

**NCHRP 20-7**  
**Proposed Research Needs Statement**

Subcommittee on Right of Way, Utilities, and Outdoor Advertising Control  
July 27, 2016

**TITLE**

Effective DOT Utility Accommodation Strategies to Minimize Future Conflicts

**BACKGROUND / NEEDS STATEMENT**

Pursuant to 23 CFR 645,205(a) the placement of utility facilities in road rights of way serves the public interest. Shared use of the footprint provides for a cost saving that is passed on to the utility company rate payers, whom of course are also tax payers. This shared interest and shared benefit is maximized only if the utility facility accommodated does not interfere with the primary use and function of the right of way which is the road and any other transportation elements.

The State Departments of Transportation (DOT) are expected to define if sharing right of way is practically viable, determining if they want utilities on highway right-of-way. If utility accommodation is accepted, the DOT must define the extent and conditions under which a shared use is viable. These standards are part of the DOT's documented utility accommodation policy. DOTs have the authority to plan the utilization of their right of way by permitting certain utilities, excluding others, establish access control standards, establish clear zone standards, and may charge fees for utility use. Since this is a state responsibility, accommodation policies vary widely across the nation.

DOTs recognize the value to the public by accommodating utilities, but with this accommodation comes the risk of conflicts with future road needs. Road widenings, improvements, and a wide array of projects may develop over time that now place the utility facility in a position of conflict. The cost savings to the customer may now become a cost to a DOT project, passed on to the taxpayer. If that conflicting facility is not reimbursable, it becomes simply a cost delayed and passed on to the utility ratepayers. This scenario shows how sound utility accommodation policies can minimize future road project impacts. FHWA guidance provides some guidance recommending strategies to plan placement of permitted utilities to minimize interference with future road needs. 23 CFR 209(c)(2)(v) suggests placing utility strips along the outer edge of the right of way.

Since these policies are unique from state to state, a synthesis of effective accommodation practices that minimize future conflicts can help all states keep project delivery on schedule and efficiently budgeted. A focus of this research will be identifying practical accommodation elements based upon utility type. These practical elements will be selected considering the typical types of road projects that most heavily can impact utilities; such as, road widenings, realignments, projects with large cut sections, etc. The resulting guidance will promote practical, forward thinking placement of utility facilities in public right of way.

**RESEARCH OBJECTIVE**

Identify practical utility accommodation elements based upon utility type and applicable to minimize utility impacts to typical DOT project types. The resulting guidance will promote practical, forward thinking placement of utility facilities in public right of way.

## **WORK TASKS**

Tasks anticipated in this project include the following:

- Pertinent literature review. Examples may include but are not limited to:
  - 1) AASHTO Guide for Accommodating Utilities within Highway Right of Way
  - 2) AASHTO Roadside Design Guide
  - 3) 23 CFR 645 Subpart B Accommodation of Utilities
  - 4) FHWA Utility Relocation and Accommodation on Federal Aid Highway Projects
- Survey all states to determine which have policies that provide standards of accommodation designed to avoid future impacts or have elements of long term planning considered in accommodation.
- Select at least 10 states to review their accommodation policies for examples of particularly efficient practices that minimize potential for utility conflicts with future road needs. Examples of effective strategies may involve the following:
  - 1) Utility strips;
  - 2) Joint trenches, casings;
  - 3) DOT placement of ducts;
  - 4) Clear zone standards;
  - 5) Pole reduction, spacing;
  - 6) Standardizing placement (OH, UG and on structures);
  - 7) Construction methods; and
  - 8) Locating standards.
- Interview states as needed to confirm the effectiveness of strategies that appear to be unique and/or innovative.
- Write and publish a synthesis report documenting effective strategies commonly accepted and innovative strategies DOTs may consider for implementation.

## **URGENCY**

This synthesis can provide effective practices proven to result in cost savings to road projects. The garnering and dissemination of these practices is inherently valuable to the DOTs and FHWA.

## **FUNDING REQUESTED AND TIME REQUIRED**

It is estimated that this research will take 8 months to complete and will require \$80,000.

## **CONTACT PERSONS**

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