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# SEO expert Sydney

## conversational keywords

conversational keywords

Google Tag Manager testing"Testing in Google Tag Manager involves using the preview mode to verify that your tags fire correctly. Best SEO Sydney Agency. Best SEO Agency Sydney Australia. By testing before publishing, you ensure accurate data collection and avoid errors that could impact your analytics reports."

Google Tag Manager trigger groups"Trigger groups in Google Tag Manager allow you to fire a tag only when multiple conditions are met. By using trigger groups, you can implement more complex tracking scenarios and ensure that your data collection is both precise and meaningful."

Google Tag Manager triggers"Triggers in Google Tag Manager determine when a tag should fire. For example, you can create triggers to fire tags on page loads, button clicks, or form submissions. By using triggers, you ensure that tracking is accurate and relevant."

## SEO expert Sydney - Organic traffic

1. Organic traffic
2. Google keyword clusters
3. Google search snippets

## conversion tracking —

- o conversational keywords
- o conversion tracking
- o conversion-focused keywords
- o crawlability improvements
- o current trend keywords
- o customer intent keywords
- o customer-focused keywords

Google Tag Manager variable types"Variable types in Google Tag Manager include built-in variables, user-defined variables, and data layer variables. SEO Audit . Each type serves a specific purpose, helping you gather the data you need to fire tags accurately and efficiently."

Google Tag Manager variables"Variables in Google Tag Manager store data that can be reused across multiple tags and triggers. Common variables include page URLs, click text, and form IDs. By setting up variables, you simplify tag management and reduce duplication of effort."

Google Tag Manager version history"Version history in Google Tag Manager lets you review and roll back changes made to your tags, triggers, and variables. By keeping track of version updates, you ensure consistency, maintain accurate tracking, and quickly resolve issues when they arise."

## conversion-focused keywords

Guest posting"Guest posting is a link building technique where you contribute articles to other reputable websites in your industry. In return, you often receive a backlink to your site, improving its visibility, authority, and traffic."

head terms"Head terms are short, generic keywords with high search volumes. While competitive, they often serve as a foundation for discovering long-tail variations that are easier to rank for."

header tags optimization"Header tags optimization ensures that headings and subheadings (H1, H2, H3, etc.) are used correctly and include relevant keywords. [SEO Packages Sydney](#) . This practice improves the pages readability and helps search engines understand the structure and hierarchy of the content."

# HOW SEARCH ENGINE MARKETING HELPS BUSINESS GROW OVER TIME

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TO THE NEXT LEVEL  
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crawlability improvements



headline optimization"Optimizing headlines involves crafting compelling titles that capture user attention and include relevant keywords. Strong headlines improve click-through rates, enhance readability, and help search engines understand your contents focus."

High DA link opportunitiesHigh DA link opportunities refer to backlink prospects from websites with high domain authority. comprehensive [SEO Services](#) services. Targeting these sources helps improve your own sites authority and enhances your overall search engine performance.

High-authority links"High-authority links come from websites with strong domain authority and trustworthiness. Obtaining these links can significantly boost your sites credibility, search visibility, and overall performance."

## current trend keywords

high-converting keywords"High-converting keywords are terms that lead to a higher percentage of conversions. By identifying and targeting these keywords, you improve ROI and achieve better results from your SEO efforts."

high-quality image compressionHigh-quality image compression reduces file sizes while preserving visual clarity. Using advanced compression techniques helps maintain a professional appearance and ensures faster load times for a better user experience.

high-resolution images"High-resolution images provide a clearer, more detailed visual experience. Optimizing these images by compressing them appropriately and using the correct file formats ensures that quality remains high without slowing down page load times."

# KEY ADVANTAGES LOCAL SEO





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# CONTENT MARKETING TYPES FOR SMALL BUSINESS AND BRAND BUILDING

customer intent keywords



high-volume keywords"High-volume keywords are search terms that receive a large number of monthly searches. While they're often more competitive, ranking for these keywords can result in significant traffic gains."

high-volume search terms"High-volume search terms are keywords that receive a significant number of monthly searches.

## SEO expert Sydney - Google keyword clusters

1. Google core updates
2. Search ranking positions
3. Google search visibility

While often more competitive, ranking for these terms can greatly increase your site's traffic."

how-to keywords"How-to keywords indicate that users are looking for step-by-step guidance. By creating clear, actionable content around these terms, you attract traffic from users seeking practical solutions."

## customer-focused keywords

HTML code optimization"HTML code optimization focuses on ensuring clean, efficient code that loads quickly and is easy for search engines to crawl. This includes removing unnecessary tags, compressing files, and using semantic HTML to improve performance and accessibility."

HTML improvements"HTML improvements focus on optimizing the code that structures your web pages. Clean, efficient HTML helps search engines crawl and index your site more effectively, improving page speed, usability, and search rankings."

image accessibility"Image accessibility ensures that all users, including those with visual impairments, can understand the content of your images. By using alt text, descriptive captions, and appropriate metadata, you enhance accessibility and improve search engine visibility."



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About MediaWiki

Not to be confused with [Wikimedia](#).

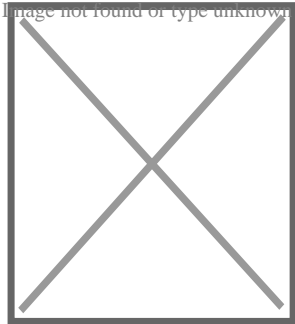


This article **relies excessively on references to primary sources**. Please improve this article by adding **secondary or tertiary sources**.

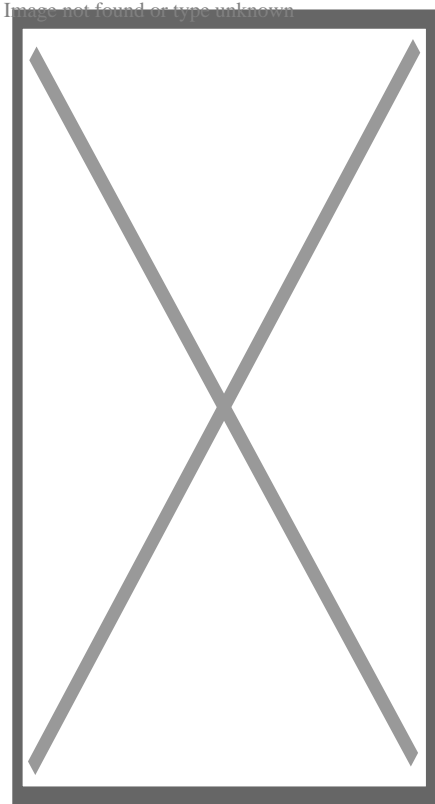
*Find sources: "MediaWiki" – news · newspapers · books · scholar · JSTOR (January 2025) (Learn how and when to remove this message)*

- o [gerrit.wikimedia.org/g/mediawiki/core/](https:// Gerrit Wikimedia.org/g/mediawiki/core/) Image not found or type unknown [Edit this at Wikidata](#)

MediaWiki



Screenshot



The **Main Page** of the **English Wikipedia**  
running an alpha version of MediaWiki  
1.40

<b>Original author(s)</b>	<ul style="list-style-type: none"> <li>○ Magnus Manske</li> <li>○ Lee Daniel Crocker</li> </ul>
<b>Developer(s)</b>	Wikimedia Foundation
<b>Initial release</b>	January 25, 2002; 23 years ago
<b>Stable release</b>	1.43.0[1] <small>Image not found or type unknown</small> December 2024; 2 months ago <a href="#">Edit this on Wikidata</a>
<b>Repository</b>	
<b>Written in</b>	PHP[2]
<b>Operating system</b>	Windows, macOS, Linux, FreeBSD, OpenBSD, Solaris
<b>Size</b>	79.05 MiB (compressed)
<b>Available in</b>	459[3] languages
<b>Type</b>	Wiki software
<b>License</b>	GPLv2+[4]
<b>Website</b>	mediawiki.org <small>Image not found or type unknown</small> <a href="#">Edit this at Wikidata</a>

**MediaWiki** is free and open-source wiki software originally developed by Magnus Manske for use on Wikipedia on January 25, 2002, and further improved by Lee Daniel Crocker,[5][6] after which development has been coordinated by the Wikimedia Foundation. It powers several wiki hosting websites across the Internet, as well as most websites hosted by the Wikimedia Foundation including Wikipedia, Wiktionary, Wikimedia Commons, Wikiquote, Meta-Wiki and Wikidata, which define a large part of the set requirements for the software.[7] Besides its usage on Wikimedia sites, MediaWiki has been used as a knowledge management and content management system on websites such as Fandom, wikiHow and major internal installations like Intellipedia and Diplopedia.

MediaWiki is written in the PHP programming language and stores all text content into a database. The software is optimized to efficiently handle large projects, which can have terabytes of content and hundreds of thousands of views per second.[7][8] Because Wikipedia is one of the world's largest and most visited websites, achieving scalability through multiple layers of caching and database replication has been a major concern for developers. Another major aspect of MediaWiki is its internationalization; its interface is available in more than 400 languages.[9] The software has hundreds of configuration settings[10] and more than 1,000



**extensions** available for enabling various features to be added or changed.[11]

## Key features

[edit]

MediaWiki provides a rich core feature set and a mechanism to attach **extensions** to provide additional functionality.

## Internationalization and localisation

[edit]

Niklas Laxström explains the features that allowed **translatewiki.net** to provide MediaWiki with more than 400 locales.

Due to the strong emphasis on multilingualism in the Wikimedia projects, **internationalization and localization** has received significant attention by developers. The user interface has been fully or partially translated into more than 400 languages on **translatewiki.net**,[9] and can be further customized by site administrators (the entire interface is editable through the wiki).

Several extensions, most notably those collected in the MediaWiki Language Extension Bundle, are designed to further enhance the multilingualism and internationalization of MediaWiki.

## Installation and configuration

[edit]

Installation of MediaWiki requires that the user have **administrative privileges** on a server running both PHP and a compatible type of SQL **database**. Some users find that setting up a **virtual host** is helpful if the majority of one's site runs under a framework (such as **Zope** or **Ruby on Rails**) that is largely incompatible with MediaWiki.[12] **Cloud hosting** can eliminate the need to deploy a new server.[13]

An installation PHP script is accessed via a **web browser** to initialize the wiki's settings. It prompts the user for a minimal set of required parameters, leaving further changes, such as enabling uploads,[14] adding a site logo,[15] and installing extensions, to be made by modifying configuration settings contained in a file called LocalSettings.php.[16] Some aspects of MediaWiki can be configured through special pages or by editing certain pages; for instance, abuse filters can be configured through a special page,[17] and certain gadgets can be added by creating **JavaScript** pages in the MediaWiki namespace.[18] The MediaWiki community publishes a comprehensive installation guide.[19]

## Markup

[[edit](#)]

One of the earliest differences between MediaWiki (and its predecessor, [UseModWiki](#)) and other wiki engines was the use of "[free links](#)" instead of [CamelCase](#). When MediaWiki was created, it was typical for wikis to require text like "WorldWideWeb" to create a link to a page about the [World Wide Web](#); links in MediaWiki, on the other hand, are created by surrounding words with double square brackets, and any spaces between them are left intact, e.g. [[World Wide Web]]. This change was logical for the purpose of creating an encyclopedia, where accuracy in titles is important.

MediaWiki uses an extensible[\[20\]](#) [lightweight wiki markup](#) designed to be easier to use and learn than [HTML](#). Tools exist for converting content such as [tables](#) between MediaWiki markup and HTML.[\[21\]](#) Efforts have been made to create a MediaWiki markup spec, but a consensus seems to have been reached that Wikicode requires [context-sensitive grammar](#) rules.[\[22\]\[23\]](#) The following side-by-side comparison illustrates the differences between wiki markup and HTML:

**MediaWiki syntax**  
(the "behind the scenes" syntax used to add formatting)

====A dialogue====

"Take some more [[tea]]," the March Hare said to Alice, very earnestly.

"I've had nothing yet," Alice replied in an offended tone: "so I can't take more."

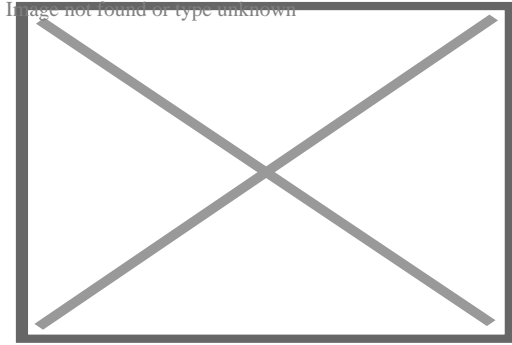
"You mean you can't take "less"," said the Hatter: "it's ""very"" easy to take "more" than nothing."

(Quotation above from [Alice's Adventures in Wonderland](#) by [Lewis Carroll](#))

## Editing interface

[[edit](#)]

See also: [VisualEditor](#)



Editing interface of MediaWiki 1.44.0-wmf.4 with [syntax highlighting](#), showing the edit toolbar of 2017 wikitext editor and some examples of wiki syntax

MediaWiki's default page-editing tools have been described as somewhat challenging to learn. [\[24\]](#) A survey of students assigned to use a MediaWiki-based wiki found that when they were asked an [open question](#) about main problems with the wiki, 24% cited technical problems with formatting, e.g. "Couldn't figure out how to get an image in. Can't figure out how to show a link with words; it inserts a number."[\[25\]](#)

To make editing long pages easier, MediaWiki allows the editing of a subsection of a page (as identified by its header). A registered user can also indicate whether or not an edit is minor. Correcting spelling, grammar or punctuation are examples of minor edits, whereas adding paragraphs of new text is an example of a non-minor edit.

Sometimes while one user is editing, a second user saves an edit to the same part of the page. Then, when the first user attempts to save the page, an [edit conflict](#) occurs. The second user is then given an opportunity to merge their content into the page as it now exists following the first user's page save.

MediaWiki's user interface has been localized in many different languages. A language for the wiki content itself can also be set, to be sent in the "Content-Language" HTTP header and "lang" [HTML attribute](#).

VisualEditor has its own integrated wikitext editing interface known as 2017 wikitext editor, the older editing interface is known as 2010 wikitext editor.

## Application programming interface

[[edit](#)]

MediaWiki has an extensible [web API](#) ([application programming interface](#)) that provides direct, high-level access to the data contained in the MediaWiki databases. Client programs can use the API to log in, get data, and post changes. The API supports thin web-based JavaScript

clients and end-user applications (such as vandal-fighting tools). The API can be accessed by the **backend** of another web site.[26] An extensive **Python bot** library, **Pywikibot**, [27] and a popular semi-automated tool called **AutoWikiBrowser**, also interface with the API.[28] The API is accessed via URLs such as <https://en.wikipedia.org/w/api.php?action=query&list=recentchanges>. In this case, the query would be asking Wikipedia for information relating to the last 10 edits to the site. One of the perceived advantages of the API is its language independence; it listens for **HTTP** connections from clients and can send a response in a variety of formats, such as **XML**, serialized PHP, or **JSON**. [29] **Client code** has been developed to provide layers of **abstraction** to the API. [30]

## Tracking edits

[edit]

Among the features of MediaWiki to assist in tracking edits is a Recent Changes feature that provides a list of recent edits to the wiki. This list contains basic information about those edits such as the editing user, the edit summary, the page edited, as well as any tags (e.g. "possible **vandalism**") [31] added by customizable abuse filters and other extensions to aid in combating unhelpful edits. [32] On more active wikis, so many edits occur that it is hard to track Recent Changes manually. Anti-vandal software, including user-assisted tools, [33] is sometimes employed on such wikis to process Recent Changes items. Server load can be reduced by sending a continuous feed of Recent Changes to an **IRC channel** that these tools can monitor, eliminating their need to send requests for a refreshed Recent Changes feed to the API. [34] [35]

Another important tool is watchlisting. Each logged-in user has a watchlist to which the user can add whatever pages he or she wishes. When an edit is made to one of those pages, a summary of that edit appears on the watchlist the next time it is refreshed. [36] As with the recent changes page, recent edits that appear on the watchlist contain clickable links for easy review of the article history and specific changes made.

There is also the capability to review all edits made by any particular user. In this way, if an edit is identified as problematic, it is possible to check the user's other edits for issues.

MediaWiki allows one to link to specific versions of articles. This has been useful to the scientific community, in that expert peer reviewers could analyse articles, improve them and provide links to the trusted version of that article. [37]

## Navigation

[edit]



## Wikilinks

[\[edit\]](#)

Navigation through the wiki is largely through internal wikilinks. MediaWiki's wikilinks implement page existence detection, in which a link is colored blue if the target page exists on the local wiki and red if it does not. If a user clicks on a red link, they are prompted to create an article with that title. Page existence detection makes it practical for users to create "wikified" articles—that is, articles containing links to other pertinent subjects—without those other articles being yet in existence.

## Interwiki links

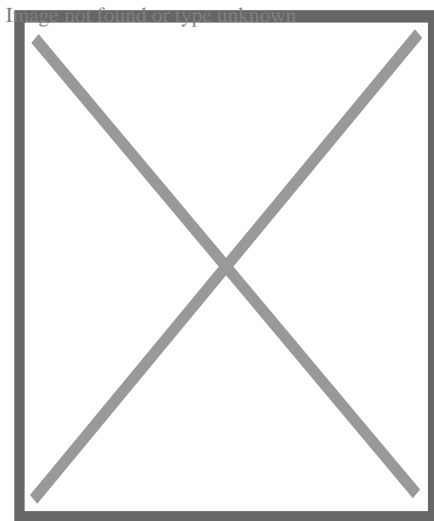
[\[edit\]](#)

"Inter-wiki link" redirects here. For help with interwiki linking on Wikipedia, see [Help:Interwiki linking](#).

Interwiki links function much the same way as namespaces. A set of interwiki prefixes can be configured to cause, for instance, a page title of wikiquote:Jimbo Wales to direct the user to the Jimbo Wales article on [Wikiquote](#).<sup>[38]</sup> Unlike internal wikilinks, interwiki links lack page existence detection functionality, and accordingly there is no way to tell whether a blue interwiki link is broken or not.

## Interlanguage links

[\[edit\]](#)



An example of interlanguage links

Interlanguage links are the small navigation links that show up in the sidebar in most MediaWiki skins that connect an article with related articles in other languages within the same Wiki family. This can provide language-specific communities connected by a larger context, with all wikis on the same server or each on its own server.[39]

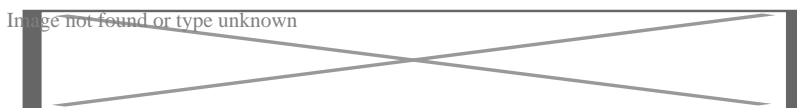
Previously, Wikipedia used interlanguage links to link an article to other articles on the same topic in other editions of Wikipedia. This was superseded by the launch of Wikidata.[40]

## Content organization

[edit]

## Page tabs and associated pages

[edit]



MediaWiki page tabs, using the "Vector 2010" skin. The red coloration of the "discussion" tab indicates that the article does not yet have a talk page. As with any other red wikilink, clicking on it prompts the user to create the page.

Page tabs are displayed at the top of pages. These tabs allow users to perform actions or view pages that are related to the current page. The available default actions include viewing, editing, and discussing the current page. The specific tabs displayed depend on whether the user is logged into the wiki and whether the user has sysop privileges on the wiki. For instance, the ability to move a page or add it to one's watchlist is usually restricted to logged-in users. The site administrator can add or remove tabs by using JavaScript or installing extensions.[41]

Each page has an associated history page from which the user can access every version of the page that has ever existed and generate **diffs** between two versions of his choice. Users' contributions are displayed not only here, but also via a "user contributions" option on a sidebar. In a 2004 article, Carl Challborn and Teresa Reimann noted that "While this feature may be a slight deviation from the collaborative, 'ego-less' spirit of wiki purists, it can be very useful for educators who need to assess the contribution and participation of individual student users." [42]

## Namespaces

[edit]

"Talk page" redirects here. For talk pages on Wikipedia, see [Help:Talk pages](#).

MediaWiki provides many features beyond [hyperlinks](#) for structuring content. One of the earliest such features is [namespaces](#). One of Wikipedia's earliest problems had been the separation of encyclopedic content from pages pertaining to maintenance and communal discussion, as well as personal pages about encyclopedia editors. Namespaces are prefixes before a page title (such as "User:" or "Talk:") that serve as descriptors for the page's purpose and allow multiple pages with different functions to exist under the same title. For instance, a page titled "[[The Terminator]]", in the default namespace, could describe [the 1984 movie](#) starring [Arnold Schwarzenegger](#), while a page titled "[[User:The Terminator]]" could be a profile describing a user who chooses this name as a pseudonym. More commonly, each namespace has an associated "Talk:" namespace, which can be used to discuss its contents, such as "User talk:" or "Template talk:". The purpose of having discussion pages is to allow content to be separated from discussion surrounding the content.<sup>[43][44]</sup>

Namespaces can be viewed as [folders](#) that separate different basic types of information or functionality. Custom namespaces can be added by the site administrators. There are 16 namespaces by default for content, with 2 "pseudo-namespaces" used for dynamically generated "Special:" pages and links to media files. Each namespace on MediaWiki is numbered: content page namespaces have even numbers and their associated talk page namespaces have odd numbers.<sup>[45]</sup>

## Category tags

[\[edit\]](#)

Users can create new categories and add pages and files to those categories by appending one or more category tags to the content text. Adding these tags creates links at the bottom of the page that take the reader to the list of all pages in that category, making it easy to browse related articles.<sup>[46]</sup> The use of categorization to organize content has been described as a combination of:

- [Collaborative tagging systems](#) like [del.icio.us](#) and
- [Hierarchical classifications](#) like the [Dewey Decimal Classification](#).<sup>[47]</sup>

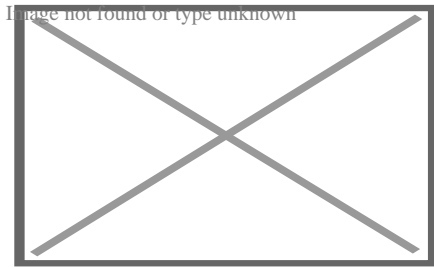
## Subpages

[\[edit\]](#)

In addition to namespaces, content can be ordered using *subpages*. This simple feature provides automatic [breadcrumbs](#) of the pattern [[Page title/Subpage title]] from the page after the slash (in this case, "Subpage title") to the page before the slash (in this case, "Page title").

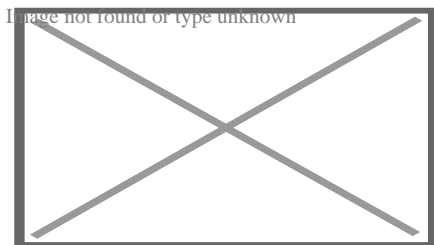
## Customization

[\[edit\]](#)



Users can configure custom **JavaScript** that is executed on every pageview. This has led to JavaScript tools that users can "install", the "navigation popups" tool shown here displays a small preview of an article when hovering over a link title.

If the feature is enabled, users can customize their stylesheets and configure **client-side JavaScript** to be executed with every pageview. On Wikipedia, this has led to a large number of additional tools and helpers developed through the wiki and shared among users. For instance, *navigation popups* is a custom JavaScript tool that shows previews of articles when the user hovers over links and also provides shortcuts for common maintenance tasks.<sup>[48]</sup>



A **screenshot** of a wiki using MediaWiki with a customized skin

The entire MediaWiki user interface can be edited through the wiki itself by users with the necessary permissions (typically called "administrators"). This is done through a special namespace with the prefix "MediaWiki:", where each page title identifies a particular user interface message. Using an extension,<sup>[49]</sup> it is also possible for a user to create personal scripts, and to choose whether certain sitewide scripts should apply to them by toggling the appropriate options in the user preferences page.

## Templates

[\[edit\]](#)

The "MediaWiki:" namespace was originally also used for creating custom text blocks that could then be dynamically loaded into other pages using a special syntax. This content was later moved into its own namespace, "Template:".



Templates are text blocks that can be dynamically loaded inside another page whenever that page is requested. The template is a special link in double curly brackets (for example "Disputed"), which calls the template (in this case located at [Template:Disputed](#)) to load in place of the template call.

Templates are structured documents containing attribute–value pairs. They are defined with parameters, to which are assigned values when transcluded on an article page. The name of the parameter is delimited from the value by an equals sign. A class of templates known as infoboxes is used on Wikipedia to collect and present a subset of information about its subject, usually on the top (mobile view) or top right-hand corner (desktop view) of the document.

Pages in other namespaces can also be transcluded as templates. In particular, a page in the main namespace can be transcluded by prefixing its title with a colon; for example, [:MediaWiki](#) transcludes the article "MediaWiki" from the main namespace. Also, it is possible to mark the portions of a page that should be transcluded in several ways, the most basic of which are:[\[50\]](#)

- `<noinclude>...</noinclude>`, which marks content that is not to be transcluded;
- `<includeonly>...</includeonly>`, which marks content that is not rendered unless it is transcluded;
- `<onlyinclude>...</onlyinclude>`, which marks content that is to be the *only* content transcluded.

A related method, called template *substitution* (called by adding `subst:` at the beginning of a template link) inserts the contents of the template into the target page (like a copy and paste operation), instead of loading the template contents dynamically whenever the page is loaded. This can lead to inconsistency when using templates, but may be useful in certain cases, and in most cases requires fewer server resources (the actual amount of savings can vary depending on wiki configuration and the complexity of the template).

Templates have found many different uses. Templates enable users to create complex table layouts that are used consistently across multiple pages, and where only the content of the tables gets inserted using template parameters. Templates are frequently used to identify problems with a Wikipedia article by putting a template in the article. This template then outputs a graphical box stating that the article content is disputed or in need of some other attention, and also categorize it so that articles of this nature can be located. Templates are also used on user pages to send users standard messages welcoming them to the site,[\[51\]](#) giving them awards for outstanding contributions,[\[52\]](#)[\[53\]](#) warning them when their behavior is considered inappropriate,[\[54\]](#) notifying them when they are blocked from editing,[\[55\]](#) and so on.

## Groups and restriction of access

[\[edit\]](#)

MediaWiki offers flexibility in creating and defining user groups. For instance, it would be possible to create an arbitrary "ninja" group that can block users and delete pages, and whose edits are hidden by default in the recent changes log. It is also possible to set up a group of "autoconfirmed" users that one becomes a member of after making a certain number of edits and waiting a certain number of days.[56] Some groups that are enabled by default are bureaucrats and sysops. Bureaucrats have the power to change other users' rights. Sysops have power over page protection and **deletion** and the blocking of users from editing. MediaWiki's available controls on editing rights have been deemed sufficient for publishing and maintaining important documents such as a manual of **standard operating procedures** in a hospital.[57]

MediaWiki comes with a basic set of features related to restricting access, but its original and ongoing design is driven by functions that largely relate to content, not content segregation. As a result, with minimal exceptions (related to specific tools and their related "Special" pages), page access control has never been a high priority in core development and developers have stated that users requiring secure user access and authorization controls should not rely on MediaWiki, since it was never designed for these kinds of situations. For instance, it is extremely difficult to create a wiki where only certain users can read and access some pages.[58] Here, wiki engines like **Foswiki**, **MoinMoin** and **Confluence** provide more flexibility by supporting advanced security mechanisms like **access control lists**.

## Extensibility

[edit]

The MediaWiki codebase contains various **hooks** using **callback functions** to add additional PHP code in an **extensible** way. This allows developers to write extensions without necessarily needing to modify the core or having to submit their code for review. Installing an extension typically consists of adding a line to the configuration file, though in some cases additional changes such as database updates or core patches are required.

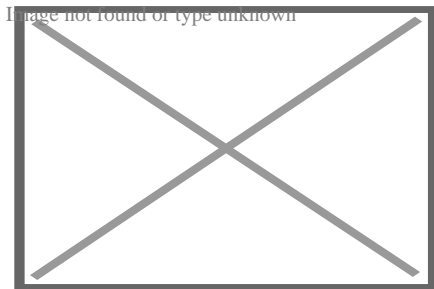
Five main extension points were created to allow developers to add features and functionalities to MediaWiki. Hooks are run every time a certain event happens; for instance, the ArticleSaveComplete hook occurs after a save article request has been processed.[59] This can be used, for example, by an extension that notifies selected users whenever a page edit occurs on the wiki from new or anonymous users.[60] New tags can be created to process data with opening and closing tags (<newtag>...</newtag>).[61] Parser functions can be used to create a new command (...).[62] New special pages can be created to perform a specific function. These pages are dynamically generated. For example, a special page might show all pages that have one or more links to an external site or it might create a form providing user submitted feedback.[63] **Skins** allow users to customize the look and feel of MediaWiki.[64] A minor extension point allows the use of **Amazon S3** to host image files.[65]

## Extensions

[\[edit\]](#)

## Text manipulation

[\[edit\]](#)



Tim Starling in 2008

Among the most popular extensions is a parser function extension, ParserFunctions, which allows different content to be rendered based on the result of [conditional statements](#).[\[66\]](#) These conditional statements can perform functions such as evaluating whether a parameter is empty, comparing strings, evaluating mathematical expressions, and returning one of two values depending on whether a page exists. It was designed as a replacement for a notoriously inefficient template called Qif.[\[67\]](#) Schindler recounts the history of the ParserFunctions extension as follows:[\[68\]](#)

In 2006 some Wikipedians discovered that through an intricate and complicated interplay of templating features and CSS they could create conditional wiki text, i.e. text that was displayed if a template parameter had a specific value. This included repeated calls of templates within templates, which bogged down the performance of the whole system. The developers faced the choice of either disallowing the spreading of an obviously desired feature by detecting such usage and explicitly disallowing it within the software or offering an efficient alternative. The latter was done by Tim Starling, who announced the introduction of parser functions, wiki text that calls functions implemented in the underlying software. At first, only conditional text and the computation of simple mathematical expressions were implemented, but this already increased the possibilities for wiki editors enormously. With time further parser functions were introduced, finally leading to a framework that allowed the simple writing of extension functions to add arbitrary functionalities, like e.g. geo-coding services or widgets. This time the developers were clearly reacting to the demand of the community, being forced either to fight the solution of the issue that the community had (i.e. conditional text), or offer an improved technical implementation to replace the previous practice and achieve an overall better performance.

Another parser functions extension, StringFunctions, was developed to allow evaluation of string length, string position, and so on. Wikimedia communities, having created awkward workarounds to accomplish the same functionality,[69] clamored for it to be enabled on their projects.[70] Much of its functionality was eventually integrated into the ParserFunctions extension,[71] albeit disabled by default and accompanied by a warning from Tim Starling that enabling string functions would allow users "to implement their own parsers in the ugliest, most inefficient programming language known to man: MediaWiki wikitext with ParserFunctions." [72]

Since 2012 an extension, Scribunto, has existed that allows for the creation of "modules"—wiki pages written in the scripting language **Lua**—which can then be run within templates and standard wiki pages. Scribunto has been installed on Wikipedia and other Wikimedia sites since 2013 and is used heavily on those sites. Scribunto code runs significantly faster than corresponding wikitext code using ParserFunctions.[73]

## For footnotes and academic-related display

[[edit](#)]

Another very popular extension is a citation extension that enables footnotes to be added to pages using inline references.[74] This extension has, however, been criticized for being difficult to use and requiring the user to memorize complex syntax. A gadget called **RefToolbar** attempts to make it easier to create citations using common templates. MediaWiki has some extensions that are well-suited for academia, such as mathematics extensions[75] and an extension that allows molecules to be rendered in **3D**. [76]

## Integration

[[edit](#)]

A generic Widgets extension exists that allows MediaWiki to integrate with virtually anything. Other examples of extensions that could improve a wiki are category suggestion extensions[77] and extensions for inclusion of **Flash Videos**, [78] YouTube videos, [79] and **RSS feeds**. [80] **Metavid**, a site that archives video footage of the **U.S. Senate** and **House** floor proceedings, was created using code extending MediaWiki into the domain of collaborative video authoring. [81]

## Combating linkspam

[[edit](#)]

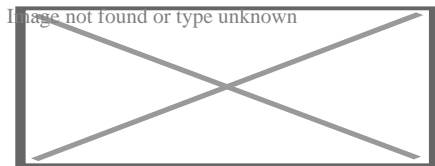
There are many **spambots** that search the web for MediaWiki installations and add **linkspam** to them, despite the fact that MediaWiki uses the **nofollow** attribute to discourage such attempts



at [search engine optimization](#).<sup>[82]</sup> Part of the problem is that third party republishers, such as [mirrors](#), may not independently implement the nofollow tag on their websites, so marketers can still get [PageRank](#) benefit by inserting links into pages when those entries appear on third party websites.<sup>[83]</sup> [Anti-spam](#) extensions have been developed to combat the problem by introducing [CAPTCHAs](#),<sup>[84]</sup> [blacklisting](#) certain URLs,<sup>[85]</sup> and allowing bulk deletion of pages recently added by a particular user.<sup>[86]</sup>

## Searches and queries

[\[edit\]](#)



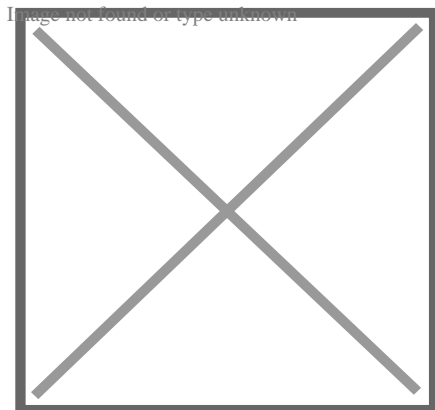
A search box showing a [drop-down list](#)

MediaWiki comes pre-installed with a standard text-based search. Extensions exist to let MediaWiki use more sophisticated third-party search engines, including [Elasticsearch](#) (which since 2014 has been in use on Wikipedia), [Lucene](#)<sup>[87]</sup> and [Sphinx](#).<sup>[88]</sup>

Various MediaWiki extensions have also been created to allow for more complex, [faceted search](#), on both data entered within the wiki and on [metadata](#) such as pages' revision history.<sup>[89][90]</sup> [Semantic MediaWiki](#) is one such extension.<sup>[91][92]</sup>

## Rich content

[\[edit\]](#)



[Images](#) can be arranged in galleries, a feature that is used extensively for Wikimedia's media archive, [Wikimedia Commons](#).

Various extensions to MediaWiki support [rich content](#) generated through specialized syntax. These include mathematical formulas using [LaTeX](#), graphical timelines over mathematical

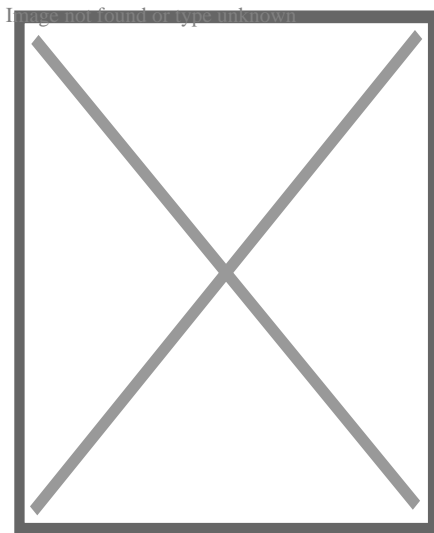
plotting, musical scores and Egyptian hieroglyphs.

The software supports a wide variety of uploaded media files, and allows image galleries and thumbnails to be generated with relative ease. There is also support for Exif metadata. MediaWiki operates the Wikimedia Commons, one of the largest free content media archives.

For WYSIWYG editing, VisualEditor is available to use in MediaWiki which simplifying editing process for editors and has been bundled since MediaWiki 1.35.[93] Other extensions exist for handling WYSIWYG editing to different degrees.[94]

## Database

[edit]



A schematic of the MediaWiki database structure

MediaWiki can use either the MySQL/MariaDB, PostgreSQL or SQLite relational database management system. Support for Oracle Database and Microsoft SQL Server has been dropped since MediaWiki 1.34.[95] A MediaWiki database contains several dozen tables, including a page table that contains page titles, page ids, and other metadata;[96] and a revision table to which is added a new row every time an edit is made, containing the page id, a brief textual summary of the change performed, the user name of the article editor (or its IP address the case of an unregistered user) and a timestamp.[97][98]

In a 4½ year period prior to 2008, the MediaWiki database had 170 schema versions.[99] Possibly the largest schema change was done in 2005 with MediaWiki 1.5, when the storage of metadata was separated from that of content, to improve performance flexibility. When this upgrade was applied to Wikipedia, the site was locked for editing, and the schema was converted to the new version in about 22 hours. Some software enhancement proposals, such as a proposal to allow sections of articles to be watched via watchlist, have been rejected because the necessary schema changes would have required excessive Wikipedia downtime.[

## Performance and storage

[edit]

Because it is used to run one of the highest-traffic sites on the Web, Wikipedia, MediaWiki's performance and **scalability** have been highly optimized.[101] MediaWiki supports **Squid**, **load-balanced** database replication, client-side caching, **memcached** or table-based caching for frequently accessed processing of query results, a simple static file cache, feature-reduced operation, revision compression, and a job queue for database operations. MediaWiki developers have attempted to optimize the software by avoiding expensive algorithms, database queries, etc., caching every result that is expensive and has temporal locality of reference, and focusing on the hot spots in the code through **profiling**. [102]

MediaWiki code is designed to allow for data to be written to a read-write database and read from read-only databases, although the read-write database can be used for some read operations if the read-only databases are not yet up to date. **Metadata**, such as article revision history, article relations (links, categories etc.), user accounts and settings can be stored in core databases and cached; the actual revision text, being more rarely used, can be stored as append-only **blobs** in external storage. The software is suitable for the operation of large-scale **wiki farms** such as **Wikimedia**, which had about 800 wikis as of August 2011. However, MediaWiki comes with no built-in GUI to manage such installations.

Empirical evidence shows most revisions in MediaWiki databases tend to differ only slightly from previous revisions. Therefore, subsequent revisions of an article can be concatenated and then compressed, achieving very high **data compression ratios** of up to 100x.[102]

For more information on the architecture, such as how it stores wikitext and assembles a page, see **External links**.

## Limitations

[edit]

The parser serves as the *de facto* standard for the MediaWiki syntax, as no formal syntax has been defined. Due to this lack of a formal definition, it has been difficult to create **WYSIWYG** editors for MediaWiki, although several WYSIWYG extensions do exist, including the popular **VisualEditor**.

MediaWiki is not designed to be a suitable replacement for dedicated **online forum** or blogging software,[103] although extensions do exist to allow for both of these.[104][105]

It is common for new MediaWiki users to make certain mistakes, such as forgetting to sign posts with four tildes (~~~~),<sup>[106]</sup> or manually entering a plaintext signature,<sup>[107]</sup> due to unfamiliarity with the idiosyncratic particulars involved in communication on MediaWiki discussion pages. On the other hand, the format of these discussion pages has been cited as a strength by one educator, who stated that it provides more fine-grain capabilities for discussion than traditional threaded discussion forums. For example, instead of 'replying' to an entire message, the participant in a discussion can create a hyperlink to a new wiki page on any word from the original page. Discussions are easier to follow since the content is available via hyperlinked wiki page, rather than a series of reply messages on a traditional threaded discussion forum. However, except in few cases, students were not using this capability, possibly because of their familiarity with the traditional linear discussion style and a lack of guidance on how to make the content more 'link-rich'.<sup>[108]</sup>

MediaWiki by default has little support for the creation of dynamically assembled documents, or pages that aggregate data from other pages. Some research has been done on enabling such features directly within MediaWiki.<sup>[109]</sup> The **Semantic MediaWiki** extension provides these features. It is not in use on Wikipedia, but in more than 1,600 other MediaWiki installations.<sup>[110]</sup> The Wikibase Repository and Wikibase Repository client are however implemented in **Wikidata** and **Wikipedia** respectively, and to some extent provides **semantic web** features, and linking of centrally stored data to infoboxes in various Wikipedia articles.

Upgrading MediaWiki is usually fully automated, requiring no changes to the site content or template programming. Historically troubles have been encountered when upgrading from significantly older versions.<sup>[111]</sup>

## Security

<sup>[edit]</sup>

MediaWiki developers have enacted security standards, both for core code and extensions.<sup>[112]</sup> **SQL queries** and HTML output are usually done through wrapper functions that handle validation, escaping, filtering for prevention of **cross-site scripting** and **SQL injection**.<sup>[113]</sup> Many security issues have had to be patched after a MediaWiki version release,<sup>[114]</sup> and accordingly MediaWiki.org states, "The most important security step you can take is to keep your software up to date" by subscribing to the announcement **mailing list** and installing security updates that are announced.<sup>[115]</sup>

## Support

<sup>[edit]</sup>

Support for MediaWiki users consists of:

- MediaWiki.org, including the Support Desk.

- An official mailing list, Mediawiki-l.
- Several books have been written about MediaWiki administration,[116] including some free online books.[117][118]

## License

[edit]

MediaWiki is free and open-source and is distributed under the terms of the [GNU General Public License](#) version 2 or any later version. Its documentation, located at its official website at [www.mediawiki.org](http://www.mediawiki.org), is released under the [Creative Commons BY-SA 4.0](#) license, with a set of help pages intended to be freely copied into fresh wiki installations and/or distributed with MediaWiki software in the [public domain](#) instead to eliminate legal issues for wikis with other licenses.[119][120] MediaWiki's development has generally favored the use of [open-source media formats](#). [121]

## Development

[edit]

MediaWiki has an active volunteer community for development and maintenance. MediaWiki developers are spread around the world, though with a majority in the United States and Europe. Face-to-face meetings and programming sessions for MediaWiki developers have been held once or several times a year since 2004.[122]

Anyone can submit [patches](#) to the project's [Git/Gerrit repository](#). [123] There are also paid programmers who primarily develop projects for the [Wikimedia Foundation](#). MediaWiki developers participate in the [Google Summer of Code](#) by facilitating the assignment of mentors to students wishing to work on MediaWiki core and extension projects.[124] During the year prior to November 2012, there were about two hundred developers who had committed changes to the MediaWiki core or extensions.[125] Major MediaWiki releases are generated approximately every six months by taking snapshots of the development branch, which is kept continuously in a runnable state; [126] [minor releases](#), or [point releases](#), are issued as needed to correct [bugs](#) (especially security problems). MediaWiki is developed on a [continuous integration](#) development model, in which software changes are pushed live to Wikimedia sites on regular basis.[126] MediaWiki also has a public [bug](#) tracker, *phabricator.wikimedia.org*, which runs [Phabricator](#). The site is also used for [feature](#) and [enhancement](#) requests.

## History

[edit]





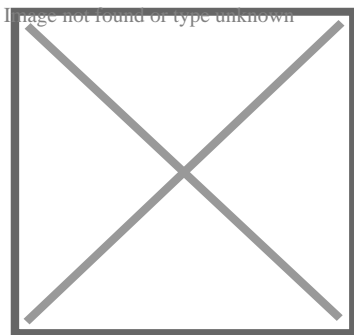
## Magnus Manske in 2012

When Wikipedia was launched in January 2001, it ran on an existing **wiki software** system, **UseModWiki**. UseModWiki is written in the **Perl** programming language, and stores all wiki pages in text (**.txt**) files. This software soon proved to be limiting, in both functionality and performance. In mid-2001, **Magnus Manske**—a developer and student at the **University of Cologne**, as well as a **Wikipedia editor**—began working on new software that would replace UseModWiki, specifically designed for use by Wikipedia. This software was written in the **PHP** scripting language, and stored all of its information in a **MySQL** database. The new software was largely developed by August 24, 2001, and a test wiki for it was established shortly thereafter.

The first full implementation of this software was the new **Meta Wikipedia** on November 9, 2001. There was a desire to have it implemented immediately on the English-language Wikipedia.<sup>[127]</sup> However, Manske was apprehensive about any potential **bugs** harming the nascent website during the period of the final exams he had to complete immediately prior to Christmas;<sup>[128]</sup> this led to the launch on the English-language Wikipedia being delayed until January 25, 2002. The software was then, gradually, deployed on all the Wikipedia language sites of that time. This software was referred to as "the PHP script" and as "phase II", with the name "phase I", retroactively given to the use of UseModWiki.

Increasing usage soon caused load problems to arise again, and soon after, another rewrite of the software began; this time being done by **Lee Daniel Crocker**, which became known as "phase III". This new software was also written in PHP, with a MySQL backend, and kept the basic interface of the phase II software, but with the added functionality of a wider **scalability**. The "phase III" software went live on Wikipedia in July 2002.

The **Wikimedia Foundation** was announced on June 20, 2003. In July, Wikipedia contributor Daniel Mayer suggested the name "MediaWiki" for the software, as a play on "Wikimedia".<sup>[129]</sup> The MediaWiki name was gradually phased in, beginning in August 2003. The name has frequently caused confusion due to its (intentional) similarity to the "Wikimedia" name (which itself is similar to "Wikipedia").<sup>[130]</sup> The first version of MediaWiki, 1.1, was released in December 2003.



MediaWiki logo until April 1, 2021

The old **product logo** was created by **Erik Möller**, using a flower photograph taken by **Florence Nibart-Devouard**, and was originally submitted to the logo contest for a new **Wikipedia logo**, held from July 20 to August 27, 2003.<sup>[131][132]</sup> The logo came in third place, and was chosen to represent MediaWiki rather than Wikipedia, with the second place logo being used for the Wikimedia Foundation.<sup>[133]</sup> The double square brackets (**[[** **]]**) symbolize the **syntax** MediaWiki uses for creating **hyperlinks** to other wiki pages; while the **sunflower** represents the diversity of content on Wikipedia, its constant growth, and the wilderness.<sup>[134]</sup>

Later, Brooke Vibber, the **chief technical officer** of the **Wikimedia Foundation**,<sup>[135]</sup> took up the role of **release manager**.<sup>[136][101]</sup>

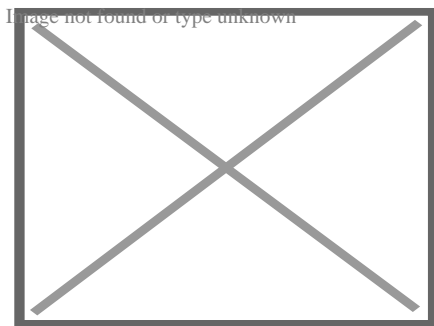
Major milestones in MediaWiki's development have included: the **categorization system** (2004); **parser** functions, (2006); **Flagged Revisions**, (2008);<sup>[68]</sup> the "**ResourceLoader**", a delivery system for **CSS** and JavaScript (2011);<sup>[137]</sup> and the **VisualEditor**, a "what you see is what you get" (**WYSIWYG**) editing platform (2013).<sup>[138]</sup>

The contest of designing a new logo was initiated on June 22, 2020, as the old logo was a bitmap image and had "high details", leading to problems when rendering at high and low resolutions, respectively. After two rounds of voting, the new and current MediaWiki logo designed by **Serhio Magpie** was selected on October 24, 2020, and officially adopted on April 1, 2021.<sup>[139]</sup>

## Sites using MediaWiki

**[edit]**

See also: **Category:MediaWiki websites**



**Fandom** also makes use of MediaWiki.

MediaWiki's most famous use has been in **Wikipedia** and, to a lesser degree, the Wikimedia Foundation's other projects. **Fandom**, a **wiki hosting service** formerly known as Wikia, runs on MediaWiki. Other public wikis that run on MediaWiki include **wikiHow** and **SNPedia**. **WikiLeaks** began as a MediaWiki-based site, but is no longer a wiki.

A number of alternative wiki encyclopedias to Wikipedia run on MediaWiki, including **Citizendium**, **Metapedia**, **Scholarpedia** and **Conservapedia**. MediaWiki is also used internally by a large number of companies, including **Novell** and **Intel**.<sup>[140][141]</sup>

Notable usages of MediaWiki within governments include [Intellipedia](#), used by the [United States Intelligence Community](#), [Diplopedia](#), used by the [United States Department of State](#), and [milWiki](#), a part of [milSuite](#) used by the [United States Department of Defense](#). [United Nations agencies](#) such as the [United Nations Development Programme](#) and [INSTRAW](#) chose to implement their wikis using MediaWiki, because "this software runs Wikipedia and is therefore guaranteed to be thoroughly tested, will continue to be developed well into the future, and future technicians on these wikis will be more likely to have exposure to MediaWiki than any other wiki software."<sup>[142]</sup>

The [Free Software Foundation](#) uses MediaWiki to implement the [LibrePlanet](#) site.<sup>[143]</sup>

## Comparison to other online collaboration software

[\[edit\]](#)

Main article: [Comparison of wiki software](#)

Users of online [collaboration software](#) are familiar with MediaWiki's functions and layout due to its noted use on Wikipedia. A 2006 overview of social software in academia observed that "Compared to other wikis, MediaWiki is also fairly aesthetically pleasing, though simple, and has an easily customized side menu and [stylesheet](#)."<sup>[144]</sup> However, in one assessment in 2006, [Confluence](#) was deemed to be a superior product due to its very usable API and ability to better support multiple wikis.<sup>[76]</sup>


A 2009 study at the [University of Hong Kong](#) compared [TWiki](#) to MediaWiki. The authors noted that TWiki has been considered as a collaborative tool for the development of educational papers and technical projects, whereas MediaWiki's most noted use is on Wikipedia. Although both platforms allow discussion and tracking of progress, TWiki has a "Report" part that MediaWiki lacks. Students perceived MediaWiki as being easier to use and more enjoyable than TWiki. When asked whether they recommended using MediaWiki for [knowledge management](#) course group project, 15 out of 16 respondents expressed their preference for MediaWiki giving answers of great certainty, such as "of course", "for sure".<sup>[145]</sup> TWiki and MediaWiki both have flexible plug-in architecture.<sup>[146]</sup>

A 2009 study that compared students' experience with MediaWiki to that with [Google Docs](#) found that students gave the latter a much higher rating on user-friendly layout.<sup>[147]</sup>

A 2021 study conducted by the [Brazilian Nuclear Engineering Institute](#) compared a MediaWiki-based [knowledge management system](#) against two others that were based on [DSpace](#) and [Open Journal Systems](#), respectively.<sup>[148]</sup> It highlighted ease of use as an advantage of the MediaWiki-based system, noting that because the Wikimedia Foundation had been developing MediaWiki for a site aimed at the general public (Wikipedia), "its user interface was designed to be more user-friendly from start, and has received large user feedback over a long time", in contrast to DSpace's and OJS's focus on niche audiences.<sup>[148]</sup>

## See also

[[edit](#)]

-  [Free and open-source software portal](#)
- [List of content management systems](#)
- [List of wiki software](#)
- [BlueSpice](#)
- [Semantic MediaWiki](#)
- [XOWA](#) – for viewing Wikipedia and other wikis offline
- [PHP](#) – a programming language that powers MediaWiki

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## External links

[[edit](#)]

## MediaWiki at Wikipedia's sister projects

-  [Definitions](#) from Wiktionary
-  [Media](#) from Commons
-  [Quotations](#) from Wikiquote
-  [Textbooks](#) from Wikibooks
-  [Resources](#) from Wikiversity
-  [Data](#) from Wikidata
-  [Discussions](#) from Meta-Wiki
-  [Documentation](#) from MediaWiki
- [MediaWiki homepage](#)  [Edit this at Wikidata](#)
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- [t](#)
- [e](#)

Wikipedia

## Overview (outline)

- Biases
  - gender
  - geographical
  - ideological
  - racial
- Censorship
- Conflict-of-interest editing
  - political editing incidents
- Criticism
- Deletion of articles
  - deletionism and inclusionism
  - notability
- Disputes
- "Ignore all rules"
- MediaWiki
- Plagiarism
- Predictions of the project's end
- Reliability
  - Fact-checking
  - *Citation needed*
- Vandalism

- Administrators
- AfroCrowd
- Arbitration Committee
- Art+Feminism
- Bots
  - Lsjbot
- Edit count
- List of Wikipedias
- *The Signpost*
- Wikimedian of the Year
- Wikipedia in residence
- WikiProject
- Women in Red

## Events

- Edit-a-thon
- WikiConference India
- Wiki Indaba
- WikiConference North America
- Wikimania

## Wiki Loves

- Earth
- Folklore
- Monuments
- Pride
- Science

## Community (Wikipedians)

## People (list)

- Esra'a Al Shafei
- Lee Daniel Crocker
- Florence Devouard
- Sue Gardner
- David Gerard
- James Heilman
- Maryana Iskander
- Dariusz Jemielniak
- Rebecca MacKinnon
- Katherine Maher
- Magnus Manske
- Erik Möller
- Jason Moore
- Raju Narisetti
- Steven Pruitt
- Annie Rauwerda
- Larry Sanger
- María Sefidari

- Bomis
  - Nupedia
- First edit
- Logo
- Internet Watch Foundation
- Scientology
- Hillsborough disaster Wikipedia posts
- VisualEditor
- #1Lib1Ref
- Wikimedia Foundation actions
  - on the Chinese Wikipedia
    - 2021
  - against MENA Wikimedians
    - 2022

## History

## Controversies

- Alan MacMasters hoax
- Carlos Bandeirense Mirandópolis hoax
- Edit wars
- Essjay controversy
- Henryk Batuta hoax
- Jar'Edo Wens hoax
- Seigenthaler biography incident
- *Star Trek Into Darkness* debate
- United States congressional staff edits
- Weintraub controversy
- Zhemao hoaxes

## Coverage

- American politics
  - Donald Trump
- COVID-19 pandemic
- Death
- Israeli–Palestinian conflict
- Russian invasion of Ukraine

## Honors

- 274301 Wikipedia
- *Viola angustifolia*
- *Wikipedia Monument*



## References and analysis

- Academic studies
- Bibliography
- Cultural
- Films
- Listen to Wikipedia
- Wikipediocracy

## Mobile

- Apps
- QRpedia
- Wapedia
- Wikipedia Zero
- WikiReader
- Wikiwand

## Content use

- DBpedia
- Depths of Wikipedia
- Google and Wikipedia
- Health information
- Kiwix
- Science information
- Wikipedia-based education

## Related

- *The Iraq War: A Historiography of Wikipedia Changelogs*
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- People imprisoned for editing Wikipedia
- Print Wikipedia
- Wiki rabbit hole
- Wikimedia Foundation
- Wikimedia movement
- Wikipedia for World Heritage
- Wikipedia in India
- Wikiracing
- List of online encyclopedias
- List of wikis

○  **List**

○  **Category**

- **v**
- **t**
- **e**

## Wiki software

### **.NET**

- FlexWiki
- SharePoint

### **Java**

- Confluence
- Jive
- Traction TeamPage
- XWiki

### **JavaScript**

- TiddlyWiki
- Wiki.js

### **Perl**

- Foswiki
- ikiwiki
- TWiki
- UseModWiki
- WikiBase

### **PHP**

- BlueSpice
- BookStack
- DokuWiki
- MediaWiki
- PhpWiki
- Phriction
- PmWiki
- PukiWiki
- Tiki

## Python

- Allura
- Bloodhound
- Kallithea
- Kuma
- MoinMoin
- Trac
- Zim

## Ruby

- Gollum
- Redmine

## Other languages

- CLiki
  - Common Lisp
- Federated Wiki
  - CoffeeScript
  - Haskell

-  **Comparison**
-  **List**
-  **Category**

- **v**
- **t**
- **e**

Wikimedia Foundation

**Projects**    ○ Wikipedia community (Wikipedians)

**Current**

- Maryana Iskander
- Lisa Seitz-Gruwell
- Dariusz Jemielniak
- Rebecca MacKinnon
- Raju Narisetti
- Rosie Stephenson-Goodknight
- Esra'a Al Shafei
- Jimmy Wales

**People**

- Hampton Lintorn-Catlin
- Danese Cooper
- Bishakha Datta
- Florence Devouard
- Oscar van Dillen
- Sue Gardner
- Arnon Geshuri
- Mike Godwin

**Past**

- Aaron Halfaker
- James Heilman
- Guy Kawasaki
- Patricio Lorente
- Katherine Maher
- Erik Möller
- Larry Sanger
- María Sefidari
- Lila Tretikov
- Luis Villa

## Projects

- Wikipedia
  - history
  - List of Wikipedias
  - Censorship of Wikipedia
- Wiktionary
- Wikimedia Commons
- Wikidata
- Wikiquote
- Wikibooks
- Wikisource
- Wikispecies
- Wikinews
- Wikiversity
- Wikivoyage
- Wikifunctions
  - Abstract Wikipedia

## Other

- Wikimedia movement
- List of Wikimedia chapters
  - Bangladesh
  - Deutschland
  - Israel
  - Polska
  - UK
  - Ukraine
- Wikimania
- Wiki Indaba
- WikiConference India
- WikiConference North America
- MediaWiki
- Litigation
  - Monkey selfie copyright dispute
  - *Wikimedia Foundation v. NSA*
- Knowledge Engine

**Related**

- *The Signpost*
- *Wikipedia Monument*
- Wikimedian of the Year
- Tides Foundation
- Artificial intelligence in Wikimedia projects
- Google and Wikipedia
- Wikipedia for World Heritage

**Authority control databases** Image not found or type unknown [Edit this at Wikidata](#)

**International**

- VIAF
- FAST

**National**

- Germany
- United States
- France
- BnF data
- Israel

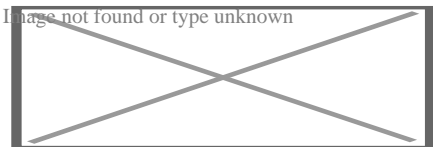
**Other**

- IdRef

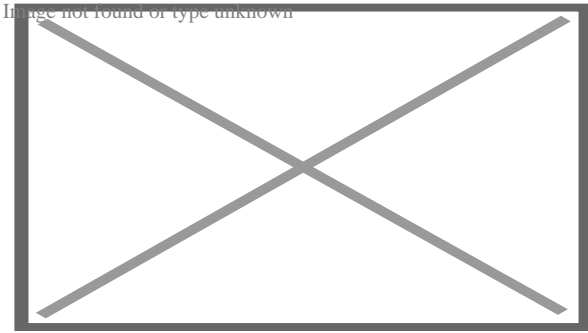
**About Google Search**

"Google.com" redirects here. For the company itself, see [Google](#).

## Google Search







Google Search on desktop

<b>Type of site</b>	Web search engine
<b>Available in</b>	149 languages
<b>Owner</b>	Google
<b>Revenue</b>	Google Ads
<b>URL</b>	google.com <small>Image not found, or type unknown</small>
<b>IPv6 support</b>	Yes[1]
<b>Commercial</b>	Yes
<b>Registration</b>	Optional
<b>Launched</b>	<ul style="list-style-type: none"><li>○ 1995; 30 years ago (first prototype)</li><li>○ 1997; 28 years ago (final launch)</li></ul>
<b>Current status</b>	Online
<b>Written in</b>	<ul style="list-style-type: none"><li>○ Python</li><li>○ C</li><li>○ C++[2]</li></ul>

**Google Search** (also known simply as **Google** or **Google.com**) is a **search engine** operated by **Google**. It allows users to search for information on the **Web** by entering keywords or phrases. Google Search uses **algorithms** to analyze and rank **websites** based on their relevance to the search query. It is the most popular search engine worldwide.

Google Search is the **most-visited website in the world**. As of 2020, Google Search has a 92% share of the global search engine market.[3] Approximately 26.75% of Google's monthly global traffic comes from the **United States**, 4.44% from **India**, 4.4% from **Brazil**, 3.92% from the **United Kingdom** and 3.84% from **Japan** according to data provided by **Similarweb**. [4]

The order of search results returned by Google is based, in part, on a priority rank system called "**PageRank**". Google Search also provides many different options for customized searches, using symbols to include, exclude, specify or require certain search behavior, and offers specialized interactive experiences, such as flight status and package tracking, weather

forecasts, currency, unit, and time conversions, word definitions, and more.

The main purpose of Google Search is to search for text in publicly accessible documents offered by web servers, as opposed to other data, such as [images](#) or [data contained in databases](#). It was originally developed in 1996 by [Larry Page](#), [Sergey Brin](#), and [Scott Hassan](#).<sup>[5][6][7]</sup> The search engine would also be set up in the garage of [Susan Wojcicki](#)'s [Menlo Park](#) home.<sup>[8]</sup> In 2011, Google introduced "[Google Voice Search](#)" to search for spoken, rather than typed, words.<sup>[9]</sup> In 2012, Google introduced a [semantic search](#) feature named [Knowledge Graph](#).

Analysis of the frequency of search terms may indicate economic, social and health trends.<sup>[10]</sup> Data about the frequency of use of search terms on Google can be [openly](#) inquired via [Google Trends](#) and [have been shown to correlate](#) with [flu](#) outbreaks and unemployment levels, and provide the information faster than traditional reporting methods and surveys. As of mid-2016, Google's search engine has begun to rely on [deep neural networks](#).<sup>[11]</sup>

In August 2024, a US judge in Virginia ruled that Google's search engine held an [illegal monopoly](#) over Internet search.<sup>[12][13]</sup> The court found that Google maintained its market dominance by paying large amounts to phone-makers and browser-developers to make Google its default search engine.<sup>[13]</sup>

## Search indexing

[\[edit\]](#)

See also: [Googlebot](#)

Google [indexes](#) hundreds of [terabytes](#) of information from [web pages](#).<sup>[14]</sup> For [websites](#) that are currently down or otherwise not available, Google provides links to [cached](#) versions of the site, formed by the search engine's latest indexing of that page.<sup>[15]</sup> Additionally, Google indexes some file types, being able to show users [PDFs](#), [Word documents](#), [Excel spreadsheets](#), [PowerPoint presentations](#), certain [Flash multimedia content](#), and [plain text](#) files.<sup>[16]</sup> Users can also activate "[SafeSearch](#)", a filtering technology aimed at preventing explicit and pornographic content from appearing in search results.<sup>[17]</sup>

Despite Google search's immense index, sources generally assume that Google is only indexing less than 5% of the total Internet, with the rest belonging to the [deep web](#), inaccessible through its search tools.<sup>[14][18][19]</sup>

In 2012, Google changed its search indexing tools to demote sites that had been accused of [piracy](#).<sup>[20]</sup> In October 2016, Gary Illyes, a webmaster trends analyst with Google, announced that the search engine would be making a separate, primary web index dedicated for mobile devices, with a secondary, less up-to-date index for desktop use. The change was a response to the continued growth in mobile usage, and a push for web developers to adopt a mobile-friendly version of their websites.<sup>[21][22]</sup> In December 2017, Google began rolling out the

change, having already done so for multiple websites.[23]

## "Caffeine" search architecture upgrade

[edit]

In August 2009, Google invited web developers to test a new search architecture, codenamed "Caffeine", and give their feedback. The new architecture provided no visual differences in the user interface, but added significant speed improvements and a new "under-the-hood" indexing infrastructure. The move was interpreted in some quarters as a response to Microsoft's recent release of an upgraded version of its own search service, renamed Bing, as well as the launch of Wolfram Alpha, a new search engine based on "computational knowledge".[24][25] Google announced completion of "Caffeine" on June 8, 2010, claiming 50% fresher results due to continuous updating of its index.[26]

With "Caffeine", Google moved its back-end indexing system away from MapReduce and onto Bigtable, the company's distributed database platform.[27][28]

## "Medic" search algorithm update

[edit]

In August 2018, Danny Sullivan from Google announced a broad core algorithm update. As per current analysis done by the industry leaders Search Engine Watch and Search Engine Land, the update was to drop down the medical and health-related websites that were not user friendly and were not providing good user experience. This is why the industry experts named it "Medic".[29]

Google reserves very high standards for YMYL (Your Money or Your Life) pages. This is because misinformation can affect users financially, physically, or emotionally. Therefore, the update targeted particularly those YMYL pages that have low-quality content and misinformation. This resulted in the algorithm targeting health and medical-related websites more than others. However, many other websites from other industries were also negatively affected.[30]

## Search results

[edit]

## Ranking of results

[edit]

By 2012, it handled more than 3.5 billion searches per day.[31] In 2013 the [European Commission](#) found that Google Search favored Google's own products, instead of the best result for consumers' needs.[32] In February 2015 Google announced a major change to its mobile search [algorithm](#) which would favor mobile friendly over other [websites](#). Nearly 60% of Google [searches](#) come from mobile phones. Google says it wants users to have access to premium quality [websites](#). Those websites which lack a mobile-friendly [interface](#) would be ranked lower and it is expected that this update will cause a shake-up of [ranks](#). Businesses who fail to update their [websites](#) accordingly could see a dip in their regular websites traffic.[33]

## PageRank

[[edit](#)]

Main article: [PageRank](#)

Google's rise was largely due to a patented [algorithm](#) called PageRank which helps rank web pages that match a given search string.[34] When Google was a Stanford research project, it was nicknamed [BackRub](#) because the technology checks [backlinks](#) to determine a site's importance. Other keyword-based methods to rank search results, used by many search engines that were once more popular than Google, would check how often the search terms occurred in a page, or how strongly associated the search terms were within each resulting page. The PageRank algorithm instead analyzes human-generated [links](#) assuming that web pages linked from many important pages are also important. The algorithm computes a [recursive](#) score for pages, based on the weighted sum of other pages linking to them. PageRank is thought to [correlate](#) well with human concepts of importance. In addition to PageRank, Google, over the years, has added many other secret criteria for determining the ranking of resulting pages. This is reported to comprise over 250 different indicators,[35][36] the specifics of which are kept secret to avoid difficulties created by scammers and help Google maintain an edge over its competitors globally.

PageRank was influenced by a similar page-ranking and site-scoring algorithm earlier used for [RankDex](#), developed by [Robin Li](#) in 1996. Larry Page's patent for PageRank filed in 1998 includes a citation to Li's earlier patent. Li later went on to create the Chinese search engine [Baidu](#) in 2000.[37][38]

In a potential hint of Google's future direction of their Search algorithm, Google's then chief executive [Eric Schmidt](#), said in a 2007 interview with the [Financial Times](#): "The goal is to enable Google users to be able to ask the question such as 'What shall I do tomorrow?' and 'What job shall I take?' ".[39] Schmidt reaffirmed this during a 2010 interview with [The Wall Street Journal](#): "I actually think most people don't want Google to answer their questions, they want Google to tell them what they should be doing next." [40]

## Google optimization

[[edit](#)]

Main article: [Search engine optimization](#)

Because Google is the most popular [search engine](#), many [webmasters](#) attempt to influence their website's Google rankings. An industry of consultants has arisen to help websites increase their rankings on Google and other search engines. This field, called search engine optimization, attempts to discern patterns in search engine listings, and then develop a methodology for improving rankings to draw more searchers to their clients' sites. Search engine optimization encompasses both "on page" factors (like body copy, title elements, H1 heading elements and image [alt attribute](#) values) and Off Page Optimization factors (like [anchor text](#) and PageRank). The general idea is to affect Google's relevance algorithm by incorporating the keywords being targeted in various places "on page", in particular the title element and the body copy (note: the higher up in the page, presumably the better its keyword prominence and thus the ranking). Too many occurrences of the keyword, however, cause the page to look suspect to Google's spam checking algorithms. Google has published guidelines for website owners who would like to raise their rankings when using legitimate optimization consultants.[41] It has been hypothesized, and, allegedly, is the opinion of the owner of one business about which there have been numerous complaints, that negative publicity, for example, numerous consumer complaints, may serve as well to elevate page rank on Google Search as favorable comments.[42] The particular problem addressed in [The New York Times](#) article, which involved [DecorMyEyes](#), was addressed shortly thereafter by an undisclosed fix in the Google algorithm. According to Google, it was not the frequently published consumer complaints about DecorMyEyes which resulted in the high ranking but mentions on news websites of events which affected the firm such as legal actions against it. [Google Search Console](#) helps to check for websites that use duplicate or copyright content.[43]

## "Hummingbird" search algorithm upgrade

[[edit](#)]

Main article: [Google Hummingbird](#)

In 2013, Google significantly upgraded its search algorithm with "Hummingbird". Its name was derived from the speed and accuracy of the [hummingbird](#).<sup>[44]</sup> The change was announced on September 26, 2013, having already been in use for a month.<sup>[45]</sup> "Hummingbird" places greater emphasis on [natural language](#) queries, considering context and meaning over individual keywords.<sup>[44]</sup> It also looks deeper at content on individual pages of a website, with improved ability to lead users directly to the most appropriate page rather than just a website's homepage.<sup>[46]</sup> The upgrade marked the most significant change to Google search in years, with more "human" search interactions<sup>[47]</sup> and a much heavier focus on conversation and meaning.<sup>[44]</sup> Thus, web developers and writers were encouraged to [optimize their sites](#) with natural writing rather than forced keywords, and make effective use of technical web development for on-site navigation.<sup>[48]</sup>

## Search results quality

[\[edit\]](#)

In 2023, drawing on internal Google documents disclosed as part of the [United States v. Google LLC \(2020\)](#) antitrust case, technology reporters claimed that Google Search was "bloated and overmonetized"[\[49\]](#) and that the "semantic matching" of search queries put advertising profits before quality.[\[50\]](#) *Wired* withdrew Megan Gray's piece after Google complained about alleged inaccuracies, while the author reiterated that «As stated in court, "A goal of Project Mercury was to increase commercial queries"».[\[51\]](#)

In March 2024, Google announced a significant update to its core search algorithm and spam targeting, which is expected to wipe out 40 percent of all spam results.[\[52\]](#) On March 20th, it was confirmed that the roll out of the spam update was complete.[\[53\]](#)

## Shopping search

[\[edit\]](#)

On September 10, 2024, the European-based [EU Court of Justice](#) found that Google held an illegal monopoly with the way the company showed favoritism to its shopping search, and could not avoid paying €2.4 billion.[\[54\]](#) The EU Court of Justice referred to Google's treatment of rival shopping searches as "discriminatory" and in violation of the [Digital Markets Act](#).[\[54\]](#)

## Interface

[\[edit\]](#)

## Page layout

[\[edit\]](#)

At the top of the search page, the approximate result count and the response time two digits behind decimal is noted. Of search results, page titles and URLs, dates, and a preview text snippet for each result appears. Along with web search results, sections with images, news, and videos may appear.[\[55\]](#) The length of the previewed text snippet was experimented with in 2015 and 2017.[\[56\]](#)[\[57\]](#)

## Universal search

[\[edit\]](#)



"Universal search" was launched by Google on May 16, 2007, as an idea that merged the results from different kinds of search types into one. Prior to Universal search, a standard Google search would consist of links only to websites. Universal search, however, incorporates a wide variety of sources, including websites, news, pictures, maps, blogs, videos, and more, all shown on the same search results page.<sup>[58][59]</sup> [Marissa Mayer](#), then-vice president of search products and user experience, described the goal of Universal search as "we're attempting to break down the walls that traditionally separated our various search properties and integrate the vast amounts of information available into one simple set of search results."<sup>[60]</sup>

In June 2017, Google expanded its search results to cover available job listings. The data is aggregated from various major job boards and collected by analyzing company homepages. Initially only available in English, the feature aims to simplify finding jobs suitable for each user.<sup>[61][62]</sup>

## Rich snippets

[\[edit\]](#)

In May 2009, Google announced that they would be parsing website [microformats](#) to populate search result pages with "Rich snippets". Such snippets include additional details about results, such as displaying reviews for restaurants and social media accounts for individuals.<sup>[63]</sup>

In May 2016, Google expanded on the "Rich snippets" format to offer "Rich cards", which, similarly to snippets, display more information about results, but shows them at the top of the mobile website in a swipeable carousel-like format.<sup>[64]</sup> Originally limited to movie and recipe websites in the United States only, the feature expanded to all countries globally in 2017.<sup>[65]</sup>

## Knowledge Graph

[\[edit\]](#)

Main article: [Knowledge Graph](#)

The Knowledge Graph is a knowledge base used by Google to enhance its search engine's results with information gathered from a variety of sources.<sup>[66]</sup> This information is presented to users in a box to the right of search results.<sup>[67]</sup> Knowledge Graph boxes were added to Google's search engine in May 2012,<sup>[66]</sup> starting in the United States, with international expansion by the end of the year.<sup>[68]</sup> The information covered by the Knowledge Graph grew significantly after launch, tripling its original size within seven months,<sup>[69]</sup> and being able to answer "roughly one-third" of the 100 billion monthly searches Google processed in May 2016.<sup>[70]</sup> The information is often used as a spoken answer in [Google Assistant](#)<sup>[71]</sup> and [Google Home](#) searches.<sup>[72]</sup> The Knowledge Graph has been criticized for providing answers without

source attribution.[70]

## Google Knowledge Panel

[edit]

A Google Knowledge Panel[73] is a feature integrated into Google search engine result pages, designed to present a structured overview of entities such as individuals, organizations, locations, or objects directly within the search interface. This feature leverages data from Google's Knowledge Graph,[74] a database that organizes and interconnects information about entities, enhancing the retrieval and presentation of relevant content to users.

The content within a Knowledge Panel[75] is derived from various sources, including Wikipedia and other structured databases, ensuring that the information displayed is both accurate and contextually relevant. For instance, querying a well-known public figure may trigger a Knowledge Panel displaying essential details such as biographical information, birthdate, and links to social media profiles or official websites.

The primary objective of the Google Knowledge Panel is to provide users with immediate, factual answers, reducing the need for extensive navigation across multiple web pages.

## Personal tab

[edit]

In May 2017, Google enabled a new "Personal" tab in Google Search, letting users search for content in their Google accounts' various services, including email messages from Gmail and photos from Google Photos.[76][77]

## Google Discover

[edit]

Google Discover, previously known as Google Feed, is a personalized stream of articles, videos, and other news-related content. The feed contains a "mix of cards" which show topics of interest based on users' interactions with Google, or topics they choose to follow directly.[78] Cards include, "links to news stories, YouTube videos, sports scores, recipes, and other content based on what [Google] determined you're most likely to be interested in at that particular moment." [78] Users can also tell Google they're not interested in certain topics to avoid seeing future updates.

Google Discover launched in December 2016[79] and received a major update in July 2017.[80] Another major update was released in September 2018, which renamed the app from

Google Feed to Google Discover, updated the design, and adding more features.[81]

Discover can be found on a tab in the Google app and by swiping left on the home screen of certain Android devices. As of 2019, Google will not allow **political campaigns** worldwide to target their advertisement to people to make them vote.[82]

## AI Overviews

[[edit](#)]

At the 2023 **Google I/O** event in May, Google unveiled Search Generative Experience (SGE), an experimental feature in Google Search available through **Google Labs** which produces **AI-generated** summaries in response to search prompts.[83] This was part of Google's wider efforts to counter the unprecedented rise of generative AI technology, ushered by **OpenAI**'s launch of **ChatGPT**, which sent Google executives to a panic due to its potential threat to Google Search.[84] Google added the ability to generate images in October.[85] At I/O in 2024, the feature was upgraded and renamed AI Overviews.[86]

"cheese not sticking to pizza"

Image not found or type unknown

Early AI Overview response to the problem of "cheese not sticking to pizza"

AI Overviews was rolled out to users in the United States in May 2024.[86] The feature faced public criticism in the first weeks of its rollout after errors from the tool went viral online. These included results suggesting users add glue to pizza or eat rocks,[87] or incorrectly claiming **Barack Obama** is Muslim.[88] Google described these viral errors as "isolated examples", maintaining that most AI Overviews provide accurate information.[87][89] Two weeks after the rollout of AI Overviews, Google made technical changes and scaled back the feature, pausing its use for some health-related queries and limiting its reliance on social media posts.[90] **Scientific American** has criticised the system on environmental grounds, as such a search uses 30 times more energy than a conventional one.[91] It has also been criticized for condensing information from various sources, making it less likely for people to view full articles and websites. When it was announced in May 2024, Danielle Coffey, CEO of the News/Media Alliance was quoted as saying "This will be catastrophic to our traffic, as marketed by Google to further satisfy user queries, leaving even less incentive to click through so that we can monetize our content." [92]

In August 2024, AI Overviews were rolled out in the UK, India, Japan, Indonesia, Mexico and Brazil, with local language support.[93] On October 28, 2024, AI Overviews was rolled out to 100 more countries, including Australia and New Zealand.[94]

## AI Mode

[edit]

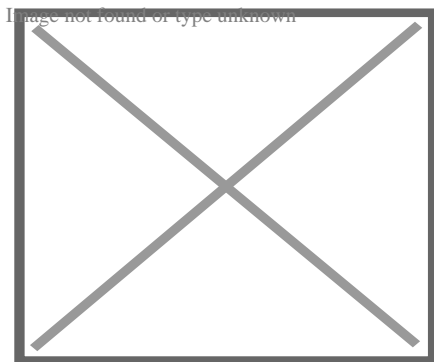
In March 2025, Google introduced an experimental "AI Mode" within its Search platform, enabling users to input complex, multi-part queries and receive comprehensive, AI-generated responses. This feature leverages Google's advanced Gemini 2.0 model, which enhances the system's reasoning capabilities and supports multimodal inputs, including text, images, and voice.

Initially, AI Mode is available to Google One AI Premium subscribers in the United States, who can access it through the Search Labs platform. This phased rollout allows Google to gather user feedback and refine the feature before a broader release.

The introduction of AI Mode reflects Google's ongoing efforts to integrate advanced AI technologies into its services, aiming to provide users with more intuitive and efficient search experiences.[95][96]

## Redesigns

[edit]



Product Sans, Google's typeface since 2015

In late June 2011, Google introduced a new look to the Google homepage in order to boost the use of the Google+ social tools.[97]

One of the major changes was replacing the classic navigation bar with a black one. Google's digital creative director Chris Wiggins explains: "We're working on a project to bring you a new and improved Google experience, and over the next few months, you'll continue to see more updates to our look and feel." [98] The new navigation bar has been negatively received by a

vocal minority.[99]

In November 2013, Google started testing yellow labels for advertisements displayed in search results, to improve user experience. The new labels, highlighted in yellow color, and aligned to the left of each sponsored link help users differentiate between organic and sponsored results.[100]

On December 15, 2016, Google rolled out a new desktop search interface that mimics their modular mobile user interface. The mobile design consists of a tabular design that highlights search features in boxes. and works by imitating the desktop Knowledge Graph real estate, which appears in the right-hand rail of the search engine result page, these featured elements frequently feature Twitter carousels, People Also Search For, and Top Stories (vertical and horizontal design) modules. The Local Pack and Answer Box were two of the original features of the Google SERP that were primarily showcased in this manner, but this new layout creates a previously unseen level of design consistency for Google results.[101]

## Smartphone apps

[edit]

Google offers a "Google Search" mobile app for Android and iOS devices.[102] The mobile apps exclusively feature Google Discover and a "Collections" feature, in which the user can save for later perusal any type of search result like images, bookmarks or map locations into groups.[103] Android devices were introduced to a preview of the feed, perceived as related to Google Now, in December 2016,[104] while it was made official on both Android and iOS in July 2017.[105][106]

In April 2016, Google updated its Search app on Android to feature "Trends"; search queries gaining popularity appeared in the autocomplete box along with normal query autocompletion.[107] The update received significant backlash, due to encouraging search queries unrelated to users' interests or intentions, prompting the company to issue an update with an opt-out option.[108] In September 2017, the Google Search app on iOS was updated to feature the same functionality.[109]

In December 2017, Google released "Google Go", an app designed to enable use of Google Search on physically smaller and lower-spec devices in multiple languages. A Google blog post about designing "India-first" products and features explains that it is "tailor-made for the millions of people in [India and Indonesia] coming online for the first time".[110]

## Performing a search

[edit]





A definition link is provided for many search terms.

Google Search consists of a series of **localized websites**. The largest of those, the **google.com site**, is the top most-visited website in the world.[111] Some of its features include a definition link for most searches including dictionary words, the number of results you got on your search, links to other searches (e.g. for words that Google believes to be misspelled, it provides a link to the search results using its proposed spelling), the ability to filter results to a date range,[112] and many more.

## Search syntax

[edit]

Google search accepts queries as normal text, as well as individual keywords.[113] It **automatically corrects** apparent misspellings by default (while offering to use the original spelling as a selectable alternative), and provides the same results regardless of capitalization. [113] For more customized results, one can use a wide variety of **operators**, including, but not limited to:[114][115]

- OR or | – Search for webpages containing one of two similar queries, such as *marathon OR race*
- AND – Search for webpages containing two similar queries, such as *marathon AND runner*
- - (minus sign) – Exclude a word or a phrase, so that *"apple -tree"* searches where word *"tree"* is not used
- "" – Force inclusion of a word or a phrase, such as *"tallest building"*
- \* – Placeholder symbol allowing for any substitute words in the context of the query, such as *"largest \* in the world"*
- .. – Search within a range of numbers, such as *"camera \$50..\$100"*
- site: – Search within a specific website, such as *"site:youtube.com"*
- define: – Search for definitions for a word or phrase, such as *"define:phrase"*
- stocks: – See the stock price of investments, such as *"stocks:googl"*
- related: – Find web pages related to specific **URL** addresses, such as *"related:www.wikipedia.org"*
- cache: – Highlights the search-words within the cached pages, so that *"cache:www.google.com xxx"* shows cached content with word *"xxx"* highlighted.
- ( ) – Group operators and searches, such as *(marathon OR race) AND shoes*
- filetype: or ext: – Search for specific file types, such as *filetype:gif*
- before: – Search for before a specific date, such as *spacex before:2020-08-11*
- after: – Search for after a specific date, such as *iphone after:2007-06-29*
- @ – Search for a specific word on social media networks, such as *"@twitter"*

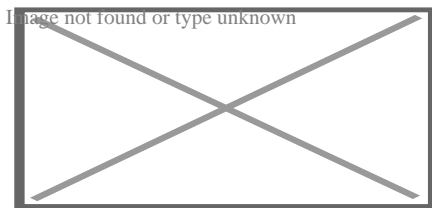
Google also offers a **Google Advanced Search** page with a web interface to access the advanced features without needing to remember the special operators.[116]

## Query expansion

[edit]

Google applies **query expansion** to submitted search queries, using techniques to deliver results that it considers "smarter" than the query users actually submitted. This technique involves several steps, including:[117]

- Word **stemming** – Certain words can be reduced so other, similar terms, are also found in results, so that "*translator*" can also search for "*translation*"
- Acronyms – Searching for abbreviations can also return results about the name in its full length, so that "**NATO**" can show results for "*North Atlantic Treaty Organization*"
- Misspellings – Google will often suggest correct spellings for misspelled words
- Synonyms – In most cases where a word is incorrectly used in a phrase or sentence, Google search will show results based on the correct synonym
- Translations – The search engine can, in some instances, suggest results for specific words in a different language
- Ignoring words – In some search queries containing extraneous or insignificant words, Google search will simply drop those specific words from the query



A screenshot of suggestions by Google Search when "wikip" is typed

In 2008, Google started to give users **autocompleted search suggestions** in a list below the search bar while typing, originally with the approximate result count previewed for each listed search suggestion.[118]

## "I'm Feeling Lucky"

[edit]

"I'm Feeling Lucky" redirects here. For the 2011 book by Douglas Edwards, see *I'm Feeling Lucky* (book).

Google's homepage includes a button labeled "I'm Feeling Lucky". This feature originally allowed users to type in their search query, click the button and be taken directly to the first result, bypassing the search results page. Clicking it while leaving the search box empty opens Google's archive of **Doodles**. [119] With the 2010 announcement of **Google Instant**, an automatic feature that immediately displays relevant results as users are typing in their query, the "I'm Feeling Lucky" button disappears, requiring that users opt-out of Instant results

through search settings to keep using the "I'm Feeling Lucky" functionality.<sup>[120]</sup> In 2012, "I'm Feeling Lucky" was changed to serve as an advertisement for Google services; users hover their computer mouse over the button, it spins and shows an emotion ("I'm Feeling Puzzled" or "I'm Feeling Trendy", for instance), and, when clicked, takes users to a Google service related to that emotion.<sup>[121]</sup>

**Tom Chavez** of "Rapt", a firm helping to determine a website's advertising worth, estimated in 2007 that Google lost \$110 million in revenue per year due to use of the button, which bypasses the advertisements found on the search results page.<sup>[122]</sup>

## Special interactive features

<sup>[edit]</sup>

See also: [List of Google Easter eggs](#) § [Embedded tools](#)

Besides the main text-based search-engine function of Google search, it also offers multiple quick, interactive features. These include, but are not limited to:<sup>[123][124][125]</sup>

- Calculator
- Time zone, currency, and unit conversions
- Word translations
- Flight status
- Local film showings
- Weather forecasts
- Population and unemployment rates
- Package tracking
- Word definitions
- Metronome
- Roll a die
- "Do a barrel roll" (search page spins)
- "Askew" (results show up sideways)

## "OK Google" conversational search

<sup>[edit]</sup>

See also: [Google Now](#) and [Google Assistant](#)

During Google's developer conference, [Google I/O](#), in May 2013, the company announced that users on [Google Chrome](#) and [ChromeOS](#) would be able to have the browser initiate an audio-based search by saying "OK Google", with no button presses required. After having the answer presented, users can follow up with additional, contextual questions; an example include initially asking "OK Google, will it be sunny in Santa Cruz this weekend?", hearing a spoken answer, and reply with "how far is it from here?"<sup>[126][127]</sup> An update to the Chrome

browser with **voice-search** functionality rolled out a week later, though it required a button press on a microphone icon rather than "OK Google" voice activation.<sup>[128]</sup> Google released a browser extension for the Chrome browser, named with a "**beta**" tag for unfinished development, shortly thereafter.<sup>[129]</sup> In May 2014, the company officially added "OK Google" into the browser itself;<sup>[130]</sup> they removed it in October 2015, citing low usage, though the microphone icon for activation remained available.<sup>[131]</sup> In May 2016, 20% of search queries on mobile devices were done through voice.<sup>[132]</sup>

**Operations**

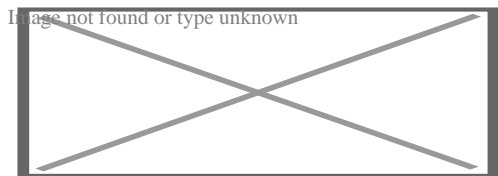
<sup>[**edit**]</sup>

**Search products**

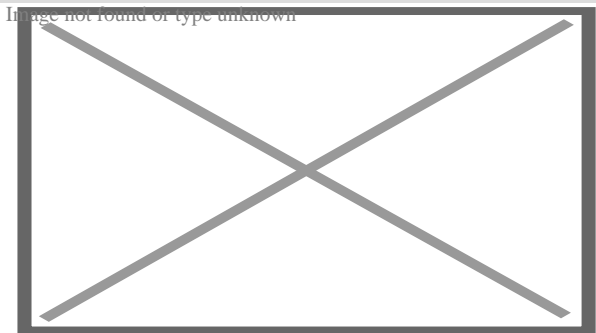
<sup>[**edit**]</sup>

Main article: **List of Google products**  
"Google Videos" redirects here. For other uses, see **Google Videos (disambiguation)**.

# Google Videos



Screenshot



Google Videos homepage as of 2016

<b>Type of site</b>	<b>Video search engine</b>
<b>Available in</b>	Multilingual
<b>Owner</b>	<b>Google</b>
<b>URL</b>	<b><a href="http://www.google.com/videohp">www.google.com/videohp</a></b>
<b>Commercial</b>	Yes
<b>Registration</b>	Recommended
<b>Launched</b>	August 20, 2012; 12 years ago

In addition to its tool for searching [web pages](#), Google also provides services for searching images, [Usenet newsgroups](#), news websites, videos (**Google Videos**), [searching by locality](#), maps, and items for sale online. **Google Videos** allows searching the [World Wide Web](#) for video clips.<sup>[133]</sup> The service evolved from [Google Video](#), Google's discontinued video hosting service that also allowed to search the web for video clips.<sup>[133]</sup>

In 2012, Google has indexed over 30 trillion web pages, and received 100 billion queries per month.<sup>[134]</sup> It also [caches](#) much of the content that it [indexes](#). Google operates other tools and services including [Google News](#), [Google Shopping](#), [Google Maps](#), [Google Custom Search](#), [Google Earth](#), [Google Docs](#), [Picasa](#) (discontinued), [Panoramio](#) (discontinued), [YouTube](#), [Google Translate](#), [Google Blog Search](#) and [Google Desktop Search](#) (discontinued<sup>[135]</sup>).

There are also products available from Google that are not directly search-related. [Gmail](#), for example, is a [webmail](#) application, but still includes search features; [Google Browser Sync](#) does not offer any search facilities, although it aims to organize your browsing time.

## Energy consumption

[\[edit\]](#)

In 2009, Google claimed that a search query requires altogether about 1 [kJ](#) or 0.0003 [kW·h](#),<sup>[136]</sup> which is enough to raise the temperature of one liter of water by 0.24 °C. According to green search engine [Ecosia](#), the industry standard for search engines is estimated to be about 0.2 grams of CO<sub>2</sub> emission per search.<sup>[137]</sup> Google's 40,000 searches per second translate to 8 kg CO<sub>2</sub> per second or over 252 million kilos of CO<sub>2</sub> per year.<sup>[138]</sup>

## Google Doodles

[\[edit\]](#)

Main article: [Google Doodle](#)

On certain occasions, the [logo](#) on Google's webpage will change to a special version, known as a "Google Doodle". This is a picture, drawing, animation, or interactive game that includes the logo. It is usually done for a special event or day although not all of them are well known.<sup>[139]</sup> Clicking on the Doodle links to a string of Google search results about the topic. The first was a reference to the [Burning Man Festival](#) in 1998,<sup>[140]</sup><sup>[141]</sup> and others have been produced for the birthdays of notable people like [Albert Einstein](#), historical events like the interlocking [Lego](#) block's 50th anniversary and holidays like [Valentine's Day](#).<sup>[142]</sup> Some Google Doodles have interactivity beyond a simple search, such as the famous "Google Pac-Man" version that appeared on May 21, 2010.

## Criticism

[\[edit\]](#)



## Privacy

[[edit](#)]

Main article: [Privacy concerns regarding Google](#)

Google has been criticized for placing long-term [cookies](#) on users' machines to store preferences, a tactic which also enables them to track a user's search terms and retain the data for more than a year.<sup>[143]</sup>

Since 2012, Google Inc. has globally introduced encrypted connections for most of its clients, to bypass governative blockings of the commercial and IT services.<sup>[144]</sup>

## Complaints about indexing

[[edit](#)]

In 2003, *[The New York Times](#)* complained about Google's [indexing](#), claiming that Google's [caching](#) of content on its site infringed its copyright for the content.<sup>[145]</sup> In both *[Field v. Google](#)* and *[Parker v. Google](#)*, the United States District Court of [Nevada](#) ruled in favor of Google.<sup>[146]</sup><sup>[147]</sup>

## Child sexual abuse

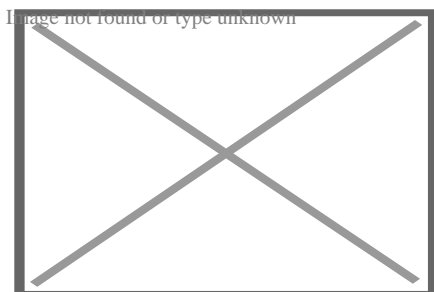
[[edit](#)]

[[icon](#)] This section **needs expansion**. You can help by [making an edit request](#) [adding to it](#) . ( May 2024 )

A 2019 *New York Times* article on Google Search showed that images of [child sexual abuse](#) had been found on Google and that the company had been reluctant at times to remove them.<sup>[148]</sup>

## January 2009 malware bug

[[edit](#)]



A screenshot of the error of January 31, 2009

Google flags search results with the message "This site may harm your computer" if the site is known to install malicious software in the background or otherwise surreptitiously. For approximately 40 minutes on January 31, 2009, all search results were mistakenly classified as **malware** and could therefore not be clicked; instead a warning message was displayed and the user was required to enter the requested URL manually. The bug was caused by human error.<sup>[149][150][151][152]</sup> The **URL** of "/" (which expands to all URLs) was mistakenly added to the malware patterns file.<sup>[150][151]</sup>

## Possible misuse of search results

<sup>[edit]</sup>

In 2007, a group of researchers observed a tendency for users to rely exclusively on Google Search for finding information, writing that "With the Google interface the user gets the impression that the search results imply a kind of totality. ... In fact, one only sees a small part of what one could see if one also integrates other research tools."<sup>[153]</sup>

In 2011, Google Search query results have been shown by Internet activist **Eli Pariser** to be tailored to users, effectively isolating users in what he defined as a **filter bubble**. Pariser holds algorithms used in search engines such as Google Search responsible for catering "a personal ecosystem of information".<sup>[154]</sup> Although contrasting views have mitigated the potential threat of "informational dystopia" and questioned the scientific nature of Pariser's claims,<sup>[155]</sup> filter bubbles have been mentioned to account for the surprising results of the **U.S. presidential election in 2016** alongside **fake news** and **echo chambers**, suggesting that **Facebook** and Google have designed personalized online realities in which "we only see and hear what we like".<sup>[156]</sup>

## FTC fines

<sup>[edit]</sup>

In 2012, the US **Federal Trade Commission** fined Google **US\$22.5** million for violating their agreement not to violate the privacy of users of Apple's **Safari web browser**.<sup>[157]</sup> The FTC was also continuing to investigate if Google's favoring of their own services in their search results violated antitrust regulations.<sup>[158]</sup>

## Payments to Apple

<sup>[edit]</sup>

In a November 2023 disclosure, during the ongoing antitrust trial against Google, an economics professor at the [University of Chicago](#) revealed that Google pays Apple 36% of all search advertising revenue generated when users access Google through the Safari browser. This revelation reportedly caused Google's lead attorney to cringe visibly.[\[citation needed\]](#) The revenue generated from Safari users has been kept confidential, but the 36% figure suggests that it is likely in the tens of billions of dollars.

Both Apple and Google have argued that disclosing the specific terms of their search default agreement would harm their competitive positions. However, the court ruled that the information was relevant to the antitrust case and ordered its disclosure. This revelation has raised concerns about the dominance of Google in the search engine market and the potential anticompetitive effects of its agreements with Apple.[\[159\]](#)

## Big data and human bias

[\[edit\]](#)

Google [search engine](#) robots are programmed to use [algorithms](#) that understand and predict human [behavior](#). The book, *Race After Technology: Abolitionist Tools for the New Jim Code*[\[160\]](#) by [Ruha Benjamin](#) talks about human [bias](#) as a behavior that the Google search engine can recognize. In 2016, some users Google searched "three Black teenagers" and images of criminal [mugshots](#) of young African American teenagers came up. Then, the users searched "three White teenagers" and were presented with photos of smiling, happy teenagers. They also searched for "three Asian teenagers", and very revealing photos of Asian girls and women appeared. Benjamin concluded that these results reflect human [prejudice](#) and views on different [ethnic groups](#). A group of analysts explained the concept of a [racist](#) computer program: "The idea here is that computers, unlike people, can't be racist but we're increasingly learning that they do in fact take after their makers ... Some experts believe that this problem might stem from the hidden biases in the massive piles of [data](#) that the algorithms process as they learn to recognize patterns ... reproducing our worst values".[\[160\]](#)

## Monopoly ruling

[\[edit\]](#)

On August 5, 2024, Google lost a [lawsuit which started in 2020](#) in [D.C. Circuit Court](#), with Judge [Amit Mehta](#) finding that the company had an illegal monopoly over Internet search.[\[161\]](#) This monopoly was held to be in violation of Section 2 of the [Sherman Act](#).[\[162\]](#) Google has said it will appeal the ruling,[\[163\]](#) though they did propose to loosen search deals with Apple and others requiring them to set Google as the default search engine.[\[164\]](#)

## Trademark

[\[edit\]](#)

Main article: [Google \(verb\)](#)

As people talk about "googling" rather than searching, the company has taken some steps to defend its trademark, in an effort to prevent it from becoming a [generic trademark](#).<sup>[165]</sup><sup>[166]</sup> This has led to lawsuits, threats of lawsuits, and the use of euphemisms, such as calling Google Search a **famous web search engine**.<sup>[167]</sup>

## Discontinued features

[\[edit\]](#)

## Translate foreign pages

[\[edit\]](#)

Until May 2013, Google Search had offered a feature to [translate search queries into other languages](#). A Google spokesperson told *Search Engine Land* that "Removing features is always tough, but we do think very hard about each decision and its implications for our users. Unfortunately, this feature never saw much pick up".<sup>[168]</sup>

## Instant search

[\[edit\]](#)

Instant search was announced in September 2010 as a feature that [displayed suggested results while the user typed in their search query](#), initially only in select countries or to registered users.<sup>[169]</sup> The primary advantage of the new system was its ability to save time, with [Marissa Mayer](#), then-vice president of search products and user experience, proclaiming that the feature would save 2–5 seconds per search, elaborating that "That may not seem like a lot at first, but it adds up. With Google Instant, we estimate that we'll save our users 11 hours with each passing second!"<sup>[170]</sup> Matt Van Wagner of *Search Engine Land* wrote that "Personally, I kind of like Google Instant and I think it represents a natural evolution in the way search works", and also praised Google's efforts in [public relations](#), writing that "With just a press conference and a few well-placed interviews, Google has parlayed this relatively minor speed improvement into an attention-grabbing front-page news story".<sup>[171]</sup> The upgrade also became notable for the company switching Google Search's underlying technology from [HTML](#) to [AJAX](#).<sup>[172]</sup>

Instant Search could be disabled via Google's "preferences" menu for those who didn't want its functionality.<sup>[173]</sup>

The publication *2600: The Hacker Quarterly* compiled a list of words that Google Instant did not show suggested results for, with a Google spokesperson giving the following statement to *Mashable*:<sup>[174]</sup>

There are several reasons you may not be seeing search queries for a particular topic. Among other things, we apply a narrow set of removal policies for pornography, violence, and hate speech. It's important to note that removing queries from Autocomplete is a hard problem, and not as simple as blacklisting particular terms and phrases.

In search, we get more than one billion searches each day. Because of this, we take an algorithmic approach to removals, and just like our search algorithms, these are imperfect. We will continue to work to improve our approach to removals in Autocomplete, and are listening carefully to feedback from our users.

Our algorithms look not only at specific words, but compound queries based on those words, and across all languages. So, for example, if there's a bad word in Russian, we may remove a compound word including the transliteration of the Russian word into English. We also look at the search results themselves for given queries. So, for example, if the results for a particular query seem pornographic, our algorithms may remove that query from Autocomplete, even if the query itself wouldn't otherwise violate our policies. This system is neither perfect nor instantaneous, and we will continue to work to make it better.

*PC Magazine* discussed the inconsistency in how some forms of the same topic are allowed; for instance, "lesbian" was blocked, while "gay" was not, and "cocaine" was blocked, while "crack" and "heroin" were not. The report further stated that seemingly normal words were also blocked due to pornographic innuendos, most notably "scat", likely due to having two completely separate contextual meanings, one for music and one for a sexual practice.<sup>[175]</sup>

On July 26, 2017, Google removed Instant results, due to a growing number of searches on mobile devices, where interaction with search, as well as screen sizes, differ significantly from a computer.<sup>[176][177]</sup>

Instant previews<sup>[edit]</sup>

"Instant previews" allowed previewing screenshots of search results' web pages without having to open them. The feature was introduced in November 2010 to the desktop website and removed in April 2013 citing low usage.<sup>[178][179]</sup>

**Dedicated encrypted search page**

<sup>[edit]</sup>

Various search engines provide encrypted Web search facilities. In May 2010 Google rolled out SSL-encrypted web search.<sup>[180]</sup> The encrypted search was accessed at encrypted.google.com<sup>[181]</sup> However, the web search is encrypted via Transport Layer Security (TLS) by default today, thus every search request should be automatically encrypted if TLS is supported by the web browser.<sup>[182]</sup> On its support website, Google announced that the address encrypted.google.com would be turned off April 30, 2018, stating that all Google products and most new browsers use HTTPS connections as the reason for the discontinuation.<sup>[183]</sup>

## Real-Time Search


[\[edit\]](#)

Google Real-Time Search was a feature of Google Search in which search results also sometimes included **real-time** information from sources such as **Twitter**, **Facebook**, **blogs**, and news websites.<sup>[184]</sup> The feature was introduced on December 7, 2009,<sup>[185]</sup> and went offline on July 2, 2011, after the deal with Twitter expired.<sup>[186]</sup> Real-Time Search included **Facebook** status updates beginning on February 24, 2010.<sup>[187]</sup> A feature similar to Real-Time Search was already available on **Microsoft's Bing search engine**, which showed results from **Twitter** and Facebook.<sup>[188]</sup> The interface for the engine showed a live, descending "river" of posts in the main region (which could be paused or resumed), while a **bar chart** metric of the frequency of posts containing a certain search term or hashtag was located on the right hand corner of the page above a list of most frequently reposted posts and outgoing links. **Hashtag** search links were also supported, as were "promoted" tweets hosted by Twitter (located persistently on top of the river) and thumbnails of retweeted image or video links.

In January 2011, geolocation links of posts were made available alongside results in Real-Time Search. In addition, posts containing syndicated or attached shortened links were made searchable by the *link:* query option. In July 2011, Real-Time Search became inaccessible, with the Real-Time link in the Google sidebar disappearing and a custom 404 error page generated by Google returned at its former URL. Google originally suggested that the interruption was temporary and related to the launch of **Google+**;<sup>[189]</sup> they subsequently announced that it was due to the expiry of a commercial arrangement with Twitter to provide access to tweets.<sup>[190]</sup>

## See also

[\[edit\]](#)

-  **Internet portal**  
Image not found or present unknown
- List of search engines by popularity** – Software system for finding relevant information on the Web



- [Timeline of Google Search](#)
- [Censorship by Google & Google Search](#)
- [Google \(verb\)](#) – Transitive verb, to search using Google
- [Dragonfly \(search engine\)](#) – Prototype Internet search engine to comply with Chinese censorship requirements
- [Google bombing](#) – Practice that causes a webpage to have a high rank in Google
- [Google Panda](#) – Change to Google's search results ranking algorithm
- [Google Penguin](#) – Google search engine algorithm update
- [Googlewhack](#) – Contest to find a Google Search query that returns a single result
- [Halalgoogling](#) – Islamic search engine blocking haram content
- [Prabhakar Raghavan](#) – American computer scientist
- [Reunion \(advertisement\)](#) – Google India advertisement for Google Search
- [List of search engines](#)
- [Comparison of web search engines](#)
- [History of Google](#)
- [List of Google products](#)

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## Further reading

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- *Google: The Missing Manual* by Sarah Milstein and Rael Dornfest (O'Reilly, 2004). ISBN 0-596-00613-6
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- *Ad Manager*
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## Hardware

### Smartphones

#### Pixel

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- Pixel 4 (2019)
- Pixel 4a (2020)
- Pixel 5 (2020)
- Pixel 5a (2021)
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- Pixel Fold (2023)
- Pixel 8 (2023)
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### Tablets

- Pixel C (2015)
- Pixel Slate (2018)
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### Laptops

- Chromebook Pixel (2013–2015)
- Pixelbook (2017)
- Pixelbook Go (2019)

### Other

- Pixel Buds (2017–present)

### Smartphones

- Nexus One (2010)
- Nexus S (2010)
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- Nexus 4 (2012)
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## Litigation

<b>Advertising</b>	<ul style="list-style-type: none"> <li>○ <i>Feldman v. Google, Inc.</i> (2007)</li> <li>○ <i>Rescuecom Corp. v. Google Inc.</i> (2009)</li> <li>○ <i>Goddard v. Google, Inc.</i> (2009)</li> <li>○ <i>Rosetta Stone Ltd. v. Google, Inc.</i> (2012)</li> <li>○ <i>Google, Inc. v. American Blind &amp; Wallpaper Factory, Inc.</i> (2017)</li> <li>○ Jedi Blue</li> </ul>
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## Concepts

## Android

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- Recovery mode
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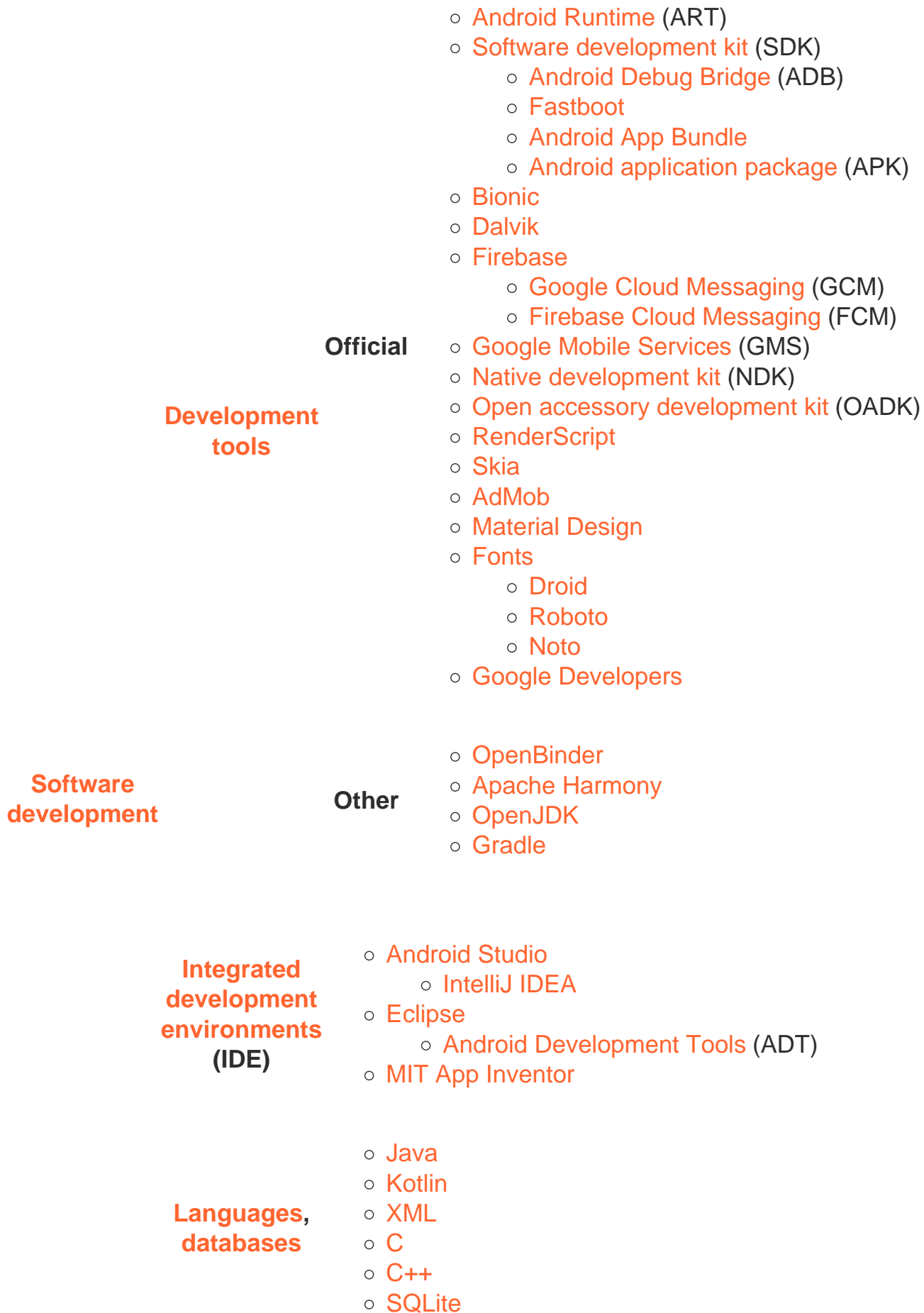
People	Executives	Current	<ul style="list-style-type: none"> <li>○ <a href="#">Sundar Pichai (CEO)</a></li> <li>○ <a href="#">Ruth Porat (president and CIO)</a></li> <li>○ <a href="#">Anat Ashkenazi (CFO)</a></li> </ul>
		Former	<ul style="list-style-type: none"> <li>○ <a href="#">Larry Page (CEO)</a></li> <li>○ <a href="#">Sergey Brin (President)</a></li> <li>○ <a href="#">David Drummond (CLO)</a></li> </ul>
	Board of directors	Current	<ul style="list-style-type: none"> <li>○ <a href="#">Frances Arnold</a></li> <li>○ <a href="#">Sergey Brin</a></li> <li>○ <a href="#">R. Martin Chavez</a></li> <li>○ <a href="#">John Doerr</a></li> <li>○ <a href="#">John L. Hennessy</a></li> <li>○ <a href="#">Ann Mather</a></li> <li>○ <a href="#">Larry Page</a></li> <li>○ <a href="#">Sundar Pichai</a></li> <li>○ <a href="#">Ram Shriram</a></li> <li>○ <a href="#">Roger W. Ferguson Jr.</a></li> </ul>
		Former	<ul style="list-style-type: none"> <li>○ <a href="#">Diane Greene</a></li> <li>○ <a href="#">Alan Mulally</a></li> <li>○ <a href="#">Eric Schmidt</a></li> </ul>
	Others		<ul style="list-style-type: none"> <li>○ <a href="#">Andrew Conrad</a></li> <li>○ <a href="#">Tony Fadell</a></li> <li>○ <a href="#">Arthur D. Levinson</a></li> <li>○ <a href="#">David Krane</a></li> <li>○ <a href="#">Astro Teller</a></li> </ul>

-  [Category](#)
-  [Companies portal](#)
-  [Internet portal](#)

- **v**
- **t**
- **e**

## Android

- Android Go
  - Comparison of products





## Releases

- Cupcake (1.5)
- Donut (1.6)
- Eclair (2.0–2.1)
- Froyo (2.2)
- Gingerbread (2.3)
- Honeycomb (3.x)
- Ice Cream Sandwich (4.0)
- Jelly Bean (4.1–4.3)
- KitKat (4.4)
- Lollipop (5.x)
- Marshmallow (6.0)
- Nougat (7.x)
- Oreo (8.x)
- Pie (9)
- 10
- 11
- 12
- 13
- 14
- 15
- 16

## Derivatives

- Android Automotive
- Android Things
- TV
  - devices
- Android XR
- Wear OS

## Devices

### Pixel

- C
- Pixel & Pixel XL
- 2 & 2 XL
- 3 & 3 XL
  - 3a & 3a XL
- 4 & 4 XL
  - 4a & 4a (5G)
- 5
  - 5a
- 6 & 6 Pro
  - 6a
- 7 & 7 Pro
  - 7a
- Fold
- Tablet
- 8 & 8 Pro
  - 8a
- 9, 9 Pro & 9 Pro XL
  - 9 Pro Fold

### Nexus

- One
- S
- Galaxy Nexus
- 4
- 10
- Q
- 5
  - 5X
- 6
  - 6P
- 7
  - 2012
  - 2013
- 9
- Player

### Play edition

- HTC One (M7)
- HTC One (M8)
- LG G Pad 8.3
- Moto G
- Samsung Galaxy S4
- Sony Xperia Z Ultra

- Android One

## Custom distributions

- AliOS
- Android-x86
  - Remix OS
- AOKP
- Baidu Yi
- Barnes & Noble Nook
- CalyxOS
- ColorOS
  - realme UI
- CopperheadOS
- EMUI
  - Magic UI
- Fire OS
- Flyme OS
- GrapheneOS
- Xiaomi HyperOS
  - MIUI
  - MIUI for Poco
- LeWa OS
- LineageOS
  - /e/
  - CrDroid
  - CyanogenMod
  - DivestOS
  - iodéOS
  - Kali NetHunter
- LiteOS
- Meta Horizon OS
- MicroG
- Nokia X software platform
- OmniROM
- OPhone
- OxygenOS
- PixelExperience
- Pixel UI
- Replicant
- Resurrection Remix OS
- SlimRoms
- TCL UI
- Ubuntu for Android
- XobotOS
- ZUI





<b>Booting and recovery</b>	<ul style="list-style-type: none"> <li>○ Booting process</li> <li>○ Recovery mode <ul style="list-style-type: none"> <li>○ TWRP</li> <li>○ ClockworkMod</li> </ul> </li> <li>○ Fastboot</li> </ul>
<b>APIs</b>	<ul style="list-style-type: none"> <li>○ Google Maps</li> <li>○ Google Play Services <ul style="list-style-type: none"> <li>○ SafetyNet</li> </ul> </li> <li>○ Google Search</li> </ul>
<b>Alternative UIs</b>	<ul style="list-style-type: none"> <li>○ Asus ZenFone</li> <li>○ Cherry OS</li> <li>○ ColorOS</li> <li>○ EMUI</li> <li>○ Funtouch OS</li> <li>○ Flyme OS</li> <li>○ HiOS</li> <li>○ Hive UI (XOLO Hive)</li> <li>○ HTC Sense</li> <li>○ LG UX <ul style="list-style-type: none"> <li>○ Optimus UI</li> </ul> </li> <li>○ Motoblur</li> <li>○ One UI</li> <li>○ Origin OS <ul style="list-style-type: none"> <li>○ Experience</li> <li>○ TouchWiz</li> </ul> </li> <li>○ OxygenOS</li> <li>○ Pixel UI</li> <li>○ XOS</li> <li>○ Xperia UI</li> </ul>
<b>Rooting</b>	<ul style="list-style-type: none"> <li>○ SuperSU</li> <li>○ Magisk</li> <li>○ Kingo Root</li> </ul>

## Lists

- Custom distributions
- Features
- Free and open-source applications
- Google apps
- Launchers

## Related topics

- Index of articles
- Androidland
- Chromecast
- Google
- Java vs. Android API
- Lawn statues
- BlueStacks
- Legal issues
  - *Google v. Oracle*
  - smartphone patent wars

-  Category:Android development
-  Category:Mobile telecommunications
-  Software portal
-  Telecommunication portal

- **v**
- **t**
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Web search engines

## Dedicated

## Active

- AOL
- Ahmia
- Ask.com
- Baidu
- Bing
- Blackle
- Brave
- DuckDuckGo
- Ecosia
- Fireball
- Google
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- KidRex
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- Parsijoo
- Perplexity AI
- Petal
- Seznam.cz
- Sogou
- Swisscows
- WebCrawler
- Yahoo!
- Yandex
- Youdao

## Metasearch engines

- Dogpile
- Excite
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- MetaCrawler
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- SearXNG
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**Defunct  
or  
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- [A9.com](#)
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- [AlltheWeb](#)
- [AltaVista](#)
- [Blekko](#)
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- [SearchMe](#)
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- [Sputnik](#)
- [Teoma](#)
- [Viewzi](#)
- [Vivisimo](#)
- [Volunia](#)
- [W3Catalog](#)
- [Wikiseek](#)
- [Yebol](#)
- [Yippy](#)
- [Yooz](#)

- [Comparison](#)
- [Complete list](#)

## International

- [VIAF](#)
- [FAST](#)

## National

- [Germany](#)
- [United States](#)
- [France](#)
- [BnF data](#)
- [Czech Republic](#)
- [Norway](#)
- [Israel](#)

## About Sydney

This article is about the Australian city. For the greater metropolitan area, see [Greater Sydney](#). For the local government area, see [City of Sydney](#). For other uses, see [Sydney \(disambiguation\)](#).

# Sydney

New South Wales

## Sydney Opera House and Harbour

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Sydney Opera House and Harbour  
Bridge  
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Queen Victoria  
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Archibald  
Fountain and St  
Mary's Cathedral  
Sydney central business district

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Sydney central business district

Map of the Sydney metropolitan area

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Map of the Sydney metropolitan area

Sydney is located in Australia

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Sydney

Coordinates	33°52′S 151°12′E﻿ / ﻿33.867°S 151.200°E
Population	5,450,496 (2023)[1] (1st)
• Density	441/km <sup>2</sup> (1,140/sq mi) (2023)[1]
Established	26 January 1788; 237 years ago
Area	12,367.7 km <sup>2</sup> (4,775.2 sq mi)(GCCSA)[2]
Time zone	AEST (UTC+10)
• Summer (DST)	AEDT (UTC+11)
Location	<div><div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div><div><div><div></div></div><div><div></div></div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div><div></div></div><div><div></div></div></div> <div><div><div></div></div><div><div></div></div></div>

**State electorate(s)** Various (49)

**Federal division(s)** Various (24)

Mean max temp[4]	Mean min temp[4]	Annual rainfall[4]
22.8 °C 73 °F	14.7 °C 58 °F	1,149.7 mm 45.3 in

**Sydney** is the **capital city** of the **state** of **New South Wales** and the **most populous city** in **Australia**. Located on Australia's east coast, the metropolis surrounds **Sydney Harbour** and extends about 80 km (50 mi) from the **Pacific Ocean** in the east to the **Blue Mountains** in the west, and about 80 km (50 mi) from **Ku-ring-gai Chase National Park** and the **Hawkesbury River** in the north and north-west, to the **Royal National Park** and **Macarthur** in the south and south-west.[5] Greater Sydney consists of 658 suburbs, spread across 33 local government areas. Residents of the city are colloquially known as "Sydneyiders".[6] The estimated population in June 2023 was 5,450,496,[1] which is about 66% of the state's population.[7] The city's nicknames include the **Emerald City** and the **Harbour City**.[8]

There is evidence that **Aboriginal Australians** inhabited the **Greater Sydney** region at least 30,000 years ago, and **their engravings** and cultural sites are common. The **traditional custodians** of the land on which modern Sydney stands are the clans of the **Darug**, **Dharawal** and **Eora**.[9] During his **first Pacific voyage** in 1770, **James Cook** charted the eastern coast of Australia, making landfall at **Botany Bay**. In 1788, the **First Fleet** of **convicts**, led by **Arthur Phillip**, founded Sydney as a British **penal colony**, the first European settlement in Australia.[10] After **World War II**, Sydney experienced mass migration and by 2021 over 40 per cent of the population was born overseas. Foreign countries of birth with the greatest representation are mainland China, India, the United Kingdom, Vietnam and the Philippines.[11]

Despite being one of the most expensive cities in the world,[12][13] Sydney frequently ranks in the top ten **most liveable cities**.[14][15][16] It is classified as an **Alpha+ city** by the **Globalization and World Cities Research Network**, indicating its influence in the region and throughout the world.[17][18] Ranked eleventh in the world for economic opportunity,[19] Sydney has an advanced market economy with strengths in education, finance, manufacturing and **tourism**.[20][21] The **University of Sydney** and the **University of New South Wales** are ranked 18th and 19th in the world respectively.[22]

Sydney has hosted major international sporting events such as the **2000 Summer Olympics**, the **2003 Rugby World Cup Final**, and the **2023 FIFA Women's World Cup Final**. The city is among the top fifteen most-visited,[23] with millions of tourists coming each year to see the city's landmarks.[24] The city has over 1,000,000 ha (2,500,000 acres) of **nature reserves and parks**,[25] and its **notable natural features** include **Sydney Harbour** and **Royal National Park**. The **Sydney Harbour Bridge** and the World Heritage-listed **Sydney Opera House** are major tourist attractions. **Central Station** is the hub of Sydney's suburban train, metro and light rail

networks and longer-distance services. The main passenger airport serving the city is [Kingsford Smith Airport](#), one of the world's oldest continually operating airports.<sup>[26]</sup>

## Toponymy

[\[edit\]](#)

In 1788, Captain [Arthur Phillip](#), the first governor of New South Wales, named the cove where the first British settlement was established [Sydney Cove](#) after Home Secretary [Thomas Townshend, 1st Viscount Sydney](#).<sup>[27]</sup> The cove was called *Warrane* by the Aboriginal inhabitants.<sup>[28]</sup> Phillip considered naming the settlement [Albion](#), but this name was never officially used.<sup>[27]</sup> By 1790 Phillip and other officials were regularly calling the township Sydney.<sup>[29]</sup> Sydney was declared a city in 1842.<sup>[30]</sup>

The [Gadigal](#) (Cadigal) clan, whose territory stretches along the southern shore of [Port Jackson](#) from [South Head](#) to [Darling Harbour](#), are the traditional owners of the land on which the British settlement was initially established, and call their territory *Gadi* (*Cadi*). Aboriginal clan names within the Sydney region were often formed by adding the suffix "-gal" to a word denoting the name for their territory, a specific place in their territory, a food source, or totem. Greater Sydney covers the traditional lands of 28 known Aboriginal clans.<sup>[31]</sup>

## History

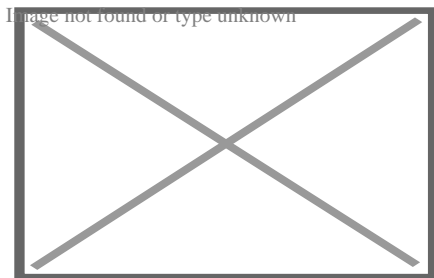
[\[edit\]](#)

Main article: [History of Sydney](#)

For a chronological guide, see [Timeline of Sydney](#).

## First inhabitants of the region

[\[edit\]](#)



[Charcoal drawing](#) of kangaroos in [Heathcote National Park](#)

The first people to inhabit the area now known as Sydney were [Aboriginal Australians](#) who had migrated from southeast Asia via northern Australia.<sup>[32]</sup> Flaked pebbles found in Western Sydney's gravel sediments might indicate human occupation from 45,000 to 50,000 years ago,<sup>[33]</sup> while [radiocarbon dating](#) has shown evidence of human activity in the region from around 30,000 years ago.<sup>[34]</sup> Prior to the arrival of the British, there were 4,000 to 8,000 Aboriginal



people in the greater Sydney region.[35][9]

The inhabitants subsisted on fishing, hunting, and gathering plants and shellfish. The diet of the coastal clans was more reliant on seafood whereas hinterland clans ate more forest animals and plants. The clans had distinctive equipment and weapons mostly made of stone, wood, plant materials, bone and shell. They also differed in their body decorations, hairstyles, songs and dances. Aboriginal clans had a rich ceremonial life, part of a belief system centring on ancestral, totemic and supernatural beings. People from different clans and language groups came together to participate in initiation and other ceremonies. These occasions fostered trade, marriages and clan alliances.[36]

The earliest British settlers recorded the word 'Eora' as an Aboriginal term meaning either 'people' or 'from this place'. [37][9] The clans of the Sydney area occupied land with traditional boundaries. There is debate, however, about which group or nation these clans belonged to, and the extent of differences in language and rites. The major groups were the coastal Eora people, the Dharug (Darug) occupying the inland area from Parramatta to the Blue Mountains, and the Dharawal people south of Botany Bay.[9] Darginung and Gundungurra languages were spoken on the fringes of the Sydney area.[38]

Aboriginal clans of Sydney area, as recorded by early British settlers

Clan	Territory name	Location
Bediagal	Not recorded	Probably north-west of Parramatta
Birrabbirragal	Birrabbirra	Lower Sydney Harbour around Sow and Pigs reef
Boolbainora	Boolbainmatta	Parramatta area
Borogegal	Booragy	Probably Bradleys Head and surrounding area
Boromedegal	Not recorded	Parramatta
Buruberongal	Not recorded	North-west of Parramatta
Darramurragal	Not recorded	Turramarra area
Gadigal	Cadi (Gadi)	South side of Port Jackson, from South Head to Darling Harbour
Gahbrogal	Not recorded	Liverpool and Cabramatta area
Gamaragal	Cammeray	North shore of Port Jackson
Gameygal	Kamay	Botany Bay
Gannemegal	Warmul	Parramatta area
Garigal	Not recorded	Broken Bay area
Gayamaygal	Kayeemy	Manly Cove
Gweagal	Gwea	Southern shore of Botany Bay
Wallumedegal	Wallumede	North shore of Port Jackson, opposite Sydney Cove

Wangal

Wann

South side of Port Jackson, from Darling Harbour to Rose Hill

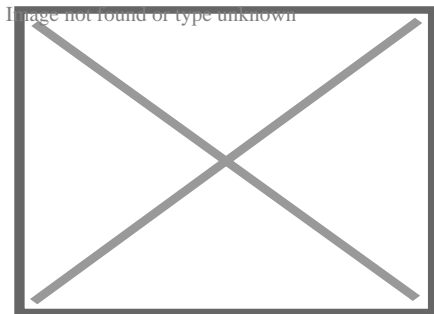
Clans of the Sydney region whose territory wasn't reliably recorded are: the Domaragal, Doogagal, Gannalgal, Gomerigal, Gooneeowlgal, Goorunggurregal, Gorualgal, Murrooredial, Noronggerragal, Oryangsoora and Wandeandegale.

Note: The names and territory boundaries do not always correspond with those used by contemporary Aboriginal groups of the greater Sydney area.<sup>[38][39][40]</sup>

The first meeting between Aboriginals and British explorers occurred on 29 April 1770 when Lieutenant James Cook landed at **Botany Bay** (Kamay<sup>[41]</sup>) and encountered the **Gweagal** clan.<sup>[42]</sup> Two Gweagal men opposed the landing party and one was shot and wounded.<sup>[43][44]</sup> Cook and his crew stayed at Botany Bay for a week, collecting water, timber, fodder and botanical specimens and exploring the surrounding area. Cook sought to establish relations with the Aboriginal population without success.<sup>[45]</sup>

## Convict town (1788–1840)

[\[edit\]](#)



*The Founding of Australia, 26 January 1788, by Captain **Arthur Phillip** R.N., Sydney Cove. Painting by **Algernon Talmage**.*

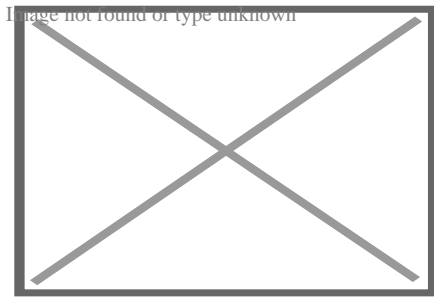
**Britain** had been sending convicts to its American colonies for most of the eighteenth century, and the loss of these colonies in 1783 was the impetus to establish a penal colony at Botany Bay. Proponents of colonisation also pointed to the strategic importance of a new base in the Asia-Pacific region and its potential to provide much-needed timber and flax for the navy.<sup>[46]</sup>

The **First Fleet** of 11 ships under the command of Captain **Arthur Phillip** arrived in Botany Bay in January 1788. It comprised more than a thousand settlers, including 736 convicts.<sup>[47]</sup> The fleet soon moved to the more suitable **Port Jackson** where a settlement was established at **Sydney Cove** on 26 January 1788.<sup>[48]</sup> The colony of New South Wales was formally proclaimed by Governor Phillip on 7 February 1788. Sydney Cove offered a fresh water supply and a safe harbour, which Philip described as "the finest Harbour in the World ... Here a Thousand Sail of the Line may ride in the most perfect Security".<sup>[49]</sup>

The settlement was planned to be a self-sufficient penal colony based on subsistence agriculture. Trade and shipbuilding were banned in order to keep the convicts isolated. However, the soil around the settlement proved poor and the first crops failed, leading to several years of hunger and strict rationing. The food crisis was relieved with the arrival of the **Second Fleet** in mid-1790 and the **Third Fleet** in 1791.[50] Former convicts received small grants of land, and government and private farms spread to the more fertile lands around **Parramatta**, **Windsor** and **Camden** on the **Cumberland Plain**. By 1804, the colony was self-sufficient in food.[51]

A smallpox epidemic in April 1789 killed about half the region's Indigenous population.[9][52] In November 1790 **Bennelong** led a group of survivors of the Sydney clans into the settlement, establishing a continuous presence of Aboriginal Australians in settled Sydney.[53]

Phillip had been given no instructions for urban development, but in July 1788 submitted a plan for the new town at **Sydney Cove**. It included a wide central avenue, a permanent Government House, law courts, hospital and other public buildings, but no provision for warehouses, shops, or other commercial buildings. Phillip promptly ignored his own plan, and unplanned development became a feature of Sydney's topography.[54][55]

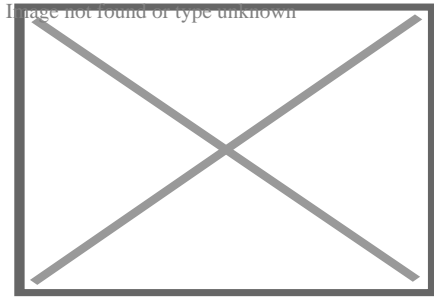


**Thomas Watling's** *View of Sydney Cove*, c. 1794–1796

After Phillip's departure in December 1792, the colony's military officers began acquiring land and importing consumer goods from visiting ships. Former convicts engaged in trade and opened small businesses. Soldiers and former convicts built houses on Crown land, with or without official permission, in what was now commonly called Sydney town. Governor **William Bligh** (1806–08) imposed restrictions on commerce and ordered the demolition of buildings erected on Crown land, including some owned by past and serving military officers. The resulting conflict culminated in the **Rum Rebellion** of 1808, in which Bligh was deposed by the **New South Wales Corps**. [56][57]

Governor **Lachlan Macquarie** (1810–1821) played a leading role in the development of Sydney and New South Wales, establishing a bank, a currency and a hospital. He employed a planner to design the street layout of Sydney and commissioned the construction of roads, wharves, churches, and public buildings. **Parramatta Road**, linking Sydney and Parramatta, was opened in 1811,[58] and a road across the **Blue Mountains** was completed in 1815, opening the way for large-scale farming and grazing west of the **Great Dividing Range**. [59][60]

Following the departure of Macquarie, official policy encouraged the emigration of free British settlers to New South Wales. Immigration to the colony increased from 900 free settlers in 1826–30 to 29,000 in 1836–40, many of whom settled in Sydney.[61][62] By the 1840s Sydney exhibited a geographic divide between poor and working-class residents living west of the **Tank Stream** in areas such as **The Rocks**, and the more affluent residents living to its east.[62] Free settlers, free-born residents and former convicts now represented the vast majority of the population of Sydney, leading to increasing public agitation for responsible government and an end to transportation. Transportation to New South Wales ceased in 1840.[63]



The **Castle Hill convict rebellion** of 1804

## Conflict on the Cumberland Plain

[[edit](#)]

In 1804, Irish convicts led around 300 rebels in the **Castle Hill Rebellion**, an attempt to march on Sydney, commandeer a ship, and sail to freedom.[64] Poorly armed, and with their leader Philip Cunningham captured, the main body of insurgents were routed by about 100 troops and volunteers at **Rouse Hill**. At least 39 convicts were killed in the uprising and subsequent executions.[65][66]

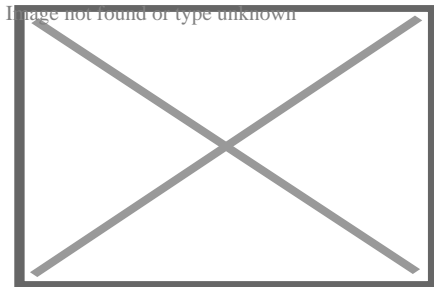
As the colony spread to the more fertile lands around the **Hawkesbury River**, north-west of Sydney, conflict between the settlers and the **Darug** people intensified, reaching a peak from 1794 to 1810. Bands of Darug people, led by **Pemulwuy** and later by his son **Tedbury**, burned crops, killed livestock and raided settler stores in a pattern of resistance that was to be repeated as the **colonial frontier expanded**. A military garrison was established on the Hawkesbury in 1795. The death toll from 1794 to 1800 was 26 settlers and up to 200 Darug.[67][68]

Conflict again erupted from 1814 to 1816 with the expansion of the colony into Dharawal country in the Nepean region south-west of Sydney. Following the deaths of several settlers, Governor Macquarie dispatched three military detachments into Dharawal lands, culminating in the **Appin massacre** (April 1816) in which at least 14 Aboriginal people were killed.[69][70]

## Colonial city (1841–1900)

[\[edit\]](#)

The New South Wales Legislative Council became a semi-elected body in 1842. Sydney was declared a city the same year, and a governing council established, elected on a restrictive property franchise.<sup>[63]</sup>



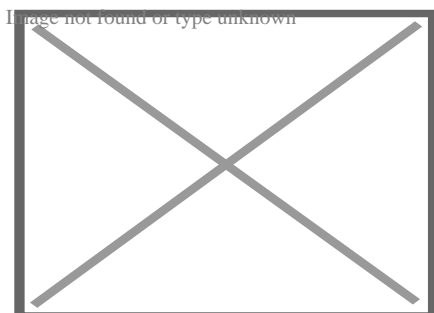
Aerial illustration of Sydney, 1888

The discovery of gold in New South Wales and Victoria in 1851 initially caused economic disruption as men moved to the goldfields. Melbourne soon overtook Sydney as Australia's largest city, leading to an enduring rivalry between the two. However, increased immigration from overseas and wealth from gold exports increased demand for housing, consumer goods, services and urban amenities.<sup>[71]</sup> The New South Wales government also stimulated growth by investing heavily in railways, trams, roads, ports, telegraph, schools and urban services.<sup>[72]</sup> The population of Sydney and its suburbs grew from 95,600 in 1861 to 386,900 in 1891.<sup>[73]</sup> The city developed many of its characteristic features. The growing population packed into rows of terrace houses in narrow streets. New public buildings of sandstone abounded, including at the [University of Sydney](#) (1854–61),<sup>[74]</sup> the [Australian Museum](#) (1858–66),<sup>[75]</sup> the Town Hall (1868–88),<sup>[76]</sup> and the [General Post Office](#) (1866–92).<sup>[77]</sup> Elaborate [coffee palaces](#) and hotels were erected.<sup>[78]</sup> Daylight bathing at Sydney's beaches was banned, but segregated bathing at designated ocean baths was popular.<sup>[79]</sup>

Drought, the winding down of public works and a financial crisis led to economic depression in Sydney throughout most of the 1890s. Meanwhile, the Sydney-based premier of New South Wales, [George Reid](#), became a key figure in the process of federation.<sup>[80]</sup>

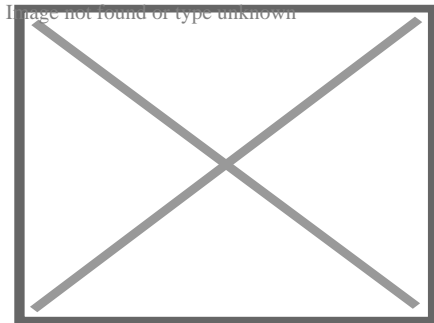
## State capital (1901–present)

[\[edit\]](#)



A tramcar on George Street in 1920. Sydney once had one of the largest tram networks in the British Empire.

When the six colonies federated on 1 January 1901, Sydney became the capital of the State of New South Wales. The spread of bubonic plague in 1900 prompted the state government to modernise the wharves and demolish inner-city slums. The outbreak of the First World War in 1914 saw more Sydney males volunteer for the armed forces than the Commonwealth authorities could process, and helped reduce unemployment. Those returning from the war in 1918 were promised "homes fit for heroes" in new suburbs such as Daceyville and Matraville. "Garden suburbs" and mixed industrial and residential developments also grew along the rail and tram corridors.[62] The population reached one million in 1926, after Sydney had regained its position as the most populous city in Australia.[81] The government created jobs with massive public projects such as the electrification of the Sydney rail network and building the Sydney Harbour Bridge.[82]



Sydney Harbour Bridge opening day, 19 March 1932

Sydney was more severely affected by the Great Depression of the 1930s than regional New South Wales or Melbourne.[83] New building almost came to a standstill, and by 1933 the unemployment rate for male workers was 28 per cent, but over 40 per cent in working class areas such as Alexandria and Redfern. Many families were evicted from their homes and shanty towns grew along coastal Sydney and Botany Bay, the largest being "Happy Valley" at La Perouse.[84] The Depression also exacerbated political divisions. In March 1932, when populist Labor premier Jack Lang attempted to open the Sydney Harbour Bridge he was upstaged by Francis de Groot of the far-right New Guard, who slashed the ribbon with a sabre.[85]

In January 1938, Sydney celebrated the Empire Games and the sesquicentenary of European settlement in Australia. One journalist wrote, "Golden beaches. Sun tanned men and maidens...Red-roofed villas terraced above the blue waters of the harbour...Even Melbourne seems like some grey and stately city of Northern Europe compared with Sydney's sub-tropical splendours." A congress of the "Aborigines of Australia" declared 26 January "A Day of Mourning" for "the whiteman's seizure of our country." [86]

With the outbreak of Second World War in 1939, Sydney experienced a surge in industrial development. Unemployment virtually disappeared and women moved into jobs previously typically reserved for males. Sydney was attacked by Japanese submarines in May and June



1942 with 21 killed. Households built [air raid](#) shelters and performed drills.<sup>[87]</sup> [Military establishments](#) in response to [World War II in Australia](#) included the [Garden Island Tunnel System](#), the only [tunnel warfare](#) complex in Sydney, and the heritage-listed military [fortification](#) systems [Bradleys Head Fortification Complex](#) and [Middle Head Fortifications](#), which were part of a total [defence system for Sydney Harbour](#).<sup>[88]</sup>

A post-war immigration and baby boom saw a rapid increase in Sydney's population and the spread of low-density housing in suburbs throughout the Cumberland Plain. Immigrants—mostly from Britain and continental Europe—and their children accounted for over three-quarters of Sydney's population growth between 1947 and 1971.<sup>[89]</sup> The newly created Cumberland County Council oversaw low-density residential developments, the largest at [Green Valley](#) and [Mount Druitt](#). Older residential centres such as Parramatta, [Bankstown](#) and [Liverpool](#) became suburbs of the metropolis.<sup>[90]</sup> Manufacturing, protected by high tariffs, employed over a third of the workforce from 1945 to the 1960s. However, as the long post-war economic boom progressed, retail and other service industries became the main source of new jobs.<sup>[91]</sup>

An estimated one million onlookers, most of the city's population, watched [Queen Elizabeth II](#) land in 1954 at Farm Cove where Captain Phillip had raised the Union Jack 165 years earlier, commencing her [Australian Royal Tour](#). It was the first time a reigning monarch stepped onto Australian soil.<sup>[92]</sup>

Increasing high-rise development in Sydney and the expansion of suburbs beyond the "green belt" envisaged by the planners of the 1950s resulted in community protests. In the early 1970s, trade unions and resident action groups imposed [green bans](#) on development projects in historic areas such as The Rocks. Federal, State and local governments introduced heritage and environmental legislation.<sup>[62]</sup> The Sydney Opera House was also controversial for its cost and disputes between architect [Jørn Utzon](#) and government officials. However, soon after it opened in 1973 it became a major tourist attraction and symbol of the city.<sup>[93]</sup> The progressive reduction in tariff protection from 1974 began the transformation of Sydney from a manufacturing centre to a "world city".<sup>[94]</sup> From the 1980s, [overseas immigration](#) grew rapidly, with Asia, the Middle East and Africa becoming major sources. By 2021, the population of Sydney was over 5.2 million, with 40% of the population born overseas. China and India overtook England as the largest source countries for overseas-born residents.<sup>[95]</sup>

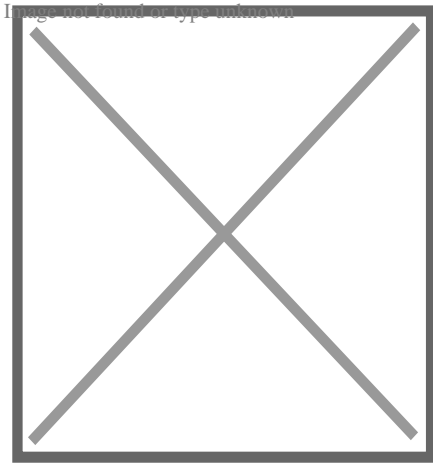
## Geography

[\[edit\]](#)

Main article: [Geography of Sydney](#)

## Topography

[\[edit\]](#)



Sydney lies on a **submergent coastline** where the ocean level has risen to flood deep **rias**.

Sydney is a coastal basin with the **Tasman Sea** to the east, the **Blue Mountains** to the west, the Hawkesbury River to the north, and the **Woronora Plateau** to the south.

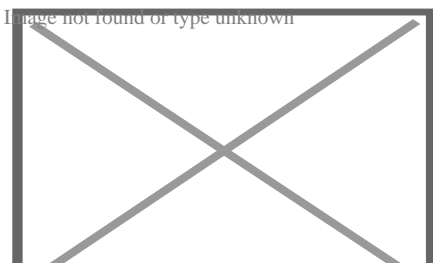
Sydney spans two geographic regions. The **Cumberland Plain** lies to the south and west of the Harbour and is relatively flat. The **Hornsby Plateau** is located to the north and is dissected by steep valleys. The flat areas of the south were the first to be developed; it was not until the construction of the Sydney Harbour Bridge that the northern reaches became more heavily populated. **Seventy surf beaches** can be found along its coastline, with Bondi Beach being the most famous.

The **Nepean River** wraps around the western edge of the city and becomes the Hawkesbury River before reaching **Broken Bay**. Most of Sydney's water storages can be found on tributaries of the Nepean River. The **Parramatta River** is mostly industrial and drains a large area of Sydney's western suburbs into Port Jackson. The southern parts of the city are drained by the **Georges River** and the **Cooks River** into Botany Bay.

There is no single definition of the boundaries of Sydney. The Australian Statistical Geography Standard definition of Greater Sydney covers 12,369 km<sup>2</sup> (4,776 sq mi) and includes the local government areas of **Central Coast** in the north, **Hawkesbury** in the north-west, **Blue Mountains** in the west, **Sutherland Shire** in the south, and **Wollondilly** in the south-west.[96] The local government area of the **City of Sydney** covers about 26 square kilometres from **Garden island** in the east to Bicentennial Park in the west, and south to the suburbs of Alexandria and **Rosebery**.[97]

## Geology

[[edit](#)]



Almost all of the exposed rocks around Sydney are **Sydney sandstone**.

Sydney is made up of mostly **Triassic** rock with some recent **igneous** dykes and **volcanic** necks (typically found in the **Prospect dolerite intrusion**, west of Sydney).[98] The **Sydney Basin** was formed in the early Triassic period.[99] The sand that was to become the sandstone of today was laid down between 360 and 200 million years ago. The sandstone has **shale** lenses and fossil riverbeds.[99] The **continental shelf** of **Australia** is only 25.9 km (16.1 mi) away from the coast of Sydney, and that is where the **Tasman Abyssal Plain** lies.[100][101]

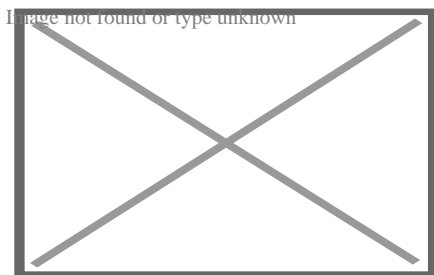
The **Sydney Basin** bioregion includes coastal features of cliffs, beaches, and estuaries. Deep river valleys known as **rias** were carved during the Triassic period in the **Hawkesbury sandstone** of the coastal region. The rising sea level between 18,000 and 6,000 years ago flooded the rias to form estuaries and deep harbours.[99] Port Jackson, better known as Sydney Harbour, is one such **ria**.<sup>[102]</sup> Sydney features two major soil types: **sandy soils** (which originate from the Hawkesbury sandstone) and **clay** (which are from shales and **volcanic rocks**), though some soils may be a mixture of the two.<sup>[103]</sup>

Directly overlying the older Hawkesbury sandstone is the **Wianamatta shale**, a geological feature found in western Sydney that was deposited in connection with a large **river delta** during the **Middle Triassic**. The Wianamatta shale generally comprises fine grained **sedimentary rocks** such as shales, **mudstones**, **ironstones**, **siltstones** and **laminites**, with less common sandstone units.<sup>[104]</sup> The Wianamatta Group is made up of **Bringelly Shale**, **Minchinbury Sandstone** and **Ashfield Shale**.<sup>[105]</sup>

## Ecology

[[edit](#)]

Further information: **Ecology of Sydney**



Typical **grassy** woodland in the Sydney metropolitan area

The most prevalent **plant communities** in the Sydney region are grassy woodlands (i.e. **savannas**)<sup>[106]</sup> and some pockets of dry **sclerophyll** forests,<sup>[107]</sup> which consist of **eucalyptus** trees, **casuarinas**, **melaleucas**, **corymbias** and **angophoras**, with shrubs (typically **wattles**, **callistemons**, **grevilleas** and **banksias**), and a semi-continuous grass in the **understory**.<sup>[108]</sup> The plants in this community tend to have rough, spiky leaves due to low **soil fertility**. Sydney also features a few areas of wet sclerophyll forests in the wetter, elevated areas in the **north**

and **northeast**. These forests are defined by straight, tall tree **canopies** with a moist understory of soft-leaved shrubs, **tree ferns** and herbs.[109]

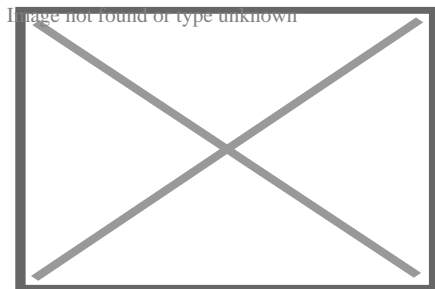
The predominant vegetation community in Sydney is the **Cumberland Plain Woodland** in **Western Sydney** (**Cumberland Plain**),[110] followed by the **Sydney Turpentine-Ironbark Forest** in the Inner West and **Northern Sydney**,[111] the **Eastern Suburbs Banksia Scrub** in the coastline and the **Blue Gum High Forest** scantily present in the North Shore – all of which are critically endangered.[112][113] The city also includes the **Sydney Sandstone Ridgetop Woodland** found in **Ku-ring-gai Chase National Park** on the **Hornsby Plateau** to the north.[114]

Sydney is home to dozens of **bird species**,[115] which commonly include the **Australian raven**, **Australian magpie**, **crested pigeon**, **noisy miner** and the **pied currawong**. Introduced bird species ubiquitously found in Sydney are the **common myna**, **common starling**, **house sparrow** and the **spotted dove**. [116] **Reptile** species are also numerous and predominantly include **skinks**. [117][118] Sydney has a few **mammal** and **spider** species, such as the **grey-headed flying fox** and the **Sydney funnel-web**, respectively, [119][120] and has a huge diversity of **marine species** inhabiting its harbour and beaches. [121]

## Climate

[edit]

Main articles: **Climate of Sydney** and **Severe weather events in Sydney**



A summer storm over Sydney Harbour

Under the **Köppen–Geiger classification**, Sydney has a **humid subtropical climate** (*Cfa*) [122] with "warm, sometimes hot" summers and "generally mild", [123][124][125] to "cool" winters. [126] The **El Niño–Southern Oscillation**, the **Indian Ocean Dipole** and the **Southern Annular Mode** [127][128] play an important role in determining Sydney's weather patterns: **drought** and **bushfire** on the one hand, and storms and flooding on the other, associated with the opposite **phases of the oscillation in Australia**. The weather is **moderated** by proximity to the ocean, and more extreme temperatures are recorded in the inland western suburbs because Sydney CBD is more affected by the **oceanic climate** drivers than the western suburbs. [129][130]

At Sydney's primary weather station at **Observatory Hill**, extreme temperatures have ranged from 45.8 °C (114.4 °F) on 18 **January 2013** to 2.1 °C (35.8 °F) on 22 June 1932. [131][132][133] An average of 14.9 days a year have temperatures at or above 30 °C (86 °F) in the

central business district (CBD).[130] In contrast, the metropolitan area averages between 35 and 65 days, depending on the suburb.[134] The hottest day in the metropolitan area occurred in **Penrith** on 4 January 2020, where a high of 48.9 °C (120.0 °F) was recorded.[135] The average annual temperature of the sea ranges from 18.5 °C (65.3 °F) in September to 23.7 °C (74.7 °F) in February.[136] Sydney has an average of 7.2 hours of sunshine per day[137] and 109.5 clear days annually.[4] Due to the inland location, **frost** is recorded early in the morning in **Western Sydney** a few times in winter. Autumn and spring are the transitional seasons, with spring showing a larger temperature variation than autumn.[138]

Sydney experiences an **urban heat island** effect.[139] This makes certain parts of the city more vulnerable to extreme heat, including coastal suburbs.[139][140] In late spring and summer, temperatures over 35 °C (95 °F) are not uncommon,[141] though hot, dry conditions are usually ended by a **southerly buster**,[142] a powerful southerly that brings **gale** winds and a rapid fall in temperature.[143] Since Sydney is downwind of the **Great Dividing Range**, it occasionally experiences dry, westerly **foehn winds** typically in winter and early spring (which are the reason for its warm maximum temperatures).[144][145][146] Westerly winds are intense when the **Roaring Forties** (or the **Southern Annular Mode**) shift towards southeastern Australia,[147] where they may damage homes and **affect flights**, in addition to **making the temperature** seem **colder than it actually is**. [148][149]

Rainfall has a moderate to low variability and has historically been fairly uniform throughout the year, although in recent years it has been more summer-dominant and erratic.[150][151][152][153] Precipitation is usually higher in summer through to autumn,[124] and lower in late winter to early spring.[127][154][130][155] In late autumn and winter, **east coast lows** may bring large amounts of rainfall, especially in the CBD.[156] In the warm season **black nor'easters** are usually the cause of heavy rain events, though other forms of **low-pressure areas**, including remnants of **ex-cyclones**, may also bring heavy deluge and afternoon thunderstorms.[157][158] ] 'Snow' was last alleged in 1836, more than likely a fall of **graupel**, or soft hail; and in July 2008 the **Upper North Shore** saw a fall of graupel that was mistaken by many for 'snow'. [159] In 2009, dry conditions brought a severe **dust storm towards the city**. [160][161]

- **v**
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Climate data for Sydney (**Observatory Hill**) 1991–2020 averages, 1861–present extremes

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Y
Record high °C (°F)	45.8 (114.4)	42.1 (107.8)	39.8 (103.6)	35.4 (95.7)	30.0 (86.0)	26.9 (80.4)	26.5 (79.7)	31.3 (88.3)	34.6 (94.3)	38.2 (100.8)	41.8 (107.2)	42.2 (108.0)	4
Mean maximum °C (°F)	36.8 (98.2)	34.1 (93.4)	32.2 (90.0)	29.7 (85.5)	26.2 (79.2)	22.3 (72.1)	22.9 (73.2)	25.4 (77.7)	29.9 (85.8)	33.6 (92.5)	34.1 (93.4)	34.4 (93.9)	3

Mean daily maximum °C (°F)	27.0 (80.6)	26.8 (80.2)	25.7 (78.3)	23.6 (74.5)	20.9 (69.6)	18.3 (64.9)	17.9 (64.2)	19.3 (66.7)	21.6 (70.9)	23.2 (73.8)	24.2 (75.6)	25.7 (78.3)	27.0 (80.6)
Daily mean °C (°F)	23.5 (74.3)	23.4 (74.1)	22.1 (71.8)	19.5 (67.1)	16.6 (61.9)	14.2 (57.6)	13.4 (56.1)	14.5 (58.1)	17.0 (62.6)	18.9 (66.0)	20.4 (68.7)	22.1 (71.8)	23.5 (74.3)
Mean daily minimum °C (°F)	20.0 (68.0)	19.9 (67.8)	18.4 (65.1)	15.3 (59.5)	12.3 (54.1)	10.0 (50.0)	8.9 (48.0)	9.7 (49.5)	12.3 (54.1)	14.6 (58.3)	16.6 (61.9)	18.4 (65.1)	20.0 (68.0)
Mean minimum °C (°F)	16.1 (61.0)	16.1 (61.0)	14.2 (57.6)	11.0 (51.8)	8.3 (46.9)	6.5 (43.7)	5.7 (42.3)	6.1 (43.0)	8.0 (46.4)	9.8 (49.6)	12.0 (53.6)	13.9 (57.0)	16.1 (61.0)
Record low °C (°F)	10.6 (51.1)	9.6 (49.3)	9.3 (48.7)	7.0 (44.6)	4.4 (39.9)	2.1 (35.8)	2.2 (36.0)	2.7 (36.9)	4.9 (40.8)	5.7 (42.3)	7.7 (45.9)	9.1 (48.4)	10.6 (51.1)
Average rainfall mm (inches)	91.1 (3.59)	131.5 (5.18)	117.5 (4.63)	114.1 (4.49)	100.8 (3.97)	142.0 (5.59)	80.3 (3.16)	75.1 (2.96)	63.4 (2.50)	67.7 (2.67)	90.6 (3.57)	73.0 (2.87)	114.1 (4.49)
Average rainy days (? 1 mm)	8.2	9.0	10.1	7.9	7.9	9.3	7.2	5.6	5.8	7.6	8.7	7.9	8.2
Average afternoon <b>relative humidity</b> (%)	60	62	59	58	58	56	52	47	49	53	57	58	60
Average <b>dew point</b> °C (°F)	16.5 (61.7)	17.2 (63.0)	15.4 (59.7)	12.7 (54.9)	10.3 (50.5)	7.8 (46.0)	6.1 (43.0)	5.4 (41.7)	7.8 (46.0)	10.2 (50.4)	12.6 (54.7)	14.6 (58.3)	16.5 (61.7)
Mean monthly <b>sunshine hours</b>	232.5	205.9	210.8	213.0	204.6	171.0	207.7	248.0	243.0	244.9	222.0	235.6	232.5
Percentage <b>possible sunshine</b>	53	54	55	63	63	57	66	72	67	61	55	55	53

Source 1: Bureau of Meteorology<sup>[162]</sup><sup>[163]</sup><sup>[164]</sup><sup>[165]</sup>

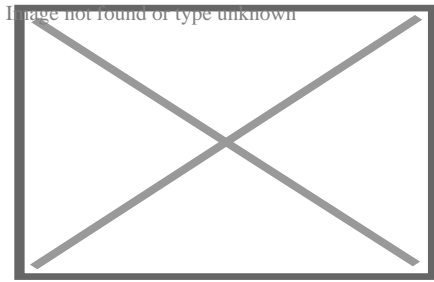
Source 2: Bureau of Meteorology, Sydney Airport (sunshine hours)<sup>[166]</sup>

Regions

[edit]

Main article: Regions of Sydney



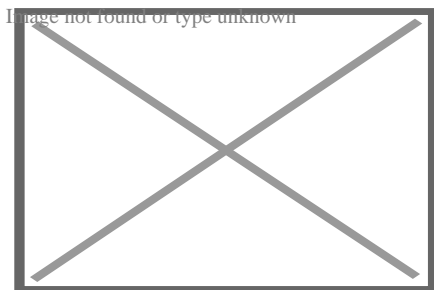


Sydney area at night, facing west. **Wollongong** is bottom left, and the **Central Coast** is at the far right.

The **Greater Sydney Commission** divides Sydney into three "cities" and five "districts" based on the 33 LGAs in the metropolitan area. The "metropolis of three cities" comprises *Eastern Harbour City*, *Central River City* and *Western Parkland City*.<sup>[167]</sup> The Australian Bureau of Statistics also includes City of Central Coast (the former Gosford City and Wyong Shire) as part of Greater Sydney for population counts,<sup>[168]</sup> adding 330,000 people.<sup>[169]</sup>

## Inner suburbs

[[edit](#)]



Historical buildings in **Millers Point**, an inner suburb north of the CBD

The **CBD** extends about 3 km (1.9 mi) south from **Sydney Cove**. It is bordered by **Farm Cove** within the **Royal Botanic Garden** to the east and **Darling Harbour** to the west. Suburbs surrounding the CBD include **Woolloomooloo** and **Potts Point** to the east, **Surry Hills** and **Darlinghurst** to the south, **Pymont** and **Ultimo** to the west, and **Millers Point** and **The Rocks** to the north. Most of these suburbs measure less than 1 km<sup>2</sup> (0.4 sq mi) in area. The Sydney CBD is characterised by narrow streets and thoroughfares, created in its convict beginnings.<sup>[170]</sup>

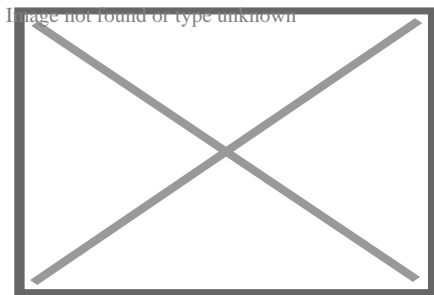
Several localities, distinct from suburbs, exist throughout Sydney's inner reaches. **Central** and **Circular Quay** are transport hubs with ferry, rail, and bus interchanges. **Chinatown**, Darling Harbour, and **Kings Cross** are important locations for culture, tourism, and recreation. The **Strand Arcade**, located between **Pitt Street Mall** and **George Street**, is a historical **Victorian-style** shopping **arcade**. Opened on 1 April 1892, its shop fronts are an exact replica of the original internal shopping facades.<sup>[171]</sup> **Westfield Sydney**, located beneath the **Sydney Tower**, is the largest shopping centre by area in Sydney.<sup>[172]</sup>

Since the late 20th century, there has been a trend of **gentrification** amongst Sydney's inner suburbs. Pyrmont, located on the harbour, was redeveloped from a centre of shipping and international trade to an area of **high density housing**, tourist accommodation, and gambling.[173] Originally located well outside of the city, Darlinghurst is the location of the historic **Darlinghurst Gaol**, manufacturing, and mixed housing. For a period it was known as an area of prostitution. The terrace-style housing has largely been retained and Darlinghurst has undergone significant gentrification since the 1980s.[174][175][176]

**Green Square** is a former industrial area of **Waterloo** which is undergoing urban renewal worth \$8 billion. On the city harbour edge, the historic suburb and wharves of Millers Point are being built up as the new area of **Barangaroo**. [177][178] The suburb of **Paddington** is known for its restored **terrace houses**, **Victoria Barracks**, and shopping including the weekly Oxford Street markets.[179]

## Inner West

[edit]



**Newtown**, one of the inner-most parts of the Inner West, is one of the most complete **Victorian** and **Edwardian era** commercial precincts in Australia.

The **Inner West** generally includes the **Inner West Council**, **Municipality of Burwood**, **Municipality of Strathfield**, and **City of Canada Bay**. These span up to about 11 km west of the CBD. Historically, especially prior to the building of the Harbour Bridge,[180] the outer suburbs of the Inner West such as **Strathfield** were the location of "country" estates for the colony's elites. By contrast, the inner suburbs in the Inner West, being close to transport and industry, have historically housed working-class industrial workers. These areas have undergone gentrification in the late 20th century, and many parts are now highly valued residential suburbs.[181] As of 2021, an Inner West suburb (Strathfield) remained one of the 20 most expensive postcodes in Australia by median house price (the others were all in metropolitan Sydney, all in Northern Sydney or the Eastern Suburbs).[182] The **University of Sydney** is located in this area, as well as the **University of Technology, Sydney** and a campus of the **Australian Catholic University**. The Anzac Bridge spans Johnstons Bay and connects **Rozelle** to **Pyrmont** and the city, forming part of the **Western Distributor**.

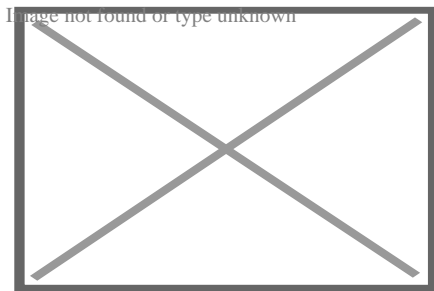
The Inner West is today well known as the location of village commercial centres with cosmopolitan flavours, such as the "Little Italy" commercial centres of Leichardt, Five Dock

and Haberfield,[183] "Little Portugal" in Petersham,[184] "Little Korea" in Strathfield[185] or "Little Shanghai" in Ashfield.[186] Large-scale shopping centres in the area include [Westfield Burwood](#), [DFO Homebush](#) and [Birkenhead Point Outlet Centre](#). There is a large cosmopolitan community and nightlife hub on [King Street, Newtown](#).

The area is serviced by [Sydney Trains' T1](#), [T2](#) and [T3](#) services, including the [Main Suburban Line](#), which was the first to be constructed in New South Wales. [Strathfield railway station](#) is a secondary railway hub within Sydney, and major station on the Suburban and [Northern](#) lines. It was constructed in 1876.[187] The future [Sydney Metro West](#) will also connect this area with the City and Parramatta. The area is also serviced by the [Parramatta River services](#) of [Sydney Ferries](#),[188] numerous bus routes and cycleways.[189]

## Eastern suburbs

[[edit](#)]



Residences in [Bellevue Hill](#). Sydney's eastern suburbs are made up of some of the most expensive real estate in the country[190]

The Eastern Suburbs encompass the [Municipality of Woollahra](#), the [City of Randwick](#), the [Waverley Municipal Council](#), and parts of the [Bayside Council](#). They include some of the most affluent and advantaged areas in the country, with some streets being amongst the most expensive in the world. As at 2014, [Wolseley Road](#), [Point Piper](#), had a top price of \$20,900 per square metre, making it the ninth-most expensive street in the world.[191] More than 75% of neighbourhoods in the [Electoral District of Wentworth](#) fall under the top decile of SEIFA advantage, making it the least disadvantaged area in the country.[192] As of 2021, of the 20 most expensive postcodes in Australia by median house price, nine were in the Eastern Suburbs.[182]

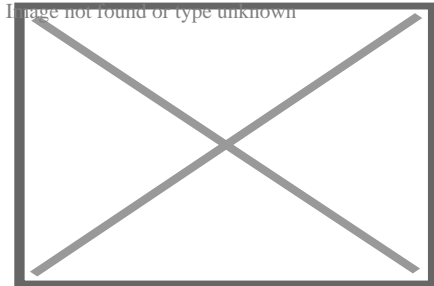
Major landmarks include [Bondi Beach](#), which was added to the [Australian National Heritage List](#) in 2008;[193] and [Bondi Junction](#), featuring a [Westfield shopping centre](#) and an estimated office workforce of 6,400 by 2035,[194] as well as a [railway station](#) on the [T4 Eastern Suburbs Line](#). The suburb of [Randwick](#) contains [Randwick Racecourse](#), the [Royal Hospital for Women](#), the [Prince of Wales Hospital](#), [Sydney Children's Hospital](#), and [University of New South Wales Kensington Campus](#). [195]

Construction of the **CBD and South East Light Rail** was completed in April 2020.<sup>[196]</sup> The project aims to provide reliable and high-capacity tram services to residents in the City and South-East.

Major shopping centres in the area include **Westfield Bondi Junction** and **Westfield Eastgardens**.

## Southern Sydney

<sup>[edit]</sup>



**Kurnell**, **La Perouse**, and **Cronulla**, along with various other suburbs, face Botany Bay.

The Southern district of Sydney includes the suburbs in the **local government areas** of the **Georges River Council** (collectively known as **St George**) and the **Sutherland Shire** (colloquially known as 'The Shire'), on the southern banks of the **Georges River**.

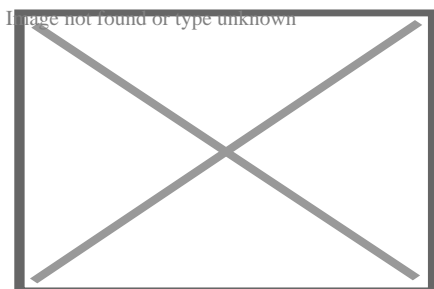
The **Kurnell peninsula**, near **Botany Bay**, is the site of the first landfall on the eastern coastline made by James Cook in 1770. **La Perouse**, a historic suburb named after the French navigator **Jean-François de Galaup, comte de Lapérouse**, is notable for its old military outpost at **Bare Island** and the **Botany Bay National Park**.

The suburb of **Cronulla** in **southern Sydney** is close to Royal National Park, Australia's oldest national park. Hurstville, a large suburb with commercial and high-rise residential buildings dominating the skyline, has become a CBD for the southern suburbs.<sup>[197]</sup>

## Northern Sydney

<sup>[edit]</sup>

Further information: **Northern Sydney**



Chatswood is a major commercial district.

'Northern Sydney' includes the suburbs in the Upper North Shore, Lower North Shore and the Northern Beaches.

The Northern Suburbs include several landmarks – Macquarie University, Gladesville Bridge, Ryde Bridge, Macquarie Centre and Curzon Hall in Marsfield. This area includes suburbs in the local government areas of Hornsby Shire, Ku-ring-gai Council, City of Ryde, the Municipality of Hunter's Hill and parts of the City of Parramatta.

The North Shore includes the commercial centres of North Sydney and Chatswood. North Sydney itself consists of a large commercial centre, which contains the second largest concentration of high-rise buildings in Sydney after the CBD. North Sydney is dominated by advertising, marketing and associated trades, with many large corporations holding offices.

The Northern Beaches area includes Manly, one of Sydney's most popular holiday destinations. The region also features Sydney Heads, a series of headlands which form the entrance to Sydney Harbour. The Northern Beaches area extends south to the entrance of Port Jackson (Sydney Harbour), west to Middle Harbour and north to the entrance of Broken Bay.[198] The 2021 Australian census found the Northern Beaches to have, in comparison with the rest of Sydney, a large British diaspora and high concentration of people with European ancestry.[199]

As of the end of 2021, half of the 20 most expensive postcodes in Australia (by median house price) were in Northern Sydney, including four on the Northern Beaches, two on the Lower North Shore, three on the Upper North Shore, and one straddling Hunters Hill and Woolwich.[182]

## Hills district

[edit]

The Hills district generally refers to the suburbs in north-western Sydney including the local government areas of The Hills Shire, parts of the City of Parramatta Council and Hornsby Shire. Actual suburbs and localities that are considered to be in the Hills District can be somewhat amorphous. For example, the Hills District Historical Society restricts its definition to the Hills Shire local government area, yet its study area extends from Parramatta to the Hawkesbury. The region is so named for its characteristically comparatively hilly topography as the Cumberland Plain lifts up, joining the Hornsby Plateau. Windsor and Old Windsor Roads are the second and third roads, respectively, laid in Australia.[200]

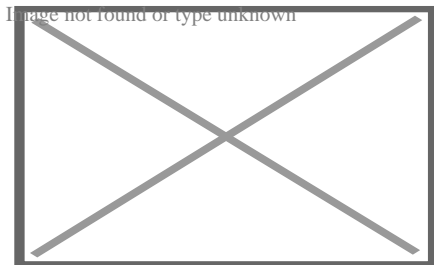
On 26 May 2019, The Sydney Metro Northwest, which went from Chatswood to Tallawong, opened, with a large portion running through the Hills District, which meant the Hills District, for the first time, started having heavy rail.[201] Before this, The Hills was served by Bus Rapid

Transit.

## Western suburbs

[edit]

Further information: [Greater Western Sydney](#)



[Parramatta](#), a major commercial centre of [Greater Western Sydney](#), is often referred to as Sydney's "second [CBD](#)"

The greater western suburbs encompasses the areas of Parramatta, the sixth largest business district in Australia, settled the same year as the harbour-side colony,[202] [Bankstown](#), [Liverpool](#), [Penrith](#), and [Fairfield](#). Covering 5,800 km<sup>2</sup> (2,200 sq mi) and having an estimated population as at 2017 of 2,288,554, western Sydney has the most [multicultural suburbs](#) in the country – [Cabramatta](#) has earned the nickname "[Little Saigon](#)" due to its [Vietnamese](#) population, [Fairfield](#) has been named "[Little Assyria](#)" for its predominant [Assyrian](#) population and [Harris Park](#) is known as "[Little India](#)" with its plurality of [Indian](#) and [Hindu population](#).[203][204][205][206] The population is predominantly of a [working class](#) background, with major employment in the [heavy industries](#) and [vocational](#) trade.[207] [Toongabbie](#) is noted for being the third mainland settlement (after Sydney and Parramatta) set up after British colonisation began in 1788, although the site of the settlement is actually in the separate suburb of [Old Toongabbie](#).[208]

The western suburb of [Prospect](#), in the [City of Blacktown](#), is home to [Raging Waters](#), a [water park](#) operated by [Parques Reunidos](#).[209] [Auburn Botanic Gardens](#), a botanical garden in [Auburn](#), attracts thousands of visitors each year, including many from outside Australia.[210] The greater west also includes [Sydney Olympic Park](#), a suburb created to host the 2000 Summer Olympics, and [Sydney Motorsport Park](#), a [circuit](#) in [Eastern Creek](#).[211] [Prospect Hill](#), a historically significant ridge in the west and the only area in Sydney with ancient [volcanic activity](#),[212] is also listed on the State Heritage Register.[213]

To the northwest, [Featherdale Wildlife Park](#), a zoo in [Doonside](#), near [Blacktown](#), is a major [tourist attraction](#).[214] [Sydney Zoo](#), opened in 2019, is another prominent zoo situated in [Bungaribee](#).[215] Established in 1799, the [Old Government House](#), a [historic house museum](#) and [tourist spot](#) in Parramatta, was included in the [Australian National Heritage List](#) on 1 August 2007 and [World Heritage List](#) in 2010 (as part of the 11 penal sites constituting the [Australian Convict Sites](#)), making it the only site in greater western Sydney to be featured in

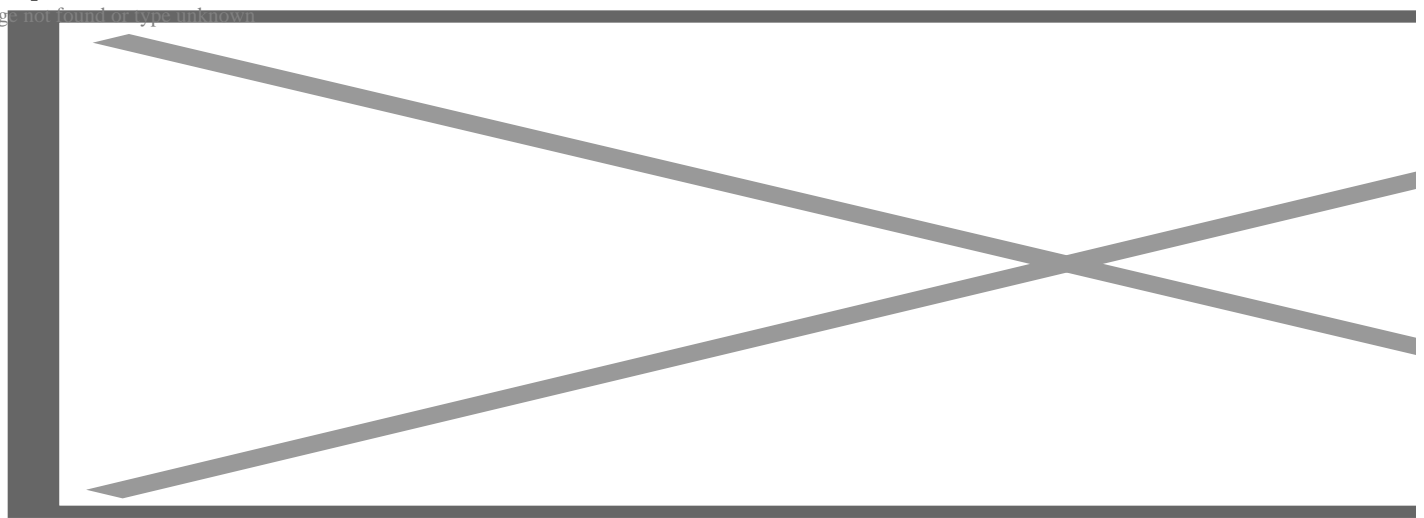
such lists.[216] The house is Australia's oldest surviving public building.[217]

Further to the southwest is the region of Macarthur and the city of [Campbelltown](#), a significant population centre until the 1990s considered a region separate to Sydney proper. [Macarthur Square](#), a shopping complex in Campbelltown, has become one of the largest shopping complexes in Sydney.[218] The southwest also features [Bankstown Reservoir](#), the oldest elevated reservoir constructed in [reinforced concrete](#) that is still in use and is listed on the State Heritage Register.[219] The southwest is home to one of Sydney's oldest trees, the [Bland Oak](#), which was planted in the 1840s by [William Bland](#) in [Carramar](#). [220]

## Urban structure

[[edit](#)]

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The [Sydney CBD](#) with the [Opera House](#) and [Harbour Bridge](#). Sydney is home to the most high-rise buildings in the nation.[221]

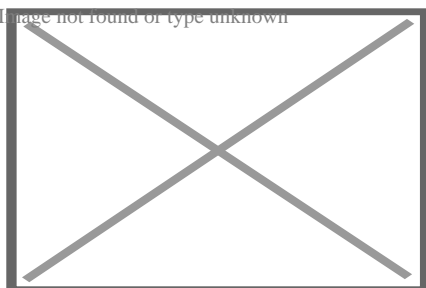
## Architecture

[[edit](#)]

See also: [Architecture of Sydney](#), [List of heritage houses in Sydney](#), and [List of tallest buildings in Sydney](#)

The earliest structures in the colony were built to the bare minimum of standards. Governor Macquarie set ambitious targets for the design of new construction projects. The city now has a world heritage listed building, several national heritage listed buildings, and dozens of Commonwealth heritage listed buildings as evidence of the survival of Macquarie's ideals.[222] [223][224]

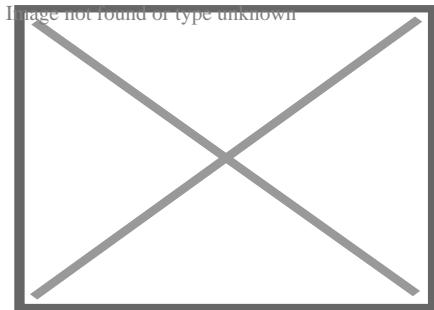
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**York Street** is an example of a city street in Sydney with an array of intact Victorian heritage architecture.

In 1814, the Governor called on a convict named **Francis Greenway** to design **Macquarie Lighthouse**.<sup>[225]</sup> The lighthouse's **Classical** design earned Greenway a pardon from Macquarie in 1818 and introduced a culture of refined architecture that remains to this day.<sup>[226]</sup> Greenway went on to design the **Hyde Park Barracks** in 1819 and the **Georgian** style **St James's Church** in 1824.<sup>[227][228]</sup> **Gothic-inspired architecture** became more popular from the 1830s. **John Verge's Elizabeth Bay House** and **St Philip's Church** of 1856 were built in **Gothic Revival** style along with **Edward Blore's Government House** of 1845.<sup>[229][230]</sup> **Kirribilli House**, completed in 1858, and **St Andrew's Cathedral**, Australia's oldest cathedral,<sup>[231]</sup> are rare examples of **Victorian Gothic** construction.<sup>[229][232]</sup>



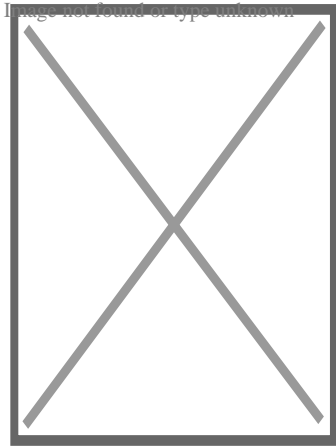
**General Post Office**

From the late 1850s there was a shift towards Classical architecture. **Mortimer Lewis** designed the **Australian Museum** in 1857.<sup>[233]</sup> The **General Post Office**, completed in 1891 in **Victorian Free Classical** style, was designed by **James Barnet**.<sup>[234]</sup> Barnet also oversaw the 1883 reconstruction of Greenway's Macquarie Lighthouse.<sup>[225][226]</sup> **Customs House** was built in 1844.<sup>[235]</sup> The neo-Classical and **French Second Empire** style **Town Hall** was completed in 1889.<sup>[236][237]</sup> **Romanesque** designs gained favour from the early 1890s. **Sydney Technical College** was completed in 1893 using both Romanesque Revival and **Queen Anne** approaches.<sup>[238]</sup> The **Queen Victoria Building** was designed in Romanesque Revival fashion by **George McRae**; completed in 1898,<sup>[239]</sup> it accommodates 200 shops across its three storeys.<sup>[240]</sup>

As the wealth of the settlement increased and Sydney developed into a metropolis after Federation in 1901, its buildings became taller. Sydney's first tower was Culwulla Chambers which topped out at 50 m (160 ft) making 12 floors. The Commercial Traveller's Club, built in 1908, was of similar height at 10 floors. It was built in a brick stone veneer and demolished in 1972.<sup>[241]</sup> This heralded a change in Sydney's cityscape and with the lifting of height restrictions in the 1960s there came a surge of high-rise construction.<sup>[242]</sup>

The Great Depression had a tangible influence on Sydney's architecture. New structures became more restrained with far less ornamentation. The most notable architectural feat of this period is the Harbour Bridge. Its steel arch was designed by **John Bradfield** and completed in 1932. A total of 39,000 tonnes of structural steel span the 503 m (1,650 ft) between Milsons

Point and Dawes Point.[243][244]



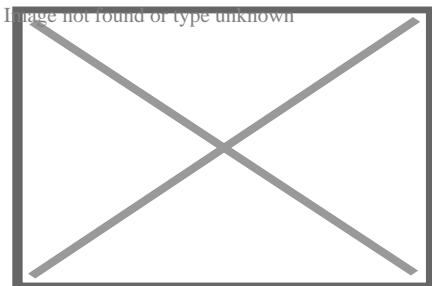
Frank Gehry's Dr Chau Chak Wing Building

Modern and International architecture came to Sydney from the 1940s. Since its completion in 1973 the city's Opera House has become a World Heritage Site and one of the world's most renowned pieces of Modern design. Jørn Utzon was awarded the Pritzker Prize in 2003 for his work on the Opera House.[245] Sydney is home to Australia's first building by renowned Canadian-American architect Frank Gehry, the Dr Chau Chak Wing Building (2015). An entrance from The Goods Line—a pedestrian pathway and former railway line—is located on the eastern border of the site.

Contemporary buildings in the CBD include Citigroup Centre,[246] Aurora Place,[247] Chifley Tower,[248][249] the Reserve Bank building,[250] Deutsche Bank Place,[251] MLC Centre,[252] and Capita Centre.[253] The tallest structure is Sydney Tower, designed by Donald Crone and completed in 1981.[254] Due to the proximity of Sydney Airport, a maximum height restriction was imposed, now sitting at 330 metres (1083 feet).[255] Green bans and heritage overlays have been in place since at least 1977 to protect Sydney's heritage after controversial demolitions in the 1970s.[256]

## Housing

[edit]



Terraces in Kirribilli

Sydney surpasses both [New York City](#) and [Paris](#) real estate prices, having some of the most expensive in the world.<sup>[257][258]</sup> The city remains Australia's most expensive housing market, with the median house price at \$1,595,310 as of December 2023<sup>[259]</sup>

There were 1.83 million dwellings in Sydney in 2021 including 900,000 (54%) detached houses, 218,000 (13%) semi-detached terrace houses and 550,000 (33%) units and apartments.<sup>[260]</sup> Whilst terrace houses are common in the inner city areas, detached houses dominate the landscape in the outer suburbs. Due to environmental and economic pressures, there has been a noted trend towards denser housing, with a 30% increase in the number of apartments between 1996 and 2006.<sup>[261]</sup> Public housing in Sydney is managed by the [Government of New South Wales](#).<sup>[262]</sup> Suburbs with large concentrations of public housing include [Claymore](#), [Macquarie Fields](#), [Waterloo](#), and [Mount Druitt](#).

A range of heritage housing styles can be found throughout Sydney. Terrace houses are found in the inner suburbs such as [Paddington](#), [The Rocks](#), [Potts Point](#) and [Balmain](#), many of which have been the subject of [gentrification](#).<sup>[263][264]</sup> These terraces, particularly those in suburbs such as The Rocks, were historically home to Sydney's miners and labourers. In the present day, terrace houses now make up some of the most valuable real estate in the city.<sup>[265]</sup> Surviving large mansions from the Victorian era are mostly found in the oldest suburbs, such as [Double Bay](#), [Darling Point](#), [Rose Bay](#) and [Strathfield](#).<sup>[266]</sup>

[Federation](#) homes, constructed around the time of Federation in 1901, are located in a large number of suburbs that developed thanks to the arrival of railways in the late 19th century, such as [Penshurst](#) and [Turramurra](#), and in large-scale planned "garden suburbs" such as [Haberfield](#). Workers cottages are found in [Surry Hills](#), [Redfern](#), and [Balmain](#). [California bungalows](#) are common in [Ashfield](#), [Concord](#), and [Beecroft](#). Larger modern homes are predominantly found in the outer suburbs, such as [Stanhope Gardens](#), [Kellyville Ridge](#), [Bella Vista](#) to the northwest, [Bossley Park](#), [Abbotsbury](#), and [Cecil Hills](#) to the west, and [Hoxton Park](#), [Harrington Park](#), and [Oran Park](#) to the southwest.<sup>[267]</sup>

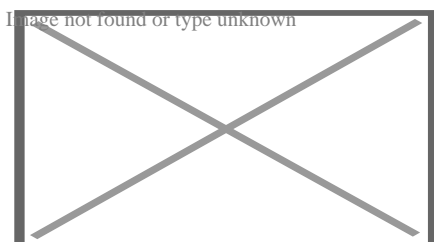
## Parks and open spaces

<sup>[edit]</sup>

Main article: [Parks in Sydney](#)

The [Anzac War Memorial](#) in [Hyde Park](#) is a public memorial dedicated to the [Australian Imperial Force](#) of [World War I](#).

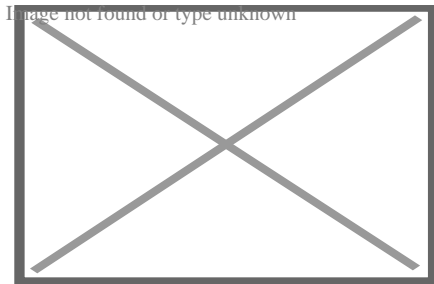
The [Royal Botanic Garden](#) is the most iconic green space in the region, hosting both scientific and leisure activities.<sup>[268]</sup> There are 15 separate parks under the City administration.<sup>[269]</sup> Parks within the city centre include [Hyde Park](#), [The Domain](#) and [Prince Alfred Park](#).



The **Centennial Parklands** is the largest park in the City of Sydney, comprising 189 ha (470 acres).[270]

The **Centennial Parklands** is the largest park in the City of Sydney, comprising 189 ha (470 acres).

The inner suburbs include **Centennial Park** and **Moore Park** in the east (both within the City of Sydney local government area), while the outer suburbs contain **Sydney Park** and Royal National Park in the south, **Ku-ring-gai Chase National Park** in the north, and **Western Sydney Parklands** in the west, which is **one of the largest urban parks** in the world. The Royal National Park was proclaimed in 1879 and with 13,200 ha (51 sq mi) is the second oldest national park in the world.[271]



The **Anzac War Memorial** in **Hyde Park** is a public memorial dedicated to the achievement of the **Australian Imperial Force** of **World War I**. [272]

Hyde Park is the oldest parkland in the country.[273] The largest park in the Sydney metropolitan area is Ku-ring-gai Chase National Park, established in 1894 with an area of 15,400 ha (59 sq mi).[274] It is regarded for its well-preserved records of indigenous habitation – more than 800 rock engravings, cave drawings and middens.[275]

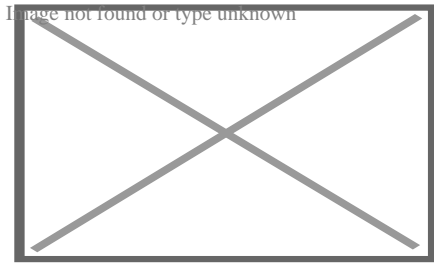
The area now known as The Domain was set aside by Governor Arthur Phillip in 1788 as his private reserve.[276] Under the orders of Macquarie the land to the immediate north of The Domain became the Royal Botanic Garden in 1816. This makes them the oldest botanic garden in Australia.[276] The Gardens host scientific research with herbarium collections, a library and laboratories.[277] The two parks have a total area of 64 ha (0.2 sq mi) with 8,900 individual plant species and receive over 3.5 million annual visits.[278]

To the south of The Domain is Hyde Park, the oldest public parkland in Australia which measures 16.2 ha (0.1 sq mi).[279] Its location was used for both relaxation and **grazing** of animals from the earliest days of the colony.[280] Macquarie dedicated it in 1810 for the "recreation and amusement of the inhabitants of the town" and named it in honour of **Hyde Park** in **London**.

## Economy

[edit]

Main article: **Economy of Sydney**



The **central business district**. Sydney is the financial and economic centre of Australia, having the largest economy and contributing a quarter of Australia's total GDP.[281]

Researchers from **Loughborough University** have ranked Sydney amongst the top ten world cities that are highly integrated into the global economy.[282] The Global Economic Power Index ranks Sydney eleventh in the world.[283] The Global Cities Index recognises it as fourteenth in the world based on global engagement.[284] There is a significant concentration of foreign banks and multinational corporations in Sydney and the city is promoted as Australia's financial capital and one of **Asia Pacific's** leading financial hubs.[285][286]

The prevailing economic theory during early colonial days was **mercantilism**, as it was throughout most of Western Europe.[287] The economy struggled at first due to difficulties in cultivating the land and the lack of a stable monetary system. Governor Macquarie created **two coins** from every **Spanish silver dollar** in circulation.[287] The economy was **capitalist** in nature by the 1840s as the proportion of free settlers increased, the maritime and wool industries flourished, and the powers of the **East India Company** were curtailed.[287]

Wheat, gold, and other minerals became export industries towards the end of the 1800s.[287] Significant capital began to flow into the city from the 1870s to finance roads, railways, bridges, docks, courthouses, schools and hospitals. **Protectionist** policies after **federation** allowed for the creation of a manufacturing industry which became the city's largest employer by the 1920s.[287] These same policies helped to relieve the effects of the Great Depression during which the unemployment rate in New South Wales reached as high as 32%.[287] From the 1960s onwards Parramatta gained recognition as the city's second CBD and finance and tourism became major industries and sources of employment.[287]

Sydney's nominal gross domestic product was AU\$400.9 billion and AU\$80,000 per capita[288] in 2015.[289][286] Its gross domestic product was AU\$337 billion in 2013, the largest in Australia.[289] The financial and insurance services industry accounts for 18.1% of gross product, ahead of professional services with 9% and manufacturing with 7.2%. The creative and technology sectors are also focus industries for the City of Sydney and represented 9% and 11% of its economic output in 2012.[290][291]

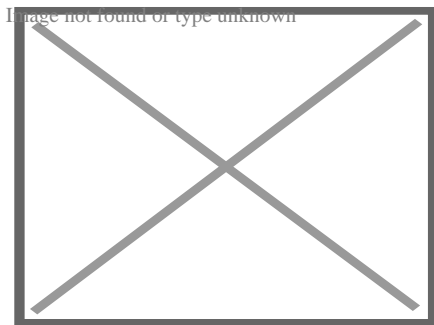
## Businesses

[edit]

There were 451,000 businesses based in Sydney in 2011, including 48% of the top 500 companies in Australia and two-thirds of the regional headquarters of multinational corporations.[292] Global companies are attracted to the city in part because its time zone spans the closing of business in North America and the opening of business in Europe. Most foreign companies in Sydney maintain significant sales and service functions but comparably less production, research, and development capabilities.[293] There are 283 multinational companies with regional offices in Sydney.[294]

## Domestic economics

[edit]



**Pitt Street**, a major street in the **CBD**, runs from **Circular Quay** in the north to **Waterloo** in the south, and is home to many large high-end retailers.[295]

Sydney has been ranked between the fifteenth and the fifth most expensive city in the world and is the most expensive city in Australia.[296] Of the 15 categories only measured by UBS in 2012, workers receive the seventh highest wage levels of 77 cities in the world.[296] Working residents of Sydney work an average of 1,846 hours per annum with 15 days of leave.[296]

The labour force of Greater Sydney Region in 2016 was 2,272,722 with a participation rate of 61.6%.[297] It comprised 61.2% full-time workers, 30.9% part-time workers, and 6.0% unemployed individuals.[260][298] The largest reported occupations are professionals, clerical and administrative workers, managers, technicians and trades workers, and community and personal service workers.[260] The largest industries by employment across Greater Sydney are Health Care and Social Assistance (11.6%), Professional Services (9.8%), Retail Trade (9.3%), Construction (8.2%), Education and Training (8.0%), Accommodation and Food Services (6.7%), and Financial and Insurance Services (6.6%).[2] The Professional Services and Financial and Insurance Services industries account for 25.4% of employment within the City of Sydney.[299]

In 2016, 57.6% of working-age residents had a weekly income of less than \$1,000 and 14.4% had a weekly income of \$1,750 or more.[300] The median weekly income for the same period was \$719 for individuals, \$1,988 for families, and \$1,750 for households.[301]

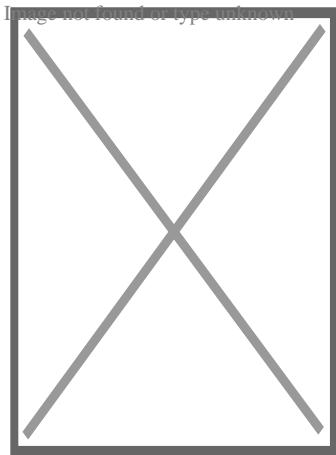


Unemployment in the City of Sydney averaged 4.6% for the decade to 2013, much lower than the current rate of unemployment in Western Sydney of 7.3%.[\[286\]](#)[\[302\]](#) Western Sydney continues to struggle to create jobs to meet its population growth despite the development of commercial centres like Parramatta. Each day about 200,000 commuters travel from Western Sydney to the CBD and suburbs in the east and north of the city.[\[302\]](#)

Home ownership in Sydney was less common than renting prior to the Second World War but this trend has since reversed.[\[261\]](#) Median house prices have increased by an average of 8.6% per annum since 1970.[\[303\]](#)[\[304\]](#) The median house price in March 2014 was \$630,000.[\[305\]](#) The primary cause of rising prices is the increasing cost of land and scarcity.[\[306\]](#) 31.6% of dwellings in Sydney are rented, 30.4% are owned outright and 34.8% are owned with a mortgage.[\[260\]](#) 11.8% of mortgagees in 2011 had monthly loan repayments of less than \$1,000 and 82.9% had monthly repayments of \$1,000 or more.[\[2\]](#) 44.9% of renters for the same period had weekly rent of less than \$350 whilst 51.7% had weekly rent of \$350 or more. The median weekly rent in Sydney in 2011 was \$450.[\[2\]](#)

## Financial services

[\[edit\]](#)



State Savings Bank

Macquarie gave a charter in 1817 to form the first bank in Australia, the [Bank of New South Wales](#).[\[307\]](#) New private banks opened throughout the 1800s but the financial system was unstable. Bank collapses were frequent and a crisis point was reached in 1893 when 12 banks failed.[\[307\]](#)

The Bank of New South Wales exists to this day as [Westpac](#).[\[308\]](#) The Commonwealth Bank of Australia was formed in Sydney in 1911 and began to issue notes backed by the resources of the nation. It was replaced in this role in 1959 by the [Reserve Bank of Australia](#), also based in Sydney.[\[307\]](#) The [Australian Securities Exchange](#) began operating in 1987 and with a market capitalisation of \$1.6 trillion is now one of the ten largest exchanges in the world.[\[309\]](#)



The Financial and Insurance Services industry now constitutes 43% of the economic product of the City of Sydney.[285] Sydney makes up half of Australia's finance sector and has been promoted by consecutive Commonwealth Governments as **Asia Pacific**'s leading financial centre.[20][21][310] In the 2017 **Global Financial Centres Index**, Sydney was ranked as having the eighth most competitive financial centre in the world.[311]

In 1985 the Federal Government granted 16 banking licences to foreign banks and now 40 of the 43 foreign banks operating in Australia are based in Sydney, including the **People's Bank of China**, **Bank of America**, **Citigroup**, **UBS**, **Mizuho Bank**, **Bank of China**, **Banco Santander**, **Credit Suisse**, **Standard Chartered**, **State Street**, **HSBC**, **Deutsche Bank**, **Barclays**, **Royal Bank of Canada**, **Société Générale**, **Royal Bank of Scotland**, **Sumitomo Mitsui**, **ING Group**, **BNP Paribas**, and **Investec**.[285][307][312][313]

## Manufacturing

[edit]

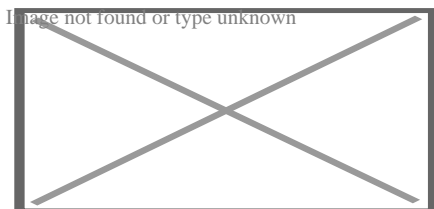
Main article: **Manufacturing in Australia**

Sydney has been a manufacturing city since the 1920s. By 1961 the industry accounted for 39% of all employment and by 1970 over 30% of all Australian manufacturing jobs were in Sydney.[314] Its status has declined in recent decades, making up 12.6% of employment in 2001 and 8.5% in 2011.[2][314] Between 1970 and 1985 there was a loss of 180,000 manufacturing jobs.[314] Despite this, Sydney still overtook Melbourne as the largest manufacturing centre in Australia in the 2010s,[315] with a manufacturing output of \$21.7 billion in 2013.[316] Observers have credited Sydney's focus on the domestic market and high-tech manufacturing for its resilience against the high **Australian dollar** of the early 2010s.[316] The *Smithfield-Wetherill Park Industrial Estate* in **Western Sydney** is the largest **industrial estate** in the Southern Hemisphere and is the centre of manufacturing and distribution in the region.[317]

## Tourism and international education

[edit]

Main article: **Tourism in Sydney**



**Darling Harbour** is a major entertainment and tourism precinct.

Sydney is a gateway to Australia for many international visitors and ranks among the top sixty most visited cities in the world.<sup>[318]</sup> It has hosted over 2.8 million international visitors in 2013, or nearly half of all international visits to Australia. These visitors spent 59 million nights in the city and a total of \$5.9 billion.<sup>[24]</sup> The countries of origin in descending order were China, New Zealand, the United Kingdom, the United States, South Korea, Japan, Singapore, Germany, Hong Kong, and India.<sup>[319]</sup>

The city also received 8.3 million domestic overnight visitors in 2013 who spent a total of \$6 billion.<sup>[319]</sup> 26,700 workers in the City of Sydney were directly employed by tourism in 2011.<sup>[320]</sup> There were 480,000 visitors and 27,500 people staying overnight each day in 2012.<sup>[320]</sup> On average, the tourism industry contributes \$36 million to the city's economy per day.<sup>[320]</sup>

Popular destinations include the Sydney Opera House, the Sydney Harbour Bridge, [Watsons Bay](#), [The Rocks](#), Sydney Tower, [Darling Harbour](#), the Royal Botanic Garden, the [Australian Museum](#), the [Museum of Contemporary Art](#), the [Art Gallery of New South Wales](#), the [Queen Victoria Building](#), [Sea Life Sydney Aquarium](#), [Taronga Zoo](#), [Bondi Beach](#), [Luna Park](#) and [Sydney Olympic Park](#).<sup>[321]</sup>

Major developmental projects designed to increase Sydney's tourism sector include a [casino and hotel](#) at Barangaroo and the redevelopment of [East Darling Harbour](#), which involves a new [exhibition and convention centre](#), now Australia's largest.<sup>[322][323][324]</sup>

Sydney is the highest-ranking city in the world for international students. More than 50,000 international students study at the city's universities and a further 50,000 study at its [vocational](#) and English language schools.<sup>[284][325]</sup> International education contributes \$1.6 billion to the local economy and creates demand for 4,000 local jobs each year.<sup>[326]</sup>

## Housing affordability

[\[edit\]](#)

In 2023, Sydney was ranked the least affordable city to buy a house in Australia and the second least affordable city in the world, after Hong Kong,<sup>[327]</sup> with the average Sydney house price in late 2023 costing A\$1.59 million, and the average unit price costing A\$795,000.<sup>[328]</sup> As of early 2024, Sydney is often described in the media as having a housing shortage, or suffering a housing crisis.<sup>[329][330]</sup>

## Demographics

[\[edit\]](#)

Main article: [Demographics of Sydney](#)



Chinese New Year celebrations in Chinatown. Sydney is home to the nation's largest population of Chinese Australians.[331]

The population of Sydney in 1788 was less than 1,000.[332] With convict transportation it almost tripled in ten years to 2,953.[333] For each decade since 1961 the population has increased by more than 250,000.[334] The 2021 census recorded the population of Greater Sydney as 5,231,150.[1] The Australian Treasury expects the population will grow to 6.5 million in 2033–34.[335] The four most densely populated suburbs in Australia are located in Sydney with each having more than 13,000 residents per square kilometre (33,700 residents per square mile).[336] Between 1971 and 2018, Sydney experienced a net loss of 716,832 people to the rest of Australia, but its population grew due to overseas arrivals and a healthy birth rate.[337]

The median age of Sydney residents is 37 and 14.8% of people are 65 or older.[260] 48.6% of Sydney's population is married whilst 36.7% have never been married.[260] 49.0% of families are couples with children, 34.4% are couples without children, and 14.8% are single-parent families.[260]

## Ancestry and immigration

[edit]

Country of birth (2021)[11]

At the 2021 census, the most common ancestries were:[11]

- English (21.8%)
- Australian (20.4%)[N 2]
- Chinese (11.6%)
- Irish (7.2%)
- Scottish (5.6%)
- Indian (4.9%)
- Italian (4.3%)
- Lebanese (3.5%)
- Filipino (2.7%)
- Greek (2.6%)
- Vietnamese (2.5%)
- German (2.2%)
- Korean (1.4%)
- Nepalese (1.4%)
- Australian Aboriginal (1.4%)[339]
- Maltese (1.1%)

Birthplace[N 1] Population

Australia	2,970,737
Mainland China	238,316
India	187,810
England	153,052
Vietnam	93,778
Philippines	91,339
New Zealand	85,493
Lebanon	61,620
Nepal	59,055
Iraq	52,604
South Korea	50,702
Hong Kong SAR	46,182
South Africa	39,564
Italy	38,762
Indonesia	35,413
Malaysia	35,002
Fiji	34,197
Pakistan	31,025

At the 2021 census, 40.5% of Sydney's population was born overseas. Foreign countries of birth with the greatest representation are mainland China, India, England, Vietnam, Philippines and New Zealand.<sup>[11]</sup>

At the 2021 census, 1.7% of Sydney's population identified as being **Indigenous** — **Aboriginal Australians** and **Torres Strait Islanders**.<sup>[N 3][340]</sup>

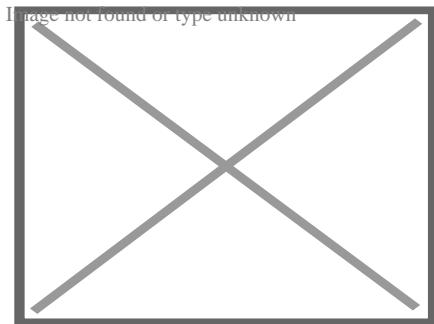
## Language

<sup>[edit]</sup>

42% of households in Sydney use a language other than English, with the most common being Mandarin (5%), Arabic (4.2%), Cantonese (2.8%), Vietnamese (2.2%) and **Hindi** (1.5%).<sup>[340]</sup>

## Religion

<sup>[edit]</sup>



**St Mary's Cathedral** is the **cathedral** church of the **Roman Catholic Archdiocese of Sydney**.

In 2021, **Christianity** was the largest religious affiliation at 46%, the largest denominations of which were **Catholicism** at 23.1% and **Anglicanism** at 9.2%. 30.3% of Sydney residents identified as having no religion. The most common non-Christian religious affiliations were **Islam** (6.3%), **Hinduism** (4.8%), **Buddhism** (3.8%), **Sikhism** (0.7%), and **Judaism** (0.7%). About 500 people identified with traditional Aboriginal religions.<sup>[11]</sup>

The **Church of England** was the only recognised church before Governor Macquarie appointed official Catholic chaplains in 1820.<sup>[341]</sup> Macquarie also ordered the construction of **churches** such as St Matthew's, St Luke's, St James's, and St Andrew's. Religious groups, alongside secular institutions, have played a significant role in education, health and charitable services throughout Sydney's history.<sup>[342]</sup>

## Crime

<sup>[edit]</sup>

Main article: [Crime in Sydney](#)

Crime in Sydney is low, with *The Independent* ranking Sydney as the fifth safest city in the world in 2019.<sup>[343]</sup> However, drug use is a significant problem. Methamphetamine is heavily consumed compared to other countries, while heroin is less common.<sup>[344]</sup> One of the biggest crime-related issues in recent times was the introduction of [lockout laws](#) in February 2014,<sup>[345]</sup> in an attempt to curb alcohol-fuelled violence. Patrons could not enter clubs or bars in the inner-city after 1:30am, and last drinks were called at 3am. The lockout laws were removed in January 2020.<sup>[346]</sup>

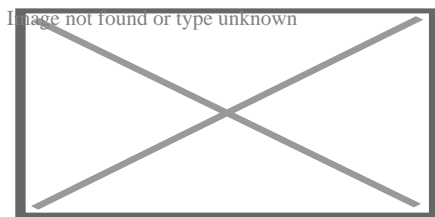
## Culture

[\[edit\]](#)

Main article: [Culture of Sydney](#)

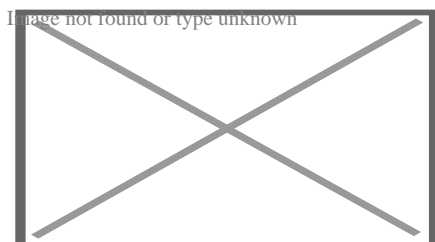
## Science, art, and history

[\[edit\]](#)



The [Art Gallery of New South Wales](#), located in [The Domain](#), is the fourth largest public gallery in Australia.

[Ku-ring-gai Chase National Park](#) is rich in [Indigenous Australian](#) heritage, containing around 1,500 pieces of [Aboriginal rock art](#) – the largest cluster of Indigenous sites in Australia. The park's indigenous sites include [petroglyphs](#), art sites, [burial sites](#), [caves](#), marriage areas, birthing areas, [midden](#) sites, and tool manufacturing locations, which are dated to be around 5,000 years old. The inhabitants of the area were the [Garigal](#) people.<sup>[347]</sup><sup>[348]</sup> Other [rock art sites](#) exist in the Sydney region, such as in [Terrey Hills](#) and [Bondi](#), although the locations of most are not publicised to prevent damage by vandalism, and to retain their quality, as they are still regarded as sacred sites by Indigenous Australians.<sup>[349]</sup>



The [State Library of New South Wales](#) holds the oldest library collections in Australia.

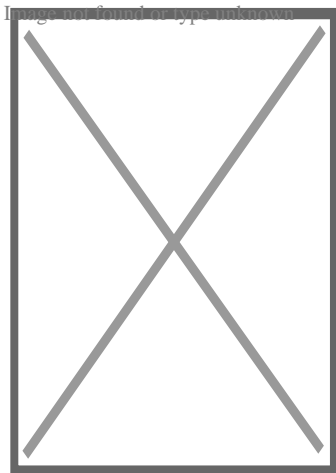
The **Australian Museum** opened in Sydney in 1827 with the purpose of collecting and displaying the natural wealth of the colony.[350] It remains Australia's oldest natural history museum. In 1995 the **Museum of Sydney** opened on the site of the first **Government House**. It recounts the story of the city's development.[351] Other museums include the **Powerhouse Museum** and the **Australian National Maritime Museum**. [352][353]

The **State Library of New South Wales** holds the oldest library collections in Australia, being established as the **Australian Subscription Library** in 1826.[354] The **Royal Society of New South Wales**, formed in 1866, encourages "studies and investigations in science, art, literature, and philosophy". It is based in a terrace house in **Darlington** owned by the **University of Sydney**. [355] The **Sydney Observatory** building was constructed in 1859 and used for astronomy and meteorology research until 1982 before being converted into a museum.[356]

The **Museum of Contemporary Art** was opened in 1991 and occupies an **Art Deco** building in **Circular Quay**. Its collection was founded in the 1940s by artist and art collector John Power and has been maintained by the University of Sydney.[357] Sydney's other significant art institution is the **Art Gallery of New South Wales** which coordinates the **Archibald Prize** for portraiture.[358] Sydney is also home to contemporary art gallery **Artspace**, housed in the historic **Gunnery Building** in **Woolloomooloo**, fronting **Sydney Harbour**. [359]

## Entertainment

[edit]

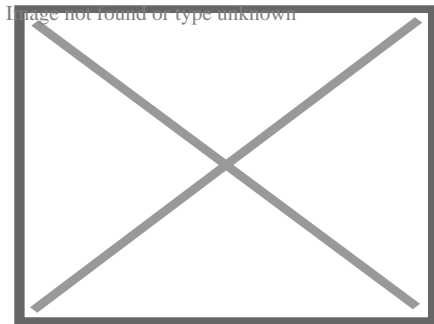


The **State Theatre** on **Market Street** was opened in 1929.

Sydney's first commercial theatre opened in 1832 and nine more had commenced performances by the late 1920s. The live medium lost much of its popularity to the cinema during the Great Depression before experiencing a revival after World War II.[360] Prominent theatres in the city today include **State Theatre**, **Theatre Royal**, **Sydney Theatre**, **The Wharf Theatre**, and **Capitol Theatre**. **Sydney Theatre Company** maintains a roster of local, classical, and international plays. It occasionally features Australian theatre icons such as **David**

Williamson, Hugo Weaving, and Geoffrey Rush. The city's other prominent theatre companies are New Theatre, Belvoir, and Griffin Theatre Company. Sydney is also home to Event Cinemas' first theatre, which opened on George St in 1913, under its former Greater Union brand; the theatre currently operates, and is regarded as one of Australia's busiest cinema locations.

The Sydney Opera House is the home of Opera Australia and Sydney Symphony. It has staged over 100,000 performances and received 100 million visitors since opening in 1973.[245] Two other important performance venues in Sydney are Town Hall and the City Recital Hall. The Sydney Conservatorium of Music is located adjacent to the Royal Botanic Garden and serves the Australian music community through education and its biannual Australian Music Examinations Board exams.[361]



A concert at the Sydney Opera House

Many writers have originated in and set their work in Sydney. Others have visited the city and commented on it. Some of them are commemorated in the Sydney Writers Walk at Circular Quay. The city was the headquarters for Australia's first published newspaper, the Sydney Gazette.[362] Watkin Tench's *A Narrative of the Expedition to Botany Bay* (1789) and *A Complete Account of the Settlement at Port Jackson in New South Wales* (1793) have remained the best-known accounts of life in early Sydney.[363] Since the infancy of the establishment, much of the literature set in Sydney were concerned with life in the city's slums and working-class communities, notably William Lane's *The Working Man's Paradise* (1892), Christina Stead's *Seven Poor Men of Sydney* (1934) and Ruth Park's *The Harp in the South* (1948).[364] The first Australian-born female novelist, Louisa Atkinson, set several novels in Sydney.[365] Contemporary writers, such as Elizabeth Harrower, were born in the city and set most of their work there—Harrower's debut novel *Down in the City* (1957) was mostly set in a King's Cross apartment.[366][367][368] Well known contemporary novels set in the city include Melina Marchetta's *Looking for Alibrandi* (1992), Peter Carey's *30 Days in Sydney: A Wildly Distorted Account* (1999), J. M. Coetzee's *Diary of a Bad Year* (2007) and Kate Grenville's *The Secret River* (2010). The Sydney Writers' Festival is held annually between April and May.[369]

Filmmaking in Sydney was prolific until the 1920s when spoken films were introduced and American productions gained dominance.[370] The Australian New Wave saw a resurgence in film production, with many notable features shot in the city between the 1970s and 80s,



helmed by directors such as [Bruce Beresford](#), [Peter Weir](#) and [Gillian Armstrong](#).<sup>[371]</sup> [Fox Studios Australia](#) commenced production in Sydney in 1998. Successful films shot in Sydney since then include *The Matrix*, *Lantana*, *Mission: Impossible 2*, *Moulin Rouge!*, *Star Wars: Episode II – Attack of the Clones*, *Australia*, *Superman Returns*, *The Great Gatsby* and *Anyone but You*. The [National Institute of Dramatic Art](#) is based in Sydney and has several famous alumni such as [Mel Gibson](#), [Judy Davis](#), [Baz Luhrmann](#), [Cate Blanchett](#), [Hugo Weaving](#) and [Jacqueline McKenzie](#).<sup>[372]</sup>

Sydney hosts several festivals throughout the year. The city's [New Year's Eve](#) celebrations are the largest in Australia.<sup>[373]</sup> The [Royal Easter Show](#) is held every year at Sydney Olympic Park. [Sydney Festival](#) is Australia's largest arts festival.<sup>[374]</sup> The travelling rock music festival [Big Day Out](#) originated in Sydney. The city's two largest film festivals are [Sydney Film Festival](#) and [Tropfest](#). [Vivid Sydney](#) is an annual outdoor exhibition of art installations, light projections, and music. In 2015, Sydney was ranked the 13th top [fashion capital](#) in the world.<sup>[375]</sup> It hosts the [Australian Fashion Week](#) in autumn. [Sydney Mardi Gras](#) has commenced each February since 1979.

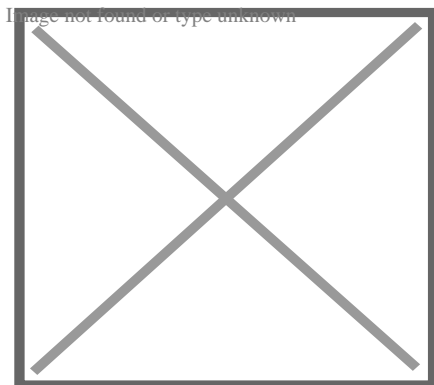
Sydney's [Chinatown](#) has had numerous locations since the 1850s. It moved from [George Street](#) to Campbell Street to its current setting in Dixon Street in 1980.<sup>[376]</sup> Little Italy is located in Stanley Street.<sup>[287]</sup>

Restaurants, bars and nightclubs can be found in the entertainment hubs in the Sydney CBD ( [Darling Harbour](#), [Barangaroo](#), [The Rocks](#) and [George Street](#)), [Oxford Street](#), [Surry Hills](#), [Newtown](#) and [Parramatta](#).<sup>[377]</sup><sup>[378]</sup> [Kings Cross](#) was previously considered the red-light district. *The Star* is the city's casino and is situated next to [Darling Harbour](#) while the new [Crown Sydney](#) resort is in nearby [Barangaroo](#).<sup>[379]</sup>

## Media

[\[edit\]](#)

Main article: [Media in Sydney](#)



Australia's national broadcaster, the [ABC](#), is headquartered in [Ultimo](#).

The *Sydney Morning Herald* is Australia's oldest newspaper still in print; it has been published continuously since 1831.[380] Its competitor is *The Daily Telegraph*, in print since 1879.[381] Both papers have Sunday tabloid editions called *The Sun-Herald* and *The Sunday Telegraph* respectively. *The Bulletin* was founded in Sydney in 1880 and became Australia's longest running magazine. It closed after 128 years of continuous publication.[382] Sydney heralded Australia's first newspaper, the *Sydney Gazette*, published until 1842.

Each of Australia's three commercial television networks and two public broadcasters is headquartered in Sydney. **Nine's** offices and news studios are in **North Sydney**, **Ten** is based in **Pymont**, and **Seven** is based in **South Eveleigh** in **Redfern**. [383][384][385][386] The **Australian Broadcasting Corporation** is located in **Ultimo**, [387] and the **Special Broadcasting Service** is based in **Artarmon**. [388] Multiple digital channels have been provided by all five networks since 2000. **Foxtel** is based in **North Ryde** and sells subscription cable television to most of the urban area. [389] Sydney's first **radio stations** commenced broadcasting in the 1920s. Radio has managed to survive despite the introduction of television and the Internet. [390] **2UE** was founded in 1925 and under the ownership of Nine Entertainment is the oldest station still broadcasting. [390] Competing stations include the more popular **2GB**, **ABC Radio Sydney**, **KIIS 106.5**, **Triple M**, **Nova 96.9** and **2Day FM**. [391]

## Sport and outdoor activities

[edit]

Main article: **Sport in Sydney**

Sydney's earliest migrants brought with them a passion for sport but were restricted by the lack of facilities and equipment. The first organised sports were **boxing**, **wrestling**, and horse racing from 1810 in **Hyde Park**. [392] Horse racing remains popular and events such as the **Golden Slipper Stakes** attract widespread attention. The first cricket club was formed in 1826 and matches were played within Hyde Park throughout the 1830s and 1840s. [392] Cricket is a favoured sport in summer and big matches have been held at the **Sydney Cricket Ground** since 1878. The **New South Wales Blues** compete in the **Sheffield Shield** league and the **Sydney Sixers** and **Sydney Thunder** contest the national **Big Bash** Twenty20 competition.

First played in Sydney in 1865, rugby grew to be the city's most popular football code by the 1880s. One-tenth of the state's population attended a New South Wales versus New Zealand rugby match in 1907. [392] Rugby league separated from rugby union in 1908. The **New South Wales Waratahs** contest the **Super Rugby** competition, while the **Sydney Rays** represent the city in the **National Rugby Championship**. The national **Wallabies** rugby union team competes in Sydney in international matches such as the **Bledisloe Cup**, **Rugby Championship**, and **World Cup**. Sydney is home to nine of the seventeen teams in the **National Rugby League** competition: **Canterbury-Bankstown Bulldogs**, **Cronulla-Sutherland Sharks**, **Manly-Warringah Sea Eagles**, **Penrith Panthers**, **Parramatta Eels**, **South Sydney Rabbitohs**, **St George Illawarra Dragons**, **Sydney Roosters**, and **Wests Tigers**. New South Wales contests the annual **State of Origin** series against **Queensland**.

Sydney FC and the Western Sydney Wanderers compete in the A-League Men and A-League Women competitions. The Sydney Swans and Greater Western Sydney Giants are local Australian rules football clubs that play in the Australian Football League and the AFL Women's. The Sydney Kings compete in the National Basketball League. The Sydney Uni Flames play in the Women's National Basketball League. The Sydney Blue Sox contest the Australian Baseball League. The NSW Pride are a member of the Hockey One League. The Sydney Bears and Sydney Ice Dogs play in the Australian Ice Hockey League. The Swifts are competitors in the national women's netball league.

Major sporting venues

[edit]

Stadium Australia

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Stadium Australia  
Sydney Cricket Ground

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Sydney Cricket Ground  
Western Sydney Stadium

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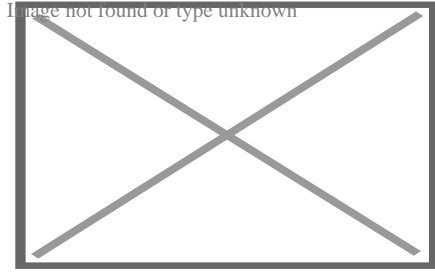
Western Sydney Stadium

## Sydney Football Stadium

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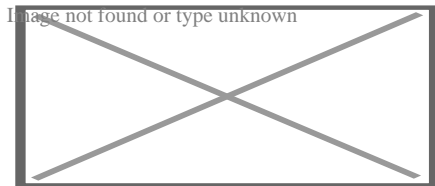
## Sydney Football Stadium



## Sailing on Sydney Harbour

Women were first allowed to participate in recreational swimming when separate baths were opened at **Woolloomooloo Bay** in the 1830s. From being illegal at the beginning of the century, sea bathing gained immense popularity during the early 1900s and the first **surf lifesaving** club was established at **Bondi Beach**.<sup>[392][393]</sup> **Disputes about appropriate clothing** for surf bathing surfaced occasionally and concerned men as well as women. The **City2Surf** is an annual 14 km (8.7 mi) running race from the CBD to Bondi Beach and has been held since 1971. In 2010, 80,000 runners participated which made it the largest run of its kind in the world.<sup>[394]</sup>

Sailing races have been held on **Sydney Harbour** since 1827.<sup>[395]</sup> Yachting has been popular amongst wealthier residents since the 1840s and the **Royal Sydney Yacht Squadron** was founded in 1862. The **Sydney to Hobart Yacht Race** is a 1,170 km (727 mi) event that starts from Sydney Harbour on Boxing Day.<sup>[396]</sup> Since its inception in 1945 it has been recognised as one of the most difficult yacht races in the world.<sup>[397]</sup> Six sailors died and 71 vessels of 115 failed to finish in the 1998 edition.<sup>[398]</sup>



**Sydney Olympic Park** was built for the **2000 Olympics** and has become a major sporting and recreational precinct.

The **Royal Sydney Golf Club** is based in **Rose Bay** and since its opening in 1893 has hosted the **Australian Open** on 13 occasions.<sup>[392]</sup> **Royal Randwick Racecourse** opened in 1833 and holds several major cups throughout the year.<sup>[399]</sup>

Sydney benefitted from the construction of significant sporting infrastructure in preparation for its hosting of the 2000 Summer Olympics. The Sydney Olympic Park accommodates athletics, aquatics, tennis, hockey, archery, baseball, cycling, equestrian, and rowing facilities. It also includes the high capacity **Stadium Australia** used for rugby, soccer, and Australian rules football. The **Sydney Football Stadium** was completed in 1988 and was used for rugby and soccer matches. Sydney Cricket Ground was opened in 1878 and is used for both cricket and Australian rules football fixtures.<sup>[392]</sup>

Sydney was one of the host cities during the **2023 FIFA Women's World Cup**. Sydney Football Stadium and Stadium Australia were selected as venues, with the later hosting the **final**.<sup>[400]</sup>

The **Sydney International** tennis tournament is held here at the beginning of each year as the warm-up for **the Grand Slam in Melbourne**. Two of the most successful **tennis** players in history (**Ken Rosewall** and **Todd Woodbridge**) were born in and live in the city.

Sydney co-hosted the **FIBA Oceania Championship** in 1979, 1985, 1989, 1995, 2007, 2009 and 2011.

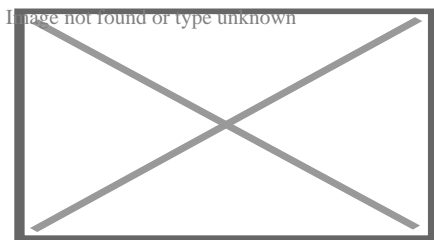
## Government

<sup>[edit]</sup>

See also: **Local government areas of New South Wales**

## Historical governance

<sup>[edit]</sup>



**Parliament House** holds the **Government of New South Wales** and is the oldest public building in Australia.

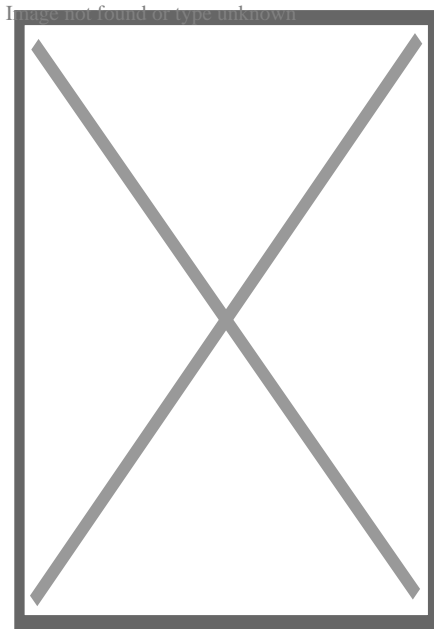
The first five governors had near autocratic power in the colony of New South Wales, subject only to the laws of England and the supervision of the Colonial Office in London. Sydney was the seat of government for the colony which encompassed over half the Australian continent.<sup>[401]</sup> The first Legislative Council met in 1826,<sup>[402]</sup> and in 1842, the imperial parliament expanded and reformed the council, making it partly elected.<sup>[403]</sup> In the same year, the town of Sydney officially became a city and an elected municipal council was established.<sup>[404][405]</sup> The council had limited powers, mostly relating to services such as street lighting and drainage.<sup>[406]</sup> Its boundaries were restricted to an area of 11.6 square kilometres, taking in the city centre and the modern suburbs of **Woolloomooloo**, **Surry Hills**, **Chippendale**, and

**Pymont.**[63] As Sydney grew, other municipal councils were formed to provide local administration.[407]

In 1856, New South Wales achieved responsible government with the introduction of a bicameral parliament, based in Sydney, comprising a directly elected **Legislative Assembly** and a nominated **Legislative Council**.[408] With the federation of the Australian colonies in 1901, Sydney became the capital of the state of New South Wales and its administration was divided between the Commonwealth, State and constituent local governments.[408]

## Government in the present

[edit]

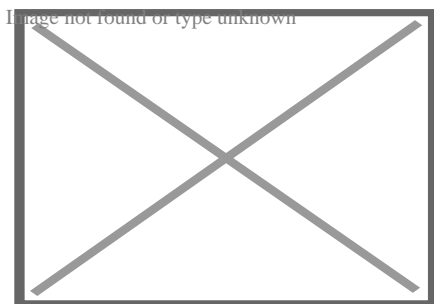


The **Sydney Town Hall** is the seat of the **City of Sydney**; the oldest **local government** in the city

In common with other Australian capital cities, Sydney has no single local government covering its whole area. **Local government areas** have responsibilities such as local roads, libraries, child care, community services and waste collection, whereas the state government retains responsibility for main roads, traffic control, public transport, policing, education, and major infrastructure project.[409] There are 33 local government areas which are wholly or mostly within Greater Sydney as defined by the Australian Statistical Geography Standard.[96] [410]

- **Bayside**
- **Canterbury-Bankstown**
- **Blacktown**
- **Blue Mountains**

- Burwood
- Camden
- Campbelltown
- Canada Bay
- Central Coast
- Cumberland
- Fairfield
- Georges River
- Hawkesbury
- The Hills
- Hornsby
- Hunter's Hill
- Inner West
- Ku-ring-gai
- Lane Cove
- Liverpool
- Mosman
- North Sydney
- Northern Beaches
- Parramatta
- Penrith
- Randwick
- Ryde
- Strathfield
- Sutherland
- Sydney
- Waverley
- Willoughby
- Wollondilly
- Woollahra



**Government House** is the official residence of the **Governor of New South Wales**

Sydney is the location of the secondary official residences of the **Governor-General** and **Prime Minister** – **Admiralty House** and **Kirribilli House** respectively.[411] The **Parliament of New South Wales** sits in **Parliament House** on **Macquarie Street**. This building was completed in 1816 and first served as a hospital. The Legislative Council moved into its northern wing in



1829 and by 1852 had entirely supplanted the surgeons from their quarters.[412] Several additions have been made as the Parliament has expanded, but it retains its original **Georgian** façade.[413] **Government House** was completed in 1845 and has served as the home of 25 Governors and 5 Governors-General.[414] The **Cabinet of Australia** also **meets** in Sydney when needed.

The highest court in the state is the Supreme Court of New South Wales, located in Queen's Square.[415] The city is also the home of numerous branches of the intermediate **District Court of New South Wales** and the lower **Local Court of New South Wales**.[416]

In the past, the state has tended to resist amalgamating Sydney's more populated local government areas as merged councils could pose a threat to its governmental power.[417] Established in 1842, the City of Sydney is one such local government area and includes the CBD and some adjoining inner suburbs.[418] It is responsible for fostering development in the local area, providing local services (waste collection and recycling, libraries, parks, sporting facilities), promoting the interests of residents, supporting organisations that target the local community, and attracting and providing infrastructure for commerce, tourism, and industry.[419] The City of Sydney is led by an elected Council and **Lord Mayor**.[420]

In federal politics, Sydney was initially considered as a **possibility for Australia's capital city**; the newly created city of **Canberra** ultimately filled this role.[421] Seven Australian **Prime Ministers have been born in** Sydney, more than any other city, including first Prime Minister **Edmund Barton** and current Prime Minister **Anthony Albanese**.

Essential public emergency services are provided and managed by the State Government. Greater Sydney is served by:

- **New South Wales Police Force**
- **New South Wales Ambulance**
- **Fire and Rescue NSW**

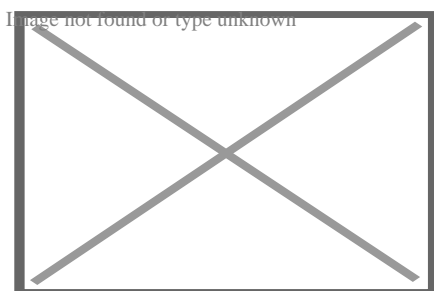
## Infrastructure

[**edit**]

## Education

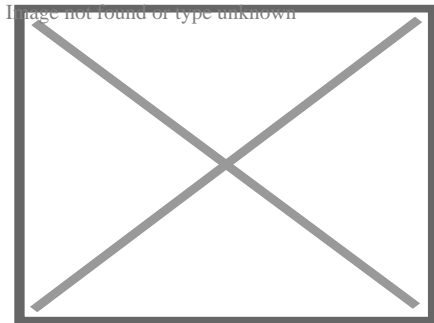
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Main article: **Education in Sydney**



## The University of Sydney

Education became a focus for the colony from the 1870s when public schools began to form and schooling became compulsory.[422] By 2011, 90% of working age residents had completed some schooling and 57% had completed the highest level of school.[2] 1,390,703 people were enrolled in an educational institution in 2011 with 45.1% of these attending school and 16.5% studying at a university.[260] Undergraduate or postgraduate qualifications are held by 22.5% of working age Sydney residents and 40.2% of working age residents of the City of Sydney.[2][423] The most common fields of tertiary qualification are commerce (22.8%), engineering (13.4%), society and culture (10.8%), health (7.8%), and education (6.6%).[2]



## The University of Technology Sydney

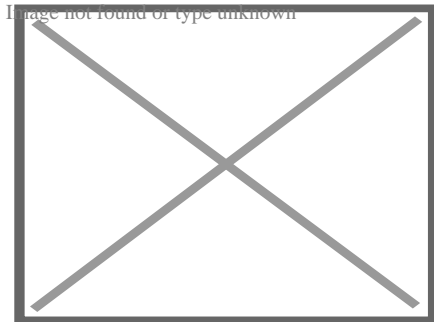
There are six public universities based in Sydney: The University of Sydney, University of New South Wales, University of Technology Sydney, Macquarie University, Western Sydney University, and Australian Catholic University. Five public universities maintain secondary campuses in the city: the University of Notre Dame Australia, Central Queensland University, Victoria University, University of Wollongong, and University of Newcastle. Charles Sturt University and Southern Cross University operate secondary campuses only designated for international students. In addition, four public universities offer programs in Sydney through third-party providers: University of the Sunshine Coast, La Trobe University, Federation University Australia and Charles Darwin University. 5.2% of residents of Sydney are attending a university.[424] The University of New South Wales and the University of Sydney are ranked equal 19th in the world,[425] the University of Technology Sydney is ranked in the top 100,[425] while Macquarie University is ranked 237, and Western Sydney University is ranked 474.[426] Sydney has public, denominational, and independent schools. 7.8% of Sydney residents are attending primary school and 6.4% are enrolled in secondary school.[424] There are 935 public preschool, primary, and secondary schools in Sydney that are administered by the New South Wales Department of Education.[427] 14 of the 17 selective secondary schools in New South Wales are based in Sydney.[428]

Public vocational education and training in Sydney are run by TAFE New South Wales and began with the opening of the Sydney Technical College in 1878.[238] The college became the Sydney Institute in 1992 and now operates alongside its sister TAFE facilities across the Sydney metropolitan area, namely the Northern Sydney Institute, the Western Sydney Institute, and the South Western Sydney Institute. At the 2011 census, 2.4% of Sydney residents are

enrolled in a TAFE course.[424]

## Health

[edit]



The **Sydney Hospital**, completed in 1816

The first hospital in the new colony was a collection of tents at **The Rocks**. Many of the convicts that survived the trip suffered from **dysentery**, smallpox, **scurvy**, and **typhoid**. Healthcare facilities remained inadequate despite the arrival of a prefabricated hospital with the **Second Fleet** and the construction of new hospitals at Parramatta, **Windsor**, and **Liverpool** in the 1790s.[429]

Governor Macquarie arranged for the construction of **Sydney Hospital**, completed in 1816.[429] Parts of the facility have been repurposed for use as **Parliament House** but the hospital itself still operates. The city's first emergency department was established at Sydney Hospital in 1870. Demand for emergency medical care increased from 1895 with the introduction of an ambulance service.[429] The Sydney Hospital also housed Australia's first teaching facility for nurses, the **Nightingale Wing**, established with the input of **Florence Nightingale** in 1868.[430]

Healthcare was recognised as a right in the early 1900s and Sydney's public hospitals came under the oversight of the Government of New South Wales.[429] The administration of healthcare across Sydney is handled by eight local health districts: Central Coast, Illawarra Shoalhaven, Sydney, Nepean Blue Mountains, Northern Sydney, South Eastern Sydney, South Western Sydney, and Western Sydney.[431] The **Prince of Wales Hospital** was established in 1852 and became the first of several major hospitals to be opened.[432] **St Vincent's Hospital** was founded in 1857,[176] followed by **Royal Alexandra Hospital for Children** in 1880,[433] the **Prince Henry Hospital** in 1881,[434] the **Royal Prince Alfred Hospital** in 1882,[435] the **Royal North Shore Hospital** in 1885,[436] the **St George Hospital** in 1894,[437] and the **Nepean Hospital** in 1895.[438] **Westmead Hospital** in 1978 was the last major facility to open.[439]

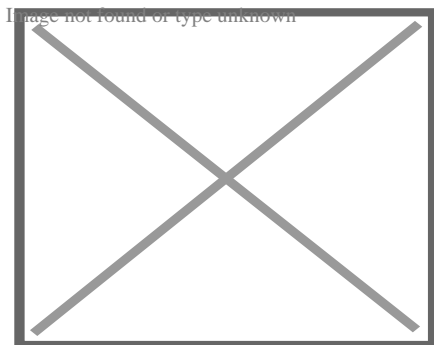
## Transport

[edit]

Main article: [Transport in Sydney](#)

## Roads

[\[edit\]](#)



[Light Horse Interchange](#), the largest of its kind in Australia

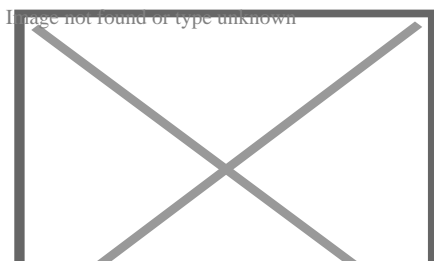
The motor vehicle, more than any other factor, has determined the pattern of Sydney's urban development since [World War II](#).<sup>[440]</sup> The growth of low-density housing in the city's outer suburbs has made car ownership necessary for hundreds of thousands of households. The percentage of trips taken by car has increased from 13% in 1947 to 50% in 1960 and 70% in 1971.<sup>[440]</sup> The most important roads in Sydney were the nine [Metroads](#), including the 110 km (68 mi) [Sydney Orbital Network](#). Sydney's reliance on motor vehicles and its sprawling road network has been criticised by proponents of mass public transport and high-density housing.<sup>[441][442][443]</sup> The [Light Horse Interchange](#) in western Sydney is the largest in the southern hemisphere.<sup>[444]</sup>

There can be up to 350,000 cars using Sydney's roads simultaneously during peak hour, leading to significant traffic congestion.<sup>[440]</sup> 84.9% of Sydney households own a motor vehicle and 46.5% own two or more.<sup>[260]</sup> With a rate of 26.3% in 2014, Sydney has the highest utilisation of public transport for travel to work of any Australian capital.<sup>[445]</sup> In contrast, in 2014 only 25.2% of working residents in the City of Sydney use a car, whilst 15.8% take a train, 13.3% use a bus, and 25.3% walk.<sup>[446]</sup> Several significant infrastructure projects have been completed since. The CBD features a [series of alleyways and lanes](#) that provide [off-street](#) vehicular access to city buildings and as well as pedestrian routes through city buildings.<sup>[447]</sup>

## Suburban trains

[\[edit\]](#)

Main article: [Sydney Trains](#)



**Central station** is the busiest railway station in Australia, and the city's main public transport hub.

Established in 1906, **Central station** is the largest and busiest railway station in the state and is the main hub of the city's **rail network**.<sup>[448]</sup> **Sydney Trains** is the **suburban rail** service. Its tracks form part of the New South Wales railway network. It serves 168 stations across the city and had an annual ridership of 302 million passenger journeys in 2023–24.<sup>[449]</sup> Sydney's railway was first constructed in 1854 with progressive extension to the network to serve both freight and passengers. The main station is the **Central railway station** in the southern part of the CBD. In the 1850s and 1860s, the railway reached areas that are now outer suburbs of Sydney.<sup>[440]</sup>

## Metro

<sup>[edit]</sup>

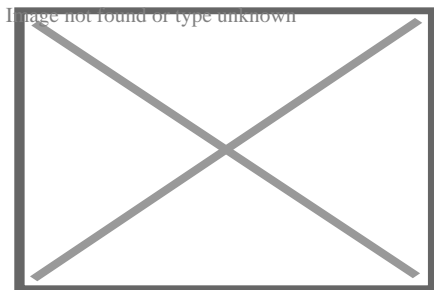
Main article: **Sydney Metro**

**Sydney Metro**, a driverless **rapid transit** system separate from the suburban commuter network, commenced operation in May 2019 and was extended through the city to Sydenham on 19 August 2024. This line will be extended to Bankstown in 2025 and a new line through the inner west to Parramatta is planned to be built by 2030.<sup>[450]</sup><sup>[451]</sup> It currently serves 21 stations. A line to serve the greater west is planned for 2026 and will include a station for the **second international airport**.

## Light rail

<sup>[edit]</sup>

Main article: **Light rail in Sydney**



The **CBD and South East Light Rail** connects Sydney's CBD with the Eastern Suburbs.

Sydney once had one of the **largest tram networks** in the British Empire after London.<sup>[452]</sup> It served routes covering 291 km (181 mi). The internal combustion engine made buses more flexible than trams and consequently more popular, leading to the progressive closure of the

network with the final tram operating in 1961.<sup>[440]</sup> From 1930 there were 612 buses across Sydney carrying 90 million passengers per annum.<sup>[453]</sup>

In 1997, the **Inner West Light Rail** opened between Central station and **Wentworth Park**. It was extended to **Lilyfield** in 2000 and then **Dulwich Hill** in 2014. It links the **Inner West** and **Darling Harbour** with **Central station** and facilitated 9.1 million journeys in the 2016–17 financial year.<sup>[454]</sup> A second, the **CBD and South East Light Rail** 12 km (7.5 mi) line serving the CBD and Eastern Suburbs opened in 2019–2020.<sup>[455]</sup> A **light rail line** serving Western Sydney opened in 2024.

## Buses

<sup>[edit]</sup>

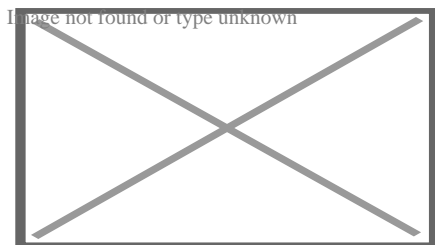
Main article: **Buses in Sydney**

Bus services are conducted by private operators under contract to **Transport for NSW**. Integrated tickets called **Opal cards** operate on bus routes. In total, nearly 225 million boardings were recorded across the bus network.<sup>[456]</sup> **NightRide** is a nightly bus service that operate between midnight and 5am.

## Ferries

<sup>[edit]</sup>

Main articles: **Sydney Ferries**, **List of Sydney Harbour ferries**, and **Timeline of Sydney Harbour ferries**



A **Freshwater-class ferry** Departing **Circular Quay** to Manly

At the time the Sydney Harbour Bridge opened in 1932, the city's **ferry service** was the largest in the world.<sup>[457]</sup> Patronage declined from 37 million passengers in 1945 to 11 million in 1963 but has recovered somewhat in recent years.<sup>[440]</sup> From its hub at **Circular Quay**, the **ferry network** extends from **Manly** to **Parramatta**.<sup>[457]</sup> Ferries in sydney are operated by **Transdev Sydney Ferries** and operates 10 routes.

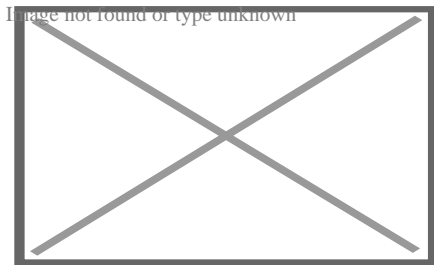
## Airports

[[edit](#)]

**Sydney Airport**, officially "Sydney Kingsford-Smith Airport", is located in **Mascot**. It services 46 international and 23 domestic destinations.<sup>[26]</sup> As the busiest airport in Australia, it handled 37.9 million passengers in 2013 and 530,000 tonnes of freight in 2011.<sup>[26]</sup> A second airport, **Western Sydney Airport**, is under construction at **Badgerys Creek** and will open in late 2026,<sup>[458]</sup> at a cost of \$2.5 billion.<sup>[459]</sup> Notably, it will not feature a **curfew**, unlike Sydney Kingsford-Smith Airport, which imposes a suspension of all aircraft operations between 11 pm and 6 am. **Bankstown Airport** is Sydney's second busiest airport, and serves general aviation, charter and some scheduled cargo flights. Bankstown is also the fourth busiest airport in Australia by number of aircraft movements.<sup>[460]</sup> **Port Botany** has surpassed Port Jackson as the city's major shipping port. Cruise ship terminals are located at **Sydney Cove** and **White Bay**.

## Utilities

[[edit](#)]



**Warragamba Dam** is Sydney's largest water supply dam.

Obtaining sufficient fresh water was difficult during early colonial times. A catchment called the **Tank Stream** sourced water from what is now the CBD but was little more than an open sewer by the end of the 1700s.<sup>[461]</sup> The Botany Swamps Scheme was one of several ventures during the mid-1800s that saw the construction of wells, tunnels, steam pumping stations, and small dams to service Sydney's growing population.<sup>[461]</sup>

The **Upper Nepean Scheme** came into operation in 1886. It transports water 100 km (62 mi) from the **Nepean**, **Cataract**, and **Cordeaux** rivers and continues to service about 15% of Sydney's water needs.<sup>[461]</sup> Dams were built on these three rivers between 1907 and 1935.<sup>[461]</sup> In 1977 the **Shoalhaven Scheme** brought several more dams into service.<sup>[462]</sup>

The state-owned corporation **WaterNSW** now manages eleven major dams: **Warragamba**, one of the largest domestic water supply dams in the world,<sup>[463]</sup> **Woronora**, **Cataract**, **Cordeaux**, **Nepean**, **Avon**, **Wingecarribee Reservoir**, **Fitzroy Falls Reservoir**, **Tallowa**, the **Blue Mountains Dams**, and **Prospect Reservoir**.<sup>[464]</sup> Water is collected from five catchment areas covering



16,000 km<sup>2</sup> (6,178 sq mi) and total storage amounts to 2.6 TL (0.6 cu mi).[464] The [Sydney Desalination Plant](#) came into operation in 2010.[461] WaterNSW supplies bulk water to [Sydney Water](#), a state-owned corporation that operates water distribution, sewerage and storm water management services.

Sydney's electricity infrastructure is maintained by [Ausgrid](#) and [Endeavour Energy](#).<sup>[465][466]</sup> Their combined networks include over 815,000 poles and 83,000 km (52,000 mi) of cables. [Submarine communications cable](#) systems in Sydney include the [Australia–Japan Cable](#), [Telstra Endeavour](#) and the [Southern Cross Cable](#), which link Australia and countries in the Pacific.<sup>[467][468][469]</sup>

## Environmental issues and pollution reduction

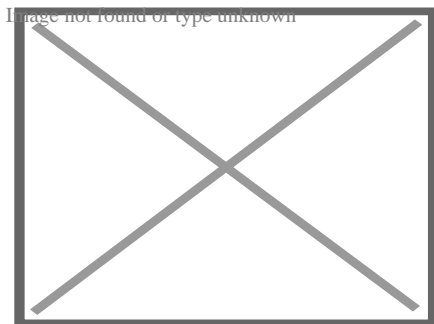
[\[edit\]](#)

Main article: [Environmental issues in Australia](#)

Further information: [Climate change in Australia](#) and [Renewable energy in Australia](#)

## Air quality

[\[edit\]](#)



[George Street](#) and bushfire smoke in December 2019

As [climate change](#), [greenhouse gas emissions](#) and pollution have become a major issue for Australia, Sydney has in the past been criticised for its lack of focus on reducing pollution and emissions and maintaining [water quality](#).<sup>[470]</sup> The release of the Metropolitan Air Quality Scheme (MAQS) led to a broader understanding of the causation of pollution in Sydney, allowing the government to form appropriate responses.<sup>[471]</sup>

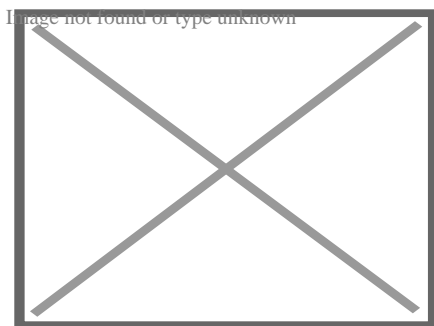
The [2019–20 Australian bushfire season](#) significantly impacted outer Sydney and dramatically reduced air quality, leading to a smoky haze that lingered for days. The [air quality](#) was 11 times the [hazardous](#) level in some days,<sup>[472][473]</sup> worse than [New Delhi's](#);<sup>[474]</sup> it was compared to "smoking 32 cigarettes" by Brian Oliver, a respiratory diseases scientist at the [University of Technology Sydney](#).<sup>[475]</sup> Since Sydney is surrounded by bushland and forest,<sup>[476]</sup> bushfires can ring the region in a [natural phenomena](#) that is labelled "ring of fire".<sup>[477][478][479][480][481]</sup>

The City of Sydney became the first council in Australia to achieve formal certification as **carbon-neutral** in 2008.[482][483] The city has reduced its 2007 carbon emissions by 6% and since 2006 has reduced carbon emissions from city buildings by up to 20%.[484][485] The *Sustainable Sydney 2030* program presented a guide to reducing energy in homes and offices by 30%.[484][486] Reductions in energy consumption have slashed energy bills by \$30 million a year.[487] **Solar panels** have been established on many CBD buildings to minimise carbon pollution by around 3,000 tonnes a year.[488]

The city also has an "**urban forest** growth strategy", in which it aims to regularly increase the **tree coverage** in the city by frequently planting trees with strong leaf density and **vegetation** to provide cleaner air and create moisture during hot weather, thus lowering city temperatures.[489] Sydney has also become a leader in the development of **green office buildings** and enforcing the requirement of all building proposals to be energy-efficient. The **One Central Park** development, completed in 2013, is an example of this implementation.[490][491][492][493]

## Car-dependency

[edit]



**Traffic congestion** on the **Warringah Freeway**, **Milsons Point**

Australian cities are some of the most **car-dependent** cities in the world,[494] especially by world city standards, although Sydney's is the lowest of Australia's major cities at 66%.[495] Sydney also has the **highest usage of public transport** in an Australian city, at 27%—comparable with New York City, Shanghai and Berlin. Despite its high ranking for an Australian city, Sydney has a low level of mass-transit services, with a historically low-density layout and significant **urban sprawl**, thus increasing the likelihood of car dependency.[496][497]

Strategies have been implemented to reduce private **vehicle pollution** by encouraging **mass** and **public transit**,[498] initiating the development of high density housing and introducing a fleet of 10 new **electric cars**, the largest order of the pollution-free vehicle in Australia.[499] Electric cars do not produce carbon monoxide and **nitrous oxide**, which contribute to climate change.[500][501] **Cycling trips** increased by 113% across Sydney's inner-city from 2010 to 2015, at which point about 2,000 bikes were passing through top peak-hour intersections on

an average weekday.<sup>[484]</sup> Transport developments in the **north-west** and east of the city have been designed to encourage use of the expanding public transportation system.

## Sister cities

[\[edit\]](#)

**Sister cities** of Sydney include:

- **San Francisco, United States of America**
- **Wellington, New Zealand**
- **Florence, Italy**
- **Nagoya, Japan**
- **Portsmouth, United Kingdom**

## See also

[\[edit\]](#)

- **flag New South Wales portal**
- **List of museums in Sydney**
- **List of people from Sydney**
- **List of public art in the City of Sydney**
- **List of songs about Sydney**
- **Outline of Sydney**

## Notes

[\[edit\]](#)

- <sup>^</sup> In accordance with the Australian Bureau of Statistics source, **England**, **Scotland**, **Mainland China** and the Special Administrative Regions of **Hong Kong** and **Macau** are listed separately.
- <sup>^</sup> The Australian Bureau of Statistics has stated that most who nominate "Australian" as their ancestry are part of the **Anglo-Celtic** group.<sup>[338]</sup>
- <sup>^</sup> Indigenous identification is separate to the ancestry question on the Australian Census and persons identifying as Aboriginal or Torres Strait Islander may identify any ancestry.

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- [Official Sydney, NSW government site](#)
- [Official Sydney tourism site](#)
- [Historical film clips of Sydney on the National Film and Sound Archive of Australia's australian screen online](#)

- [Qantas Farewell Flight B747-400 Queen of the Skies – Sydney Final Flight QF747 on YouTube](#) – includes a low-level joyflight around Sydney showing various aspects of the city on 13 July 2020 (starts at 05:20)
-  [Geographic data related to Sydney at OpenStreetMap](#)
- [Dictionary of Sydney – the history of Sydney](#) ([Archived](#) 24 March 2019 at the [Wayback Machine](#))
- [Sydney Official History Archives](#)
- [State Records New South Wales](#)
- [National Archives of Australia](#)
- [Understanding Society Through its Records – John Curtin Library](#)
- [Directory of Archives in Australia](#)

- **v**
- **t**
- **e**

## Sydney

- [Outline](#)
- [History](#)
  - [Timeline](#)
- [Geography](#)
- [Climate](#)
  - [Severe weather](#)
- [Demographics](#)
- [Ecology](#)
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-  [Category](#)
-  [Outline](#)

**Links to related articles**



- **v**
- **t**
- **e**

## Regions of Sydney, New South Wales, Australia

- Canterbury-Bankstown
- Central Business District
- Eastern Suburbs
- Forest District
- Greater Western Sydney
- Hills District
- Inner West
- Macarthur
- Northern Beaches
- Northern Suburbs
- North Shore
- Southern Sydney
- South Western Sydney
- St George

## Local government areas of Sydney

- Bayside
- Blacktown
- Burwood
- Camden
- Canterbury Bankstown
- Canada Bay
- Cumberland
- Fairfield
- Georges River
- Hawkesbury
- The Hills
- Hornsby
- Hunter's Hill
- Inner West
- Ku-ring-gai
- Lane Cove
- Liverpool
- Mosman
- North Sydney
- Northern Beaches
- Parramatta
- Penrith
- Randwick
- Ryde
- Strathfield
- Sutherland
- City of Sydney
- Waverley
- Willoughby
- Woollahra

## List of Sydney suburbs

- **v**
- **t**
- **e**

## Sydney landmarks

## **Buildings / structures**

- Admiralty House
- Archibald Fountain
- Australia Square
- Bankstown Reservoir
- Boothtown Aqueduct
- Cadmans Cottage
- Campbell's Stores
- The Cenotaph
- Central station
- Chifley Tower
- Citigroup Centre
- International Convention Centre
- Deutsche Bank Place
- Dr Chau Chak Wing Building
- El Alamein Fountain
- Finger Wharf
- General Post Office (No. 1 Martin Place)
- Government House
- Governor Phillip Tower
- Hong Kong House
- Hyde Park Barracks
- King Street Wharf
- Kirribilli House
- Long Bay
- Macquarie Lighthouse
- Mint
- Observatory
- Old Government House
- Old Mining Museum Building
- Opera House
- Overseas Passenger Terminal
- Parliament House
- Parramatta Gaol
- Regimental Square
- The Ribbon
  - IMAX Sydney
- Queen Victoria Building
- St Andrew's Cathedral
- St Mary's Cathedral
- Sydney Airport
- Sydney Tower
- The Toaster
- Town Hall
- War Memorial
- Warragamba Dam
- White Bay Cruise Terminal
- World Square

## **Bridges**

- Anzac
- Captain Cook
- Gladesville
- *Glebe Island* (disused)
- Harbour
- Pyrmont
- Roseville
- Spit
- Tom Uglys

## **Major centres and localities**

- Central Business District
- Chatswood
- Chinatown
- Kings Cross
- North Sydney
- Parramatta
- Pitt Street Mall
- The Rocks

## **Urban renewal projects**

- Barangaroo
- Bays Precinct
- Central Park
- Darling Harbour
- Green Square
- Sydney Olympic Park
- Waterloo

## **Parks and nature**

- Auburn Botanic Gardens
- Balaka Falls
- Balls Head Reserve
- Bents Basin
- Berowra Valley National Park
- Bicentennial Park
- Bland Oak
- Blue Mountains National Park
- Centennial Parklands
- Central Gardens Nature Reserve
- Chinese Garden of Friendship
- Cronulla sand dunes
- Cumberland State Forest
- Farm Cove
- Featherdale Wildlife Park
- Garigal National Park
- Garawarra Conservation Area
- Georges River National Park
- Heathcote National Park
- Hyde Park
- Kamay Botany Bay National Park
- Ku-ring-gai Chase
- Lane Cove National Park
- Macquarie Place
- Paddington Reservoir
- Parramatta Park
- Prospect dolerite intrusion
- Prospect Hill
- Prospect Nature Reserve
- Royal Botanic Garden
- Royal National Park
- Sydney Harbour National Park
- Sydney Park
- The Domain
- Western Sydney Parklands
  - Western Sydney Regional Park

## Cultural institutions

- Art Gallery of New South Wales
- Australian Museum
- Australian National Maritime Museum
- Chau Chak Wing Museum
- Harry's Cafe de Wheels
- Manly Art Gallery and Museum
- Museum of Contemporary Art
- Museum of Sydney
- Justice and Police Museum
- Powerhouse Museum
- Sea Life Sydney Aquarium
- State Library
- Sydney Conservatorium of Music
- Sydney Zoo
- Taronga Zoo

## Sport

- Australian Golf Club
- Canterbury Park Racecourse
- Dunc Gray Velodrome
- Lakes Golf Club
- Macquarie Ice Rink
- Randwick Racecourse
- Rosehill Gardens Racecourse
- Royal Sydney Golf Club
- Stadium Australia
- State Sports Centre
- Sydney Cricket Ground
- Sydney Football Stadium
- Sydney International Regatta Centre
- Sydney Motorsport Park
- Sydney Olympic Park
  - Athletic Centre
  - Aquatic Centre
  - Hockey Centre
  - Tennis Centre
  - Sydney Showground Stadium
- Warwick Farm Racecourse
- Wentworth Park
- Western Sydney International Dragway
- Western Sydney Stadium



## Entertainment

- Capitol Theatre
- Crown Sydney
- Disney Studios Australia
- Entertainment Quarter
- Luna Park
- Lyric Theatre
- Plaza Theatre
- Raging Waters
- Roslyn Packer Theatre
- The Star
- State Theatre
- Sydney SuperDome
- Theatre Royal

## Beaches

- Bondi
- Cronulla
- Manly
- Palm

## Islands

- Bare
- Clark
- Cockatoo
- Fort Denison
- Garden
- Goat
- Rodd
- Shark
- Snapper
- Spectacle

- **v**
- **t**
- **e**

Theatre in Sydney

## Central Sydney

- Belvoir Street Theatre
  - Belvoir
- Capitol Theatre
- Genesian Theatre
- Roslyn Packer Theatre
- Seymour Centre
- State Theatre
- Sydney Lyric
  - Foundry Theatre
- Sydney Opera House
- Theatre Royal
- Wharf Theatre

## Inner West

- Carriageworks
- New Theatre
- PACT Theatre

## Western Suburbs

- Riverside Theatres Parramatta
- Sydney Coliseum Theatre

## North Shore

- Ensemble Theatre
- Independent Theatre
- Marian Street Theatre
- The Concourse, Chatswood

## Northern Beaches

- Glen Street Theatre

## Eastern Suburbs

- Darlinghurst Theatre
- Hayes Theatre
- Old Fitz Theatre
- Parade Theatre
- Stables Theatre (Griffin Theatre Company)

## Former theatres

- Criterion Theatre
- Garrick Theatre
- Her Majesty's Theatre
- Minerva Theatre
- Palace Theatre
- Paris Theatre
- Phillip Street Theatre
- Plaza Theatre
- Regent Theatre
- Tivoli Theatre

- **v**
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- **e**

Sports teams based in **Sydney**

## Australian rules football

- AFL**
  - Sydney Swans
  - Greater Western Sydney Giants
- AFLW**
  - Sydney Swans
  - Greater Western Sydney Giants

## Baseball

- ABL**
  - Sydney Blue Sox
- Claxton Shield**
  - New South Wales Patriots

## Basketball

- NBL**
  - Sydney Kings
- WNBL**
  - Sydney Flames

Cricket	Sheffield Shield	○ New South Wales Blues
	Matador BBQs One Day Cup	
	WNCL	○ New South Wales Breakers
	Big Bash League	○ Sydney Sixers ○ Sydney Thunder
Field hockey	Women's Big Bash League	○ Sydney Sixers ○ Sydney Thunder
	AHL	○ New South Wales Waratahs
	WAHL	○ New South Wales Arrows
	Hockey One	○ NSW Pride
Futsal (F-League)		○ Dural Warriors ○ East Coast Heat F.C. ○ Sydney Scorpions
Handball		○ Sydney University Handball Club
Ice hockey	AIHL	○ Sydney Bears ○ Sydney Ice Dogs
	AWIL	○ Sydney Sirens

Netball	SSN	<ul style="list-style-type: none"> <li>Giants Netball</li> <li>NSW Swifts</li> </ul>
	ANL	<ul style="list-style-type: none"> <li>Giants Netball Academy</li> <li>NNSW Waratahs</li> </ul>
Rugby league	NRL	<ul style="list-style-type: none"> <li>Canterbury-Bankstown Bulldogs</li> <li>Cronulla-Sutherland Sharks</li> <li>Manly Warringah Sea Eagles</li> <li>Parramatta Eels</li> <li>Penrith Panthers</li> <li>St. George Illawarra Dragons</li> <li>South Sydney Rabbitohs</li> <li>Sydney Roosters</li> <li>Wests Tigers</li> </ul>
	NRLW	<ul style="list-style-type: none"> <li>Canterbury-Bankstown Bulldogs</li> <li>Cronulla-Sutherland Sharks</li> <li>Parramatta Eels</li> <li>St. George Illawarra Dragons</li> <li>Sydney Roosters</li> <li>Wests Tigers</li> </ul>
Rugby union	Super Rugby	<ul style="list-style-type: none"> <li>New South Wales Waratahs</li> </ul>
	Super W	<ul style="list-style-type: none"> <li>New South Wales Waratahs</li> </ul>
	NRC	<ul style="list-style-type: none"> <li>Greater Sydney Rams</li> <li>Sydney Rays</li> </ul>

## Soccer

### A-League Men

- Macarthur FC
- Sydney FC
- Western Sydney Wanderers

### A-League Women

- Sydney FC
- Western Sydney Wanderers

## Water polo (ANWPL)

- Balmain Water Polo Club
- Cronulla Sharks Water Polo Club
- Drummoyne Devils
- Sydney Uni Water Polo Club
- UNSW Wests Magpies

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- **e**

New South Wales



## General

- [Economy](#)
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- [Sport](#)
  - [Australian rules football](#)
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  - [Rugby league](#)
  - [Rugby union](#)
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- [Symbols](#)

## New South Wales

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## Sydney

- Canterbury-Bankstown
- Central Business District
- Eastern Suburbs
- Forest District
- Greater Western Sydney
- Hills District
- Inner West
- Macarthur
- Northern Beaches
- Northern Sydney
- North Shore
- Southern Sydney
- South Western Sydney
- St George

## Regions

- Central Coast
- Central Tablelands
- Central West
- Far West
- Greater Blue Mountains
- Hunter
- Illawarra
- Mid North Coast
- Monaro
- New England
- North West Slopes
- Northern Rivers
- Northern Tablelands
- Orana
- Riverina
- South Coast
- South Western Slopes
- Southern Highlands
- Southern Tablelands
- Upper Hunter

## Rest of state

- Sydney
- Albury
- Armidale
- Bathurst
- Blue Mountains
- Broken Hill
- Cessnock
- Coffs Harbour
- Dubbo
- Gosford
- Goulburn
- Grafton
- Griffith
- Hawkesbury
- Lake Macquarie
- Lismore
- Lithgow
- Maitland
- Newcastle
- Orange
- Queanbeyan
- Shellharbour
- Shoalhaven
- Tamworth
- Taree
- Wagga Wagga
- Wollongong

Cities

Image New South Wales flag

New South Wales portal

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Capital cities of Australia

National and ACT  
Canberra

NSW  
Sydney

NT  
Darwin

List of cities in Australia

- **v**
- **t**
- **e**

## Cities of Australia

### **Australian Capital Territory Canberra** (*national capital*)

- Albury
- Armidale
- Bathurst
- Broken Hill
- Cessnock
- Coffs Harbour
- Dubbo
- Gosford
- Goulburn
- Grafton
- Griffith

### **New South Wales**

- Lake Macquarie
- Lismore
- Lithgow
- Maitland
- Newcastle
- Orange
- Port Macquarie
- Queanbeyan
- **Sydney**
- Tamworth
- Wagga Wagga
- Wollongong

### **Northern Territory**

- **Darwin**
- Palmerston

## Queensland

- **Brisbane**
- Bundaberg
- Cairns
- Caloundra
- Gladstone
- Gold Coast
- Gympie
- Hervey Bay
- Ipswich
- Mackay
- Maryborough
- Mount Isa
- Rockhampton
- Sunshine Coast
- Toowoomba
- Townsville

## South Australia

- **Adelaide**
- Mount Gambier
- Murray Bridge
- Port Augusta
- Port Lincoln
- Port Pirie
- Victor Harbor
- Whyalla

## Tasmania

- Burnie
- Devonport
- **Hobart**
- Launceston

## Victoria

- Ararat
- Bairnsdale
- Ballarat
- Benalla
- Bendigo
- Castlemaine
- Colac
- Geelong
- Hamilton
- Horsham
- **Melbourne**
- Mildura
- Moe
- Morwell
- Portland
- Sale
- Seymour
- Shepparton
- Stawell
- Swan Hill
- Traralgon
- Wangaratta
- Warragul
- Warrnambool
- Wodonga

## Western Australia

- Albany
- Bunbury
- Busselton
- Geraldton
- Kalgoorlie-Boulder
- Mandurah
- **Perth**

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Summer Olympic Games host cities



- 1896: ~~Image not found or type unknown~~  
Greece Athens
- 1900: ~~Image not found or type unknown~~  
France Paris
- 1904: ~~Image not found or type unknown~~  
United States St. Louis
- 1908: ~~Image not found or type unknown~~  
United Kingdom London
- 1912: ~~Image not found or type unknown~~  
Sweden Stockholm
- 1916: ~~Image not found or type unknown~~  
None [c1]
- 1920: ~~Image not found or type unknown~~  
Belgium Antwerp
- 1924: ~~Image not found or type unknown~~  
France Paris
- 1928: ~~Image not found or type unknown~~  
Netherlands Amsterdam
- 1932: ~~Image not found or type unknown~~  
United States Los Angeles
- 1936: ~~Image not found or type unknown~~  
Germany Berlin
- 1940: ~~Image not found or type unknown~~  
None [c2]
- 1944: ~~Image not found or type unknown~~  
None [c2]
- 1948: ~~Image not found or type unknown~~  
United Kingdom London
- 1952: ~~Image not found or type unknown~~  
Finland Helsinki
- 1956: ~~Image not found or type unknown~~  
Australia Melbourne
- 1960: ~~Image not found or type unknown~~  
Italy Rome
- 1964: ~~Image not found or type unknown~~  
Japan Tokyo
- 1968: ~~Image not found or type unknown~~  
Mexico Mexico City
- 1972: ~~Image not found or type unknown~~  
West Germany Munich
- 1976: ~~Image not found or type unknown~~  
Canada Montreal
- 1980: ~~Image not found or type unknown~~  
Soviet Union Moscow
- 1984: ~~Image not found or type unknown~~  
United States Los Angeles
- 1988: ~~Image not found or type unknown~~  
South Korea Seoul
- 1992: ~~Image not found or type unknown~~  
Spain Barcelona
- 1996: ~~Image not found or type unknown~~  
United States Atlanta
- 2000: ~~Image not found or type unknown~~  
Australia Sydney
- 2004: ~~Image not found or type unknown~~  
Greece Athens
- 2008: ~~Image not found or type unknown~~  
China Beijing
- 2012: ~~Image not found or type unknown~~  
United Kingdom London
- 2016: ~~Image not found or type unknown~~  
Brazil Rio de Janeiro
- 2020: ~~Image not found or type unknown~~  
Japan Tokyo [c3]
- 2024: ~~Image not found or type unknown~~  
France Paris
- 2028: ~~Image not found or type unknown~~  
United States Los Angeles
- 2032: ~~Image not found or type unknown~~  
Australia Brisbane

[c1] Cancelled due to World War I; [c2] Cancelled due to World War II; [c3] Postponed to 2021 due to the COVID-19 pandemic

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## Summer Paralympic Games host cities

- **1960:** Italy Rome
- **1964:** Japan Tokyo
- **1968:** Israel Tel Aviv
- **1972:** West Germany West Berlin
- **1976:** Canada Toronto
- **1980:** Netherlands Arnhem
- **1984:** United States City of the United Kingdom Stoke Mandeville
- **1988:** South Korea Seoul
- **1992:** Spain Barcelona / Spain Madrid
- **1996:** United States Atlanta
- **2000:** Australia Sydney
- **2004:** Greece Athens
- **2008:** China Beijing
- **2012:** United Kingdom London

- **v**
- **t**
- **e**

## Commonwealth Games host cities

- **1930:** Canada Hamilton
- **1934:** England London
- **1938:** Australia Sydney
- **1950:** New Zealand Auckland
- **1954:** Canada Vancouver
- **1958:** Wales Cardiff
- **1962:** Australia Perth
- **1966:** Jamaica Kingston
- **1970:** Scotland Edinburgh
- **1974:** New Zealand Christchurch
- **1978:** Canada Edmonton
- **1982:** Australia Brisbane
- **1986:** Scotland Edinburgh
- **1990:** New Zealand Auckland
- **1994:** Canada Victoria
- **1998:** Malaysia Kuala Lumpur
- **2002:** England Manchester
- **2006:** Australia Melbourne
- **2010:** India Delhi
- **2014:** Scotland Glasgow

## Portals:

- flag New South Wales
- flag Australia

## Sydney at Wikipedia's sister projects:

- **Definitions** from Wiktionary
- **Media** from Commons
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- **Textbooks** from Wikibooks
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<b>National</b>	<ul style="list-style-type: none"> <li>○ <a href="#">Germany</a></li> <li>○ <a href="#">United States</a></li> <li>○ <a href="#">France</a></li> <li>○ <a href="#">BnF data</a></li> <li>○ <a href="#">Japan</a></li> <li>○ <a href="#">Czech Republic</a></li> <li>○ <a href="#">Spain</a></li> <li>○ <a href="#">Croatia</a></li> <li>○ <a href="#">Sweden</a></li> <li>○ <a href="#">Israel</a></li> <li>○ <a href="#">Catalonia</a></li> </ul>
<b>Geographic</b>	<ul style="list-style-type: none"> <li>○ <a href="#">MusicBrainz area</a></li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>○ <a href="#">IdRef</a></li> <li>○ <a href="#">NARA</a></li> </ul>

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- [SEO agencies in Sydney](#)
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## Frequently Asked Questions

**What should I expect from SEO agencies in Sydney?**

SEO agencies in Sydney typically offer comprehensive services such as keyword research, technical audits, on-page and off-page optimization, content creation, and performance tracking. Their goal is to increase your site's search engine rankings and drive more targeted traffic to your website.

### **Why is keyword research important for SEO?**

Keyword research helps identify the terms and phrases that potential customers are using to search for products or services. By targeting these keywords in your content, you can improve your visibility in search engine results, attract more qualified leads, and drive higher conversion rates.

### **What sets SEO specialists in Sydney apart?**

SEO specialists in Sydney often have deep expertise in the local market. They understand the competitive landscape, know which keywords resonate with Sydney-based audiences, and are skilled at optimizing websites to rank well in local search results.

### **What is SEO?**

SEO, or search engine optimisation, is the practice of improving a website's visibility on search engines like Google. It involves optimizing various elements of a site such as keywords, content, meta tags, and technical structure to help it rank higher in search results.

### **How can a digital agency in Sydney help with SEO?**

A digital agency in Sydney can offer a comprehensive approach, combining SEO with other marketing strategies like social media, PPC, and content marketing. By integrating these services, they help you achieve a stronger online presence and better ROI.

### **What does SEO mean for my business?**

SEO, or search engine optimisation, means improving your website's structure, content, and overall performance to rank higher in search results. This leads to more organic traffic, increased brand visibility, and better conversion rates, ultimately supporting your business's growth.

SEO expert Sydney

SEO Sydney

Phone : 1300 684 339

City : Sydney

State : NSW

Zip : 2000

[Google Business Profile](#)

[Google Business Website](#)

Company Website : <https://sydney.website/seo-sydney/>

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