



MEMORANDUM

To: CMAP Transportation Committee

From: CMAP staff

Date: October 14, 2016

Re: Policies to improve coordination between utilities and transportation agencies

Construction-related delays can impose significant cost increases for transportation projects. Often, utility infrastructure – including publicly or privately owned communications, electricity, gas, water, or other lines or equipment – is located in the transportation facility right-of-way, and must be relocated or removed during construction. Any number of these utilities may be involved, and their lines may be located underground or overhead.

Coordination with utility operators is a complex process which involves each utility agency and includes multiple reviews of construction plans at various stages of project development, signing agreements, and completing construction-related work. If the utility facilities can be adjusted before road construction takes place, then delays may impact only the project start date and not the project duration. However, if these adjustments take place during project construction, the impacts on construction schedule, traffic, and cost can be significant.

CMAP hosted a technical forum in January 2016 to discuss cost efficiencies in project delivery. While the program emphasized innovative construction practices, materials, and technologies, much of the discussion from the local stakeholders in attendance centered on coordination with utility operators. According to these stakeholders, the cost savings of innovative materials and practices would be relatively modest over the long-range planning horizon; in contrast, delays caused by poor coordination with utilities result in substantial costs.

This memo reviews potential policies to improve coordination between utilities and transportation agencies, as well as the existing regulatory framework in Illinois. This memo does not attempt to quantify the potential benefits of improved coordination, which would depend on a variety of factors, including the costs associated with delayed travel times, reduced safety, duplication of construction effort, delayed construction schedules, and so on.

Existing regulatory framework

In Illinois, [605 ILCS 5/9-113](#) establishes the regulatory framework for transportation agencies to coordinate with utilities. Utilities must receive written authorization from a state or county authority to use a highway right-of-way, and the public sector may charge fees for this use. State law also requires utilities to remove, relocate, or otherwise modify their infrastructure within 90 days of receiving written notice from a state or county department of transportation. If the deadline is not met, the public agency can perform this utility work itself and charge the utility for the costs incurred.

State law also requires the Illinois Department of Transportation (IDOT) to develop strategies and practices to coordinate with utilities, including delivering 5-year and annual programs and establishing a utility coordination council. Utilities must designate their staff liaisons in writing to the IDOT Secretary. IDOT's detailed policies are laid out in the [Bureau of Design and Environment Manual, Chapter 6 Utility Coordination](#), as well as the [Bureau of Local Roads and Streets Manual](#).

These same coordination provisions are optional for county departments of transportation. However, the establishment of a utility coordination council is necessary to enforce the statutory 90-day deadline for utilities to remove, relocate, or otherwise modify their infrastructure within county highway rights-of-way. CMAP staff inquiries suggest that originally all the counties in northeast Illinois had developed utility coordination councils, but only the councils in Cook County and Lake County continue to meet today. Lake County's Utility Coordination Council, for example, hosts an annual coordination meeting at which the county 5-year highway improvement program is discussed, including topics such as the number and types of permits issued by the highway department and how and when those permits interface with the county's project management system.

According to CMAP staff research, departments of transportation in the region (excluding the Illinois Tollway) expressed frustration with the utility coordination process. Requested extensions to the 90-day statutory deadline are nearly always granted by the permitting transportation agency due to the broad array of reasons to request an extension, as well as the statutory directive not to unreasonably withhold the waiver.¹ Further, this 90-day period may occur too late in the project development process for some transportation agencies to be able to incorporate utilities' feedback in a proactive way.

Recommendation

Difficulties in coordination with utilities are a leading cause of delay, and by extension cost increases, for the construction of transportation projects in the region. Better data is key to

¹ 605 ILCS 5/9-113 defines "reasonable" factors for waiving the 90-day deadline fairly broadly to include "acts of God, war, the scope of the project, the State failing to follow the proper notice procedure, and any other cause beyond reasonable control of the owner of the facilities"

understanding the impact of utility coordination delays on highway performance and developing a plan to improve performance, starting with baseline data on the number of requests for extensions to the 90-day deadline, the number of those requests granted, and the actual number of days between a request for a utility adjustment and the actual completion of that task. This information would be helpful in better understanding the scale and scope of utility-coordination issues in the region, and could point to appropriate policy responses in the future.

This topic has recently been of interest at the national level, and was researched as part of the second Strategic Highway Research Program (SHRP2). More specifically, SHRP2 developed a [3D utility location data repository](#) to store data for use by transportation agencies. Locally, some efforts at improved coordination have moved forward in the region. For example, the City of Chicago Project Coordination Office (PCO) brings together various city agencies, private utilities, and other groups to better coordinate their work in the municipal right of way. The PCO provides a web-based geographic information system (GIS) tool that fosters improved communication and provides a streamlined process to manage project-related documents, such as permits and timelines.

ON TO 2050 could set a goal of improving utility coordination to reduce construction delays. There are several potential approaches to improving coordination, ranging from improved data sharing to statutory or regulatory changes. CMAP staff is relatively new to this topic and requests the Transportation Committee to discuss the following questions:

- One approach could be the **development of a regional or subregional database** of detailed utility location information. Accurate utility location data collected before and during construction projects is useful for future project planning, contracting, design and construction. This data should be retained in an asset database in a format that makes it an accessible resource for the region's transportation agencies, but also in a secure format to protect the sensitivity and security of the data.
 - Would such a database be useful for implementers? Would it be feasible to develop at a sufficient level of detail for on-site work?
 - What are the challenges in developing such a database? Could it be developed and updated within a reasonable timeframe and at reasonable cost?
 - Which agency or agencies would be best positioned to maintain such a database?
- Another approach **could be the establishment or re-establishment of utility coordination councils** at the county level to promote information sharing and reduce the risk of delays.
 - Would such an approach improve coordination with utilities?
 - What are the barriers to establishing or maintaining coordination councils?
 - Would coordination councils be more effective if held at the regional level?

- Yet another approach would be **strengthened statutory language**, such as revising the statutory deadlines and allowing penalties for failure to comply with these deadlines.
 - Would such changes to the statute improve its effectiveness?

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