

FAQs

Q – Why is this bill necessary?

A – Under current Virginia law, some photogrammetry (mapping from aerial photography) is required to be performed by a licensed professional, while other such work is unlicensed. This has (1) created confusion, (2) resulted in unlicensed work being used for applications that under the law should be licensed, and (3) provides a serious threat to public health, welfare and safety.

Q – What are examples of unlicensed mapping being used for applications and projects that threaten public health, welfare and safety?

A – According to FEMA, Lee County, Russell County, Scott County, Smyth County, Washington County, and Wise County all used VITA/VGIN topographic data, which was not performed by a licensed professional. This was used for flood mapping, flood insurance rates, and flood engineering Hydrology and Hydraulics (“H&H”) studies. Hydrology is the study or science of transforming rainfall amount into quantity of runoff. Hydraulics is the study or science of taking that quantity of runoff to determine a flood level.

In addition to VITA/VGIN, several localities have produced unlicensed photogrammetric mapping. All these agencies put these data in the public domain, and they have no control of who uses the data or what the data is used for. They could be used for engineering design, making calculations, improvement and development of real property, flood-related projects, and other applications where an unsuspecting or unknowledgeable individual is putting safety at risk by mis-applying the data.

Q – Will this bill limit county geographic information systems (GIS)?

A – No, neither the terms “geographic information systems” nor “GIS” appear in the bill. Nothing in this bill limits the ability of county government or any other governmental entity in Virginia to build or operate GIS. The bill simply closes the loophole for unlicensed photogrammetric base mapping. No local government in Virginia has an in-house photogrammetry capability. Therefore, this has no impact on county GIS or other government agency GIS. Photogrammetry is an expensive and technically challenging engineering process that requires an aircraft, digital camera, plotting and processing computers, software, and extensive personnel training that totals more than \$2 million in initial investment. There is a qualified and competitive market of commercial firms that do photogrammetry, and scores of licensed professionals in those firms that are doing and will continue to do the photogrammetry needed by government agencies in Virginia. To clarify the intent and effect of the bill, the Virginia Association of Surveyors support an amendment to specify that GIS is exempt from the bill

Q – There has been scrutiny over state licensing boards as a result of the North Carolina Dental Association case that recently went before the U.S. Supreme Court. Does HB 2145 in any way restrain trade?

A – No, HB 2145 does not restrain trade. In fact, the bill *re-opens* the grandfather period for licensure as a surveyor photogrammetrist so more professionals can become licensed. That opens trade and commerce, not restrict.

Q – How does Virginia’s law compare to other state laws.

A – The loophole in current Virginia law is not in the laws of any other state that licenses photogrammetry. The national organization of licensing boards in this field, the National Council of Examiners for Engineering and Surveying, NCEES, has a model law, and it does NOT have the loophole. Every state recognizes that mapping from photogrammetry affects public, health, welfare and safety and

covers all such projects, and does NOT distinguish among uses and applications as Virginia currently does.

Moreover, “topographic mapping” or the “determination of topography, contours ...” for planning has been in the definition of the practice of land surveying in Virginia for decades. Neither the 2005 law nor HB 2145 change that definition of the “practice of land surveying”.

Q – How will this bill affect procurement?

A – One consequence of this bill will be to clarify that all government contracts for photogrammetry will be considered contracts for professional services, and subject to the competitive procedures for professional services as defined in the Virginia Public Procurement Act, §2.2-4300 - § 2.2-4302.2.4.

Q – Do competitive procedures for professional services add cost?

A – No, cost increase is a canard often perpetrated by opponents of quality in government contracting. There are no studies that show costs increase when contracting based on competitive qualifications procedures. This “qualifications based selection” or “QBS” process is in Federal law, in Virginia law and more than 45 of the other 50 state laws, and is in the American Bar Association Model Procurement Code for State and Local Government. It is the honored, time-tested, and cost-effective way to procure professional services that results in the best value for the taxpayer, the greatest competition among firms, and the lowest life-cycle cost to the government activity that is based on the professional service.

Q – Will this bill make data in a GIS equivalent to a boundary survey, with the attendant legal implications?

A – No, GIS will continue in Virginia as is. The definition of land surveying in Virginia law is not proposed to be changed in HB 2145. Data in a GIS will not take on additional legal representation or be required to have exact precision

measurements under HB 2145. GIS maps will continue to be used for representations, general information, planning, program management, business process, and other government functions. Nothing in HB 2145 changes that.

Moreover, HB 2145 does not affect the personnel who use photogrammetry, it only affects those who produce photogrammetric maps. Those individuals are in private practice, not government employment. As noted above, the bill has no impact on government personnel or their ability to use GIS.

Q – Is there a sufficient supply of professionals in photogrammetry to meet the demand?

A – There are more than 1,200 licensed surveyors in Virginia, many of whom are qualified and competent in the field of photogrammetry. In addition, there are more than 130 surveyor photogrammetrists licensed in Virginia. The supply of qualified professionals is more than sufficient to meet the demand. Furthermore, HB 2145 includes a provision opening the licensing system for new surveyor photogrammetrists, so any qualified professionals not currently licensed can become licensed by virtue of their expertise in the science of photogrammetry, rather than boundary surveying. Finally, experience has shown that competition for photogrammetry contracts where professional services qualifications is used in selection is greater in terms of number of firms competing than on contracts based on price. HB 2145 will *increase* competition in Virginia.

Q – Does HB 2145 eliminate the distinction between GIS and surveying? Is this bill an attempt by surveyors to take over GIS?

A – HB 2145 simply closes the loophole that has been abused with regard to photogrammetry. The bill does nothing to change or expand the definition of the practice of surveying in current Virginia law. The bill does not mention GIS. It does nothing to change who in Virginia can and cannot do GIS. To make this point abundantly clear, the Virginia Association of Surveyors support an amendment to the bill to specifically exempt GIS.

Q – Will HB 2145 affect employment of GIS personnel in local government, or require that county GIS personnel be replaced with multiple, high salary surveyor photogrammetrists?

A – No! HB 2145 simply closes the loophole that has been abused with regard to photogrammetry. The bill does nothing to change or expand the definition of the practice of surveying in current Virginia law. The bill does not mention GIS. It does nothing to change who in Virginia can and cannot do GIS. No county GIS employees would be disqualified or replaced as a result of HB 2145.