

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 609 Session of 2021

INTRODUCED BY EMRICK, HELM, JOZWIAK, MARSHALL, MILLARD, SAYLOR, ZIMMERMAN, QUINN AND TOOHIL, FEBRUARY 24, 2021

AS REPORTED FROM COMMITTEE ON PROFESSIONAL LICENSURE, HOUSE OF REPRESENTATIVES, AS AMENDED, APRIL 19, 2021

AN ACT

1 Amending the act of May 23, 1945 (P.L.913, No.367), entitled "An
2 act relating to and regulating the practice of the profession
3 of engineering, including civil engineering, mechanical
4 engineering, electrical engineering, mining engineering and
5 chemical engineering, the profession of land surveying and
6 the profession of geology and constituent parts and
7 combinations thereof as herein defined; providing for the
8 licensing and registration of persons practicing said
9 profession, and the certification of engineers-in-training
10 and surveyors-in-training, and the suspension and revocation
11 of said licenses, registrations and certifications for
12 violation of this act; prescribing the powers and duties of
13 the State Registration Board for Professional Engineers, Land
14 Surveyors and Geologists, the Department of State and the
15 courts; prescribing penalties; and repealing existing laws,"
16 further providing for definitions, for procedure for
17 licensing as professional engineer, for continuing
18 professional competency requirements and for exemption from
19 licensure and registration.

20 The General Assembly of the Commonwealth of Pennsylvania
21 hereby enacts as follows:

22 Section 1. Section 2(a)(1), (c), (d) and (j) of the act of
23 May 23, 1945 (P.L.913, No.367), known as the Engineer, Land
24 Surveyor and Geologist Registration Law, are amended and the
25 section is amended by adding subsections to read:

26 Section 2. Definitions.--As used in this act--

1 (a) (1) "Practice of Engineering" shall mean the  
2 application of the mathematical and physical sciences for the  
3 design or analysis of public or private buildings, structures,  
4 machines, equipment, processes, works or engineering systems,  
5 and the consultation, investigation, evaluation[, engineering]  
6 or surveys, construction management, modification and  
7 alteration, planning and inspection in connection therewith, the  
8 performance of the foregoing acts and services being prohibited  
9 to persons who are not licensed under this act as professional  
10 engineers unless exempt under other provisions of this act. The  
11 term includes the performance of engineering land surveys.

12 \* \* \*

13 (c) ["Engineer-in-Training"] "Engineer Intern," formerly  
14 known as "engineer-in-training," means a candidate for licensure  
15 as a professional engineer, who has been granted a certificate  
16 as an engineer intern or the predecessor title of engineer-in-  
17 training after successfully passing the prescribed written  
18 examination in fundamental engineering subjects, and who shall  
19 be eligible upon the completion of the requisite years of  
20 experience in engineering, under the supervision of a  
21 professional engineer, or similarly qualified engineer, for the  
22 final examination prescribed for licensure as a professional  
23 engineer.

24 (d) "Practice of Land Surveying" [means the practice of that  
25 branch of the profession of engineering which involves the]  
26 shall mean the authoritative acts of location, relocation,  
27 establishment, reestablishment or retracement of any property  
28 line or boundary of any parcel of land or any road right-of-way,  
29 easement or alignment; the use of principles of land surveying,  
30 determination of the position of any structure or permanently

1 installed equipment in relation to monuments or reference  
2 points, determination of the position of any monument or  
3 reference point which marks a property line boundary, or corner  
4 setting, resetting or replacing any such monument or individual  
5 point including the writing of deed descriptions; the  
6 performance of engineering land surveys; procuring or offering  
7 to procure land surveying work for himself or others; managing  
8 or conducting as managers, proprietors or agent any place of  
9 business from which land surveying work is solicited, performed,  
10 or practiced; the performance of the foregoing acts and services  
11 being prohibited to persons who are not granted certificates of  
12 registration under this act as a professional land surveyor  
13 unless exempt under other provisions of this act. The term also:

14 (1) Includes, but is not limited to, the following  
15 activities:

16 (i) The creation of maps and geospatial databases  
17 representing authoritative locations for boundaries, the  
18 location of fixed ~~works~~ OBJECTS or topography. This includes <--  
19 maps and geospatial databases prepared by a person or government  
20 agency if the data is provided to the public as a ~~survey~~ <--  
21 SURVEYING product. <--

22 (ii) Original data acquisition, or the resolution of  
23 conflicts between multiple data sources, if used for the  
24 authoritative location of features within the following data  
25 themes:

26 (A) geodetic control;

27 (B) orthoimagery;

28 (C) elevation and hydrographic;

29 (D) fixed ~~works~~ OBJECTS; <--

30 (E) private and public boundaries; and

1 (F) cadastral information.

2 (iii) Certification of positional accuracy of maps or  
3 measured survey data.

4 (iv) Authoritative adjustment or interpretation of raw  
5 survey data.

6 (v) GIS-based parcel or cadastral mapping used for  
7 authoritative boundary definition purposes wherein land title or  
8 development rights for individual parcels are or may be  
9 affected.

10 (vi) Interpretation of maps, deeds and other land title  
11 documents to resolve conflicting data elements with the intent  
12 of being authoritative.

13 (vii) Acquisition of field data required to authoritatively  
14 position fixed ~~works~~ OBJECTS or cadastral data relative to <--  
15 geodetic control.

16 (viii) Analysis, adjustment or transformation of cadastral  
17 data of the parcel layers with respect to the geodetic control  
18 layer within a GIS resulting in the affirmation of positional  
19 accuracy with the intent of being authoritative.

20 (2) Excludes the following activities:

21 (i) The creation of general maps:

22 (A) Prepared by private firms or government agencies for use  
23 as guides to motorists, boaters, aviators or pedestrians.

24 (B) Prepared for publication in a gazetteer or atlas as an  
25 educational tool or reference publication.

26 (C) Prepared for or by education institutions for use in the  
27 curriculum of a course of study.

28 (D) Produced by an electronic or print media firm as an  
29 illustrative guide to the geographic location of an event.

30 (E) Prepared by laypersons for conversational or

1 illustrative purposes. This includes advertising material and  
2 users guides.

3 (ii) The transcription of previously georeferenced data into  
4 a GIS or LIS by manual or electronic means, and the maintenance  
5 thereof, if the data is clearly not intended to indicate the  
6 authoritative location of property boundaries, the authoritative  
7 definition of the shape or contour of the earth or the  
8 authoritative location of fixed ~~works~~ OBJECTS of individuals. <--

9 (iii) The transcription of public record data, without  
10 modification except for graphical purposes, into a GIS or LIS  
11 based cadastre, including tax maps and associated records, by  
12 manual or electronic means, the maintenance of that cadastre and  
13 dissemination of the cadastre if the data is clearly not  
14 intended to authoritatively represent property boundaries. This  
15 includes tax maps and zoning maps.

16 (iv) The preparation and dissemination of a document that  
17 does not authoritatively define real property boundaries. This  
18 includes civilian and military versions of quadrangle  
19 topographic maps, military maps, satellite imagery and other  
20 documents.

21 (v) The incorporation or use of documents or databases into  
22 a GIS or LIS, including, but not limited to, Federal census and  
23 demographic data, quadrangle topographic maps and military maps.

24 (vi) Original data acquisition, inventory maps and databases  
25 created for nonauthoritative use by an organization, in either  
26 hard copy or electronic form, of physical features, facilities  
27 or infrastructure that are wholly contained within properties to  
28 which they have rights or for which they have management  
29 responsibility. The distribution of these maps or databases  
30 outside the organization must contain appropriate metadata

1 describing, at a minimum, the accuracy, method of compilation,  
2 data sources and dates and disclaimers of use clearly indicating  
3 that the data is not intended to be used as a ~~survey~~ SURVEYING <--  
4 product.

5 (vii) Maps and geospatial databases depicting the  
6 distribution of natural resources or phenomena prepared by  
7 foresters, geologists, soil scientists, geophysicists,  
8 biologists, archeologists, historians or other persons qualified  
9 to document the data.

10 (viii) Original data acquisition, maps and geospatial  
11 databases depicting assets, features and events prepared by any  
12 government agency where the access to that data is restricted by  
13 statute.

14 (ix) Original data acquisition, maps and geospatial  
15 databases created for use in, and support of, emergency  
16 operations, including 911 dispatch.

17 (x) Nonauthoritative GIS or LIS and related activities,  
18 including, but not limited to, original data acquisition,  
19 geospatial database development and maintenance and map creation  
20 by any government organization.

21 (XI) ACTIVITIES BY A LICENSED LANDSCAPE ARCHITECT OR A <--  
22 LICENSED GEOLOGIST PERFORMED PURSUANT TO THE LICENSED LANDSCAPE  
23 ARCHITECT'S OR LICENSED GEOLOGIST'S SCOPE OF PRACTICE.

24 \* \* \*

25 (j) "Engineering Land Surveys" means surveys for: (i) the  
26 development of any tract of land including the incidental design  
27 of related improvements, such as line and grade extension of  
28 roads, sewers and grading but not requiring independent  
29 engineering judgment: Provided, however, That tract perimeter  
30 surveys shall be the function of the Professional Land Surveyor;

1 (ii) the determination of the configuration or contour of the  
2 earth's surface, or the position of fixed objects thereon or  
3 related thereto for purposes of authoritative review, analysis  
4 and determination of the location or as-built construction of  
5 fixed assets or objects, the postdevelopment contours, or for  
6 the purposes of designs based thereon by means of measuring  
7 lines and angles and applying the principles of mathematics,  
8 photogrammetry or other measurement, mapping or positioning  
9 methods without regard to tools or technologies which currently  
10 exist or which may be developed in the future, the application  
11 of which means and methods involves professional understanding  
12 as to the appropriate and safe usage; (iii) geodetic survey,  
13 underground survey and hydrographic survey; (iv) storm water  
14 management surveys and sedimentation and erosion control  
15 surveys; (v) the determination of the quantities of materials;  
16 (vi) tests for water percolation in soils; and (vii) the  
17 preparation of plans and specifications and estimates of  
18 proposed work and attendant costs as described in this  
19 subsection. The term does not include any activity under  
20 subsection (d) (2).

21 \* \* \*

22 (u) "Agent" shall mean a person who is authorized to act for  
23 another through employment, by contract or apparent authority.

24 (v) "Authoritative" shall mean presented as definitive when  
25 used to describe products, processes, applications or data to be  
26 used as a ~~survey~~ SURVEYING product. <--

27 (w) "Cadastre" shall mean a register of property showing the  
28 extent, value and ownership of land for taxation.

29 (x) "Contractor" shall mean a person or entity that enters  
30 into a contract.

1 (y) "Geospatial technology" shall refer to equipment  
2 necessary to acquire, process, store and analyze geospatial  
3 data, including GPS or GIS.

4 (z) "GIS" shall mean Geographic Information System, an  
5 information system and related applications and infrastructure  
6 used to store, view, edit, analyze and display geographical  
7 information and associated attribute data related to positions  
8 on, above or beneath the Earth's surface.

9 (aa) "GPS" shall mean Global Positioning System, a global  
10 navigating satellite system and associated components that  
11 provides geographic location information.

12 (bb) "LIS" shall mean Logistics Information System, an  
13 automated system used to communicate with other units on  
14 vertical and horizontal flow of logistics and maintenance  
15 information and status.

16 Section 2. Sections 4.2(c), 4.5(c) and 5 are amended to  
17 read:

18 Section 4.2. Procedure for Licensing as Professional  
19 Engineer.--\* \* \*

20 (c) An applicant who is a certified [engineer-in-training] <--  
21 ENGINEER INTERN may apply for licensure and shall pass the  
22 examination in engineering principles and practice. To qualify  
23 for the principles and practice examination, an applicant shall,  
24 in addition to holding the [engineer-in-training] ENGINEER <--  
25 INTERN certificate, show satisfactory proof of:

26 (1) four or more years of progressive experience in  
27 engineering work performed after the [issuance of the engineer-  
28 in-training certificate] successful completion of the  
29 fundamentals of engineering examination and under the  
30 supervision of a professional engineer or a similarly qualified



1 engineer of a grade and character to [fit him] QUALIFY THE <--  
2 APPLICANT to assume responsible charge of the work involved in  
3 the practice of engineering; or

4 (2) four or more years of progressive teaching experience in  
5 an approved curriculum under the supervision of a professional  
6 engineer or a similarly qualified engineer of a grade or  
7 character to [fit him] QUALIFY THE APPLICANT to assume <--  
8 responsible charge of the work involved in the practice of  
9 engineering.

10 \* \* \*

11 Section 4.5. Continuing Professional Competency  
12 Requirements.--\* \* \*

13 (c) Each licensee shall be required to obtain twenty-four  
14 PDH units during the biennial renewal period. If a licensee  
15 exceeds the requirement in any renewal period, a maximum of  
16 twelve PDH units may be carried forward into the subsequent  
17 renewal period. PDH units may be earned as follows:

18 (1) Successful completion of college courses relevant to  
19 professional practice.

20 (2) Completion of continuing education courses relevant to  
21 professional practice.

22 (3) Completion of [correspondence, televised, videotaped and  
23 other short courses or tutorials relevant to professional  
24 practice.] distance learning courses if the course relates to  
25 professional practice and the PDH units awarded are verifiable  
26 and measurable by the actual hours of instruction.

27 (4) Completion of seminars, employer-sponsored courses,  
28 workshops or professional or technical presentations made at  
29 meetings, conventions or conferences relevant to professional  
30 practice.

1 (5) Teaching, presenting or instructing in any of the  
2 activities listed in clauses (1), (2), (3) and (4).

3 (6) Authoring published papers, articles or books relevant  
4 to professional practice.

5 (7) Obtaining patents relevant to professional practice.

6 \* \* \*

7 Section 5. Exemption from Licensure and Registration.--

8 Except as specifically provided in this section, this act shall  
9 not be construed to require licensure and registration in the  
10 following cases:

11 (a) The practice of engineering, land surveying or geology  
12 by any person who acts under the supervision of a professional  
13 engineer, professional land surveyor or geologist, respectively,  
14 or by an employe of a person lawfully engaged in the practice of  
15 engineering, land surveying or geology and who, in either event,  
16 does not assume responsible charge of design or supervisions[;].

17 (b) The practice of engineering, land surveying or geology,  
18 not exceeding thirty days in the aggregate in one calendar year,  
19 by a nonresident not having a place of business in this  
20 Commonwealth, if such person is legally qualified to engage in  
21 the practice of engineering, land surveying or geology in the  
22 state or territory of his residence: Provided, That standards of  
23 such state or territory are at least equal to the standards of  
24 this Commonwealth[;].

25 (c) The practice of engineering, land surveying or geology  
26 by officers and employes of the United States Government for the  
27 said government[;].

28 (d) Except as otherwise provided in subsection (g) of this  
29 section, the practice of engineering or land surveying by a  
30 regular employe, contractor or agent of a public utility

1 company, as defined by the Public Utility Code (66 Pa.C.S. § 101  
2 et seq.) in connection with the facilities of such public  
3 utility, which are subject to regulation by the Pennsylvania  
4 Public Utility Commission: Provided, That such public utility  
5 shall employ at least one professional engineer, as defined in  
6 this act, who shall be in responsible charge of such utility's  
7 engineering work and shall employ at least one professional land  
8 surveyor, as defined in this act, who shall be in responsible  
9 charge of such utility's land surveying[;].

10 (e) The practice of architecture by a duly registered  
11 architect, and the doing of such engineering work as is  
12 incidental to his architectural work[;].

13 (f) The practice of engineering, land surveying or geology  
14 by any person or by any employe of any copartnership,  
15 association or corporation upon property owned by such person or  
16 such copartnership, association or corporation, unless such  
17 practice affects the public safety or health or the property of  
18 some other person or entity.

19 (f.1) The practice of engineering or land surveying by a  
20 regular employe or agent of an electric cooperative corporation,  
21 as defined in 15 Pa.C.S. § 7302 (relating to application of  
22 chapter), in connection with the facilities of the electric  
23 cooperative, provided that the electric cooperative corporation  
24 or agent thereof either shall employ at least one professional  
25 engineer or professional land surveyor or belongs to a  
26 Pennsylvania electric cooperative association that employs a  
27 professional engineer or professional land surveyor.

28 (g) The practice of engineering, land surveying or geology  
29 work by a manufacturing, mining, communications common carrier,  
30 research and development or other industrial corporation or by

1 employes of such corporation, provided such work is in  
2 connection with or incidental to products of, or non-engineering  
3 services rendered by, such corporation or its affiliates.

4 (h) The running of lines or grades and layout work on or  
5 within established property limits, or from established points  
6 outside the property limits to or within such property limits  
7 when performed by a contractor or home builder in conjunction  
8 with the construction, reconstruction, alteration, maintenance  
9 or demolition of a structure or other facility.

10 (i) The writing of deed descriptions and narrative  
11 descriptions utilizing information from a survey.

12 (j) The preparation of shop drawings or the performance of  
13 construction management services by persons customarily engaged  
14 in construction work.

15 (k) The practice of individuals providing geologic services  
16 to businesses engaged in the exploration or development of gas  
17 or oil.

18 (l) The practice of engineering, land surveying or geology  
19 work by the employes, contractors or agents of a provider of  
20 cable service, voice over Internet protocol service, broadband  
21 Internet access service or any other service delivered over a  
22 cable system, a provider of enhanced telecommunications services  
23 or a provider of telecommunications services, if those services  
24 are in connection with or incidental to products of, or  
25 nonengineering, land surveying or geology services rendered by  
26 the company.

27 Section 3. This act shall take effect in 60 days.