
FREE RESOURCE · NO. IX

Speed, mobile & the *invisible* stuff

The technical side of your website, without jargon and without the scaremongering.

Most speed advice is sold by people who sell speed fixes. This one tells you what the measurements mean, how to check your own site free, and **where the evidence does not support the alarm** — including a large study that found no speed benefit at all for lead-generation sites.



Why this guide is different

Most speed advice is sold by people who sell speed fixes. The result is an industry-wide habit of quoting alarming statistics with no traceable source, to justify work that may or may not be worth doing on your site.

This guide does three things instead:

1. **Tells you what the actual measurements are**, what "good" means, and where those numbers come from
2. **Shows you how to check your own site** in ten minutes with free tools
3. **Is honest about what the evidence supports** — including the large study, funded by Google, that found *no* speed benefit for lead-generation websites

You will finish knowing whether you have a real problem, and roughly what it is worth.

Google publishes three metrics, collectively called **Core Web Vitals**. Every one of them is an attempt to measure something a real person experiences.

METRIC	WHAT IT MEASURES	"GOOD" IS	IN PLAIN ENGLISH
LCP — Largest Contentful Paint	When the main content appears	2.5 seconds or less	How long until the page looks like it has loaded
INP — Interaction to Next Paint	How fast the page responds to a tap or click	200 milliseconds or less	Whether the page feels responsive or laggy
CLS — Cumulative Layout Shift	How much the page jumps around while loading	0.1 or less	Whether you tap the wrong thing because content moved

Two details that matter

These are measured at the 75th percentile. That means: for 75% of your visitors, the page must hit the threshold. Google is not measuring your best visit or your average visit — it is asking whether the *typical* experience is good, including people on older phones and worse connections. This is why your site can feel fast to you and still fail.

INP replaced an older metric called FID in 2024. If a tool or a report is still showing you First Input Delay, it is out of date. That is a quick, reliable way to date any technical audit you are handed.

CLS is the one people underestimate

Layout shift is the reason you go to tap a link, an ad or an image loads above it, and you tap something else entirely. It is intensely annoying, it happens most on phones, and it is usually caused by something trivial — images without dimensions set, fonts swapping in late, banners injected after load.

It is also often the cheapest of the three to fix.

The one tool you need

Google's **PageSpeed Insights** (pagespeed.web.dev). Free, no account, no installation. Enter a page address and read the report.

Do this for your homepage and your two most valuable pages — usually your main service page and your contact page. Do it on the **Mobile** tab first. That is where most of your traffic is, and where problems live.

Reading the report without being fooled

The report has two halves, and confusing them is the single most common mistake.

Field data — labelled "Discover what your real users are experiencing." This is measurement of actual visits to your site over the previous 28 days. **This is the half that matters.** It is what Google's ranking systems use.

Lab data — a single simulated load on a simulated device. Useful for diagnosing *why* something is slow. It is not what your visitors experienced, and it fluctuates run to run.

The big number at the top — the 0–100 "Performance score" — is lab data. It is a diagnostic aid, not a grade. A site can score 68 and pass all three Core Web Vitals in the field. Another can score 95 and fail.

IF SOMEONE SHOWS YOU A SCREENSHOT OF A LOW SCORE AS EVIDENCE YOU NEED WORK, ASK TO SEE THE FIELD DATA INSTEAD

If your site does not have enough traffic to produce field data, the report will say so — and in that case nobody can tell you what your real users are experiencing, including them.

The other free tool worth knowing

Google Search Console has a Core Web Vitals report covering your whole site rather than one page at a time, grouping pages into "Good," "Needs improvement" and "Poor." It is the fastest way to see whether a problem is site-wide or specific to one template.

This is the section that will save you money.

Does speed affect rankings? yes, but modestly

Google confirms Core Web Vitals are used by its ranking systems, and simultaneously that there is no single "page experience" score and that good technical numbers will not lift a page whose content is weak.

The honest summary: **speed is a tiebreaker, not a strategy.** If two pages are equally useful, the faster one has an edge. A fast page that answers nobody's question ranks nowhere.

Does speed affect sales? sometimes — and here is the good evidence

The strongest study that exists is a genuine randomised experiment at Vodafone Italy. Two versions of the same site, identical in appearance and function, differing only in performance work, with traffic split 50/50 across roughly 34,000 visits a day. A **31% improvement in load time produced 8% more sales**, plus double-digit improvements in lead and cart rates.

That is a real experiment, which makes it more valuable than every correlational statistic in circulation. Caveats worth stating: it was published by Google, on Google's own developer site, and it covers one company in one market.

The finding that never gets quoted

The largest multi-brand study — commissioned by Google, run by Deloitte Digital with Fifty-Five, covering 37 brands and roughly 30 million sessions — found that a 0.1-second improvement was associated with:

- Retail conversions **+8.4%**
- Travel conversions **+10.1%**
- **Lead generation conversions –1.9%**

That last line is the sector closest to most small business websites, and it is systematically omitted from the marketing that cites this report. The study is also explicitly correlational — it says so itself.

And Google's own caution

Google's guidance on relating site speed to business metrics recommends server-side A/B testing, recommends validating your testing setup with an A/A test first, and explicitly lists among the possible explanations for a null result: *site speed really doesn't influence your business metrics.*

When Google is more cautious about speed than the agency quoting Google at you, that tells you something.

What this means for you

- If your pages take eight seconds on a phone, you have a real problem worth real money.
- If you are passing all three Core Web Vitals, further speed work is one of the *lowest*-value things you could spend money on.
- If you sell to consumers who buy online, speed is worth more to you than if you generate leads and close them by phone.

In rough order of how often it is the culprit.

1. images (the usual answer)

On most small business websites, unoptimised images are the entire problem. A photo straight off a phone can be six megabytes. Displayed in a 600-pixel-wide slot, 99% of that data was downloaded for nothing.

The fix, in order:

- Resize images to the dimensions they are actually displayed at
- Save in a modern format (WebP or AVIF) — most platforms will do this automatically if asked
- Set explicit width and height on every image (*this also fixes layout shift*)
- Load images below the fold lazily
- Delete the auto-playing hero video nobody watches

This is usually free, usually takes an afternoon, and usually fixes the majority of the problem.

2. too many plugins and third-party scripts

Every chat widget, popup tool, analytics package, heatmap recorder, review widget and tracking pixel loads its own code from someone else's server. Each one is a small delay you do not control.

The audit: list every third-party tool on your site. For each, ask when you last used its output. Anything you cannot answer for, remove. Businesses routinely carry three analytics tools and read none of them.

3. cheap shared hosting

If the server takes over half a second to send the first byte of the page, nothing you do afterwards can rescue it. Hosting is the one area where the cheapest option is frequently a false economy — though moving hosts is disruptive, so confirm the server is genuinely the bottleneck before you do it.

4. fonts

Custom web fonts block text from appearing, or cause it to flash and reflow. Limit yourself to one or two font files, and ask your developer about font-display: swap. Small change, visible improvement.

5. page builders

Some visual builders generate enormous amounts of code for simple layouts. This is real, and it is also the hardest to fix without rebuilding — so it is worth knowing about *before* you choose a platform, not after.

Between roughly half and two thirds of visits are on a phone, depending on your sector. (*StatCounter puts mobile at about 52% of all web traffic; Contentsquare's benchmark of consumer brands puts it near 70%. Both are real — they measure different populations. Be suspicious of anyone quoting one figure as "the" number.*)

Mobile visitors also convert worse — Contentsquare's 2026 benchmark found desktop conversion 74% higher than mobile. Some of that is intent rather than friction; people browse on phones and buy on laptops. But a meaningful part is that your site is genuinely harder to use with a thumb.

The five-minute mobile test

On your own phone, outdoors, one-handed, with the screen at normal brightness:

- ☐ Can you read the text without pinching to zoom?
- ☐ Can you tap every button accurately on the first try?
- ☐ Does the page ever scroll sideways?
- ☐ Is the phone number visible without scrolling, and does tapping it open the dialler?
- ☐ Can you complete your own contact form?
- ☐ Does the correct keyboard appear for each field — numbers for the phone field, the @ key for email?
- ☐ Do popups cover the content, and can you close them with a thumb?

That last one has teeth: Google's guidance on intrusive interstitials makes clear that content hidden behind a popup may not be indexed properly. Popups that block the content on mobile are a genuine risk, not just an annoyance.

The keyboard problem nobody mentions

A touch keyboard covers roughly half the screen in portrait and up to four fifths in landscape. Your visitor loses all sense of where they are in the form and starts treating each field as an isolated task. Baymard found 60% of the top 50 mobile-optimised e-commerce sites failed at least two of five basic keyboard optimisations.

Getting input types right costs your developer minutes and removes friction on every single mobile form submission you will ever receive.

Speed is the technical topic that gets attention. These get less, and matter more.

HTTPS

The padlock. If any page shows "Not Secure," particularly a page with a form, fix it today. Browsers warn visitors directly, and it is the kind of thing that costs you enquiries silently.

Whether Google can actually see your pages

The most expensive technical mistake in this entire guide is invisible from the front of the site: a leftover instruction from the staging version telling search engines not to index anything.

How to check, in two minutes:

1. Visit `yourdomain.com/robots.txt` and read it. You are looking for `Disallow: /`
2. In Google Search Console, use URL Inspection on your three most valuable pages
3. Search `site:yourdomain.com` and see roughly what is listed

A page that is not indexed cannot rank, no matter how good it is or how fast it loads.

Backups you have actually tested

An untested backup is not a backup. Confirm when the last one ran, and confirm somebody has restored one at least once. Find out before you need it.

Updates

Outdated plugins are among the most common ways small business sites get compromised. Set a monthly rhythm: check for updates, apply them, confirm the site still works and the forms still send.

Your forms still working

Silently broken forms cost more than every performance problem in this guide combined. Submit your own form monthly, from your phone, with a real email address, and confirm it arrives — inbox, spam folder, and wherever leads are supposed to land.

Technical guides age badly. Spotting these lets you date anything you are handed.

- **First Input Delay (FID)** was replaced by INP in 2024. Any report still using it is stale.
- **rel="next" and rel="prev"** for paginated pages — Google states it no longer uses them.
- **Canonicalising all paginated pages to page one** — Google now explicitly warns against this. Each page needs its own canonical.
- **The URL Parameters tool** in Search Console was retired in 2022. Advice telling you to configure parameters there is dead.
- **FAQ rich results** stopped appearing on 7 May 2026 and the documentation was removed. **HowTo rich results** were deprecated in 2023 and removed. Adding that markup for rich results now does nothing.
- **The Sitelinks Search Box markup** was deprecated in October 2024.
- **"Add schema to appear in AI answers"** is not supported. Google's own May 2026 guidance states structured data is not required for generative AI features and there is no special markup to add.
- **"You need an llms.txt file"** — Google clarified in June 2026 that these are not needed. This is being actively sold right now.

Still fully supported, despite the deprecations above: Product structured data, and the ordinary structured data types in Google's current search gallery. The FAQ and HowTo removals do not mean schema in general is dead.

If you are handing this work over, these questions will tell you quickly whether you are talking to someone honest.

- **"Can you show me the field data, not the score?"** — separates people who understand the measurement from people reading a number off a screen
- **"Which of the three Core Web Vitals are we failing, and on which templates?"** — a real answer is specific
- **"What is the single biggest contributor, and what would fixing it cost?"** — if images are 80% of the problem, that should be the first thing said
- **"What will this be worth?"** — an honest answer acknowledges uncertainty. A confident revenue promise is a warning sign
- **"Are we passing already?"** — a developer willing to tell you that you do not need the work is one worth keeping

Getting the priority right

PRIORITY	FIX	TYPICAL COST
1	Anything blocking Google from indexing your pages	Free–low
2	Broken forms, broken HTTPS	Free–low
3	Mobile usability failures	Low
4	Image optimisation	Free–low
5	Removing unused third-party scripts	Free
6	Layout shift (CLS)	Low
7	Server response time / hosting	Medium
8	Chasing a perfect performance score	Rarely worth it

Most sites get most of their available improvement from rows 4 and 5, at almost no cost. Row 8 is where budgets go to die.

The short version

1. Run your three most important pages through PageSpeed Insights, on Mobile
2. Read the **field data**, not the score
3. LCP under 2.5s, INP under 200ms, CLS under 0.1 — at the 75th percentile
4. If you are passing, stop. Spend the money on content or proof instead
5. If you are failing, it is almost certainly images first
6. Check robots.txt for a leftover block — this is the expensive one
7. Test your own forms on your own phone, monthly
8. Confirm your backups have actually been restored once
9. Treat any confident promise of revenue from speed work with suspicion

— IF THE DIAGNOSIS IS CLEAR AND THE FIX IS TECHNICAL

We host it, and we *watch* it.

If you are already passing all three Core Web Vitals, further speed work is one of the lowest-value things you could buy. We would rather you knew that.

If you are not, or if nobody is watching, that is what managed hosting is for. **Hyde & Co. is an agency for business owners** — we build it, host it, and keep it healthy in the background.

i. We check your field data and tell you whether you have a real problem.

ii. If you do, we tell you the single biggest contributor and what it costs.

iii. If you do not, we tell you that and leave it alone.

No obligation. We will not sell you a performance package for a site that is already fast.

[Book a consultation](#)

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WE BUILD ASSETS, NOT JUST WEBSITES

Sources

USED IN	SOURCE
Part 1 — thresholds	Google / web.dev, <i>Web Vitals</i> — LCP 2.5s, INP 200ms, CLS 0.1 at the 75th percentile; INP replaced FID in 2024
Parts 2, 3 — ranking	Google Search Central, <i>Understanding page experience in Google Search results</i> — Core Web Vitals used by ranking systems; no single page experience signal
Part 3 — best evidence	web.dev Vodafone case study — randomised 50/50 split, ~34,000 visits/day, 31% LCP improvement, +8% sales
Part 3 — the omitted finding	Deloitte Digital & Fifty-Five, <i>Milliseconds Make Millions</i> (2020), commissioned by Google — 37 brands, ~30M sessions; retail +8.4%, travel +10.1%, lead generation -1.9% ; explicitly correlational
Part 3 — caution	web.dev, <i>Relating site speed and business metrics</i> — recommends A/B and A/A testing; lists "site speed really doesn't influence your business metrics" as a possible explanation
Part 5 — mobile share	StatCounter Global Stats (all web); Contentsquare Digital Experience Benchmark 2026 (consumer brands) — different populations
Part 5 — mobile forms	Baymard Institute — mobile keyboard optimisation failures across the top 50 mobile-optimised e-commerce sites
Part 5 — popups	Google Search Central guidance on intrusive interstitials
Part 7 — deprecations	Google Search Central changelog — FAQ rich results ceased 7 May 2026, documentation removed 15 June 2026; HowTo deprecated 2023; Sitelinks Search Box deprecated October 2024; pagination guidance on rel=next/prev and canonicals; URL Parameters tool retired 2022
Part 7 — AI claims	Google Search Central, <i>Optimizing your website for generative AI features on Google Search</i> (May 2026) — structured data not required, no special markup, no llms.txt needed

Deliberately not used: "a one-second delay costs 7% of conversions" (a 2008 opinion survey of ~160 organisations, sponsored by two performance vendors, eighteen years old) and "100ms cost Amazon 1% in sales" (a 2006 conference slide, never published or replicated). Both are quoted constantly. Neither is evidence.

This guide is free to use and share.

The only goal is better websites and better results.