

Web Performance Metrics Cheatsheet

Created by [Ire Aderinokun](#)

A summary of the web performance metrics

Metric	Description		Lab?	Field?
Time to First Byte (TTFB)	Measures the time from when the browser requests a page to the first byte of the page being received	< 600ms	✓	✓
First Paint (FP)	Measures the time when the first pixel is painted on the screen	< 1.8s *	✓	✓
First Contentful Paint (FCP)	Measures the time when the first piece of content from the DOM is rendered	< 1.8s	✓	✓
Largest Contentful Paint (LCP) ★	Measures the time when the largest piece of content within the viewport is rendered	< 2.5s	✓	✓
Visually Complete (VC)	Measures the time taken for the content within the viewport to be fully rendered	< 3.4s	✓	✗
Speed Index (SI)	Measures how quickly visual content is rendered within the viewport	< 3.4s	✓	✗
First Input Delay (FID) ★	Measures the delay between the time a user can attempt to interact with a part of the site, and the time that the interface is able to respond to that interaction	< 100ms	✗	✓
Max Potential First Input Delay (mFID)	Measures the maximum possible First Input Delay based on the duration of the longest task	< 130ms	✓	✗
Total Blocking Time (TBT)	Measures the total duration of Javascript tasks between the FCP and TTI	< 200ms	✓	✗
Time to Interactive (TTI)	Measures the time to when the main thread has had up to 5 seconds with no network activity or JavaScript tasks	< 3.8s	✓	✗
Cumulative Layout Shift (CLS) ★	Measures the shifts in layout while a page is loading	< 0.1	✓	✓
Frame Rate (FR)	Measures the rate at which the browser can produce new frames in response to interactions and/or animations	60 FPS	✓	✓

★ [Core Web Vital](#)

