Rethinking Environmental Mitigation Costs - Achieving Cost Reduction and Meeting Environmental Challenges on Chicago's High Speed Rail Project

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"The costs of mitigating a railroad project's environmental impacts can be substantial, both in terms of direct expenditures for construction and long-term maintenance, as well as the investment of schedule and effort to coordinate mitigation concepts and plans with regulators. Throughout the course of the Chicago to St. Louis High-Speed Rail (HSR) project, a 285-mile-long improvement to implement high-speed rail service between two major urban centers, Union Pacific Railroad (UPRR) used a combination of best management practices (BMPs) and a good neighbor policy to minimize its mitigation costs and transfer risks and long-term responsibilities to partners better suited to assume those risks.

HSR is a partnership between UPRR, the Illinois Department of Transportation (IDOT), and the Federal Railroad Administration (FRA). IDOT and FRA are responsible for coordinating preliminary engineering and leading the National Environmental Policy Act (NEPA) review of the project. UPRR is responsible for engineering design, construction, regulatory permitting, and mitigation implementation. Although impacts were identified as part of the NEPA review, the details of the mitigation were generally determined during permitting activities. This resulted in UPRR initially assuming cost and implementation responsibilities for permit and mitigation commitments during NEPA review. UPRR, in coordination with permitting agencies, reviewed those conditions and used BMPs, such as species avoidance measures and construction monitoring, to meet agency objectives and minimize permitting. For situations where impact avoidance was not possible, UPRR applied a similar approach to mitigation, resulting in significant time and cost savings while also directly benefiting regulatory agency program objectives.

This presentation describes UPRR's approach to achieve cost reduction or avoidance in environmental mitigation costs. For example, UPRR renegotiated a mitigation agreement with the Illinois Department of Natural Resources (IDNR) that originally required UPRR to identify, construct, and maintain habitat for state-listed endangered and threatened species in perpetuity. By collaborating with IDNR staff, UPRR modified the original agreement to allow UPRR to support an existing IDNR program designed to help re-establish the species in Illinois, capitalizing on the expertise already present within the agency. Additionally, UPRR contracted with the state to conduct monitoring on the railroad right-of-way, which will add directly to the state's research and knowledge about this species. The new agreement reduced mitigation costs for UPRR, eliminated the risks and responsibilities associated with acquiring and maintaining property in perpetuity, and provided direct benefits to an agency charged with the management and protection of natural resources. Other examples discussed in this presentation include using BMPs to protect species during construction, thus avoiding the need to apply for time-consuming state and federal take permits."