

**ARC SOLUTIONS-WESTERN TRANSPORTATION INSTITUTE FORUM  
2013 International Conference on Ecology and Transportation (ICOET)**

*Forum Notes – June 23, 2013*

**Background:** Wildlife crossings in combination with fencing are proven to reduce vehicle collisions with larger animals (Huijser *et al.* 2008), and installing such mitigation on roads with as few as 3.2 deer-vehicle collisions/km/year will likely generate economic benefits to society (Huijser *et al.* 2009). In addition to increasing safety and saving money, wildlife crossings have the added benefit of accommodating movement for many types and sizes of wildlife – creating a rare win-win-win opportunity.

Armed with this knowledge, in 2010, a public-private partnership, known as ARC, initiated an international competition to design the next generation of wildlife crossing overpass infrastructure. Among others, the partnership included the Western Transportation Institute at Montana State University, Woodcock Foundation in New York, the Federal Highway Administration and the American Association of State Highway Transportation Officials. As a result of the ARC challenge, new thinking, new methods, new materials and new solutions to the problem of wildlife-vehicle collisions emerged.

In order to move beyond idea generation to on-the-ground implementation of new technologies, the partnership undertook a study in 2012 to better understand the culture and beliefs of state Departments of Transportation regarding implementation of wildlife crossing infrastructure. In particular, the study focused on obstacles to implementing wildlife crossings as a standard practice. When asked whether minimizing wildlife-vehicle collisions is a priority, the majority of respondents (80.8%) agreed that it was either a top priority across the state (13.1%) or, at a minimum, a priority under certain circumstances (67.7%). Three main themes – economics/available funding, proven cost-effectiveness, and public support – emerged as primary barriers to implementing wildlife crossing infrastructure. Respondents further agreed that more effort – in the form of education and research – is needed to operationalize wildlife crossing infrastructure as a standard practice.

To follow-up on the issues identified during the study, ARC and the Western Transportation Institute convened a day-long meeting of transportation, natural resource, and other stakeholders on June 23, 2013, prior to the 2013 International Conference on Ecology and Transportation, in Scottsdale, Arizona. The following notes represent key obstacles to deploying wildlife crossings identified during the meeting.

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## IDENTIFICATION OF OBSTACLES TO WILDLIFE CROSSINGS

*Federal Lands (number of Forum participant votes identifying this issue as a priority indicated parenthetically)*

- Wildlife crossings not a priority for funding on federal lands, lack of funding to physically demo wildlife overpass (15)
- Regional, long-range transportation plans do not have wildlife crossing provisions (15)
- Lack of policy metrics/targets (12)
- Silo'd approaches/missions (7)
- Lack of accountability among concurrent jurisdictions, federal land managers not in control of the road (2)
- Land management plans for travel are silent on wildlife needs for crossings (2)
- Intra-agency, wildlife-engineering not on same page (1)
- Public perception of federal government (0)
- Shrinking budgets – including MAP-21 funding (0)
- FLMAs very inconsistent on progress for wildlife crossings (0)

*States (number of Forum participant votes identifying this issue as a priority indicated parenthetically)*

- Lack of leadership, resistance to change, lack of regulatory drivers/mandate, lack of federal leadership on standards, ecological planning (13)
- Lack of coordination early in planning process (between biologists and engineers), different timelines among agencies, schedules for planning, projects, funding misaligned (13)
- Lack of maintenance funding for new and aging infrastructure, federal funds do not pay for maintenance (11)
- Not a funding priority (3)
- Lack of acceptable criteria for crossing recommendations (2)
- State and local politics has potential to negatively impact wildlife crossings (1)
- No plan to alleviate road ecology issues (1)
- Lack of stand-alone and shrinking scope of wildlife mitigation projects (1)
- Little incentive to work across state boundaries (0)

***Multi-agency*** (number of Forum participant votes identifying this issue as a priority indicated parenthetically)

- Different agency missions, different drivers for agency priorities, geographies (15)
- No laws for integrating across agencies – direction, funding, policy, no overarching environmental policy applicable to all agencies (11)
- Lack of clear incentives for coordination among agencies, streamlining, “what’s in it for me?” (10)
- Differing/competing agency priorities (3)
- Lack of trust (3)
- Agency funding inequities (3)
- Contradictory/conflicting agency laws, regulations and mandates (1)
- Regulatory agencies’ lack of adaptation/flexibility (1)
- Personality clashes (0)
- Funding restrictions (including travel/sequestration) (0)

***National-US/Canada/Mexico*** (number of Forum participant votes identifying this issue as a priority indicated parenthetically)

- (Flexible) design standards not articulated, landscape and design challenges differ by region, but there is a perception that “one size fits all” (16)
- Lack of involvement from construction industry, application of highway standards to wildlife crossing structures (e.g., payload requirements, despite fact that wildlife, not semi-trailers, will be using the crossing) (13)
- Lack of uniform, consistent policy, planning and practice, both nationally and internationally (12)
- Lack of performance metrics for permeability, connectivity (e.g., need for wildlife equivalent of “state of good repair,” for example a “wildlife state of good habitat” or something similar) (11)
- Need for federal lead/buy-in (0)
- Need for standardized terminology (0)
- Different funding models (private vs. public) (0)
- Difficulty balancing national security with providing wildlife access across the border (0)