## **Geodesy today and tomorrow**

"Surveyor 2020"

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#### **Terrestial photogrammetry**





#### **3D laser scanners**

















## Why drones are the future of geodesy?

With every single day drones become more commonly used in geodesy. These unmanned devices can make topographic measurements, create orthophotos, calculate quantities and volumes, create 3D models of specific object.







#### Why drones are so simple to use?

To complete most of the functions that drone can offer, all you need is to specify the rout, rest of the job drone will do for you.









Land Surveys has experienced surveyors located nationally, who can be rapidly engaged to help capture, convert or improve your existing GIS database.





GIS can show many different kinds of data on one map, such as streets, buildings and vegetation.



Figure 1. Eight base layers of The National Map.



#### GIS is used for:

- Traffic management
- Statistics on the map expression
- Interactive maps creation
- Engineering networks
- Communication networks
- Environmental research
- Cities planning
- Tourisms



Benefits of using GIS are:

- GIS allows for a scalable solution, and for the best and most relevant information to be delivered at a rapid manner
- The use of GIS data can help streamline large-scale decision making, and improve projects on a large scale





### What is BIM and how can we find in helpful?

Building information modeling is the process which seeks buildings cycle from the initial design concept to its final demolition. BIM program:

- Provides incredible amounts of information about the building, also offers different projects management methods.
- Predicts construction and operating costs
- Simulates the state of a building over the years.







#### Worth to mention:

Lithuania has registry center and with the systems like "Geomatininkas" and "Matininkas" help plans for buildings and land areas could be easily prepared and registered to make sure, that every area in our country is accurate and legal.



# **Thanks for your attention**

