CLOUDSWITCHED

FREE RESOURCE — AUDIT CHECKLIST

# Website Performance Audit Checklist

Score your site against six performance areas covering Core Web Vitals, image optimisation, the CSS/JS/font asset pipeline, caching and CDN, server and TTFB, and mobile delivery. Identify the gaps costing you traffic, conversions and Google ranking.

| 6 | 40+ | /10 | Fillable |
|---|---|---|---|
| PERFORMANCE AREAS COVERED | AUDIT ITEMS TO CHECK | SCORE EACH SECTION | TICK & TYPE IN ANY VIEWER |

CORE WEB VITALS · ASSET PIPELINE · CDN & CACHING · MOBILE

| PREPARED FOR | PREPARED BY | VERSION | FORMAT |
|---|---|---|---|
| Cloudswitched Knowledge Library | Cloudswitched Ltd. | 2026 Edition | Interactive PDF |

# 00

# How to use this checklist

Work through each of the six sections with your web developer or digital agency. Tick every checkpoint that is **fully in place** in production — not partially, not "next sprint", but live today and verifiable in PageSpeed Insights, Search Console or the browser dev-tools. Then award each section a score out of 10 based on how many checkpoints you can confidently tick.

A score **below 6 in any section** indicates a performance gap that is almost certainly costing you ranking, bounce-rate or conversions. Use the action items page at the back to capture your top three priorities. This is an **interactive PDF** — tick the boxes and type your scores, URLs and notes directly in any modern PDF viewer.

**WHY PERFORMANCE MATTERS**

53% of mobile visitors abandon a site that takes longer than 3 seconds to load. Google uses Core Web Vitals as a ranking signal. Every additional second of delay reduces conversions by roughly 7%. Performance is not a vanity metric — it directly affects search visibility, revenue and the cost of paid traffic.

**SCORING GUIDANCE**

Award one point per checkpoint where you have evidence the optimisation is live in production — a Lighthouse report, a Search Console screenshot, a CDN dashboard, a response header. Half measures do not score. Round each section to the nearest whole number out of 10 and carry it forward to the summary table.

## The six sections

- **01 Core Web Vitals** — LCP, INP, CLS, PageSpeed Insights and Search Console pass status.
- **02 Image Optimisation** — WebP/AVIF, responsive srcset, dimensions, lazy loading, compression.
- **03 Asset Pipeline (CSS / JS / Fonts)** — minification, critical CSS, deferred JS, unused code, font loading.
- **04 Caching & CDN** — CDN, browser cache headers, service worker, hit ratio, Cache-Control.
- **05 Server & TTFB** — Time to First Byte, UK edge, TLS 1.3, HTTP/2-3, Gzip/Brotli, database, uptime.
- **06 Mobile Performance** — mobile-first index, viewport, tap targets, mobile LCP, 4G throttled test.

# 01

# Core Web Vitals

Google's three real-user metrics for loading, interactivity and visual stability. All three should be rated **Good** in PageSpeed Insights and passing in Search Console for both mobile and desktop — this is a documented ranking signal.

- **Largest Contentful Paint (LCP)** is under 2.5 seconds on the 75th percentile of real users — measures loading performance.
- **Interaction to Next Paint (INP)** is under 200ms — the 2024 replacement for First Input Delay, measures responsiveness.
- **Cumulative Layout Shift (CLS)** is under 0.1 — measures visual stability (no jumping content as the page loads).
- Core Web Vitals are **passing in Google Search Console** for both mobile and desktop URL groups *(no "needs improvement" or "poor" buckets)*.
- **PageSpeed Insights** score is ≥ 90 for desktop and ≥ 70 for mobile on the top 5 landing pages.
- No **layout shift** caused by ads, images without dimensions, dynamically injected banners or web-font swaps.
- **Field data (CrUX)** is reviewed monthly — not just lab data from a one-off Lighthouse run.

### LAB DATA VS FIELD DATA

Lighthouse runs in a controlled lab environment. Search Console's CrUX dataset reports what real visitors experienced on their real devices and connections over the last 28 days. Google ranks on the field data — tune your audits to it.

**SECTION 01 SCORE** _____ / **10** *Aim for 9+. Below 6 = ranking risk.*

# 02

# Image Optimisation

Images are typically the heaviest assets on a page and the easiest win in any audit. Optimise here for dramatic LCP and bandwidth improvements — expect a 40–60% byte reduction without visible quality loss.

- ☐ All images are served in **modern formats** (WebP or AVIF) with appropriate fallbacks for older browsers via <picture>.
- ☐ Images are **properly sized** — no 4000px source images being downscaled by CSS into 400px containers.
- ☐ **Responsive images** use srcset and sizes attributes to serve appropriate dimensions per device.
- ☐ All images have **explicit width and height** attributes *(or CSS aspect-ratio)* to prevent layout shift.
- ☐ **Lazy loading** is implemented for below-the-fold images via loading="lazy".
- ☐ Hero and above-the-fold images are **preloaded** with <link rel="preload"> so the LCP element renders fast.
- ☐ Image **compression** is applied at build/upload time — target < 100KB per content image, < 200KB per hero.
- ☐ An **image CDN** with on-the-fly resize and format negotiation is in use *(Cloudflare Images, Imgix, Cloudinary)*.

**THE BIGGEST SINGLE LCP WIN**

On most marketing sites the LCP element is the hero image. Convert it to AVIF, add fetchpriority="high" and a matching <link rel="preload">, and you typically shave 0.5–1.5s off mobile LCP for zero design risk.

**SECTION 02 SCORE** _____ / **10** *Aim for 8+. Below 6 = images bloated.*

# 03

# Asset Pipeline — CSS / JS / Fonts

Stop the browser doing unnecessary work on the critical path. The cheapest performance gains come from removing or deferring code the user will never see — not from making slow code faster.

- ☐ **CSS is minified** in production and the critical above-the-fold styles are inlined in the document <head>.
- ☐ **JavaScript is minified**, then deferred or loaded asynchronously — no render-blocking JS in the document head.
- ☐ **Unused CSS and JS** have been removed *(verified with Chrome DevTools > Coverage)* — aim for < 40% unused.
- ☐ **Third-party scripts** are audited and culled — tag manager, chat widget, A/B tester, analytics, heatmap, retargeting.
- ☐ **Font loading** uses font-display: swap, preloads the critical weight, and limits to 2–3 weights per family.
- ☐ **Code splitting** is in place for JS bundles — route-level chunks rather than a monolithic main.js.
- ☐ A **JS bundle budget** is enforced in CI *(e.g. < 170KB compressed first-party JS on the main route)*.

### AUDIT THE THIRD-PARTIES FIRST

Pull a Lighthouse “Third-party usage” report. If chat widgets, heatmaps and tag managers are blocking the main thread for > 500ms, remove them or load them async after user interaction — far higher leverage than micro-optimising your own code.

**SECTION 03 SCORE** _____ / **10** *Aim for 8+. Below 6 = JS/CSS bloat.*

# 04

# Caching & CDN

The fastest byte is the one you do not have to fetch. A correctly configured CDN with aggressive browser cache headers turns repeat visits and second-page navigations into near-instant experiences.

- ☐ A **Content Delivery Network (CDN)** sits in front of every public-facing asset *(Cloudflare, Bunny, CloudFront, Fastly, Azure)*.
- ☐ **Browser caching headers** set static assets to `max-age=31536000, immutable` with cache-busting filenames.
- ☐ HTML pages have a sensible `Cache-Control` — either short-TTL (5–60s) edge cache or stale-while-revalidate.
- ☐ A **service worker** or HTTP cache strategy is in place for repeat visitors and offline resilience.
- ☐ **CDN cache hit ratio** is ≥ 90% on static assets (verified in the CDN dashboard analytics).
- ☐ **ETag and Last-Modified** headers are correctly configured so conditional revalidation works.
- ☐ A **cache-purge mechanism** is documented and tested — deploys do not require manual edge invalidation.

**QUICK CDN SANITY CHECK**

Open DevTools > Network, reload, and look at the `cf-cache-status` (or equivalent) header on your assets. If you see `DYNAMIC` or `BYPASS` on static files, your CDN is paying bandwidth for nothing — investigate before chasing micro-optimisations elsewhere.

**SECTION 04 SCORE** _____ / **10** *Aim for 8+. Below 6 = no edge cache.*

# 05

## Server & TTFB

Everything else is wasted effort if the server takes 800ms to start sending bytes. Time to First Byte is the foundation — under 200ms means the rest of the budget belongs to your front-end.

- ☐ Server **Time to First Byte (TTFB)** is under 200ms on the 75th percentile of real visitors.
- ☐ Hosting is on a **UK-based server** or a CDN edge with London POPs — UK visitors are not routed via US datacentres.
- ☐ **SSL/TLS** is configured with TLS 1.3, OCSP stapling enabled and HSTS preloaded.
- ☐ **HTTP/2 or HTTP/3** is enabled end-to-end for multiplexed connections (verified in the Network panel).
- ☐ **Gzip or Brotli** compression is enabled for HTML, CSS, JS, JSON and SVG *(Brotli preferred — ~15% smaller than Gzip)*.
- ☐ Server has **adequate resources** for peak load — no CPU throttling or memory pressure during traffic spikes.
- ☐ **Database queries** are optimised — no N+1, no slow queries above 100ms on hot paths *(query log enabled)*.
- ☐ **Uptime monitoring** is in place with on-call alerts and a public status page or internal incident channel.

**THE TTFB CEILING**

If your TTFB is 600ms, the best possible LCP is 600ms *plus* however long the browser then takes to parse HTML, fetch CSS and decode the hero image. No amount of front-end magic recovers a slow origin — fix the server side first.

**SECTION 05 SCORE** _____ / 10 *Aim for 8+. Below 6 = slow origin.*

# 06

# Mobile Performance

Google indexes the mobile version of your site first and ranks on real-world mobile field data. Test on a throttled 4G connection on a mid-tier Android device — not on your office WiFi from a flagship phone.

- ☐ The site is **mobile-first responsive** — no horizontal scrolling, no zoom required, all interactions work on touch.
- ☐ A correct **viewport meta tag** is set *(width=device-width, initial-scale=1)* — no fixed-width or zoom-disabled.
- ☐ **Tap targets** are at least 48×48px with adequate spacing — verified in Lighthouse's accessibility audit.
- ☐ **Mobile LCP** is under 2.5s when tested on a throttled *Slow 4G* profile in Lighthouse / WebPageTest.
- ☐ The mobile page **weight** is under 1.5MB total transfer for the initial view *(check the Network panel total)*.
- ☐ **Text remains visible** during web-font load *(no FOIT)* — font-display: swap or optional.
- ☐ **Mobile-friendly test** in Search Console reports *Mobile usable* with no issues flagged.
- ☐ Heavy embeds *(maps, videos, chat widgets)* are **lazy-loaded on scroll or click**, not on initial mobile render.

**THE REAL-DEVICE GAP**

Lighthouse's mid-tier emulated device is roughly four times slower than the latest iPhone but four times faster than the cheapest Android handsets your customers actually own. Cross-check with an entry-level real device once a quarter — the gap usually surprises designers.

**SECTION 06 SCORE** _____ / **10** *Aim for 8+. Below 6 = mobile fail.*

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# URL benchmarks — current vs target

Pick the five highest-traffic landing pages on your site and record the current value for each headline metric next to the target. Re-run the audit 30 and 90 days after remediation to prove the gain. Pull current values from PageSpeed Insights field data, the Search Console Core Web Vitals report and a Lighthouse mobile run.

| URL | LCP target < 2.5s | INP target < 200ms | CLS target < 0.1 | TTFB target < 200ms |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

### TWO DATA SOURCES, NOT ONE

Record the **field** value (real-user data from PageSpeed Insights / CrUX) and the **lab** value (a Lighthouse run on a throttled mobile profile) side-by-side. Big divergences between them point at problems specific to your real audience — geographic latency, third-party scripts that only fire for logged-in users, or device classes you do not own.

### PAGESPEED INSIGHTS SCORE

The single-number Lighthouse score is a weighted composite — record it here for tracking momentum, but always treat the individual Core Web Vitals as the source of truth for ranking decisions.

**Mobile PSI** _____ / 100 **Desktop PSI** _____ / 100

Σ

# Audit score summary

Transfer the score for each section into the table. Set a priority (H/M/L) based on the gap to target. Anything below 6 is a candidate for the top-3 actions on the next page.

| # | PERFORMANCE AREA | SCORE / 10 | PRIORITY |
|---|---|---|---|
| 01 | Core Web Vitals | _____ / 10 | ☐ H ☐ M ☐ L |
| 02 | Image Optimisation | _____ / 10 | ☐ H ☐ M ☐ L |
| 03 | Asset Pipeline (CSS / JS / Fonts) | _____ / 10 | ☐ H ☐ M ☐ L |
| 04 | Caching & CDN | _____ / 10 | ☐ H ☐ M ☐ L |
| 05 | Server & TTFB | _____ / 10 | ☐ H ☐ M ☐ L |
| 06 | Mobile Performance | _____ / 10 | ☐ H ☐ M ☐ L |
| Σ | **TOTAL SCORE** | _____ / 60 | — |

**AFTER REMEDIATION — RE-SCORE IN 30 / 90 DAYS**

Performance work is only worth doing if you can prove the gain. Re-run this audit 30 and 90 days after each remediation sprint and record both totals on the next page. A halved bounce-rate or a recovered ranking will not chase itself.

# Interpretation & priority actions

Translate your total score into a risk band, then commit to a small number of next steps. The goal is one page of decisions, not a wish list.

## Score interpretation

| | |
|---|---|
| 48–60 | **Excellent.** Your site is performance-tuned and on the right side of every Core Web Vital. Stay there with quarterly re-audits and a PSI regression alert. |
| 36–47 | **Solid foundation, gaps exist.** Prioritise any area scoring below 6 with an owner and a 30-day deadline. |
| Below 36 | **Significant performance debt.** Bounce, conversions and ranking are being damaged today. Consider an urgent review with an external web specialist. |

## Top 3 priority actions

01 _____

02 _____

03 _____

## Additional notes

_____

_____

AUDIT COMPLETED BY _____ DATE _____ NEXT REVIEW DUE _____

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