

2013 TRB Poster: Enhancing Bicycling, Walking, and Accessibility at Wichita Mountains Wildlife Refuge

Unit: Wichita Mountains National Wildlife Refuge

Transportation Scholar: Heidi Beierle

Wichita Mountains Wildlife Refuge (WMWR) encompasses nearly 60,000 acres and conserves the largest remnant of undisturbed mixed-grass prairie in the world. The Refuge is home to 50 mammal, 240 bird, 64 reptile and amphibian, 36 fish, and 806 plant species, including one endangered bird species.

Approximately 1.7 million annual visitors engage in wildlife-dependent recreation and enjoy the scenic views. Ninety percent of these visitors arrive in private vehicles, which leads to negative auto-related effects including speeding, animal-vehicle collisions, parking congestion, habitat degradation, and pollution.

The Refuge began work in 2009 to provide visitors with more options to experience the abundant natural and cultural resources through non-motorized means. Three high-priority trail projects are now being advanced to a National Environmental Policy Act (NEPA)-ready state through the Transportation Scholar's efforts.

The trail projects are designed to create opportunities for families with children, people using wheelchairs, and casual recreationalists to experience the Refuge through active modes. Where feasible, trails will meet accessibility standards and provide separation from vehicular traffic.

In addition to reducing the negative effects from automobiles, the trails aim to increase regional health in a state that ranks 48 out of 50 in health-related outcomes. Consequently, a significant element of this active transportation project employs partnerships to leverage regional health and activity strategies, particularly for the region's youth, and to interconnect existing facilities managed by multiple agencies.

Four main tasks comprise the project: outreach, trail area documentation, preliminary design, and pre-NEPA project proposals. This project poster highlights the outreach and trail area documentation tasks.

Robust community outreach will inform Refuge decision making for trail design (scheduled to occur in February). Audiences who included target trail users were asked their preferences – or “likes” – for three different design elements: trail surfacing, trail width, and shared use or separation from motor vehicles. Audiences were also asked what elements, amenities, or activities make for enjoyable trail experiences in a place like the Refuge.

Documentation of the trail areas includes information about existing conditions, possible or likely trail alignments, presence of endangered species, and presence of historic or archaeological resources. Consideration has also been given to how the areas are currently used, how visitation patterns might change with future use, and what kind of accommodation should be made to meet the needs of the target audience trail users.

Next steps for the project include Refuge review of key design questions and options. Results from this review will guide development of preferred alternatives and schematic design drawings to be used in the NEPA process.