|  |
| --- |
| Drivers for the transition to GDA2020 in Victoria |
| Surveyor-General Victoria – Geodesy |

Organisations in Victoria are encouraged to transition to the Geocentric Datum of Australia 2020 (GDA2020) as the datum (or coordinate reference system) of spatial information and applications.

There are a range of drivers for the transition to GDA2020 in Victoria. These include:

|  |  |
| --- | --- |
| Driver | Description |
| **GDA2020 is the national datum** | In October 2017, GDA2020 was formally defined in Commonwealth legislation as the national datum for Australia.  |
| **GDA2020 is used for cadastral surveys in Victoria** | In Victoria, cadastral surveying regulations were amended to specify that GDA2020 **must** be adopted for all cadastral surveys from the 1st of January 2019. |
| **Consistency with Victorian Digital Asset Strategy and modern spatial information products and services** | The Victorian Digital Asset Strategy nominated GDA2020 as the datum standard for the management of modern spatial information products and services, such as digital engineering (DE) for major infrastructure and Digital Twin Victoria.  |
| **Foundational spatial information maintained in GDA2020** | The Vicmap suite of products and services are all available in GDA2020 and will be maintained in GDA2020 moving forward. Support for GDA94 will continue although there will be less support over time.  |
| **Alignment with satellite positioning (such as GPS)** | GDA2020 is designed to enable close alignment of spatial data and satellite positioning services (such as GPS). This enhanced alignment will ensure maximum benefit from ongoing advancements in positioning technology, such as 3-10 cm accuracy positioning in mobile devices. In contrast, in 2022, spatial information in GDA94 will be out of alignment with GPS positioning by approximately 1.7 m.  |
| **GDA2020 is a modernised datum** | GDA2020 is defined by 109 high quality GPS ground stations, aligned to the most current International Terrestrial Reference Frame and based on where the Australian Tectonic Plate was on the 1st of January 2020.  |
| **GDA2020 is part of a broader Australian Geospatial Reference System (AGRS) modernisation program** | GDA2020 is central to the broader AGRS modernisation program being delivered through the ICSM. There is a direct relationship between GDA2020 and the dynamic Australian Terrestrial Reference Frame 2014 (ATRF2014) which will support positioning services. Similarly, Australian Vertical Working Surface heights can be derived directly from GDA2020 ellipsoidal heights and are instantly available through positioning services. |
| **GDA2020 is similar to GDA94 and transformation between the datums is simple to perform** | GDA2020 is a conventional static datum, just like GDA94. It has the same type of local projections including MGA2020 and VICGRID2020. In Victoria, spatial information can be transformed from GDA94 to GDA2020 using the 7-parameter conformal transformation parameters (EPSG: 8048) or conformal-only transformation grid (EPSG: 8446). |
| **Other organisations are transitioning to GDA2020** | Surveyor-General Victoria (SGV) Geodesy are encouraging a coordinated transition to GDA2020 in Victoria throughout 2022. SGV Geodesy are offering support to organisations as they transition to GDA2020. Email: smes.support@delwp.vic.gov.au |

For more information on GDA2020 please visit <https://www.icsm.gov.au/gda2020>

|  |  |
| --- | --- |
| © The State of Victoria Department of Environment, Land, Water and Planning 2021LogoThis work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/ DisclaimerThis publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. | AccessibilityIf you would like to receive this publication in an alternative format, please telephone the DELWP Customer Service Centre on 136186, email customer.service@delwp.vic.gov.au or via the National Relay Service on 133 677 [www.relayservice.com.au](http://www.relayservice.com.au). This document is also available on the internet at [www.delwp.vic.gov.au](http://www.delwp.vic.gov.au).  |