AASHTO | American Association of State Highway and Transportation Officials

GUIDE FOR ACCOMMODATING UTILITIES

WITHIN HIGHWAYS AND FREEWAYS

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1. INTRODUCTION

1.1. BACKGROUND

Transportation, communications, and utility networks are growing in complexity. Such networks include highways, railways, and waterways at the surface; subways, pipelines, conduits, and cables below the surface; communication lines and electric transmission lines above the surface; and wireless communication systems. Highways might include fully controlled-access highways such as freeways, partially controlled-access highways, and non-controlled-access highways. It is in the public interest for utility facilities to be accommodated on highway right-of-way when such use and occupancy do not adversely affect highway safety, construction, maintenance, use, function, or operations. In this respect, guidelines outlining safe and reasonable practices for accommodating utilities within highway right-of-way are valuable to transportation agencies. The guidelines herein are provided in the interest of developing and preserving safe highway operations and rights-of-way.

The possibility of many networks occupying a common right-of-way or intersecting increases as the networks grow. As a result, problems arise due to the construction, maintenance, and operations of one network affecting the others.

Each transportation agency has the responsibility to maintain highway right-of-way under its jurisdiction and to preserve the operational safety, integrity, use, and function of the highway facility. Since the manner in which utilities cross or otherwise occupy highway right-of-way can materially affect the safe operation, maintenance, and appearance of the highway, it is necessary that such use and occupancy be authorized and reasonably regulated. Transportation agencies have various degrees of authority to regulate the use of utilities within highway rights-of-way, generally through their authority to designate and control the use of right-of-way acquired for public highway purposes. Their authority depends on Federal laws and regulations, and state laws or regulations that differ between states.

Also, a state may have local, city, or county government laws and regulations differing from those applicable statewide. Aside from the necessary differences imposed by state and local laws, regulations, franchises, governmental/industry codes, climate, and geography, transportation agencies should employ reasonable uniformity in the engineering requirements to regulate the use of highway right-of-way by utilities.

1.2. PURPOSE

Uniform guidelines are needed to establish the conditions under which public and private utilities may be accommodated on the public right-of-way. The intent of this Guide is to establish procedures whereby the individual state transportation agencies may uniformly administer the accommodation of utilities on public highways. While this Guide has as its primary purpose improving and maintaining highway safety

and operation, and encouraging uniformity of utility treatment among the states, this Guide recognizes the public interest in avoiding unnecessary and costly operation and relocation of public utilities. This Guide does not intend to impose restrictions on the future installation of utility crossings that would obstruct the development of expanding areas adjacent to freeways.

This Guide provides information about the accommodation of utilities on highways, highlighting differences of applicable rules based on the degree of authority a transportation agency might have over the highway and emphasizing considerations for the efficient and beneficial accommodation of utilities in the public right-of-way. The goal is to minimize (a) possible interference and impairment to the highway and its structures, (b) adverse visual impacts, and (c) overall maintenance. Wherever appropriate, existing utility accommodation policies should be updated in light of these guidelines.

1.3. SCOPE

This Guide is provided for consideration and use by transportation agencies in regulating the use and occupancy by utilities of public right-of-way for freeways and highways. This Guide is limited to matters that are the responsibility of transportation agencies for preserving the safe operation, maintenance, construction, use, function, and integrity of the public right-of-way as a conduit for a transportation facility.

This Guide makes no reference to the legal right of utilities to use or occupy highway right-of-way or to the financial responsibility involved in the adjustment or installation of utilities on such right-of-way. Federal regulation and state law govern these matters. This Guide should be interpreted and applied to the extent consistent with state laws that give utilities the right to use or occupy highway right-of-way.

Where the laws or orders of public authority, industry, or governmental codes—or the transportation agencies—prescribe a higher degree of protection than provided by this Guide, the higher degree of protection should prevail.

This Guide recognizes that a distinction exists between buried fiber-optic cables and other utilities. This Guide supplements but does not alter the provisions of *Guidance on Sharing Freeway and Highway Rights-of-Way for Telecommunications* (AASHTO, 1996; see *Section 7*).

1.4. APPLICABILITY

This Guide applies to utilities, which may include entities owning a system for supplying water, gas, electric power, steam, or communications (e.g., cable television, cellular towers, and small cell facilities); a storm sewer, sanitary sewer, drainage tile, or other system for transmitting liquids; a pipeline system; or like service systems, and include their appurtenances. A utility might be privately, publicly, municipally, or cooperatively owned and includes entities that own traffic signal systems and street and intersection lighting systems. There are emerging technologies that might be defined as a utility under state law, for example, electric vehicle charging stations or certain alternative energy systems including photovoltaic electric systems. Ultimately, state law defines what systems are included in the definition of utility.

These utilities are located, adjusted, or relocated within the public right-of-way of transportation facilities under the jurisdiction of transportation agencies. Such utilities may involve the construction and maintenance of underground, surface, or aboveground facilities, either singularly or in combination. These transportation facilities have specific functional classifications that correspond to the level of access to the

roadway, also called access control. Access control governs the transportation agency's ability to accommodate utilities since the utility accommodation standards vary depending on the transportation facility's functional classification as a freeway (fully controlled access), highway (non-fully controlled access), or other roads (free access).