DATASET 01

PREDICTIVE AGE BANDS IN HOCKEY

How a player’s scoring at each age predicts his next five seasons. The report covers aging by position, the value of contracts and projections for the league’s best players.

18–19	20–24	25–30	31–34	35+
ARRIVAL	GROWTH	PRIME	DECLINE	LATE CAREER

SUMMARY

FINDINGS

01
FIVE STAGES
A career divides into five stages: 18–19, 20–24, 25–30, 31–34 and 35+. The data set the boundaries, and each stage ages differently.

02
PRIME RUNS 24 TO 28
Forwards improve about 6% a year until 23, then stay within 2% of their best from 24 to 28. Defencemen hold their level from 23 to 28. Nine in ten career-best seasons come after 22.

03
THE FALL STARTS AT 29
Forwards are 13% below their peak at 30, 22% at 32 and 32% at 34. Defencemen are 6%, 16% and 24% below.

04
PRORATING MISSES BOTH ENDS
Carrying a player's last three seasons forward rates a 35-year-old 11 points per 82 games too high three seasons out, and a teenager 22 points too low.

05
THE COST OF TERM
A five-year deal returns 78% of a forward's current scoring if signed at 26, 65% at 30 and 52% at 33.

06
STAR FORWARDS BREAK AT 33
The top fifth of forwards lose 5% a year at 31 and 32 and 10% at 33 and 34. Other forwards decline steadily, about 7% a year.

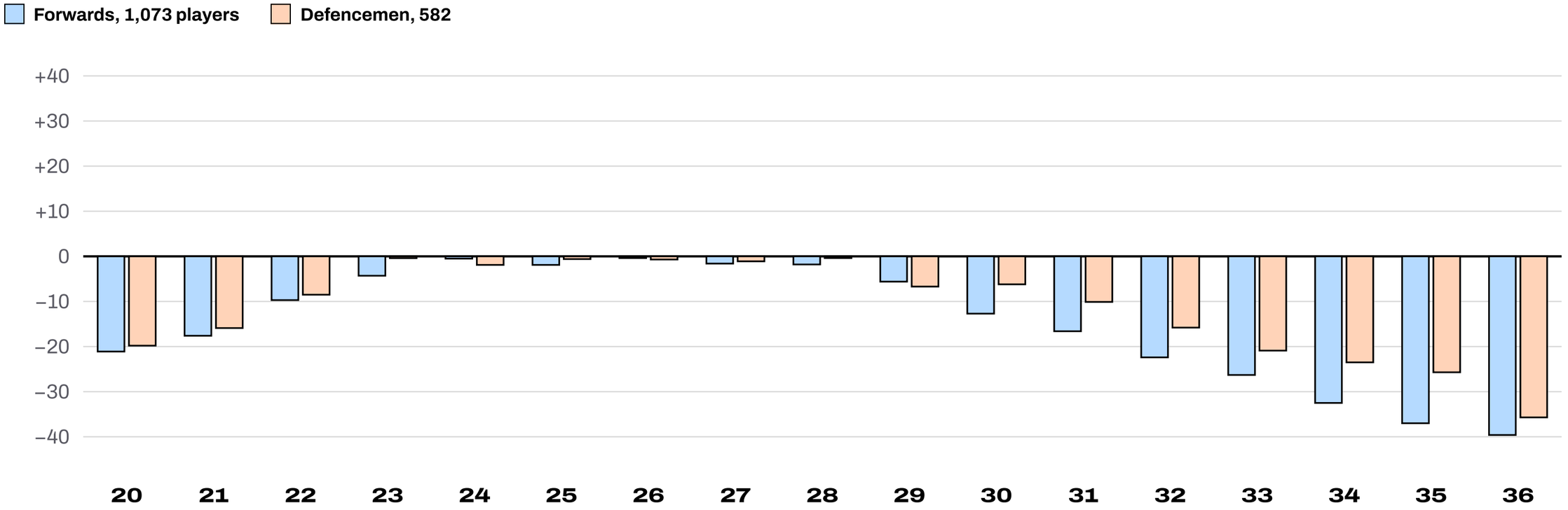
07
DEFENCEMEN LAST LONGER
At 34, a defenceman is 24% below his peak and a forward 32%. Star defencemen lose only about 3% a year from 29 to 34.

08
MILEAGE SHOWS BY 34
Players with the most NHL games by 27 are 36% below their prime at 34. Players with the fewest are 17% below. A player's recent seasons already show the wear.

THE CURVE

THE CURVE, FORWARDS AND DEFENCEMEN

We compared each player with his own best level and averaged the results by age. The chart shows how far below his peak a typical player scores at each age. It covers players who stay in the league; page 12 gives the odds that they do.



Figures are percent of peak points per game. Forwards peak at 26 and defencemen at 28, and both stay within 2% of their best for five seasons. The data include every NHL season of 20 or more games from 1997-98 to 2025-26, for players whose whole careers fall in that span. Each figure is accurate to within 3 points for forwards and 3 to 6 points for defencemen, nine times in ten.

THE BANDS

THE FIVE STAGES

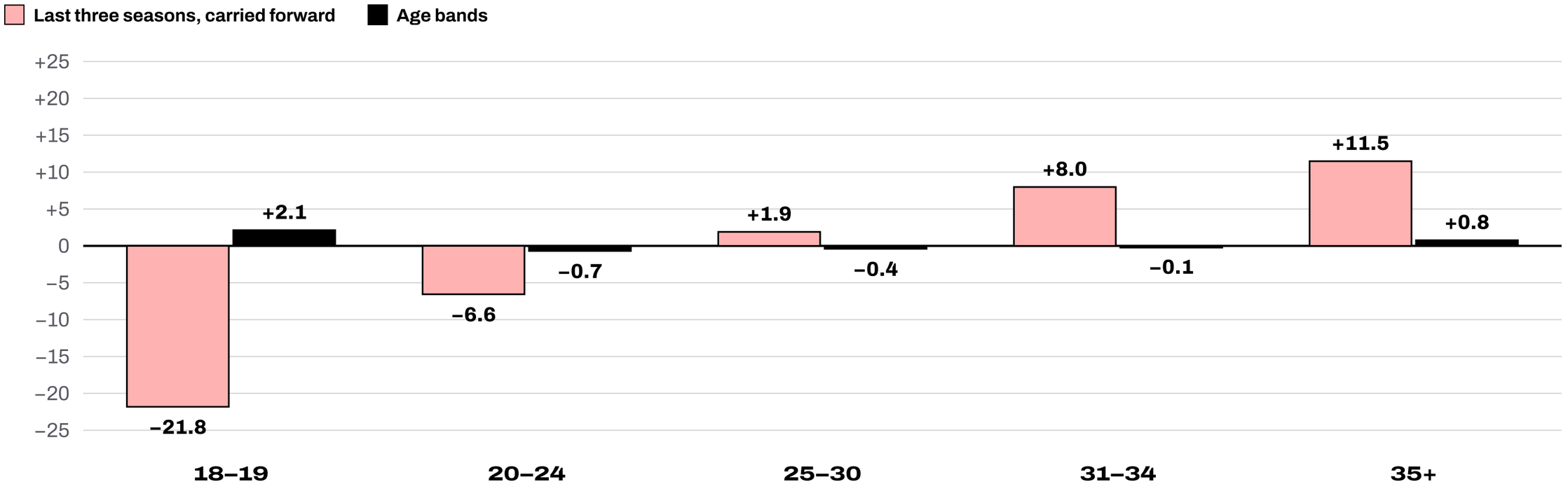
AGES	STAGE	SCORING, A YEAR	BACK NEXT SEASON	WHAT PREDICTS THE NEXT SEASON
18–19	ARRIVAL	+27 to +36% a year	87%	Last season matters most, along with draft position. Teenagers already in NHL roles, especially star scorers, improve less.
20–24	GROWTH	+6% a year until 23, then level	82%	The last three seasons, weighted toward the most recent. The higher an NHL player already scores, the less he improves.
25–30	PRIME	Level until 28, then –6% F, –2% D at 29 and 30	81%	Only the last three seasons.
31–34	DECLINE	–6% F, –6% D at 31 and 32, –8% F, –3% D at 33 and 34	77%	The last three seasons and games played.
35+	LATE CAREER	–7% F, –8% D a year	62%	The last three seasons, ice time, power-play role and games played.

Scoring shows how the same players change from year to year, for forwards (F) and defencemen (D) who stay in the league. For ages 18 and 19 it shows the change for an average player of that age, with every league converted to NHL strength. Back next season is the share of NHL regulars who play 10 or more NHL games the following season.

WHY BANDS

PRORATING A CAREER MISSES AT BOTH ENDS

The chart shows how far each method missed a player's next three seasons, in points per 82 games. A positive miss means the method rated the player too high. The test covers every NHL regular from 2016-17 to 2022-23, projected only from seasons before 2016.



CONTRACT LOOKUP

FORWARDS: THE NEXT FIVE SEASONS

Each row describes a healthy player who has scored at the same rate for three straight seasons. The table gives his points per 82 games one, three and five seasons ahead, and the odds that he is still an NHL regular in the fifth season.

	60 PER 82 NOW				80 PER 82 NOW				100 PER 82 NOW			
AGE NOW	YR 1	YR 3	YR 5	ODDS YR 5	YR 1	YR 3	YR 5	ODDS YR 5	YR 1	YR 3	YR 5	ODDS YR 5
22	66	66	65	80%	87	84	83	82%	107	101	101	84%
24	61	60	56	75%	79	78	73	78%	98	96	89	80%
26	59	56	50	72%	79	73	65	75%	98	91	80	77%
28	57	51	45	68%	76	67	59	72%	94	83	73	74%
30	54	49	40	60%	72	65	53	65%	90	80	66	69%
32	54	45	35	48%	72	60	46	54%	90	75	57	59%
34	52	40	30	31%	68	54	40	39%	86	67	50	45%
36	49	38	28	21%	65	50	37	29%	81	62	46	35%

Points per 82 games are at the 2025-26 scoring level and count only the games a player plays.

CONTRACT LOOKUP

DEFENCEMEN: THE NEXT FIVE SEASONS

Each row describes a healthy player who has scored at the same rate for three straight seasons. The table gives his points per 82 games one, three and five seasons ahead, and the odds that he is still an NHL regular in the fifth season.

	30 PER 82 NOW				45 PER 82 NOW				60 PER 82 NOW			
AGE NOW	YR 1	YR 3	YR 5	ODDS YR 5	YR 1	YR 3	YR 5	ODDS YR 5	YR 1	YR 3	YR 5	ODDS YR 5
22	34	35	34	81%	50	50	49	84%	66	64	63	86%
24	31	31	29	78%	46	45	42	81%	60	59	54	84%
26	30	28	25	75%	44	41	37	79%	59	54	48	81%
28	29	26	23	70%	42	38	34	75%	56	50	44	78%
30	27	25	20	62%	41	36	30	69%	54	48	40	73%
32	27	23	19	46%	40	34	28	56%	54	45	37	62%
34	26	22	17	28%	39	32	26	39%	51	43	34	47%
36	26	21	16	19%	38	31	24	29%	51	41	32	37%

Points per 82 games are at the 2025-26 scoring level and count only the games a player plays.

CONTRACT TERM

WHAT A TERM RETURNS

AGE SIGNED	FORWARD			DEFENCEMAN		
	3 YRS	5 YRS	7 YRS	3 YRS	5 YRS	7 YRS
22	100%	96%	90%	104%	100%	95%
23	95%	89%	83%	98%	93%	87%
24	91%	85%	77%	94%	88%	81%
25	90%	82%	74%	92%	85%	77%
26	86%	78%	70%	88%	80%	73%
27	83%	74%	66%	85%	77%	69%
28	80%	71%	62%	82%	74%	65%
29	78%	68%	58%	80%	70%	61%
30	76%	65%	55%	78%	68%	57%
31	75%	63%	51%	77%	65%	54%
32	71%	57%	46%	73%	60%	49%
33	66%	52%	41%	69%	56%	44%
34	62%	47%	36%	65%	51%	40%
35	57%	42%	32%	62%	47%	37%
36	53%	39%	29%	57%	43%	33%

Each figure compares the points a player is expected to score over the contract with the points he would score if he held his current level. A season out of the league counts as zero.

The table assumes a steady forward at 80 points per 82 games and a defenceman at 45. A seven-year deal signed at 30 returns 55% for a forward; signed at 26, it returns 70%. A deal signed before 24 can return more than 100%, because the player is still improving.

BY TIER

STARS AND THE REST

GROUP	PLAYERS	PEAK AGE	A YEAR, 29–30	31–32	33–34	AT 34, AGAINST 24–28
Forwards, top fifth	215	27	–5% –6 to –3	–5% –7 to –3	–10% –14 to –7	–24% –29 to –19
Forwards, the rest	858	24	–7% –9 to –5	–7% –10 to –4	–6% –10 to –2	–38% –43 to –31
Defencemen, top fifth	117	28	–1% –5 to +3	–4% –8 to –1	–3% –8 to +2	–15% –23 to –7
Defencemen, the rest	465	23	–2% –5 to +1	–8% –12 to –4	–4% –9 to +2	–27% –33 to –21

Each player is measured against his own career. The top fifth is the best fifth of each position by career scoring level. Small figures give the range that holds nine times in ten.

Star forwards hold their level longer, then decline sharply at 33. Their yearly loss doubles, from 5% to 10%. Other forwards peak at 24 and decline steadily. Star defencemen decline least of all.

START AGE	STARS	REST	STARS, PLAYERS
26–28	–2.1	0.0	56
29–30	–2.9	–0.3	33
31–32	+0.1	–0.6	27
33–34	–0.8	+0.9	14
35+	–6.5	+1.9	9

The table shows how far the age bands missed over the next three seasons, in points per 82 games, from 2016-17 to 2022-23. Here a star scored 75 or more points per 82 games in the starting season. The bands already account for the stars' decline.

FORWARDS AND DEFENCEMEN

POSITION

RISE	From 20 to 23, forwards improve about 6% a year and defencemen about 5%.
PRIME	Forwards hold their level from 24 to 28 and peak at 26. Defencemen hold from 23 to 28, with no single peak year. The typical career-best season comes at 26 for forwards and 27 for defencemen. Of all defencemen, 91% have theirs after 22.
29 TO 34	Defencemen decline more slowly. At 34 they are 24% below their peak; forwards are 32% below.
BREAKS	When each position is analyzed alone, the stages for forwards are 20–21, 22–25, 26, 27–37, and for defencemen 20–22, 23–25, 26–27, 28–35, 36–37. The defenceman's late stage lasts until 35.

Projecting forwards and defencemen separately is no more accurate than projecting them together, because each player is already compared with others at his position and age.

AGES	POSITION	TOGETHER	APART
20–24	Forwards	12.54	12.55
25–30	Forwards	12.05	12.05
31–34	Forwards	11.86	11.84
35+	Forwards	11.13	10.95
20–24	Defencemen	9.32	9.32
25–30	Defencemen	9.68	9.69
31–34	Defencemen	9.72	9.71
35+	Defencemen	8.18	7.91

Figures are the typical miss on the next season, in points per 82 games, from 2016-17 to 2025-26.

MILEAGE

MILEAGE AND AGE OF ARRIVAL

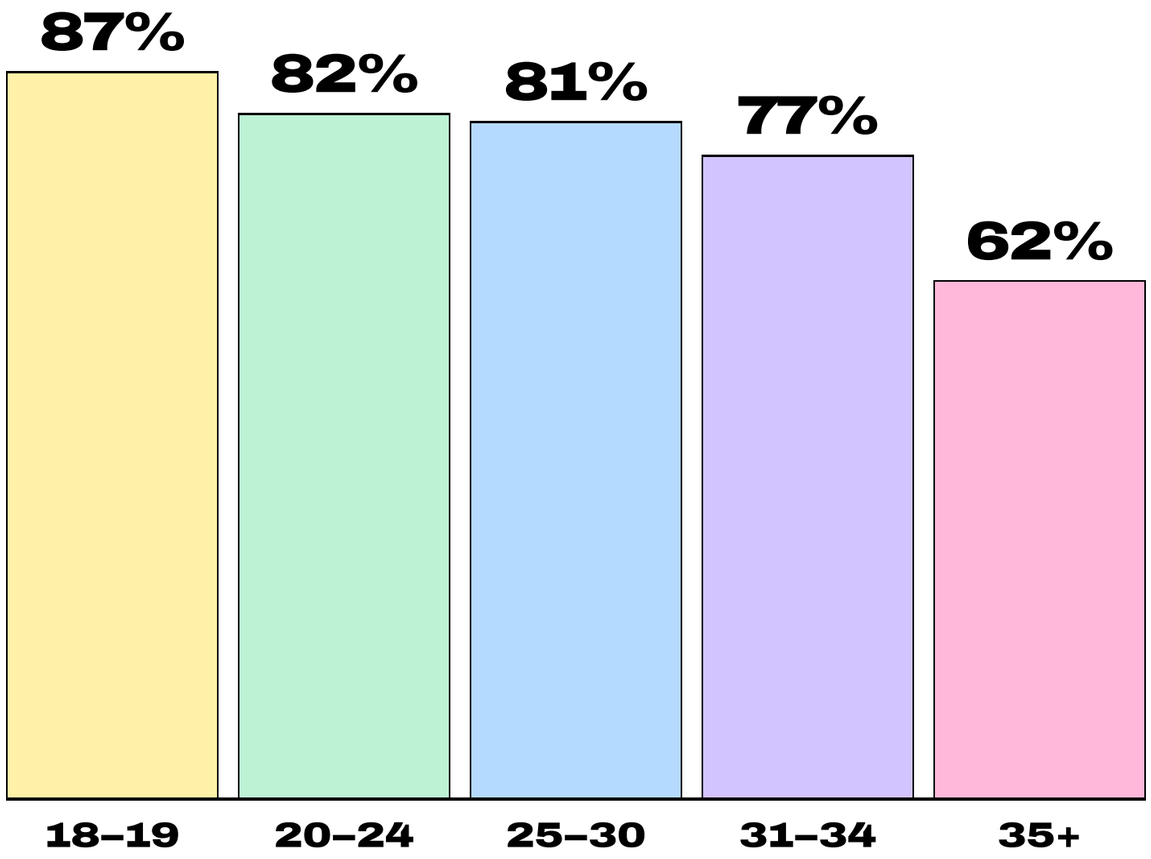
At 27, players are split into thirds on each measure, within their position. Each group is followed to 34 and compared with its own prime, ages 24 to 28.

	A YEAR, 29 TO 34		AT 34, AGAINST HIS PRIME	
MEASURE AT 27	LOWEST THIRD	HIGHEST THIRD	LOWEST THIRD	HIGHEST THIRD
NHL games to 27, playoffs in	−4% −5 to −2	−6% −7 to −5	−17% −26 to −6	−36% −40 to −33
NHL minutes to 27	−4% −5 to −2	−6% −7 to −5	−13% −22 to −4	−36% −40 to −33
Age he became a regular	−6% −7 to −5	−4% −6 to −3	−36% −39 to −32	−15% −22 to −9
Hits and blocks a game to 27	−4% −6 to −2	−6% −8 to −3	−32% −39 to −26	−37% −45 to −29

Mileage matters. Players with the most NHL games and minutes by 27 lose more of their prime by 34, and most of them became regulars youngest. Hits and blocked shots show no clear difference, though hits are recorded only since 2007-08 and hits taken are not recorded at all. A player’s recent seasons already reflect the wear. Over the next three seasons at 31 to 34, projections miss the most-used third by 1.0 points per 82 games, on the low side, and the least-used third by 0.2. No correction is needed. Small figures give the range that holds nine times in ten.

SURVIVAL

WHO IS BACK NEXT SEASON



The chart shows the share of NHL regulars who play 10 or more NHL games the following season.

GAMES PLAYED	Games played is the strongest sign from age 20 on. From 25 to 30, a player who misses a third of a season has 27% of the odds of returning that a full-season player has.
PRODUCTION	Scoring above the average for his age and position raises a player's odds. It matters most for teenagers and players 35 and over.
EACH YEAR OLDER	From 20 on, each year older within a stage lowers the odds.
DEFENCE	From 25 to 34, defencemen keep their places a little longer than forwards.

STYLE, DEPLOYMENT, HEALTH

WHAT ELSE PREDICTS SCORING

STAGE	TRAIT	A STEP UP	NEXT SEASON
18–19	Draft slot	a pick about a third as deep: 10th, not 29th	+10%
	Games played, share of the team's	20 more games of 82	–9%
	Ice time a game	3.4 more minutes	–3%
	Scoring level now, NHL players	20 more points per 82	–9%
20–24	Scoring level now, NHL players	21 more points per 82	–1%
25–30	No trait beyond the last three seasons improved the projection.		
31–34	Games played, share of the team's	18 more games of 82	+2%
	Games, the worse of the last two seasons	19 more games of 82	+1%
35+	Ice time a game	4.0 more minutes	+4%
	Games, the worse of the last two seasons	16 more games of 82	+3%
	Power-play share of points	19 points more of every 100	+4%

A step equals one standard deviation for players of that age. Through 24, a full NHL role and a high scoring level reduce growth, because most young players improve by moving up from junior and European leagues. A young player who already scores like a star has less room to improve. Four traits made no difference at any age: the balance of goals and assists, shooting luck, height and weight.

PLAYERS

PROJECTIONS FOR THE LEAGUE'S BEST

PLAYER		AGE	2025-26	PRORATED	2026-27	2027-28	2028-29	ODDS
Connor McDavid	F	29	138	136	126	117	114	87%
Leon Draisaitl	F	30	122	118	108	105	97	82%
Nathan MacKinnon	F	30	130	131	117	112	104	86%
Nikita Kucherov	F	32	140	139	123	112	102	82%
Auston Matthews	F	28	72	95	82	77	70	78%
David Pastrnak	F	29	106	108	99	92	88	85%
Kirill Kaprizov	F	28	94	102	92	87	80	85%
Mitch Marner	F	28	81	96	85	81	74	85%
Artemi Panarin	F	34	88	101	82	75	69	71%
Sidney Crosby	F	38	89	93	76	69	60	48%
Jack Eichel	F	29	100	98	91	86	83	84%
Jack Hughes	F	24	104	99	96	96	95	86%
Connor Bedard	F	20	89	77	93	98	101	93%
Macklin Celebrini	F	19	115	84	101	116	122	95%

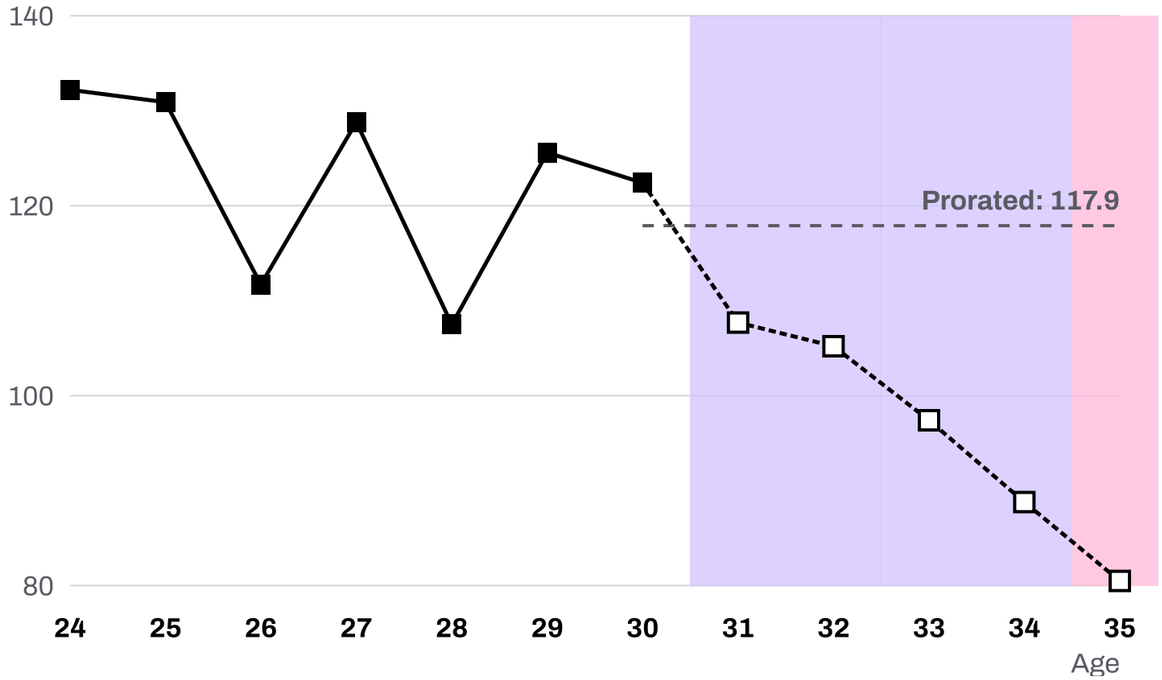
PLAYER		AGE	2025-26	PRORATED	2026-27	2027-28	2028-29	ODDS
Cale Makar	D	27	86	93	87	84	78	90%
Quinn Hughes	D	26	84	90	86	83	79	91%
Zach Werenski	D	28	89	81	78	75	70	89%
Rasmus Dahlin	D	25	79	72	74	74	71	91%
Roman Josi	D	35	66	72	61	57	54	68%
Erik Karlsson	D	35	72	60	58	56	52	70%
Evan Bouchard	D	26	95	82	84	81	79	92%
Lane Hutson	D	21	78	64	78	80	80	94%

Points per 82 games are at the 2025-26 scoring level, and ages are as of 2025-26. Prorated is the average of a player's last three seasons. Odds is the chance that he is still an NHL regular in 2028-29.

WORKED EXAMPLES

DRAISAITL AND HUGHES

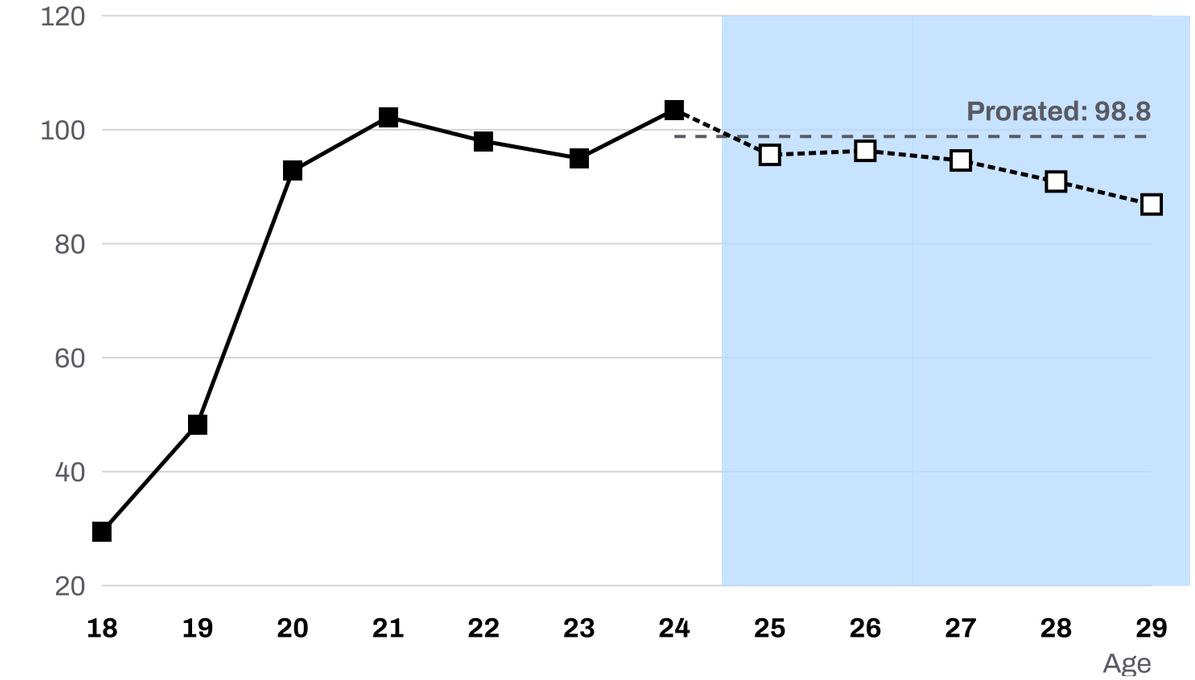
Leon Draisaitl, 30: 97 points in 65 games



Prorating his last three seasons gives 118 points a year. The age bands project 108 at 31 and 80 at 35, with a 69% chance that he is still a regular at 35.

■ Seasons played □ Age bands - - - Prorated

Jack Hughes, 24: 77 points in 61 games



Prorating gives 99 points a year. The age bands project 96 at 25 and 95 at 27, as he enters his prime.

THE TEST

ACCURACY

The table shows the typical miss on the next season, in points per 82 games, for NHL regulars from 2016-17 to 2025-26. Each projection uses only earlier seasons. Lower is better.

STAGE	SEASONS	SAME AS LAST SEASON	LAST THREE, AVERAGED	ONE CURVE, EVERY AGE	AGE BANDS
18–19	75	15.4	24.5	16.4	**14.1**
20–24	1,885	12.9	13.8	11.7	**11.7**
25–30	2,705	12.7	11.8	11.3	**11.3**
31–34	844	13.4	12.9	11.2	**11.1**
35+	208	12.0	13.6	10.7	**10.2**
All	5,717	12.9	13.0	11.5	**11.4**

About 7 points of every miss come from the luck of a single 82-game season, which no projection can foresee. Splitting ages 31 to 34 into two stages, or using a separate curve for every age from 28, made the projections no more accurate.

SOURCES

NOTES AND SOURCES

THE RECORD	The data come from the NHL's own statistics: every skater season since 1997-98, including ice time and power-play scoring, with hits and blocked shots from 2007-08. They also include every drafted player's seasons in other leagues. League strength comes from Hockey Feature's measures of players who moved between leagues.
THE CURVE	Each player is measured against his own level, season by season, so that one great season is not mistaken for a peak and the next for a decline. The curve describes players who stay in the league; the odds that they stay are measured separately. Ranges hold nine times in ten, based on 300 resamplings of the players.
EARLIER WORK	Earlier studies put the scoring peak at 24 (Eric Tulsky), 26 (Schuckers and others, 2021) and 27 to 28 (Brander, Egan and Yeung, 2014).
LIMITS	The report measures scoring, not defence. Outside the NHL, it covers only drafted players. Injuries are inferred from games missed. Few players reach 37 or 38, and projections for those ages run slightly high.