

know your number

The Mirror Metric Manual.

The measurements college coaches and pro scouts actually take, and the real numbers by position and by level, for eight sports.

read this first

Before you trust a single number.

Every number in here is one I could actually verify. Where I could not find a number, I left it blank instead of guessing. A made-up benchmark will have you training toward a target that does not exist.

Some sports have more published data than others. That is just where things stand right now. Use what is here as your starting point, and go dig on the rest.

RULE ONE. EVERY NUMBER IS A SHOWCASE NUMBER.

Every number you are about to see was measured at a showcase or a combine. None of it was measured during a game. Take exit velocity in baseball. A showcase reading is your best swing off a tee, with no pitcher trying to beat you. A game reading is your average against somebody who is trying to get you out. The showcase number is the higher one. Hold your showcase number up against somebody's game number and you will think you are further ahead than you are.

RULE TWO. THERE ARE TWO KINDS OF NUMBER, AND THEY ARE NOT THE SAME.

MEASURED **MEASURED**

Somebody timed, weighed, or clocked a real group and published the result. The NCAA standards. The NFL Combine. The NBA Combine. Published swim times. University studies. This is a fact about people who were actually tested.

RECRUITING STANDARD **STANDARD**

What coaches say they are looking for. It is built from real coaches and real rosters, so it is not made up. But it is not the average of any actual group that got tested. It is a target, not a fact.

Read the chip on every table to know which kind you are looking at. A target and a fact ask different things of you.

RULE THREE. HOW YOU WERE MEASURED MATTERS MORE THAN THE NUMBER.

Three things trip up almost everybody. Learn them now and you will read every table the way a coach does.

1 Hand timing runs fast

A stopwatch in somebody's hand runs 0.15 to 0.25 seconds fast, because the person starts the clock when you move and stops it a beat late. A hand-timed 4.5 is a laser 4.65 to 4.75. Coaches subtract that in their head without being asked. So always say how you were timed.

2 Who held the clock matters

Best to worst, this is the order coaches trust a number: a college coach timing you at their own camp, then an electronic combine result, then a documented laser session, then film. Same number, four different levels of proof.

3 Different devices disagree

Two machines can read the same effort several units apart. In golf, one kind of launch monitor reads 3 to 4 mph higher than another on the exact same swing. If a number jumps and nothing else about you changed, check whether the device changed before you celebrate.

Rule four. On D3, NAIA, and JUCO. The data at these levels is thin in every sport. Where you see a range at these levels, treat it as a range and not an average. Aim at the top end of it, not the middle.

HOW TO READ EVERY TABLE THAT FOLLOWS

Read a range as a range, not a promise. And always read the small note under a table. That is where the judgment calls live, and where a blank cell gets explained.

02 Baseball

Plenty of numbers. None of them official.

Baseball has more numbers floating around than almost any sport. Here is the part nobody tells you. Not one clean division table came from the NCAA or from Perfect Game. Every one you have seen was built by a recruiting service or a training company. That does not make them worthless. It makes them targets, not facts. Read them that way.

WHAT GETS TRACKED

The sixty-yard dash, exit velocity, throwing velocity from your position, pop time for catchers, and fastball velocity for pitchers. Home-to-first time shows up in some places as a second speed number.

OUTFIELD · CENTER FIELD

RECRUITING STANDARD

LEVEL	60-YARD DASH	OUTFIELD VELOCITY
D1	Below 6.7	87 to 95+ mph
D2	Below 6.9	<i>not published</i>
D3 / NAIA	6.9 or below	80+ mph
JUCO	7.0 or below	78+ mph

Source: NCSA.

OUTFIELD · CORNER

RECRUITING STANDARD

LEVEL	60-YARD DASH	OUTFIELD VELOCITY
D1	Below 6.8	87+ mph, verified by a neutral source
D2 / D3 / NAIA	6.9 or below	80+ mph
JUCO	7.0 or below	78+ mph

Why D2 sits with D3 and NAIA here. The source listed a D2 corner outfield 60 time that was slower than its own D3 time. That is backward, so I collapsed the two levels into one row rather than print a number I already know is wrong.

INFIELD · MIDDLE

RECRUITING STANDARD

LEVEL	60-YARD DASH	INFIELD VELOCITY
D1	6.5 to 6.8, third-party verified	85 to 95 mph across the diamond
D2	6.9 or below	Low 80s and above from shortstop
D3 / NAIA	7.0 or below	78+ mph from shortstop
JUCO	7.1 or below	Upper 70s mph from shortstop

Source: NCSA. D1 coaches concentrate middle-infield recruiting on shortstops rather than pure second basemen.

INFIELD · CORNER (THIRD BASE)

RECRUITING STANDARD

LEVEL	INFIELD VELOCITY
D1	85 to 95 mph
D2	At least 80 mph, with room to improve through development
D3 / NAIA	<i>not published</i>
JUCO	<i>not published</i>

Source: NCSA.

CATCHER · POP TIME

RECRUITING STANDARD

LEVEL	POP TIME
D1	1.95 and below consistently, verified by a neutral source
D2	2.0 and below consistently, verified by a neutral source
D3 / NAIA	2.0 to 2.1
JUCO	2.1 or below

Source: NCSA. Coaches weigh catch-and-throw mechanics and arm strength to second and third alongside the raw pop time.

PITCHER · FASTBALL VELOCITY

RECRUITING STANDARD

LEVEL	FASTBALL VELOCITY
D1, Power 4	90+ mph
D1, mid-major	85 to 90 mph
D2	82 to 90+ mph
D3 / NAIA	80 to 86 mph, with strong D3 programs recruiting 82 to 85
JUCO	80 mph consistently

Two sources disagree on D1 pitchers. An older one puts D1 at 84 and up. A newer one puts the top level at 90 and up. I used the newer numbers here, because velocity has climbed, but you will still see the 84 figure quoted around. Most D1 pitchers also run a 6.8 to 7.2 sixty.

EXIT VELOCITY · ALL POSITION PLAYERS

RECRUITING STANDARD

LEVEL	EXIT VELOCITY
D1, Power 4	93+ mph
D1, mid-major	88 to 91+ mph
D2	84 to 87 mph
D3	80 to 83 mph
NAIA / JUCO	Roughly 82 to 87 mph

Source: NextCommit, showcase readings. These are read off a tee or front toss with a Stalker unit, HitTrax, Rapsodo, or TrackMan, and the best swing of a short round is what goes on your profile. Tee readings run a few mph below live ones.

HOME TO FIRST · A SECOND SPEED NUMBER

RECRUITING STANDARD

PROFILE	RIGHT-HANDED	LEFT-HANDED
Middle infield reference	4.1	4.0
Outfield reference	4.3 or below	4.2

Source: All American Baseball Academy. Home to first sits behind the sixty as a second speed number. The middle-infield reference also lists a verified sixty of 6.8 or below and infield velocity of 85+ mph verified. The outfield reference lists a sixty of 7.30 or faster and outfield velocity of 78+ mph.

PITCHER · SIXTY-YARD DASH

RECRUITING STANDARD

LEVEL	60-YARD DASH
D1	6.8 to 7.2
D2	7.0 to 7.4

Source: NextCommit. Pitchers get a sixty too. It counts for less than velocity, but coaches still note it.

Go measure this yourself. Two baseball numbers you will not find in any table: exit velocity broken out by position, and a division benchmark that comes from the NCAA instead of a company. Get your own verified readings and let them stand in.

HOW TO GET MEASURED

Get your sixty timed electronically, not by hand. Get exit velocity, throwing velocity, and pop time read on a radar or a tracking unit at a showcase or a college camp, and write down which unit did the reading. A verified number from a coach at his own camp is worth more than a faster number you clocked yourself.

03 Football

The forty is the number the whole sport agrees on.

Football measures a lot on paper. The forty-yard dash, the pro-agility shuttle, the vertical, the broad jump, the 225-pound bench, and height and weight, which matter here more than in most sports. The forty and the specialist charts are the numbers worth trusting, so start there.

FORTY-YARD DASH · COLLEGE RECRUITING TARGETS		RECRUITING STANDARD
POSITION	D1 TARGET	D2 / D3 COMPETITIVE
Wide receiver	4.40 to 4.55	4.55 to 4.75
Cornerback	4.40 to 4.55	4.55 to 4.75
Running back	4.45 to 4.60	4.60 to 4.80
Safety	4.45 to 4.60	4.60 to 4.80
Linebacker	4.55 to 4.75	4.75 to 4.95
Tight end	4.65 to 4.85	4.85 to 5.05
Edge / defensive end	4.65 to 4.90	4.90 to 5.10
Quarterback	4.60 to 4.90	4.80 to 5.20
Defensive tackle	4.90 to 5.15	5.10 to 5.35
Offensive line	5.00 to 5.30	5.20 to 5.50

Source: NextCommit. D1 here covers FBS and FCS scholarship football. The D2 and D3 column fits most NAIA programs too.

FORTY-YARD DASH BY AGE · HIGH SCHOOL

RECRUITING STANDARD

AGE	AVERAGE	STRONG
12	5.6 to 6.0	5.3 to 5.6
13	5.4 to 5.8	5.1 to 5.4
14	5.2 to 5.6	4.9 to 5.2
15	5.0 to 5.4	4.8 to 5.0
16	4.9 to 5.3	4.7 to 4.9
17	4.8 to 5.2	4.6 to 4.8
18	4.7 to 5.1	4.5 to 4.7

Source: NextCommit, reliable timing assumed. Strong is roughly the top quarter of the age group. Most high school varsity players run 4.8 to 5.2 with reliable timing.

HEIGHT, WEIGHT, AND SPEED BY POSITION

RECRUITING STANDARD

POSITION	HEIGHT AND WEIGHT	SPEED
Quarterback	6'0" to 6'5", 180 to 225 lbs	4.7 to 5.0
Running back	5'8" to 6'0", 180 to 220 lbs	4.5 to 4.7 at D1 FCS and D2; 4.6 to 4.9 at D3 and NAIA
Wide receiver	<i>not published</i>	4.4 to 4.7 at D1 FCS and D2; 4.6 to 4.9 at D3 and NAIA
Tight end	6'2" to 6'6", 220 to 260 lbs	4.7 to 5.0 at D1 FCS and D2; 4.8 to 5.2 at D3 and NAIA
Offensive line	6'2" to 6'6", 270 to 310 lbs	<i>not published</i>

Source: Lance O's Recruiting Network. For scale, FBS offensive linemen on 2025 rosters average about 6'4" and 305 lbs.

Why there is no vertical or bench table here. You will see those numbers on other football sites. I left them out on purpose. The one source I found mixed up rep counts and one-rep maxes in the same sentence, so I could not give you a figure I trust. A wrong number is worse than no number.

FORTY-YARD DASH · NFL COMBINE CEILING

MEASURED

POSITION GROUP	AVERAGE	FASTEST ON RECORD
Wide receiver	4.52	4.21, Xavier Worthy, 2024
Defensive back, all	4.53	4.23, Kalon Barnes
Cornerback	4.50	4.23
Safety	4.57	4.29
Running back	4.59	4.24, Chris Johnson, 2008
Linebacker	4.71	4.38, Shaquem Griffin
Tight end	4.76	4.40, Vernon Davis
Quarterback	4.82	4.35
Defensive line, all	4.94	4.36, Amaré Barno
Defensive tackle	5.11	4.67
Offensive line	5.26	4.71, Terron Armstead

Source: NFL official combine database, every participant since 2003. This is the professional ceiling, not a college target. Put a college number next to it only to see how far the top of the sport really is.

You do not need a 4.3. Of 848 wide receivers to run at the combine since 2003, only 10 ran under 4.3. That is about one in a hundred. Ninety-two ran under 4.4. Only three linebackers out of 581 have ever run under 4.4, and only six of 301 tight ends have run in the 4.4s. Chase the target for your position, not the record.

specialists

The three jobs almost nobody charts.

KICKER		RECRUITING STANDARD	
LEVEL	KICKOFF	FG	HANG
D1 FBS	65+	55+	3.8
D1 FCS	65+	55+	3.8
D2	55 to 60	50+	3.6
D3 / NAIA	40 to 45	45+	3.4

PUNTER		RECRUITING STANDARD	
LEVEL	AVERAGE	HANG TIME	
D1 FBS	45 to 48+	4.6	
D1 FCS	42 to 45+	4.5	
D2	38 to 40+	4.3 to 4.5	
D3 / NAIA	35+	4.0	

LONG SNAPPER · SNAP TIMES		RECRUITING STANDARD
LEVEL	PUNT SNAP	FG / PAT SNAP
D1 FBS	.65 to .70	.25
D1 FCS	.70 to .75	.25
D2	.75 to .78	.25 to .30
D3 / NAIA	.76 to .80	.28 to .32

Source: NCSA. D1 programs want .75 or better, but will take a slower, more accurate snapper over a faster, less accurate one. I put specialists in because almost nobody else does.

Go measure this yourself. Below D1 there are no published vertical, broad jump, shuttle, or bench numbers, and JUCO is nearly blank. Get those tested and dated so you show up with a full card, not just a forty. JUCO recruits should aim at the D1-FCS marks.

HOW TO GET MEASURED

Get your forty laser-timed or run it at a college camp, and always say which one it was, because a hand time and a laser time are two different numbers. If you are a specialist, chart your hang time and your distance the same way, since those are the numbers a coach can check on film in seconds.

04 Basketball

Only height is published by level, and height you cannot train.

Basketball has the least published testing data of any sport. The only thing published by level is height, and height is the one number you cannot train. So the numbers can start you off, but your real level gets read off film and by coaches who watch you play.

WHAT GETS TRACKED

Standing vertical, max vertical, lane agility, the shuttle run, and the three-quarter court sprint. Plus the body measurements basketball leans on hard: height without shoes, wingspan, and standing reach.

MEN · HEIGHT BY POSITION AND DIVISION			RECRUITING STANDARD
POSITION	D1	D2 / NAIA	JUCO / D3
Point guard	6'0" to 6'3"	5'10" to 6'2"	<i>not published</i>
Shooting guard	<i>not published</i>	<i>not published</i>	<i>not published</i>
Small forward	6'5" to 6'8"	6'3" to 6'7"	6'2"+
Power forward	6'7" to 6'10"	6'5" to 6'9"	6'4"+
Center	6'9" to 7'0"+	6'7" to 6'11"	<i>not published</i>

Source: StudBud. Shooting guard is missing from this source entirely. I left it blank rather than borrow a guess from the point guard row.

A second source, Next Level Recruiting, sizes players in tiers instead of divisions. For a forward it puts top D1 and top junior college at 6'7"+, and low D3 and low junior college at 6'4"+. For a guard it puts low D1, top D2, and top NAIA at 6'1"+, and low D3 and low junior college at 5'9"+.

WOMEN · HEIGHT BY POSITION AND DIVISION			RECRUITING STANDARD
POSITION	D1	D2 / NAIA	JUCO / D3
Point guard	5'7" to 5'10"	5'5" to 5'9"	5'4"+
Shooting guard	not published	not published	not published
Small forward	not published	not published	not published
Power forward	not published	not published	not published
Center	not published	not published	not published

Source: StudBud. Only point guard was published for women. Four of five positions are open. That is not me being lazy. That is the whole state of the published data, shown honestly.

ATHLETIC TESTING · NBA COMBINE CEILING		MEASURED
DRILL	REFERENCE PERFORMANCE	
Lane agility, elite	10.51 seconds, third at the 2025 combine	
Shuttle run record	2.58 seconds, 2025	
Three-quarter court sprint, strong	3.06 to 3.12 seconds	
Max vertical, elite frontcourt	38.5 to 41.5 inches	
Standing vertical, elite	32 to 36 inches	
Combine vertical record	48.0 inches, Keon Johnson, 2021	

Source: NBA Draft Combine official database. These are individual reference performances, not position averages. The combine does publish position averages; they are on the list to add in a later version.

What the numbers do say. A study of 3,610 players from the 2000 to 2018 NBA combines found that drafted players beat undrafted players across all five positions in height, wingspan, vertical jump, reach, lane agility, and the three-quarter sprint. The testing matters. There is just no college-by-division table for it.

Go measure this yourself. College vertical, lane agility, and sprint numbers do not exist by division, and most women's position heights were never published. So clock the five drills yourself and date them. Where a table cannot place you, film and a coach's eyes will.

THE FIVE DRILLS TO CLOCK ANYWAY

- ☐ Standing vertical
- ☐ Max vertical
- ☐ Lane agility
- ☐ Shuttle run
- ☐ Three-quarter court sprint

HOW TO GET MEASURED, AND WHY BASKETBALL IS DIFFERENT

Here is where basketball splits off from every other sport. The only thing published by level is height, and you cannot train height. So do this instead. Test yourself on the five combine drills anyway, your standing vertical, max vertical, lane agility, shuttle, and three-quarter sprint. Write them down and watch them move.

Then get your level read off film and from coaches who actually watch you play, not off a table. In this one sport, the table cannot place you. The people who see you play can.

05 Volleyball

Every number is a target, not a fact.

Volleyball has no measured numbers at all. There is no combine database. Every figure is a recruiting standard, a target somebody set, not the average of a tested group. Weight the weakest table lightly.

WHAT GETS TRACKED

Standing reach, approach touch, block touch, and height. Coaches do a quick check of your height, block jump, approach jump, attack jump, and standing reach, depending on your position.

COLLEGE AVERAGE STANDING REACH

RECRUITING STANDARD

POSITION	COLLEGE AVERAGE STANDING REACH
Middle blocker, outside hitter, right side	7'9"
Setter	7'5"
Libero	<i>not published</i>

Why the libero cell is empty. The source printed the libero standing reach as seven inches. That is impossible. It almost certainly meant seven feet. I could type seven feet and probably be right, but probably right is exactly the kind of guess that sends you chasing a number nobody measured. So the cell stays open, and you should get your own standing reach measured instead.

APPROACH TOUCH BY LEVEL · NET POSITIONS

RECRUITING STANDARD

LEVEL	APPROACH TOUCH
D1	Exceeds 10'0" to 10'3"
D2 / NAIA	9'8" to 10'0"
D3 / JUCO	9'6" to 9'10"

Trust this one the least. This is the weakest-sourced table in the manual, a single blog with no author on it. It is the only approach-touch-by-level data that exists, so I kept it, but weight it lightly and confirm it against the programs you talk to. Applies to outside hitter, middle blocker, and opposite.

MEN · HEIGHT AND APPROACH TOUCH BY POSITION

RECRUITING STANDARD

POSITION	HEIGHT	APPROACH TOUCH
Outside hitter / opposite	6'3"+ for D1, 6'0"+ for D2 and NAIA	10'0"+
Middle blocker	<i>not published</i>	<i>not published</i>
Setter	<i>not published</i>	<i>not published</i>
Libero / defensive specialist	<i>not published</i>	<i>not published</i>

Source: StudBud. Only the outside hitter and opposite line was published.
The other three positions are open in every source I found.

WOMEN · ACADEMIC BENCHMARKS

RECRUITING STANDARD

LEVEL	GPA
D2 / NAIA	2.8 to 3.2+, with some flexibility
D3	3.0 to 3.5+, academics heavily emphasized
JUCO	Varies

Source: StudBud. I put this in because volleyball is one of the few sports where somebody published GPA by level at all.

Go measure this yourself. No numbers are published for middle blocker, setter, or libero, and block touch has no benchmark at any level. Those are yours to get. Have your standing reach, approach touch, and block touch clocked and dated.

HOW TO GET MEASURED

Get your standing reach, approach touch, and block touch measured and dated. Because every number in this sport is a target and not a fact, do not treat any of these tables as a cutoff. Take your real numbers to a specific coach and ask where they put you on their roster. That answer beats any table you will find.

06 Soccer

The data is one squad, not three positions.

You might expect separate numbers for defenders, midfielders, and strikers. There are not any. Every soccer benchmark that exists was measured for the whole squad, not by position. So read these as team-wide targets, not position cutoffs.

WHAT GETS TRACKED

Sprint splits at 5, 10, 20, and 30 meters, the forty-yard dash, the beep test or Yo-Yo test, the mile, the Cooper test for distance, the vertical jump, the standing broad jump, and change-of-direction tests like the 505 and the pro-agility.

D1 FITNESS STANDARDS · FIELD PLAYERS			RECRUITING STANDARD
METRIC	D1 MEN	D1 WOMEN	
Mile	5:00 to 5:30	5:45 to 6:30	
Beep test level	13 to 17	11 to 14	
40-yard dash	4.6 to 4.9	5.0 to 5.4	

Source: LevelUp.soccer. Midfielders and forwards face the hardest aerobic marks.

WOMEN · SPRINT SPLITS BY DIVISION				RECRUITING STANDARD
LEVEL	5 M	10 M	20 M	
D1	Sub 1.0 sec	Sub 1.8 sec	Sub 3.6 sec	
D2	Sub 1.1 sec	Sub 1.9 sec	Sub 3.7 sec	
D3	Sub 1.2 sec	Sub 2.0 sec	Sub 3.8 sec	

Source: SoccerTalented. Only women's splits by division were published. Men's were not.

COOPER TEST BY DIVISION

RECRUITING STANDARD

LEVEL	12-MINUTE DISTANCE
D1	8,202+ feet, or 2,500+ meters
D2	7,218 to 8,202 feet, or 2,200 to 2,500 meters
D3	<i>not published</i>

Source: SoccerTalented.

The measured part of soccer. Real university studies have tested NCAA soccer players, and they all use the same battery: vertical jump, broad jump, triple hop, a 30-meter sprint with splits, the 505 change-of-direction test, and the Yo-Yo test. Those studies tell you which tests are legitimate, and they found midfielders were faster over 5 meters than defenders. The groups were small, from 17 to 36 players, and the papers report averages, not recruiting cutoffs, so no target numbers came out of them. There is also match-tracking data on D1 players, but that describes a game, not a test, so it sets no targets and is not printed here.

Go measure this yourself. Nothing is published by position, no men's splits by division exist, and NAIA, JUCO, and goalkeepers are blank. So your own dated numbers are the whole picture. Get your splits, a beep or Yo-Yo test, and a Cooper test on record.

HOW TO GET MEASURED

Get your sprint splits, a beep or Yo-Yo test, and a Cooper test done and dated. Compare yourself to the whole-squad marks above and know they are targets, not averages of a tested group. If you play in goal, understand that none of these numbers were built for you, and ask coaches which goalkeeper-specific tests they run.

07 Swimming

The clock is the whole conversation.

Swimming is the cleanest sport to measure. There are no positions. The event time is both the number and the currency, the same way a sixty is in baseball, and there are no teammates standing between you and the clock. Read the tables line by line for your events.

WHAT GETS TRACKED

Your event time, in short course yards. That is the whole list. The event is the position, and the clock is the measurement.

WHY THERE ARE NO DIVISION COLUMNS HERE

Swimming does not sort by division, and neither will I. A top Division 3 program recruits faster times than a low Division 1 program. Kenyon, Emory, and Denison give no athletic scholarships and still recruit Division 2 level times. So these tables use four performance tiers that cut across the divisions. Find your time, find your tier, then go see which programs live in that tier.

Tier 1: elite Power 5 D1. **Tier 2:** elite D2 and D3, strong mid-major D1, Power 5 D1. **Tier 3:** elite NAIA, mid to strong D2 and D3, low to mid-major D1. **Tier 4:** low to average D2 and D3, low to strong NAIA. All times short course yards.

HOW THE MONEY AND THE MEETS WORK

There are 377 D3 and 44 NAIA schools with swimming. On scholarships, D1 offers 11.7 for men and 14 for women per team, D2 offers 8.1 for men and 14 for women, and D3 offers no athletic money, though the top programs give real merit aid. NAIA offers athletic scholarships with more flexible rules and no dead periods. One more thing before you pick events: coaches put money on swimmers who score points at conference and national meets, so a relay contribution can be worth more than a strong individual event alone.

Go measure this yourself. The exact championship cut times are not reprinted here. They live in the NCAA, NAIA, NJCAA, and USA Swimming standards documents, updated every year, so pull up your events and read your own cut. If you dive, know that diving scores on a separate system.

MEN · COLLEGE TIMES BY TIER

RECRUITING STANDARD

EVENT	TIER 1	TIER 2	TIER 3	TIER 4
50 Free	19.9 and faster	20.5 to 20.9	21.1 to 21.4	21.7 to 23.9
100 Free	43.8 and faster	44.9 to 45.4	45.9 to 46.5	47.8 to 50.9
200 Free	1:36.3 and faster	1:38.5 to 1:39.8	1:40.9 to 1:41.8	1:43.8 to 1:51.9
500 Free	4:23.3 and faster	4:27.9 to 4:31.5	4:35.5 to 4:37.1	4:42.8 to 5:09.9
1650 Free	15:26.1 and faster	15:36.9 to 15:46.9	15:55.9 to 16:05.0	16:24.4 to 17:59.9
100 Fly	47.4 and faster	48.9 to 49.9	50.5 to 51.1	52.1 to 55.9
200 Fly	1:46.7 and faster	1:49.9 to 1:52.1	1:52.9 to 1:53.7	1:55.1 to 2:09.9
100 Back	47.7 and faster	49.0 to 50.8	51.5 to 52.1	53.4 to 56.9
200 Back	1:45.0 and faster	1:48.5 to 1:50.6	1:51.9 to 1:52.8	1:54.9 to 2:09.9
100 Breast	54.3 and faster	55.9 to 57.4	58.1 to 58.7	59.8 to 1:04.9
200 Breast	1:58.4 and faster	2:02.5 to 2:05.7	<i>not published</i>	2:09.7 to 2:19.9
200 IM	1:46.8 and faster	1:49.5 to 1:51.5	1:53.5 to 1:55.1	1:57.1 to 2:09.9
400 IM	3:51.5 and faster	3:55.9 to 4:00.2	4:04.9 to 4:07.6	4:11.2 to 4:29.9

Source: NCSA. **The 200 breast Tier 3 cell is dropped on purpose.** The source printed that range backward, with one end faster than the Tier 1 standard. That is a source error, so rather than guess I left it open. Read across from your Tier 2 and Tier 4 times to place yourself.

HOW TO GET MEASURED

Your event time from an official meet is the measurement. There is no combine to book. Find your events on this table, find your tier, then open the governing-body standards documents and read your exact cut. The clock does not care who timed it. That is why swimming is the fairest sport to get recruited in.

WOMEN · COLLEGE TIMES BY TIER				RECRUITING STANDARD
EVENT	TIER 1	TIER 2	TIER 3	TIER 4
50 Free	21.7 and faster	22.9 to 23.5	23.9 to 24.1	24.5 to 27.9
100 Free	47.3 and faster	49.9 to 50.9	51.9 to 52.1	53.1 to 1:00.9
200 Free	1:43.2 and faster	1:47.9 to 1:49.7	1:50.9 to 1:52.6	1:53.8 to 2:09.9
500 Free	4:36.3 and faster	4:45.9 to 4:53.1	4:59.9 to 5:03.5	5:05.1 to 5:59.9
1650 Free	15:53.5 and faster	16:29.9 to 16:46.2	16:59.9 to 17:14.4	17:25.7 to 19:59.9
100 Fly	51.0 and faster	53.5 to 56.1	56.5 to 57.5	58.2 to 1:04.9
200 Fly	1:53.5 and faster	1:59.9 to 2:02.7	2:03.9 to 2:05.0	2:08.9 to 2:24.9
100 Back	51.0 and faster	53.9 to 56.1	57.1 to 58.1	59.0 to 1:05.9
200 Back	1:50.5 and faster	1:57.9 to 2:01.3	2:03.5 to 2:05.0	2:07.2 to 2:24.9
100 Breast	58.8 and faster	1:01.9 to 1:03.7	1:04.9 to 1:06.0	1:06.9 to 1:14.9
200 Breast	2:06.9 and faster	2:14.9 to 2:19.8	2:21.5 to 2:22.7	2:24.7 to 2:39.9
200 IM	1:54.3 and faster	1:59.9 to 2:03.1	2:05.0 to 2:08.4	2:09.3 to 2:24.9
400 IM	4:04.1 and faster	4:14.9 to 4:23.3	4:27.5 to 4:30.7	4:33.4 to 5:09.9

Source: NCSA. All times short course yards. Same four tiers as the men's table.

The real standards sit underneath these tables. Swimming is the only sport with official time standards that get published and updated every year. Read them directly, because they beat any chart anybody makes: NCAA D1 and D3 championship cuts, the NAIA and NJCAA championship cuts, USA Swimming Futures times, USA Swimming Speedo Sectionals times, and the USA Swimming Motivational Standards for 2024 to 2028. The Futures cut is the minimum most D1 programs look at. Sectionals is the practical baseline for competitive D2 and D3.

08 Golf

You cannot control the course. You can control the club.

Most golfers stare at their handicap and their scoring average. Look somewhere else first. Your score is shaped by the course, the wind, and the field you played against. It is an outcome. The numbers you actually control are how fast you swing the club and how cleanly you strike it. Lead with those. The score follows.

THE FOUR NUMBERS YOU CONTROL

Clubhead speed. How fast the clubhead is moving at impact. **Ball speed.** How fast the ball leaves the face, about 1.5 times clubhead speed on a solid strike. **Smash factor.** Ball speed divided by clubhead speed, which measures strike quality on its own. It is the most trainable number here if you cannot yet swing faster. **Carry distance.** How far the ball flies before its first bounce, measured by club.

TOUR REFERENCE · THE CEILING

MEASURED

	CLUBHEAD SPEED	BALL SPEED	CARRY
PGA Tour driver	112 to 113 mph	165 to 167 mph	269 to 275 yards
PGA Tour 8-iron	87 mph	115 mph	160 yards
LPGA Tour driver	94 mph	139 mph	220 yards
LPGA Tour 8-iron	74 mph	100 mph	130 yards

Source: Trackman tour averages. For scale, the average male amateur swings the driver 93.4 mph for about 214 yards, and Trackman's 99th percentile for all men is 111 mph. On tour, every 1 mph of ball speed is worth about 2 yards of carry.

Go measure this yourself. Nobody publishes clubhead speed, ball speed, smash factor, or carry by division, so there is no table to chase. Get on a launch monitor, record all four by club, and note the device, since one brand can read several mph high. Your own numbers climbing are the record.

Clubhead speed is trainable, and here is the proof. In a study of 19 elite young female golfers, clubhead speed lined up most strongly with physical testing, and the single strongest link was to pushing force in the first tenth of a second of a bench press. A separate NCAA D1 study tied clubhead speed to rotational power from the obliques. And when 16 NCAA D1 golfers trained three times a week for 11 weeks, their strength and power numbers rose 7.3 to 19.9 percent, their clubhead speed rose 1.6 percent, and that alone added about 4.9 meters of driving distance. Rotational power is real, measurable, and trainable.

MEN · SCORING AVERAGE BY DIVISION		RECRUITING STANDARD
LEVEL	18-HOLE SCORING AVERAGE	
Top D1	72 or lower	
Top D2, D3, NAIA	74 or lower	
General D2 / D3 / NAIA	74 to 78, depending on program and field	

Source: NCSA. This is an outcome measure. Coaches weight scores from multi-day tournaments, 36 or 54 holes, on courses 6,600 yards or longer. Short single-round high school events count for less. In men's golf the drop-off from D1 to NAIA is not dramatic.

WOMEN · SCORING AVERAGE BY DIVISION		RECRUITING STANDARD
LEVEL	18-HOLE SCORING AVERAGE	
Top D1	75 and lower	
Top D2	80 or lower, some programs in the 70s only	
D3 / NAIA	80 to 95	

Source: NCSA. Also an outcome measure, read it the same way.

HANDICAP BY DIVISION

RECRUITING STANDARD

LEVEL	MEN	WOMEN, RANGE ACROSS TWO SOURCES
D1	0 to +2	0 to 3
D2	0 to +2	3 to 8
D3	3.5 to 4 or better	6 to 12
NAIA	<i>not published</i>	3 to 20

The women's column is loose on purpose. Two sources disagree a lot on women's handicap by division, one much more permissive than the other, so each cell is a range spanning both. Treat it as a wide target, not a cutoff.

GOLFERS WHO ACTUALLY REACHED COLLEGE

MEASURED

	HANDICAP	18-HOLE AVERAGE	GPA
Men	1	72.5	3.37
Women	9.6	83.7	3.42

Source: NCSA tracking of its own athletes who reached college golf. Real, measured people, though a self-selected group of one company's clients. They played national events like AJGA, FCWT, and USGA alongside state and local ones.

A number to throw out, and why. There is a famous clubhead-speed-by-age table all over the internet. Do not use it. It was measured on a device that reads 3 to 4 mph high, and its reported median for ages 17 to 29 is 113 mph, basically the PGA Tour average. A random group of young golfers cannot have a median equal to the tour. When a number looks too good, check the device and check who got measured. That is the whole skill.

HOW TO GET MEASURED

For your scoring number, play multi-day tournaments on long courses, because coaches weight those over one-off high school rounds. And chase national ranking events, since a coach reads your ranking before your scorecard.

09 Lacrosse

The published numbers are thin, so plan to get your own.

Lacrosse has not standardized its recruiting numbers yet. There is no combine database and no Perfect Game equivalent. Here is what has actually been measured, which is not much, so you will get most of your numbers yourself.

WHAT GETS TRACKED

The forty-yard dash, the 5-10-5 pro agility shuttle, the broad jump, and shot speed. Lacrosse is a high change-of-direction sport, so agility carries unusual weight.

SHOT SPEED BY POSITION		RECRUITING STANDARD	SHOT SPEED BY LEVEL		RECRUITING STANDARD
POSITION		SHOT SPEED	LEVEL		SHOT SPEED
Attack		<i>not published</i>	Youth		40 to 60 mph
Midfield		70 to 90 mph	High school		70 to 85 mph
Defense, long pole		60 to 80 mph	Source: Lacrosse Ball Store. Attack players are told to prioritize speed, but no figure is published for them. The fastest recorded pro shot is 108 mph.		
Goalie		40 to 60 mph			

Go measure this yourself. Nothing is published by division, by shot speed level, or for attack specifically, and men's and women's numbers do not carry between them. Your forty, pro agility, broad jump, and shot speed are yours to go clock.

HOW TO GET MEASURED

Get to a lacrosse-specific combine. Get four numbers clocked by somebody neutral: your forty, your pro agility, your broad jump, and your shot speed. Then track them every month. In a sport with no published benchmark, a documented number that has climbed for eighteen straight months is worth more than any table anybody could hand you.

10 · if your sport is not listed

The method works for any sport.

Eight sports are covered. Yours might not be one of them. That is fine, because the method is the same everywhere, and you can run it yourself in an afternoon.

1 Find which tests your sport measures

Every sport has a short list of physical tests coaches actually use. Find that list first. It is usually three or four things.

2 Find the numbers at each level

Look up the targets by level, and label each one measured or recruiting standard as you go.

3 Go test yourself for real

Get each number clocked by somebody neutral, on a known device, with a date on it. Self-reported numbers do not count.

4 Write the gap next to each number

Put your number beside the target and write the difference. Then attack the smallest gap first, because closing it is the fastest proof that the method works.

WHERE MOST ATHLETES ARE

Working hard, training often, and guessing. No dated numbers, no targets, no idea which gap to close next.

WHERE THIS PUTS YOU

Four dated numbers, a gap written next to each one, and one habit pointed straight at the smallest gap. That is a plan a coach can read.

11 • sources

Where every number came from.

Measured sources first, because they carry the most weight. Recruiting standards after, because they are targets coaches set, not averages of a tested group. Every number traces back to one of these.

MEASURED

MEASURED

- NFL Scouting Combine official database, every participant since 2003
- NBA Draft Combine official database
- Trackman PGA and LPGA tour averages, plus Trackman data across 10,000+ golfers
- NCAA D1 Swimming and Diving championship qualifying standards
- NCAA D3 Swimming and Diving championship qualifying standards
- NAIA Swimming and Diving championship standards
- NJCAA Swimming and Diving championship standards
- USA Swimming Futures Championships time standards
- USA Swimming Speedo Sectionals time standards
- USA Swimming Motivational Standards, 2024 to 2028
- Peer-reviewed collegiate soccer testing studies
- Peer-reviewed golf studies on strength and clubhead speed
- Peer-reviewed NBA combine analysis, 3,610 players, 2000 to 2018
- NCSA internal tracking of its own golfers who reached college

RECRUITING STANDARD

STANDARD

- NCSA College Recruiting, across most sports
- NextCommit, baseball and football
- StudBud, basketball, volleyball, men's soccer, women's golf
- Dynamite Sports, NCSA-derived tables
- All American Baseball Academy
- Go Big Recruiting, baseball catchers
- Next Level Recruiting, football and basketball
- Lance O's Recruiting Network, football
- LevelUp.soccer, D1 fitness standards
- SoccerTalented, sprint splits and Cooper test
- National Lax Combine, lacrosse testing
- Lacrosse Ball Store, shot speed
- EasyGrader, volleyball approach touch, the weakest source of the set
- Golf Monthly, reporting NCSA handicap figures

SEVEN ERRORS I FOUND INSIDE THE SOURCES, AND WHAT I DID

Every one of these is a mistake in a published source. None of them was reprinted as a clean number, because a wrong number in your hands is worse than no number.

SPORT	THE ERROR IN THE SOURCE	WHAT I DID
Baseball	D2 corner outfield 60 time slower than the same source's D3 and NAIA time	Collapsed D2 into the D3 and NAIA row, and said why
Baseball	Older D1 pitcher velocity of 84 contradicts a newer source at 90+	Used the newer figure, noted the conflict
Swimming	Men's 200 breast Tier 3 range runs backward, faster than Tier 1	Dropped the cell, told you to read across from Tier 2 and 4
Volleyball	Libero standing reach printed as seven inches	Left it open, refused to guess seven feet
Football	Vertical and bench source mixes rep counts with one-rep maxes	Left both out entirely
Golf	Two sources disagree a lot on women's handicap by division	Showed a range spanning both, labeled it loose
Golf	A circulated clubhead-speed-by-age table, wrong device and unrepresentative group	Kept it off the tables, used it as a warning

GO TO THE SOURCE

The measured sources are public. The NFL and NBA combine databases, the Trackman tour averages, and the USA Swimming, NCAA, NAIA, and NJCAA standards are all online, and each one is updated on its own schedule. When a number matters to you, do not stop at a chart. Read it at the source and write down the date you found it.

An empty cell you can trust beats a full one you cannot.



the through-line

Failure is simply feedback.

A number you do not like is not a verdict. It is a starting line with a date on it. Get measured for real, write it down, then go make the next number better than the last one.

That is the whole game. Not one perfect test. The next honest number, and the one after that.