
Fiber Optics on Freeway Right of Way: The Flip Side

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Introduction

Communication links are required between major metropolitan centers and smaller cities. These centers are now linked by interstate highways, freeways, and feeder highways. Fiber optics is a major development in the field of communications, and it would appear logical to use this pattern of existing highway right of way for the purpose of locating fiber-optic networks.

Some of the views of highway officials are presented below.

Presentation

Existing Regulations

Although existing regulations and AASHTO policy strongly discourage longitudinal use of freeway right of way, adequate provisions are made for exceptions for special and unique circumstances. Approval of approximately 250 exceptions in 1960 is evidence of this.

Impact on Agricultural Land

Some argue that utility installations adversely impact agricultural land and for that reason the freeway right of way should be made available. Although there may be some crop damage during construction, there will be no adverse effects thereafter. Most farm uses of the land can continue

without interruption. This is especially true for fiber-optic installations.

If utilities were allowed on freeway right of way, outside the clear zone, construction could destroy natural and planted vegetation which provide protection against erosion and noise proliferation and provide enhancement of natural beauty along the highway.

Primary Consideration of Highways

The primary consideration of highway officials is the safety of the traveling public. The strict posture taken to date on protecting the freeway right of way has prevented excessive proliferation by utilities and has significantly contributed to the safety of freeway facilities. A modification to ease this policy will decrease the safety environment for the traveling public.

Fiber-Optic Installation and Maintenance

Some case has been made for the accommodation of fiber optics on freeways because of its ease of installation and low maintenance. It is true that if any utility were to be permitted on the freeway right of way, underground installations would prove the least detrimental.

However, during construction, traffic control would be adversely affected if numerous miles of utility construction were permitted, especially if in the median or adjacent to the shoulder. Such utility projects would escalate traffic congestion and accident potential above the normal mandated by routine highway maintenance.

Increased Cost of Highway Maintenance and Construction

The cost of highway maintenance would increase because of the required coordination of the work with utilities. Even with the limited exceptions now provided for crossings of the freeway it is increasingly difficult to monitor and prevent unauthorized access points, parking of vehicles and equipment on the shoulders, and working from the through roadways or ramps. It is also difficult to limit the hours of operation, enforce special signing requirements, and police the control of traffic.

Completed freeways are now entering the first phases of renovation and safety enhancement. Utilities on the right of way will add cost to the renovation of highways, construction of additional lanes, or modification or addition of interchanges, which will be certain to continue as local transportation needs are met.

Unreliable As-built Plans

Cables, poles, and pipelines are routinely adjusted in the field to miss boulders, rocks, and unstable soil conditions without prior approval or appropriate revisions to the plans. This practice will undoubtedly continue. Incomplete or erroneous as-built plan records result in extensive and costly interference with future improvements or maintenance activities.

The Interstate System—A Secure Environment

The Interstate Highway System has been proposed as a secure and protected environment for the nationwide defense communications network. This proposal is without merit. Cables attached to bridges or through interchange areas would upgrade the priority for the destruction of such facilities by enemy or terrorist groups.

The Issue

The issue is not whether to allow fiber optics on the freeway but whether to allow any utility on the right of way. If one utility is permitted then it becomes impossible to limit or exclude others, not only other types of utilities but other competing companies with similar facilities. If one company is allowed on the right of way, then which one? Permitting one company to use the right of way while denying others would be discriminatory and provide an unfair advantage by providing a government subsidy for private enterprise.

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Who is Behind the Effort?

The effort is being led by the fiber optics industry to save the time and expense of acquiring private right of way and the cost of difficult construction. This effort is supported by the entire utility industry as a wedge to open the freeway for additional use.

Support for the current policy is eroding partly because of the money it may possibly generate. Any fee so generated will be small in comparison to the damage incurred, and

no fee structure is adequate to compensate for the impairment created to the traveling public and to the safety environment.

Billions of dollars have been spent nationwide to clear freeway right of way of utilities and preclude reinstallation within same. It would not now seem prudent to permit the occupation of such right of way by private industry.

Summary

The right of way which has been acquired for the freeways is of sufficient width for

highway purposes only. The use of same for any commercial venture should be prohibited as there is insufficient space to allow the installation of all utilities desiring the use of freeway right of way.

We now have a freeway system void of congestion. We should keep it that way.



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