	2.74	30
STL	0.79	24	2.25	12	6.89	20
TB	0.36	26	0.00	27	5.20	26
TEX	0.00	28	1.75	15	5.45	24
TOR	3.08	11	2.84	8	18.56	2
WSH	1.69	19	2.46	11	6.79	21

Teams in Top 10 every year: ATL, LAA

Teams in Top 10 at least two years: CIN, COL, CWS, DET, MIA, NYM, TOR

Teams in Bottom 10 every year: LAD, TB

Teams in Bottom 10 at least two years: BOS, CHC, CLE, MIN, PHI, SEA, STL, TEX

Which teams excel in one area for both?

PD: SD

Transactions: WSH, DET, OAK, PIT

Graduated: AZ

Drafted: COL

Which teams struggle in one area for both?

PD: AZ, MIA

Transactions: LAD, SD, TB

Graduated: CWS, HOU, NYM, TOR

Drafted: None



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

Good Hitting, Bad Pitching

PD: WSH

Transactions: SF, CWS

Graduated: NYY

Drafted: BOS, CHC, MIN, PHI, SEA, TEX

Good Pitching, Bad Hitting

PD: LAD, NYM, PIT

Transactions: PHI

Graduated: MIA, ATL, LAD

Drafted: CWS, ATL, CIN, TOR



BE A GOOD TEAMMATE

DOMINATE THE FUNDAMENTALS

COMPETE WITH PASSION

General Takeaways



Actionable Takeaways

1. **Hitting:** Teams that consistently graduate good hitting prospects to the big leagues have improved offensively at the big-league level, and vice versa
2. **Pitching:** Teams that consistently trade for high value pitching prospects have improved their ability to limit damage at the big-league level, and vice versa
3. **Overall:** Great all-around management of hitting prospects is a recipe for offensive success at the big-league level



Questions?