Oregon Department of Transportation

Stage 1 Research Problem Statement

Number*: 25-30*

Proposed Title: Evaluation of non-paved multi-use path surfaces for inter-city active transportation connections

1. Concisely describe the **transportation issue** (including problems, improvements, or untested solutions) that Oregon needs to research.

As ODOT continues to build out it's active transportation connections between Oregon cities, especially as these paths connect through rural areas, providing wide, completely paved, asphalt multi-use paths are proving to be difficult to fund as we are seeing costs of $1 to $2 (or even more) million per mile for capital construction costs and significant maintenance costs for maintaining the path surface. The multi-use paths that ODOT Region 4 has in design and planning have all used the RD602 Shared Use Path Pavement for ACP multi-use paths and this project would explore potential different surfaces for multi-use paths.

This project will research non-paved surfaces that could serve as a supplement to or potential replacement for traditional asphalt multi-use paths (potentially as a 6' unpaved surface adjacent to a 6' asphalt paved path to ensure ADA accessibility or some other combination) that may have benefits beyond the potential initial construction and long-term maintenance costs, such as reducing the carbon emissions from construction materials, using materials that create less of a barrier for wildlife, reducing the amount of impervious surfaces and heat island effects from large paved areas (especially if used in urban areas), and creating more context-sensitive infrastructure for rural areas.

2. Document how this **transportation issue** is important to Oregon and will meet the Oregon Research Advisory Committee Priorities

This transportation issue is important to Oregon is most directly related to the Stewardship of Public Resources that focuses on material improvement and cost reductions or savings to construction and asset management by researching lower construction and maintenance cost materials. As we continue to build out the multi-modal network, the lower construction and maintenance costs will enable us to fund and build these critical connections more rapidly.

3. What **final product or information** needs to be produced to enable this research to be implemented?

The final product will need to consider including an environmental screening of potential treatments, considerations on the initial construction costs and expected long-term maintenance costs (especially compared to traditional asphalt paths), longevity and maintenance considerations, real-world applications, lessons-learned, and best practices for usage from local jurisdictions using these treatments, and assessment criteria/considerations for where and how these might be implemented on ODOT facilities. This will support the

4. (Optional) Are there any individuals in Oregon who will be instrumental to the success of implementing any solution that is identified by this research? If so, please list them below.

Name	Title	Email	Phone

5. Other comments:

ODOT Region 4 has typically used the RD602 Shared Use Path Pavement Details for our paths but we've experienced significant cracking and difficulty in maintaining the paths in good conditions – there are other local Central Oregon agencies like Bend Parks and Recreation and Sunriver using different materials for both paved (permeable pavements, glass-grid, and other treatments) to reduce maintenance costs and unpaved ADA accessible active transportation paths that could be good case studies for the effectiveness of some of these treatments, especially in similar freeze/thaw type locations like in ODOT Region 4.

6. Corresponding Submitter's Contact Information:

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