

Table 1

**TABLE OF CATEGORIES OF COMPUTERIZED SURVEYING AND
MAPPING RESULTS**

Category of results	Explanation of results
Control survey data files	<ol style="list-style-type: none"> 1. The Ministry of the Interior grants authorization for providing the basic control survey outcome such as the level 1 and the level 2 satellite control survey outcome data, the leveling outcome data and the gravity survey outcome data. 2. The NLSC creates files to administer the basic control survey outcomes over the years such as Taiwan triangulation point outcome, Taiwan level 1 benchmark measurement, Taiwan coastland control survey outcome and Taiwan coastland benchmark leveling result. 3. The NLSC takes the level 1 and the level 2 basic control points set by Minister of the Interior, Taiwan triangulation point outcome and Taiwan coastland control survey points as constrained point to measure the level 3 basic control points.
Original numerical cadastre surveying data	The NLSC keeps the original outcome files of the changes on all numerical land surveying due to non land division or merger reasons.
GIS cadastral map data	GIS cadastral map data is the value-add data with the procedure of geometry check, shape modify, format convert, attributes connect. The original data is cadastral map data that built by the NLSC every month with transferred data from computer operating system for land registration, recertification of initial adjudication, land price and land administration, digitization of analog cadastral maps data management system, or from Basic Database of National Land, Ministry of the Interior.
Land-Section Registration data	The NLSC makes use of the land section data from each land administration unit to add value to the land data processing and regularly maintains the land attribute of each section and the peripheral land data.
Scanned file of archive cadastral map	Scanned image data of archive official woodland distribution maps, old cadastral maps, historical cadastral maps, blueprint film and 160gsm blueprint copies of cadastral maps, of the NLSC which are ceased to be updated and used.
Taiwan Electronic Maps data	The national vector electronic map completed by the NLSC, such as map manipulation data of roads, railroads, water system, administrative boundaries, blocks, buildings, important landmarks and control points.
Land use investigation data	Land use investigation data is the classified records of land use category by applying remote-sensing technology, GIS data and field investigation in survey situation.
Basic topographic map data	Basic topographic maps data include 1:5,000 topographic map and the generalization products. 1:5,000 topographic maps are produced by photogrammetric method and field survey. The kinds of generalization products are topographic maps at scales of 1:25,000, 1:50,000, 1:100,000, 1:50,000 and 1:40,000.
Administrative map data	<ol style="list-style-type: none"> 1. Administrative maps formed with boundary maps of municipality, county, township and village. Boundary maps are revised according boundary data provided by local governments. 2. Land office jurisdiction map is the output integrated and produced by the NLSC according to the land-section registration data

Ortho-image data	Ortho-image data are the aerial image dealing with rectification and mosaic. The origin image are took by unmanned aircraft system and dealt with photogrammetric method and specifications of Taiwan Electronic Maps production.
Integrated land surveying and mapping data	<ol style="list-style-type: none"> 1. The integrated land surveying and mapping data which are produced by the NLSC via application of spatial database related technologies are provided with web service. The list of web services and relevant information are announced on website of Taiwan Map Service (https://maps.nlsc.gov.tw/). 2. Web services that include WMS, WMTS, map tile package, Offline maps and open data of Taiwan Electronic Maps at the scale smaller than 1:18,000 follow “Open Government Data License”. The rest of web services follows “Taiwan Map Service Terms of Use”.