Economic Impact Analysis
Virginia Department of Planning and Budget

24 VAC 30-90 –Virginia Department of Transportation (Commonwealth Transportation Board)
Subdivision Street Requirements
March 26, 2004

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.G of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007.G 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. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The proposed regulations will 1) increase the surety coverage required for subdivision streets that are accepted by the Virginia Department of Transportation, 2) increase the fees collected for the maintenance of these streets, 3) establish a new fee to recover administrative costs involved in review and inspection of these streets, 4) remove all engineering criteria from the regulation into a design guide, 5) simplify phased development acceptance procedure, 6) expand the types of structures that can be accepted by the department, and 7) improve the clarity of a number of requirements.

Estimated Economic Impact

These regulations establish design and procedural standards by which the Virginia Department of Transportation (VDOT) accepts subdivision streets into the secondary system of road inventory. Local governments in cooperation with land developers establish subdivision streets and roads. Later, the local government has the option to ask VDOT to assume responsibility to maintain and operate these streets. With the exception of Counties of Henrico and Arlington, the rest of the localities currently prefer VDOT to maintain and operate subdivision roads. Every year approximately 215 miles of subdivision roads are added to the secondary system of roads in Virginia according to these rules and regulations. Once subdivision roads are accepted into the inventory, these regulations no longer apply, as they become subject of other regulations.

The proposed changes are the result of a periodic review conducted by VDOT and suggested by an advisory committee composed of local government representatives and real estate developers also taking into account comments received from stakeholders. Several changes are related to surety coverage and fees collected from developers. Subdivision streets accepted by VDOT become part of the Commonwealth's secondary system of highways, but VDOT does not receive any general funds to maintain, or, if needed, to repair these roads in the first year. Therefore, developers are required to post a surety to ensure the performance of the streets and pay fees to cover the maintenance costs in the first year. According to VDOT, required surety and fee amounts have not been revised since 1980 even though the construction and maintenance costs have changed significantly.

One of these proposed changes will increase the surety coverage to $2,000 per lane per tenth mile of the street accepted by VDOT. For comparison purposes, this represents an increase from $15,000 to $40,000 for one mile of a two-lane street. If 215 miles of two-lane subdivision roads were accepted every year, the proposed change would increase the total surety coverage required from developers by approximately $5.4 million. If the cost of obtaining a dollar of surety were about 1% to 2% of the face value, the total cost of this change to developers would be approximately $53,750 to $107,500. Some of these costs are expected to be passed on to real estate buyers. On the other hand, should a street fail to perform as expected in the first year, VDOT will be able to fully recover repair costs from the proceeds it will collect from the surety. If the proposed surety amounts are commensurate with the actual cost of repairs, this change is expected to provide economic benefits by reducing incentives to construct substandard subdivision streets.

Another proposed change will increase the maintenance fees. For comparison purposes, this represents an increase from $1,500 to $3,000 for one mile of a two-lane street. If 215 miles of two-lane subdivision roads were accepted every year, the proposed change would increase the total maintenance fees collected from developers by approximately $322,500. Some of these costs are expected to be passed on to real estate buyers as well. On the other hand, VDOT will be able to fully recover maintenance costs. If the proposed fees are commensurate with the actual cost of maintenance, this change is expected to provide economic benefits by allowing VDOT to fully recover its costs associated with maintaining subdivision streets.

In addition, the proposed regulations will establish a new fee to allow VDOT to recover its administrative costs associated with reviewing plans and inspecting construction. Currently, these administrative costs are fully borne by the department. Based on current available data, administrative costs per mile of a two-lane subdivision road are about $10,500. The proposed language will establish a $250 base fee per lane plus a $100 fee per lane per tenth mile, which will amount to $2,500 for one mile of a two-lane subdivision road, or approximately 24% of the estimated actual costs. This fee schedule will be effective from July 2005 to July 2007. Thereafter, the commissioner will have the discretion to adjust this fee through a notification in Virginia Register every year, up to 25%, based on a cost report that will be available to public. For the approved construction plans, the fee will be fixed for the next three years.

This new fee will be borne by the developers and real estate buyers. If 215 miles of two-lane subdivision roads were accepted every year, the proposed administrative cost recovery fee would introduce approximately $537,500 cost to developers, some of which will be passed on to real estate buyers. On the other hand, this fee will allow VDOT to recover approximately 24% of its administrative costs. It is well established that when economic agents pay the full cost of the services they receive, they tend to use resources more efficiently. Since this fee will increase the participation of real estate owners in the cost of subdivision streets (and reduce the financing of these streets by public dollars), a corresponding reduction in oversupply of these roads and, hence, a more efficient allocation of available resources will be achieved. This economic principle suggests that the economic efficiency could be even further improved if the recovery rate of actual costs is increased, a possibility, given the commissioners authority to do so under the proposed language.

In summary, the proposed fee-related changes will shift some additional maintenance, repair, and administrative costs associated with subdivision streets from VDOT onto developers who will likely pass a good portion of these costs onto real estate buyers. As a result, the primary users of these streets will start funding a larger portion of maintenance and repair costs that are currently paid by public dollars. Shifting cost burden from public transportation funds to primary users will improve allocation of available resources, which will provide incentives to reduce the supply of subdivision streets if everything else is held constant. The anticipated move toward a reduction in supply will provide a better allocation of scarce resources and indicates improved economic efficiency.

Another main proposed change is the removal of all engineering criteria from the regulation into the VDOT's Supplemental Design Guide for Subdivision Streets. Examples of these technical standards include functional classification criteria, methodology for traffic/capacity analysis, geometric design standards for roadways, and design standards related to pavements, parking lanes, intersections, cul-de-sacs, private entrances, pedestrian and bicycle facilities, bridges, culverts, drainages, landscapes, utilities, and lighting.

With the proposed changes, these technical standards will no longer be a part of the regulations and hence subject to the regulatory overview. Immediate implication of this is that VDOT will be able to modify technical criteria by changing the referenced design guide without having to go through the Administrative Process Act process. This is expected to provide benefits in terms of the speed that VDOT can respond and fix technical design problems, or incorporate technical innovations as they occur and in terms of the avoided administrative costs of amending regulations. It is also noted that most of the current technical standards are already flexible, or for guidance with a required final approval from VDOT staff. It appears that currently VDOT has considerable discretion with respect to engineering criteria and, therefore, removal of these standards will not significantly increase or decrease VDOT's ability to enforce technical criteria it deems appropriate. If there is no effect on VDOT's ability to require compliance with its standards, then there should be no significant economic costs of removing the technical criteria into a referenced design guide. In short, this change is likely to produce net benefits in terms of VDOTs flexibility to update technical standards and avoiding some administrative costs.

Also related, the differences between the technical criteria currently in the regulation and the criteria that will be incorporated through the design guide are relatively minor with one exception. With the proposed changes, pavement width for low volume roads will be reduced by 2' and for high volume roads will be increased by 2'. Although this change could increase or decrease construction costs for different developers depending on the roadway width, most subdivision roads tend to be low volume roads. Thus, this change is expected to provide significant net cost savings for the developers at the aggregate.

The proposed changes will also remove some uncertainty in the process by which VDOT accepts portions of a phased development project. An example of a phased development project is a project where a developer builds the first two lanes and the county completes the remaining two lanes of what would eventually be a major four-lane roadway. These projects serve not only a subdivision, but also a county's whole transportation system. Currently, the use of VDOT revenue sources is not guaranteed for the completion of phased development projects, but permitted on a case-by-case basis. Due to this uncertainty under the current regulations, a county, or a developer may find himself in a position to pay for the completion of the road from their own resources. Removal of this uncertainty will provide more assurance to localities in completing a phased development project using VDOT revenue sources.

With the proposed changes, an increase in phased development project applications may result. If an increase in the number of such applications is realized, more VDOT revenue sources will be devoted to completion of such projects and developers, or the county will be relieved of the financial responsibility to complete such projects. Given that these roads benefit not only a subdivision, but also the whole transportation system, their public good characteristics are more pronounced. Financing of the projects with such characteristics from VDOT revenue sources is consistent with the current practices followed in Virginia. More importantly, increased applications for phased development projects could actually reduce the use of VDOT revenue sources. When this approach cannot be used, a county must assume the full responsibility (without any developer paying for the partial cost of the project) to develop a four-lane roadway for which VDOT revenue sources can be used. Thus, phased development could reduce the use of VDOT revenue sources by the amount of funds that would be required to build the first two lanes of a four-lane road because the developer would pay for it under the phased development approach.

A number of other changes will expand, or clarify the types of subdivision street structures VDOT will be responsible for maintaining. With these changes, VDOT will start accepting facilities such as sidewalks, bicycle roads, and tunnels meeting certain criteria into its inventory. Existing structures currently maintained by the localities will not be affected by this change. While there is no estimate available for the number of sidewalks and bicycle roads that may be accepted in a given year, about five tunnels are expected annually. This change will introduce additional costs to VDOT that are associated with maintenance of these structures and provide similar savings to the local governments. Thus, the main effect of this change is shifting maintenance costs from local governments onto the state government.

Finally, the proposed changes contain a number of clarifying changes. For example, a significant change is the clarification that underground utilities may be placed within the right of way and even under the pavement allowing dual use of the public right of way. According to VDOT, there have been some misunderstandings about the dual use of public right of way and numerous inquiries about the review, approval, and acceptance procedures. Thus, these clarifications have the potential to reduce the communication costs to clarify the regulatory requirements and the processes and to prevent costly mistakes in some cases.

Businesses and Entities Affected

The proposed regulations are estimated to affect more than 500 entities including all counties, cities, towns, and subdivision developers.

Localities Particularly Affected

The proposed regulations apply throughout the commonwealth. However, the counties of Henrico and Arlington have historically declined to ask VDOT to assume responsibility for their subdivision roads.

Projected Impact on Employment

The employment effect of additional compliance costs and the compliance cost savings will likely to cancel out each other. The two major provisions are the proposed reduction in pavement width for low-traffic roads, which is expected to reduce compliance costs and increase in fee and surety collections, which will increase compliance costs. Due to these counterbalancing effects, the net impact on employment will probably be negligible even though there is no strong conclusive evidence.

Effects on the Use and Value of Private Property

The proposed changes may have differing effects on subdivisions. If a subdivision developer cannot take advantage of the reduced pavement width and reduce construction costs, the net effect will be an increase in compliance costs due to higher fees. The property prices in such subdivisions would probably increase if some of the additional costs can be passed onto the real estate buyers. On the other hand, if the additional fees are balanced out by the reduction in the construction costs, there may be no significant effect on prices of property located in such subdivisions.