



U.S. Department of Transportation
Federal Highway Administration
Office of Infrastructure

Utility Accommodation within Federal-aid Rights-of-Way

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Can a Utility Reside in a Federal-aid ROW?

The answer is, “It depends.”

- The use of highway ROW to accommodate utilities is in the public interest.
- Governed by Federal law/regulation, State law, and the State’s Utility Accommodation Policy.
- The CFR defines a utility very broadly (23 CFR 645.105).
 - Must serve the public.
 - State law definition of a utility can be more restrictive.

What if the State Law Is More Restrictive?

- If proposed installation is not a utility under state law, it is considered a “Non-Highway Use.”
- A ROW use agreement may be issued if certain terms and conditions are met (23 CFR 710.405).
 - Requires FHWA approval in most instances.
- Current fair market value must be charged with few exceptions (23 CFR 710.403(e)).
 - Railroads.
 - Bikeways and pedestrian walkways.
 - Overall public interest based on social, environmental, or economic benefits.
 - See 23 CFR 710.403(e) for entire list of exceptions.

Safety, Operations, & Aesthetics

- Location of utilities must conform to the clear roadside policies for the highway involved.
- Above ground installations should be located as far from the traveled way as possible.
- With limited exceptions, no new above ground installations may be located within the established clear zone of the highway (see exceptions in 23 CFR 645.209(b)).
 - Safety countermeasures are required when exceptions are made.

*Note: The above is **not** an all inclusive list.*

Why Is This Important?

- Collisions with roadside trees and utility poles are the most harmful event in 14 percent of all fatal crashes.
- Reference: FHWA, Office of Safety, "Roadway Departure Safety," 2010-2013, last modified September 1, 2015.



Source: FHWA

Note Pole Location



Source: FHWA

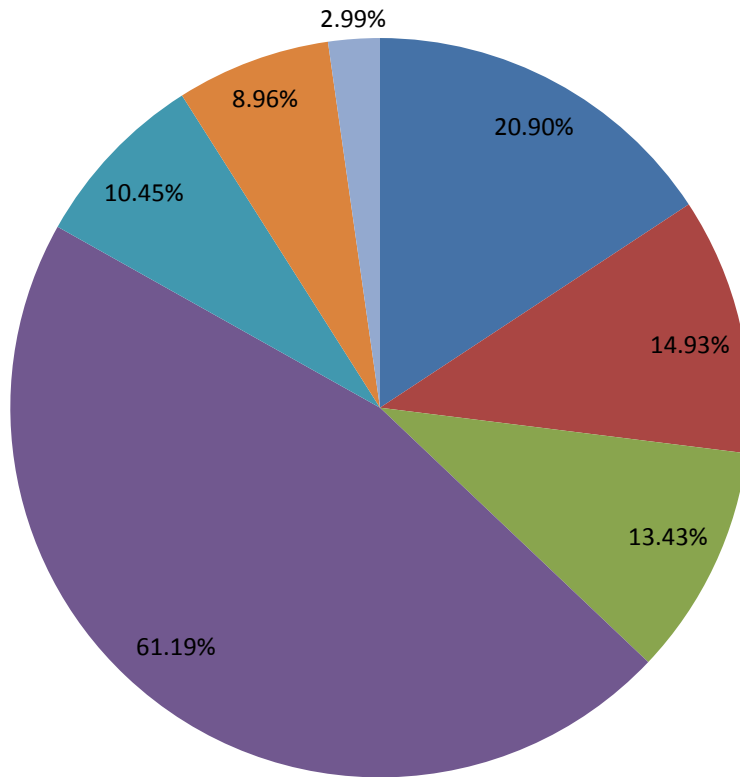
Other Considerations

- FHWA has found that utility conflicts during highway construction projects have large impacts on cost and schedules.
- A 2015 report to the Texas House Transportation Committee found that TxDOT had spent \$25 million on 70 projects because one major telecommunications company failed to timely move utility lines.
- A 2002 Transportation Research Board (TRB) report, *The Root Causes of Delays in Highway Construction*, found that utility relocation delays were the number one reason for delays in highway construction.

Other Considerations

- A 2009 (SHRP 2) report, *Encouraging Innovation in Locating and Characterizing Underground Utilities*, unknown underground utility is one of the major causes of delay during highway projects and one of the major contributors to traffic disruptions and budget overruns.
- An October 2001 NCHRP report, *Avoiding Delays During the Construction Phase of Highway Projects*, found that unforeseen underground utilities and untimely utility relocations were among the more common root causes of delays affecting most of the transportation agencies visited during the study.

3rd Leading Cause of Project Delays



- Weather
- Utilities/3rd parties
- Materials, QA, Fabrication
- Site Conditions, Extra Work, Env. Mitigation, Quantity Adjustments
- Other - Contractor Means and Methods, Records
- Design
- Incentives

Impacts on Transportation Projects

- Contractors increase bids due to the increased risks, costing taxpayers more money.
- Construction projects are delayed due to unknown utility issues, leaving the public's transportation needs unmet.
- Costs and time are increased because of change orders due to utility conflicts.

Impacts on Transportation Projects

- Contractor and public safety is jeopardized because of unknown underground utilities during construction.
- Public safety is compromised when delays extend construction, sometimes into the next season.
- Relationships among State DOTs, contractors, and utility companies are strained.

What Is FHWA Doing About This?

- Utility Coordination Initiatives in FHWA's 2018/2019 Strategic Implementation Plan (SIP).
- Improve educational opportunities.
- Improve utility program networking.
- Encourage Divisions to be more engaged in utilities.
 - Assess risk of State program.
 - Conduct program review for high-risk programs.

Utilities in the Right-of-Way

- June 2017 Memo
- Utility Accommodation and Other Uses of Highway Rights-of-Way (ROW)
 - Brief refresher on regulations that govern utility accommodation and other uses of highway ROW

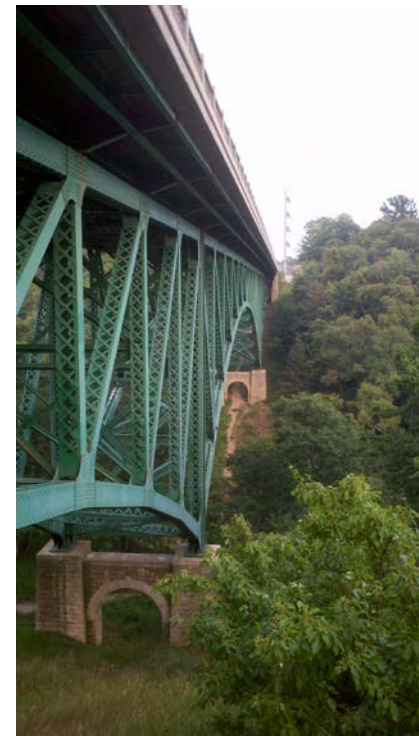
Web search: FHWA Utilities ==> Principle Documents

The Way to the Future

- Support for innovation and streamlining.
- Collaborative effort.
 - Future transportation needs.
 - Future utility/technology needs.

Thank You

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Source: FHWA – Cut River Bridge, MI