

#### Economic Impact Analysis Virginia Department of Planning and Budget

18 VAC 10-20 – Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers, and Landscape Architects Regulations
Department of Professional and Occupational Regulation
December 13, 2007

#### **Summary of the Proposed Amendments to Regulation**

Chapter 683 of the 2006 Acts of Assembly requires that the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers, and Landscape Architects (Board) promulgate regulations that "require the completion of the equivalent of 16 hours per biennium of Board-approved continuing education activities as a prerequisite to the renewal or reinstatement of a license issued to an architect, professional engineer, or land surveyor." Furthermore, "The Board shall establish criteria for continuing education activities including, but not limited to (i) content and subject matter; (ii) curriculum; (iii) standards and procedures for the approval of activities, courses, sponsors, and instructors; (iv) methods of instruction for continuing education courses; and (v) the computation of course credit." The Board proposes regulatory amendments to specifically satisfy the above-referenced requirements of Chapter 683.

# **Result of Analysis**

There is insufficient data to accurately compare the magnitude of the benefits versus the costs. Detailed analysis of the benefits and costs can be found in the next section.

# **Estimated Economic Impact**

As addressed above, pursuant to § 54.1-404.2 the Board proposes to require architects, professional engineers, and land surveyors to complete at least sixteen credit hours of board-approved continuing education activities for any license renewal or reinstatement. Currently the Board's regulations do not require any continuing education. The proposed regulations state that "Continuing education activities must be related to practice of the profession of the license being

renewed, have a clear purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the licensee's area of practice..."

According to the Department of Professional and Occupational Regulation, the typical cost of continuing education for architects, professional engineers, and land surveyors ranges from \$30 to \$90 per course hour or approximately \$480 to \$1,440 every two years for 16 hours. Internet coursework could qualify for credit if it meets all other requirements; thus, licensees do not necessarily need to incur travel costs to obtain continuing education.

Time has value for architects, professional engineers, and land surveyors. Thus, in addition to incurring fees, these professionals also incur the cost of up to 16 hours of their time. The mean hourly earnings for architects, professional engineers, and land surveyors in Virginia are \$34.32, \$39.12 and \$22.38, respectively. Assuming that the value of a licensee's time is equal to her mean hourly wage, then for those who would not have otherwise acquired any continuing education credits, satisfying the 16 hour requirement will cost \$549.12, \$625.92, and \$358.08 for architects, professional engineers, and land surveyors, respectively.

Therefore, for licensees who without the proposed requirement would not participate in any continuing competency activity and who seek to minimize fees and travel costs, compliance will cost approximately \$1029,<sup>3</sup> \$1106,<sup>4</sup> and \$838,<sup>5</sup> respectively, for architects, professional engineers, and land surveyors. If the Board approves less than 16 hours of Internet courses for any of these professions, then travel costs would need to be added to these estimates. The costs will be proportionately less for those who would have acquired some continuing education credits without the proposed requirement.

The benefit of the proposed continuing competency activity requirement is more difficult to estimate than the cost. Since the continuing competency hours must be spent on field-related topics and have a clear purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the licensee's area of practice, licensees who participate likely gain

<sup>&</sup>lt;sup>1</sup> Source: Department of Professional and Occupational Regulation

<sup>&</sup>lt;sup>2</sup> Source: U.S. Department of Labor, Bureau of Labor Statistics, 2006 State Occupational Employment and Wage Estimates. The figure for professional engineers is a weighted (by employment) average of the mean hourly earnings for the several different varieties of engineers listed.

<sup>&</sup>lt;sup>3</sup> Calculation: \$480 (course fees) + \$34.32 (value of one hour of time)  $\times 16 = 1029.12$ 

<sup>&</sup>lt;sup>4</sup> Calculation: \$480 (course fees) + \$39.12 (value of one hour of time)  $\times 16 = 1105.92$ 

<sup>&</sup>lt;sup>5</sup> Calculation: \$480 (course fees) + \$22.38 (value of one hour of time) x 16 = \$838.08

some useful knowledge. Nevertheless, the amount of useful field-related knowledge that is gained, i.e., not already known by the licensees, is not obvious. Since the proposed requirement only affects those professionals who would not otherwise have acquired 16 hours of continuing education, those affected implicitly judge that the benefit of the additional continuing education does not exceed the costs. For the total benefit to exceed the total cost overall, there must be significant benefit generated for the outside public (direct clients, people who drive across bridges, etc) by having the professionals participate in the additional continuing education. There are no estimates of the magnitude of this potential benefit available.

#### **Businesses and Entities Affected**

The proposed amendments affect the 24,561 professional engineers, 6,673 architects, and 1,438 land surveyors licensed to practice in the Commonwealth, as well as their employers and clients. Virginia Employment Commission Quarterly Census of Employment and Wages data indicate that 3,803 firms listed under Architectural and Engineering Services (which includes land surveyors) qualified as small businesses. Other small firms, such as small manufacturers for example, mining companies, may employ professional engineers, architects, or land surveyors as well.

### **Localities Particularly Affected**

No localities are particularly disproportionately affected by the proposed change.

# **Projected Impact on Employment**

The proposal to require 16 hours of continuing education for architects, professional engineers, and land surveyors will likely have some positive impact on employment for suppliers of continuing education to these professions. The extent of the positive impact depends on how much voluntary continuing education architects, professional engineers, and land surveyors participate in without the requirement. If many of these professionals participate in substantial continuing education with or without the requirement, then the establishment of the requirement will only produce a moderate increase in employment hours for suppliers of continuing education. If a large percentage of architects, professional engineers, and land surveyors would not participate in close to 16 hours or more of continuing education without the requirement,

<sup>&</sup>lt;sup>6</sup> Number source: Department of Professional and Occupational Regulation

then the proposed requirement will produce more than a moderate increase in employment hours for suppliers of continuing education. Current data is not available on continuing education participation rates.

#### **Effects on the Use and Value of Private Property**

The proposal to require architects, professional engineers, and land surveyors to complete at least sixteen continuing education credit hours of board-approved continuing education activities each two-year licensure period will increase costs for those professionals who do not already voluntarily meet this requirement. Presuming that the affected professionals find continuing education activities that have positive value, the net loss to the value of these individuals and their employers will be less than the total fee and time cost associated with the activities.

Suppliers of continuing education will encounter increased demand for their services. Consequently, the value of firms supplying continuing education for architects, professional engineers, and land surveyors will likely rise.

#### **Small Businesses: Costs and Other Effects**

The proposed requirement that architects, professional engineers, and land surveyors complete at least sixteen credit hours of board-approved continuing education activities for any license renewal or reinstatement adds fees and time costs for architecture, engineering, and land surveying firms whose employees licensed in these fields do not already acquire 16 hours of continuing education every two years. Other small business which employ architects, professional engineers, or land surveyors are affected as well.

### **Small Businesses: Alternative Method that Minimizes Adverse Impact**

Since the requirement that architects, professional engineers, and land surveyors complete at least sixteen continuing education credit hours of board-approved continuing education activities is pursuant to Chapter 683 of the 2006 Acts of Assembly, there are no alternative methods that minimize adverse impact to small business.

# **Real Estate Development Costs**

By adding to the costs for architecture, engineering, and land surveying firms, the proposed amendments may moderately add to real estate development costs.

#### **Legal Mandate**

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.H of the Administrative Process Act and Executive Order Number 36 (06). Section 2.2-4007.H requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, Section 2.2-4007.H requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.