In Lithuania, mass valuation of land and buildings is being improved through geographical information systems (GIS).

The State Enterprise Centre of Registers has been performing mass valuation of land and buildings for more than 15 years. Valuation results play an increasing role in the national fiscal and social policy. Average market values are used for setting land and real property taxes, rent of state-owned land and other property, property registration and inheritance taxes as well as for granting social assistance. Approximately, 2.4 million parcels and 4.1 million structures are assessed annually. In 2019, the value of all registered and assessed real property in Lithuania amounted to more than 109 billion euros.

Information about real property transactions stored in the database of the Centre of Registers, data of the Real Property Cadastre and Register, the Address Register, as well as spatial datasets publicly available from various institutions, are used for the valuation of land parcels and buildings. Using GIS, the data are integrated into the systems of the Centre of Registers and enable valuers to determine the factors which affect value of property and to calculate the average market value more accurately.

Every year, land parcel data used for valuation are updated taking into account the protection zones of power lines, gas and oil transmission pipelines, flood-meadows and dry meadows, where restrictions on activities apply. Using GIS, additional qualitative or quantitative factors are identified, which make valuation models more precise and ensure more accurate valuation of parcels. There are also plans to introduce additional spatial parameters. Solutions of master plans obtained from municipalities are also used for valuation.

One of the key factors affecting value is a location factor reflected in the established value zone. In 2019, 1,349 established value zones for 99.33% of parcels (by coordinates and address point) and for 93% of buildings (by address point) were defined by geographic location on the map.