

Longitudinal Accommodation of Utilities in the Interstate System Right-of-way

Purpose

The purpose of this guidance is to discuss the FHWA's interests regarding the longitudinal accommodation of utility facilities within the right-of-way of the Interstate System. This document identifies the existing laws, regulations, policies and guidance applicable to the longitudinal installation and accommodation of public and private utility facilities and clarifies their application on a case-by-case basis.

This guidance is intended to complement the FHWA's "Program Guide: Utility Relocation and Accommodation on Federal-Aid Highway Projects" (6th edition, January 2003) (<http://www.fhwa.dot.gov/reports/utilguid/index.htm>) (Program Guide) and provide expanded discussion of how 23 CFR Part 645 and 23 CFR Part 710 are applicable to utility accommodation proposals based on the classification of the facility's intended use. This classification is of continued importance based on an increasing number of proposals to use the Interstate System right-of-way to accommodate infrastructure that supports renewable energy sources. It should be noted that although the focus of this guidance is with the Interstate System, much of the discussion contained in this document is considered applicable to other freeways and similar transportation facilities.

While this document is intended to be a convenient desk top resource primarily for both FHWA and State Department of Transportation (DOT) decision makers and Right-of-Way and Utility professionals when addressing issues pertaining to longitudinal accommodation of utilities within the rights-of-way of the Interstate system, this guidance also offers a series of recommendations on how both FHWA and DOTs can successfully address relocation/accommodation considerations in a proactive, longer-term, programmatic fashion.

Background & Key Issues

The FHWA has determined that the use of highway rights-of-way to accommodate public utility facilities is in the public interest (23 CFR Part 645.205 (a)). Non-highway use of Interstate right-of-way is subject to the airspace leasing requirements of 23 CFR 710.405, with the purpose of ensuring that the non-highway use does not impact the DOT's ability to maintain and operate the highway in a safe manner. However, 23 CFR 710.405 (a)(2) specifically states that Subpart D (of 23 CFR 710) does not apply to "...public utilities which cross or otherwise occupy Federal-aid highway right-of-way," which is addressed in 23 CFR 645 Subpart B. These regulations define utility facilities to be "in the public interest" and provide a process which public utilities must follow in order to be permitted to longitudinally occupy the right-of-way in a manner that is safe for the traveling public. This accommodation process also provides the requirements which must be satisfied to ensure the utility facility does not "...impair the highway or interfere with the free and safe flow of traffic thereon" (23 CFR 1.23(c)).

Prior to 1988, the FHWA historically prohibited the installation of new utility facilities within the rights-of-way of access-controlled freeways except in some extraordinary cases. This prohibition was consistent with the AASHTO policies for longitudinal accommodation. However, with a 1988 amendment to the FHWA regulations, the FHWA's policy changed to allow each state to decide whether to permit new utility facilities within these rights-of-way, or continue to adhere to the stricter AASHTO policies.

This regulatory update provided each State with the flexibility to address utility accommodation in the Interstate system as follows:

- States may decide if they want to allow longitudinal utility installations on freeways and, if so, to what extent and under what conditions.
- Whatever a state decides to do in this regard must be documented in its utility accommodation policy and approved by the FHWA. Exceptions or changes must be approved by the FHWA Division Administrator.
- A State may permit certain utilities and exclude others. If a State so chooses, it can prohibit any longitudinal utility installation.
- Fees charged for utility use are at a State's discretion and may be used as the State sees fit. The FHWA does, however, encourage States to use generated revenues for transportation purposes.

The passage by Congress of the Telecommunications Act (TCA) in January 1996 posed a potential impact to the FHWA accommodation policies. The TCA called for open competition between utility providers, specifically in the communications arena (cable, telephone). Each state now had the right to enter into agreements with communications providers; however, to do so, the state was required to provide the opportunity to all interested providers. In October 1996, the FHWA issued guidance on the anticipated effects of the TCA on utility accommodations, indicating that the TCA did not affect the FHWA's established policies regarding longitudinal installation in freeway right-of-way.

In addition to the telecommunication industry's impacts on the use of Interstate System right-of-way, the rapid development over the past decade of technologies which have greatly improved methods for efficiently and effectively generating and distributing electricity have led to some States pursuing ways to accommodate longitudinal installations of new facilities in a manner that has not been previously explored. Two examples of these emerging technologies and utility facilities are wind turbines and solar panels.

In recent years, the use of photovoltaic (PV) technology for the environmentally friendly generation and distribution of electricity has been accommodated within the highway rights-of-way in several European countries, and there are efforts currently underway with the first American installation of solar panels in the right-of-way of Interstate 5 just south of Portland, Oregon.

Wind turbines that connect the kinetic energy of wind to mechanical energy are another form of technology now being considered for accommodation within the Interstate right-of-way. For example, see the attached guidance issued in response to a 2007 Massachusetts Turnpike Authority proposal to install wind turbines (as well as solar panels) along the right-of-way of Interstate 90, the Massachusetts Turnpike.

The preceding discussion indicates that a clear distinction exists between when a non-highway use of Interstate right-of-way requires an airspace lease under 23 CFR 710.405, and when a facility can be accommodated under 23 CFR 645 Subpart B. Furthermore, it is clear that the current Federal regulations provide each State with flexibility regarding utility accommodation. However, the emergence of the new forms of utility services and technologies described above can blur the distinction between uses. Moreover, these facilities may not be explicitly addressed in the states' current accommodation policies. As a result, a careful review and assessment of the proposed use of the facility and how the facilities would be defined is crucial.

Determination of Public or Private Utility Facilities

As noted above, the FHWA has determined that the use of highway rights-of-way to accommodate public utility facilities is in the public interest. To the extent that any such facilities serve “the public”, they can be accommodated under the DOT’s approved Utility Accommodation Policy Manual or Plan. If the use of such facilities is to serve a private or proprietary interest, they might still be accommodated; however, they would have to be approved under the airspace leasing requirements of 23 CFR 710 Subpart D. Thus, the distinction between a public or private use will determine which regulations apply.

FHWA’s Program Guide describes several factors that help determine whether the facility is deemed a “public” or a “private line”. The key consideration is how the State defines the facility under its laws or regulations. If, for example, a utility facility is regulated by the State and/or local government and the party which owns and manages the facility meets the definition of a “utility” as defined in 23 CFR 645.207, accommodation under 23 CFR 645 Subpart B is appropriate. If, however, a recognized public utility places a new or untried technology within the highway right-of-way but that technology is not a regulated utility service, the service may not be considered a public utility and the application of 23 CFR 710 may be the appropriate means of allowing such a facility within the right-of-way. In the event that there are questions concerning whether the proponent is a public utility, a legal opinion from the State may be necessary to establish the status of the facility.

There are additional considerations that help determine the applicability of these regulations. For accommodation under 23 CFR 645 Subpart B, rather than 23 CFR 710.405, the facility must meet the regulatory definition of a “utility,” and it must serve a public, rather than a proprietary, interest.

1. Is the facility a “utility”? As defined in 23 CFR 645.207, a “utility” is “...a privately, publicly, or cooperatively owned line, facility or system for producing, transmitting, or distributing communications, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, or any other similar commodity, including any fire or police signal system or street lighting system, which directly or indirectly serves the public.” While this definition may predate fiber optic and alternative energy technologies, a close reading of this definition should enable most technologies, even those of most recent vintage, to be clearly identified either as a utility or not.

The definition of “utility” in 23 CFR 645.207 is broad enough to include solar and wind generated energy facilities. Solar panels and wind turbines constitute a “facility or system” for producing, transmitting, and distributing electricity and/or heat. Similarly, other more recent forms of technology, such as fiber optics, meet this test if they produce, transmit, and/or distribute any of the defined forms of utility service, such as communications. Consequently, such facilities meet the first test as a “utility”.

2. Is the facility a “public” utility? The second test for determining applicability for accommodation under 23 CFR 645 Subpart B is met when the utility is found also to be “public.” While the term itself has a common-sense meaning, for purposes of the accommodation test we again refer to the definition of a “utility” in 23 CFR 645.207.

Since the first part of the definition (privately, publicly, or cooperatively owned) is broad enough to encompass most utility ownership scenarios a State DOT might encounter, the FHWA looks at the latter phrase (which directly or indirectly serves the public) to confirm whether the utility meets the criteria for “public” utilities. The Program Guide referenced above provides three illustrative examples for distinguishing between a “utility facility”

(i.e., a “public” utility) and a private line. The key distinction, in reviewing these examples, is that a facility is “private” if it serves a limited proprietary use; for example, a utility facility that provides direct, dedicated service to a corporation) would be proprietary in nature and not meet the test as a “public” use. Similarly, a telecommunications company that proposes to place a line within the highway ROW to serve a select group of users on a lease arrangement basis would normally be considered “private” rather than “public”. In contrast, a small utility company servicing a small community or limited number of neighborhoods would normally be considered a “public” use, if it is generally available to any occupants within the service area.

Because many possible scenarios could exist, each would require evaluation on a case-by-case basis, utilizing the definition of “utility” in 23 CFR 645.207. If a utility service is determined to meet both tests for accommodation, then the DOT may proceed with such action in accordance with an FHWA-approved Utility Accommodation Manual or Plan.

In either case (i.e., public or private), some form of written agreement is required. The DOT must ensure that the form of written agreement used to permit such facilities within the Interstate right-of-way is adequate to protect the highway and clearly defines the responsibilities and authorities of the parties. The appropriate agreement document required for actions subject to 23 CFR 710.405 is an airspace lease. For the accommodation of public utilities subject to 23 CFR 645 Subpart B, many DOTs use a Special Use Permit or similar document.

Agreements. Either form of agreement must be in writing and clearly address applicable terms and conditions including but not limited to:

1. The rights and interests being conveyed or permitted.
2. The terms of the agreement (i.e., the value of the conveyed/permited interests and the time frame in which those interests will be maintained).
3. The roles and responsibilities of the parties to the lease or permit, both in terms of their relationship to each other and their responsibilities for preserving and protecting the highway facility.

Finally, the form of written agreement used by the DOT to permit non-highway uses in the right-of-way must comply with 23 U.S.C. 156 regarding fair market value and the use of the Federal share of income derived from the use of right-of-way. The requirement reads, in part: “...a State shall charge, at a minimum, fair market value for the sale, use, lease, or lease renewal (other than for utility use and occupancy or for a transportation project eligible for assistance under this title) of real property acquired with Federal assistance ...”.

The requirement for charging fair market rent is also addressed in 23 CFR 710.403(d), although public utilities are exempt from this requirement. However, if the State does charge a public utility for occupying right-of-way, whether at fair market rent or a lesser amount, the Federal share of the net income shall be used by the State for activities eligible for funding under Title 23 of the U.S. Code. The regulations do provide an exception to charging fair market rent if the State DOT shows, and the FHWA approves, that such an exception is in the overall public interest for social, environmental, or economic purposes. This exception may be appropriate for activities that positively address climate change, contribute to improvements in air quality, and similar environmental initiatives.

Other Longitudinal Accommodation Considerations

Although the regulations found in 23 CFR 645 and 23 CFR 710 are those principally referenced regarding longitudinal accommodation of utilities, a review of any proposed accommodation requests, and any final decisions made regarding accommodation should consider the provisions established for standards (as specified in 23 U.S.C. 109), use and access (as specified in 23 CFR

1.23 (b) and 23 U.S.C. 111), and maintenance (as specified in 23 U.S.C. 116) of the Interstate System. Other applicable laws, regulations, policies and standards that should be considered include, but are not limited to:

- AASHTO *Policy on Geometric Design of Highways and Streets*;
- AASHTO *Roadside Design Guide*;
- AASHTO *Guide to Highway Vulnerability for Critical Asset Identification and Protection*;
- Manual on Uniform Traffic Control Devices (MUTCD); and
- The Highway Beautification Act (23 USC 131).

Other legislation, regulation, policy and guidance exist regarding issues that both the State DOT and the FHWA should consider in a review and assessment of any longitudinal accommodation proposal. Although more detailed information regarding these topics is available elsewhere, the following provides general considerations:

Planning. 23 USC 134 and 135 and 23 CFR 450 establish the FHWA requirements for Statewide and Metropolitan transportation planning and programming. Although utility interests are not explicitly addressed in the regulations, it is nevertheless appropriate to include a utility element in the undertaking of a multimodal, systems-level corridor or subarea planning study (23 CFR 450.212 or 450.318) or the development of the long-range statewide and/or metropolitan transportation plan (23 CFR 450.214 and/or 23 CFR 450.322). Discussions in these documents would supplement, rather than supplant, the information contained in the Utility Accommodation Policies.

It is encouraged that coordination with utility interests be conducted in adherence to a strategic planning process that identifies the roles and responsibilities of the State DOT in the accommodation of longitudinal utility facilities within the right-of-way of the Interstate system. Any specific proposal for longitudinal installation along Interstate System right-of-way could therefore be evaluated for compatibility with the applicable Metropolitan or Statewide long-range transportation plan and planning strategies that address the future needs of the State's highway system. As an example, with enhanced consideration during the planning process, it could be easily determined whether the proposed installations conflict with future expansion or use of the Interstate facility.

Safety, Traffic Operations and Maintenance. The State DOT must ensure that a use does not impair the highway or interfere with the free and safe flow of traffic. This is well stated in 23 CFR 645.205(c):

“...it is necessary that such use and occupancy, where authorized, be regulated by transportation departments in a manner which preserves the operational safety and the functional and aesthetic quality of the highway facility.”

Regardless of the type of facility to be placed within the highway right-of-way, the State DOT must follow the applicable regulations and policies which are intended to ensure the safety of the highway user and adjacent property owners.

Related to the safety of the Interstate facility is the safe and proper maintenance of the feature proposed to be installed in the right-of-way, including consideration of how the feature is to be accessed to safely conduct maintenance activities.

Environment.

The State must submit environmental documentation on the proposed use of the highway right-of-way to the FHWA Division office, as specified in 23 CFR Part 771. This proposed use may require a federal action for approval, although the environmental review of such a proposal would be conducted in compliance with the National Environmental Policy Act (NEPA), and would be dependent on the existing environment within and in proximity to the right-of-way and the level of impacts to environmental resources. Where the proposed impacts are minor, the required level of documentation will consist of a categorical exclusion (CE). However, when sensitive environmental resources (e.g. wetlands, threatened and endangered species, historic sites) will be impacted, the required level of analysis, mitigation and documentation may necessitate the development of a higher level of environmental document [i.e., an Environmental Assessment (EA) or Environmental Impact Statement (EIS)]. In areas where right-of-way determinations may impact Section 4(f) resources (i.e. historic sites, public parks, recreation areas, and wildlife / waterfowl refuges), the State must submit documentation as specified in 23 CFR Part 774. When considering placement of utilities, such as solar panels and wind turbines, within highway rights-of-way, visual impacts to resources must be evaluated.

Recommended Actions

The utilization of Interstate System right-of-way for the installation, operation and maintenance of utility facilities can present challenges to the DOTs and the FHWA in their roles as effective stewards of the public right-of-way. Given the noted development of more effective technologies available to generate and transmit energy, and given the existing legislative and regulatory frameworks, both entities have opportunities to successfully achieve their respective stewardship roles.

DOTs: DOT's are encouraged to conduct a review of their current Utility Accommodation Policies and other pertinent State legislation, regulation and guidance, and make modifications and updates as necessary. If this review process is conducted in a proactive manner, the DOTs will be better prepared to address a variety of future accommodation issues including those described in this document. Key focal points when conducting a review of the Utility Accommodation Policies should include, but not be limited to:

- Identifying gaps between the State's legal definition of "utility" and current technologies.
- Reviewing and analyzing other State laws having relevance to utility accommodation issues.
- Analyzing whether the language in the accommodation policies that address environmental, security, highway safety, highway capacity, and maintenance issues adequately meet current considerations.
- Determining compliance with latest editions of relevant AASHTO and MUTCD guidance.

The DOTs are also encouraged to include in their policies a discussion of how utility accommodation can be better integrated into their transportation planning process at the State, regional and corridor levels. Ultimately, this focus would place the States in a better position to handle accommodation questions systematically rather than on a case-by-case basis.

FHWA Division Offices: FHWA Division offices also have opportunities to proactively address utility accommodation issues by adequately considering right-of-way and utility issues when conducting their annual Risk Assessments. This process may lead to

conducting further process or program reviews dealing specifically with right-of-way or utility accommodation issues. Division offices are also encouraged to collaborate as much as practicable with the DOTs should they choose to conduct a review of their Utility Accommodation Policies.

As is the case with the DOTs, the Division offices are also encouraged to foster an enhanced consideration of right-of-way and utility accommodation interests in the statewide, regional and corridor transportation planning processes.

Conclusion and Summary

The key points of this guidance are summarized as follows:

- **23 CFR 710.405** and the **DOTs' approved Right-of-Way Manual** regulate the use of Interstate air rights (airspace) for **non-highway purposes** other than public utilities, railroads, bikeways, and pedestrian walkways.
- The proper form of written agreement for a non-highway use other than a public utility is an **airspace lease**, which should address applicable terms and conditions including but not limited to the rights and interests being conveyed, the terms of the conveyance, and the roles and responsibilities of the parties.
- **23 CFR 645 Subpart B** and the **DOTs' approved Utility Accommodation Manual or Plan** (as approved by the FHWA) regulate the use of Interstate air rights (airspace) for facilities defined as **public utilities**. Accommodation of a facility as a public utility is determined by how a State views the facility under its own laws and regulations, as well as by that facility meeting the definition established in 23 CFR 645.207.
- The proper form of written agreement or permit for a public utility is **established in the Utility Accommodation Manual or Plan** and addresses the applicable terms and conditions including but not limited to the rights and interests being permitted, the terms of the agreement, and the roles and responsibilities of the parties. (See 23 CFR 1.23(c)).
- Agreements to install and/or accommodate utilities longitudinally must contain the necessary provisions and controls to ensure the safe and free flow of traffic (as specified in 23 CFR 1.23(c)).
- All actions in highway right-of-way that can be classified as a Federal action or have a Federal handle must comply with 23 CFR Part 771 (National Environmental Policy Act) and 23 CFR Part 774 (Section 4(f)).
- Division Realty and Utility Professionals are encouraged to work with their DOTs to conduct a review and assessment of their DOT's Utility Accommodation Policy Manual or Plan to ensure it is consistent with 23 CFR 645 Subpart B and adequately meets current needs.
- Division staffs are encouraged to work with their DOTs to identify opportunities to integrate the consideration of utility facilities in their statewide strategic plans, freeway or highway system plans, metropolitan Transportation Plans, and corridor transportation plans.