



Research Problem Statement

ODOT Research Section
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I. TITLE

17-069 Safety and Liability on Bicycle Touring Routes—Actual and Perceived

II. PROBLEM

Bicycle tourism brings millions of dollars per year into Oregon. The routes that are designated and promoted through Oregon's Scenic Bikeways program attract cyclists from all over Oregon and around the country, and generate an estimated \$12 million per year. The Scenic Bikeways program is becoming very popular with tourism and economic development interests, but most of the routes are on public roads. Many county officials, federal land agencies and some ODOT districts are reluctant to allow a Scenic Bikeway designation on their roads due to concerns about road safety and agency liability once a route is designated. Or, if willing to support the Bikeway route, they are unsure what types of signs, pavement markings and other treatments will minimize legal liability, and which are most likely to be effective.

There is a general lack of data on cycling in rural areas. For Scenic Bikeways in particular, there is a need for information on how the route designation affects or attracts cycling, beyond anecdotal accounts from local business owners. ODOT has design guidance in the 2011 Bicycle and Pedestrian Design Guide (chapter 1) and the Highway Design Manual (Table 7-2). But when counties or federal agencies are approached about a Scenic Bikeway, there is sometimes a higher perception of danger, and a feeling the ODOT guidance does not apply to their road.

III. PROPOSED RESEARCH, DEVELOPMENT, OR TECHNICAL TRANSFER ACTIVITY

The research will collect and analyze data to enable a consistent, objective evaluation of proposed bicycle touring routes and provide guidance on what actions or investments are needed to maintain safe use by cyclists and motorized traffic.

- Field studies of roadway conditions, traffic conditions, cyclist and motorist behavior, and crash history—on designated Scenic Bikeways and on comparable roads that are not designated routes.
- Interviews or surveys to analyze the experiences of people who drive or bike existing or proposed Scenic Bikeway routes. Compare responses for before and after designation, or compare results for designated bikeways vs. those that have no formal designation or route identification.
- Field or research study of cyclist and motorist response to different sign messages, pavement markings, or safety information campaigns.
- Expand or augment the pending Federal Lands Access Program funded research involving two case studies in Oregon.

IV. POTENTIAL BENEFITS

Safety—ODOT and other agencies will be able to determine what treatments and outreach efforts to use, correlated to roadway conditions, vehicle traffic, bicycle usage, and other factors. This brings potential safety benefits for motorists and cyclists on existing bikeway routes—and also helps identify valid safety reasons for not designating a particular route.

Economic—Results will help ODOT and other agencies save money by not spending more than what's actually needed along bicycle touring routes. On a broader scale, results will aid in designation of future bike touring routes, which will bring substantial tourism dollars into the rural economy.

Interagency and Public/Private Coordination—Results will provide objective data and guidance for decision-making, and provide a “common language” for discussions between road agencies and bikeway proponent groups.

Engineering/Operations—results can help move towards consistency in how Scenic Bikeways and other popular cycling routes are signed, marked and maintained. Variation can then be based on factors actually measured or studied, and not based on perception or speculation.

V. IMPLEMENTATION

The findings of this study will be implemented within ODOT and by many interested agencies within and beyond Oregon. This will provide a basis of discussion and route evaluation as well as the basis for adopting objective criteria for approving and maintaining Scenic Bikeway routes.

- The Association of Oregon Counties (AOC) will present the findings at the Oregon Association of Engineers and Surveyors annual meeting, and will make the report available to county road officials.
- Oregon Parks and Recreation Department (OPRD) will distribute the findings to road jurisdictions that are approached for endorsement of a Scenic Bikeway route, and to bicycle tourism and bicycle advocate groups. The data will also be incorporated into the rating process for future Scenic Bikeways.
- The US Forest Service will use the findings in evaluating USFS roads that are proposed for Scenic Bikeway designation in Oregon. The Forest Service also anticipates the report being used by National Forests in other states, and by other agencies.

This proposed research will benefit the FLAP-funded research that Western Transportation Institute will start in 2016. The designation approval for least one Scenic Bikeway is currently on hold, pending the findings of the WTI research.

VI. LIST OF REFERENCES *(optional)*

Federal Lands Access Program (FLAP) research project funded for FY 2016 – available on request.

Travel-Oregon list of Cycling Research

<http://industry.traveloregon.com/research/cycling-research/>

VII. CONTACT INFORMATION

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