

Relationship between the Land Cadastre and the Mass Valuation System - Mutual Benefits and Challenges

Presented at the FIG Working Week 2017,
May 29 - June 2, 2017 in Helsinki, Finland

Rimantas Ramanauskas
Kęstutis Sabaliauskas
Arvydas Bagdonavičius
Albina Aleksienė
LITHUANIA

LOOKING FOR
COST-
EFFECTIVE
VALUATI...

MULTI-
PURPOSE
CADASTRE
AND REGIST...

MASS
VALUATION

MUTUAL
BENEFITS OF
TWO SYSTEMS

Thank
You For
Your
Attention!

LOOKING FOR COST-EFFECTIVE VALUATION SYSTEM

The total **annual expenditures** for property tax administration generally are in **the range of 5 to 10%** of annual property tax revenues in developed countries. Although the costs and effectiveness of valuation systems seem little studied, valuation costs can be as low as **1 to 2%** in high property tax countries like the United Kingdom and the United States. (R.Almy)

Costs for mass valuation of land and structures in Lithuania make **0.5%** of the tax collected. Total costs for administration of both taxes are not calculated exactly; however they **do not exceed 1 % of tax revenue.**

Mass valuation system consists of:

- Data collection and management
- Data analysis
- Value computation
- Methodical-administrative component

Mass valuation system consists of:

- Data collection and management
- Data analysis
- Value computation
- Methodical-administrative component

The three-quarters of mass valuation costs are usua...

Traditionally recommended ways to make da...

The recommendation of the Internation...

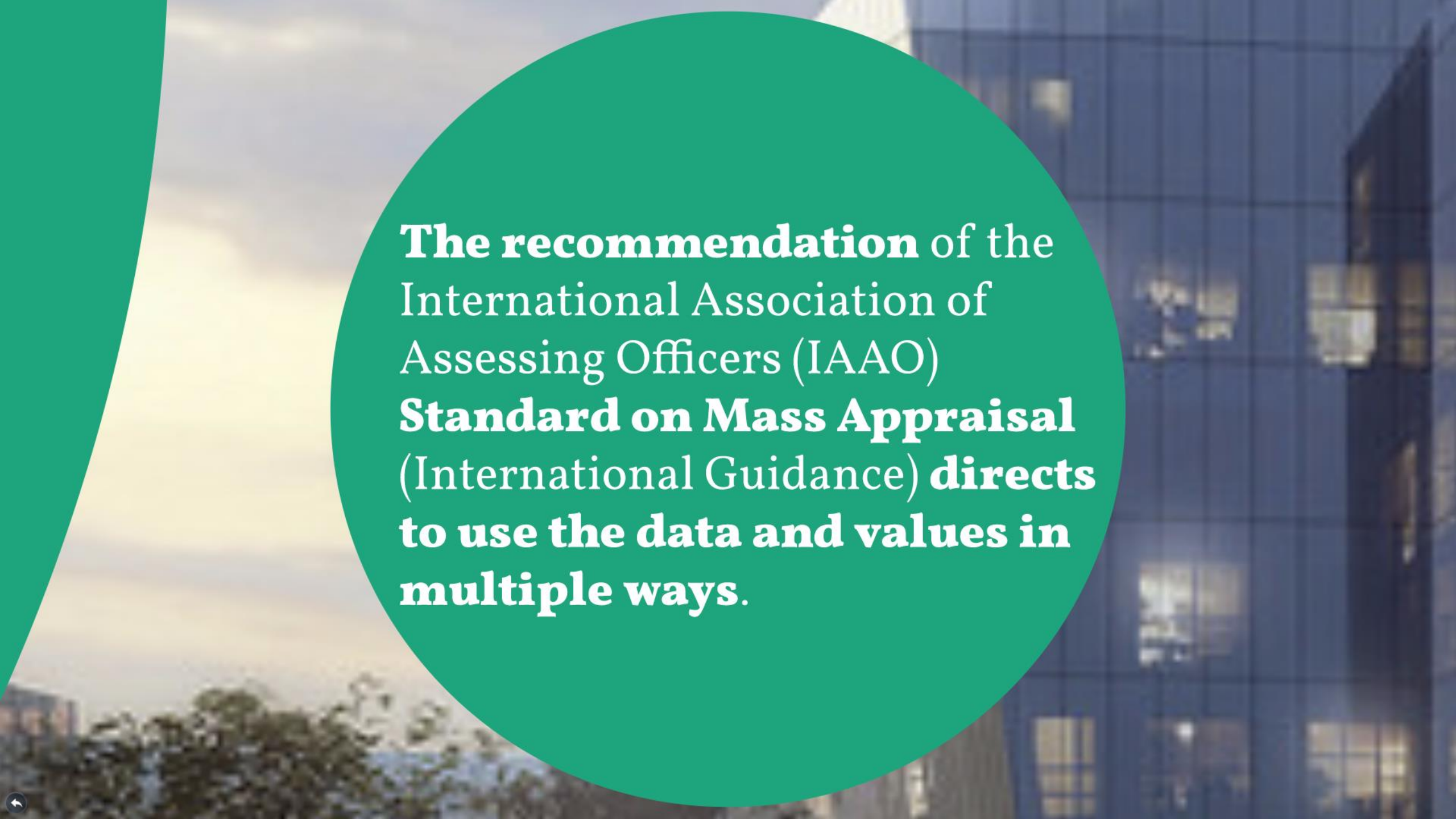
Lithuania's practice in mass valuation and the multi-purpo...

The three-quarters of mass valuation costs are usually allocated for collection and maintenance of data on properties .

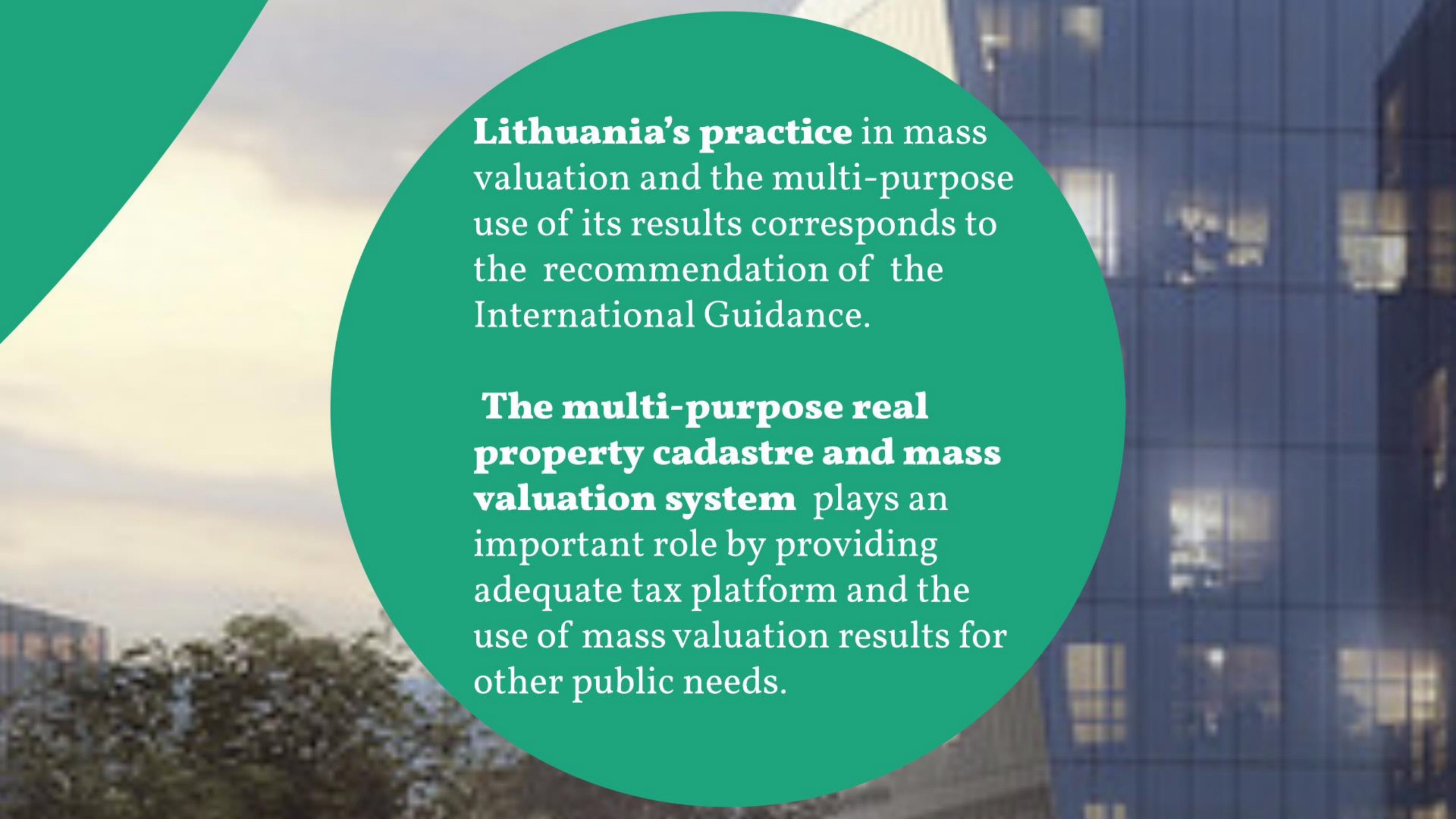
In order to reduce the mass valuation costs, it is necessary to look for ways **how to collect** and use the data more **effectively**.

Traditionally recommended ways
to make data collection cost-effective:

- valuers can often be more judicious in determining **which data elements are needed** in valuation
- **field data** entry can now be **automated**
- **aerial imagery** and other techniques can be used **to detect unassessed** properties and new constructions
- well-designed **taxpayer declarations** can also reduce or eliminate the need to inspect properties on site



The recommendation of the International Association of Assessing Officers (IAAO) **Standard on Mass Appraisal (International Guidance) directs to use the data and values in multiple ways.**

A large green circle is centered on the page, containing two paragraphs of white text. The background is a blurred image of a modern building with a grid of windows, some of which are lit up, suggesting dusk or dawn. The sky is a mix of light and dark tones, and there are some trees visible in the lower left corner.

Lithuania's practice in mass valuation and the multi-purpose use of its results corresponds to the recommendation of the International Guidance.

The multi-purpose real property cadastre and mass valuation system plays an important role by providing adequate tax platform and the use of mass valuation results for other public needs.

MULTI-PURPOSE CADASTRE AND REGISTER SYSTEM

- Effectiveness of the Lithuanian mass valuation system is ensured by the **appropriate choice of Real Property Administration System**
- Real property and its transactions in Lithuania are registered in **one** Real Property Cadastre and Register **Database**

The mass
valuation
system was
built on t...



**The mass valuation
system was built on the
integrated digital data of
Real Property Cadastre
and Register**

**Data collection
has become the
function of
SURVEYO...**

**Data on
physical
characteristics
of property
and the sales
a...**

Lithuania
managed to
establish a mul...

**Data collection has
become the function of
SURVEYORS**

who are surveying newly
formed real property units or
updating the information in
case of changes related to
property



Data on physical characteristics of property and the sales are collected, stored and updated in the **Cadastral and Register DB** and are used by **valuers**

Lithuania
managed to establish a **multi-
purpose cadastre and register
system** that contributes:

- to improving the protection of ownership rights
- to developing the real property administration
- to promoting the economic development in the country

MASS VALUATION

Mass valuation process is based on the digital data ...

• physical characteristics of real proper...

Centre of Registers

More than 100 000 real property transactions ...

Over 5,5 million units of properties (2,2 million la...

Results of mass valuation are used for differe...

• To estimate the inherited proper...

Results of mass valuation are public

Data collection is not a function of valuers,
except specific market data is collected.

Mass valuation process is based on the digital data of Real Property Cadastre and Register

Integrated data used for mass valuation are based on the following key elements:

- physical **characteristics** of real property
 - **GIS** information
 - archive of **e-documents**
- data about **legal status** of real property, owners and users, real rights, their restrictions and legal facts

Real property
e-transaction data

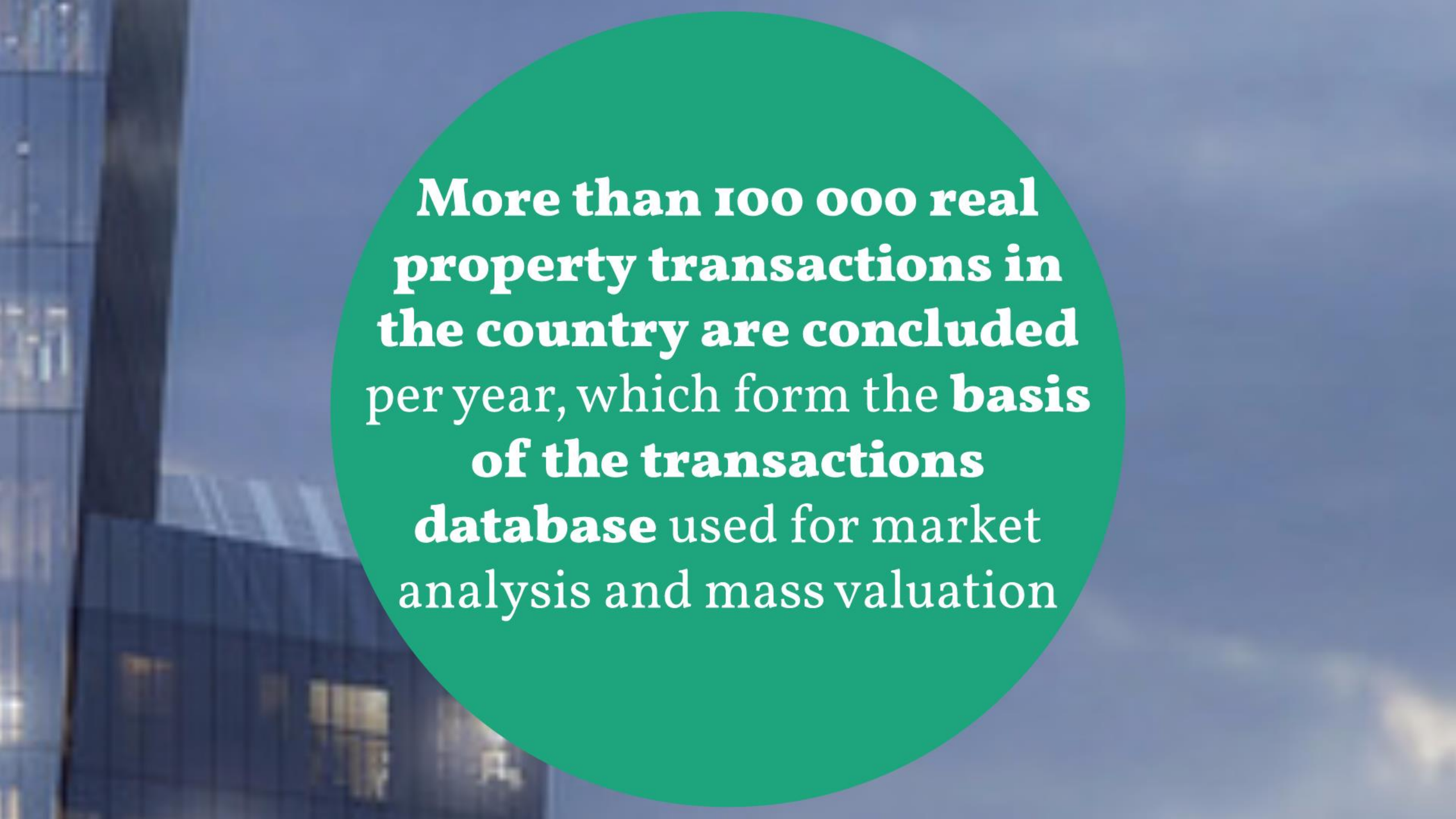


E-sale contract

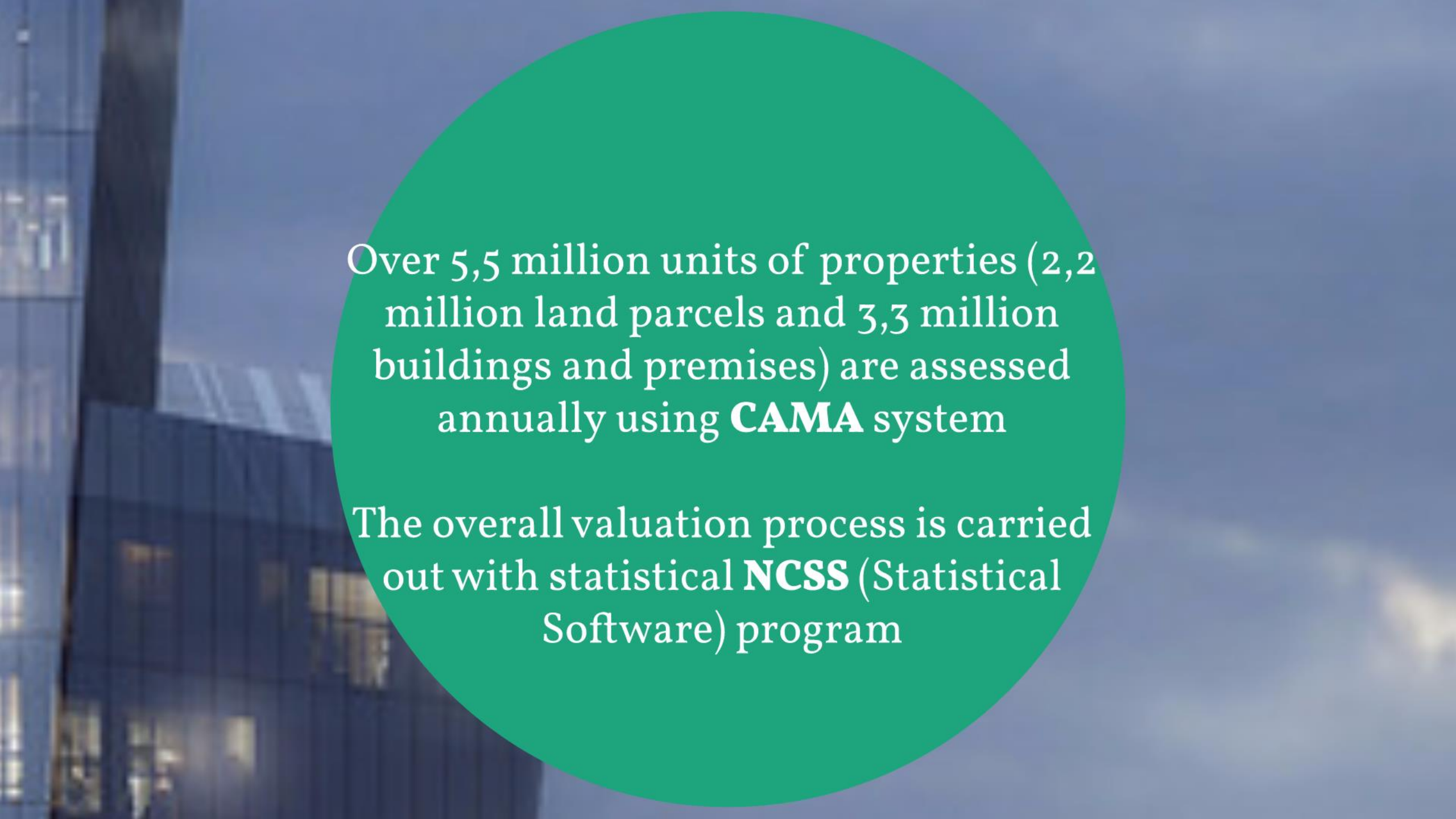


Centre of Registers

Data on real property transactions are integrated in
the real property database



More than 100 000 real property transactions in the country are concluded per year, which form the **basis of the transactions database** used for market analysis and mass valuation



Over 5,5 million units of properties (2,2 million land parcels and 3,3 million buildings and premises) are assessed annually using **CAMA** system

The overall valuation process is carried out with statistical **NCSS** (Statistical Software) program

Results of mass valuation are used for different purposes (1):

- To **estimate taxable** values of land and buildings (two separate taxes)
- To make decisions on provision of **social support** and state guaranteed legal assistance for citizens
- To **estimate sales and rental values** of the state-owned land parcels and buildings

Results of mass valuation are used for different purposes (2):

- To estimate the **inherited** property taxable value
- To **calculate fees for registration** of real property and rights to it
- To **estimate notary fees** for real property transactions

**Results of mass
valuation are public**

www.registrucentras.lt

www.regia.lt

**Free of
charge:**

Free of charge:

- textual data - the **average market value or taxable value** by unique number
- search for **value zones** by municipalities and addresses
- mass **valuation documents**
- materials of public discussions and graphical data, e.g. **value maps** of the territory of Lithuania
- **graphical search** for value zones

MUTUAL BENEFITS OF TWO SYSTEMS

**Mass valuation
benefits from
Cadastral and
Register**

**Cadastral and
Register
benefits
from ma...**

**Mutual
benefits**

Mass valuation benefits from Cadastre and Register

Database of the
Cadastre and
Register
provides da...



Database of the Cadastre and **Register provides data on characteristics of property**, legal facts as well as sales data.

It allows to **save three quarters of financial resources** and to direct human and technical resources for data analysis and assessment.

Cadastral and Register benefits from mass valuation

Mass valuation complements the cadastral system wi...



**Mass valuation
complements the cadastral
system with values, value
zones** and other attributes that
enrich the data base and
provide more information to
consumers

Mutual benefits

**Integration of
mass valuation
system with
the Cadast...**

**Administratio
n and
integration of
sever...**

**3 levels of
provision of
information
through t...**

**REGIA is the
regional
environment
geoinformati...**

Integration of mass valuation system with the Cadastre and Register creates preconditions for more effective submission of information to consumers

Administration and integration of several registers allows consumers to choose various ways of access to information - such as use of personal data, address, property ID, and other parameters



3 levels of provision of information through the Internet:

- 1. for public** (anonymous users) - free of charge but minimum information provided
- 2. for professional** users - complete information; available both in HTML/XML; different authentication methods available
- 3. self-service** - complete information about owned property; limited information about any property. Interactive authentication via ipasas.lt

REGIA is the **regional environment geoinformation service**, based on the cadastral map of Lithuania with built-in three state registers: Address, Legal Entities and Real Property
www.regia.lt

**Thank You For Your
Attention!**