

Summary

A sustainability rating system for roadway design and construction. It applies to all road projects including new, reconstruction and rehabilitation. It is designed to promote sustainability best practices within and beyond existing federal, state and local regulations.

Certifying body: Greenroads Foundation

Applicable sectors					Award types				
General civil	Transport only	Buildings	Public realm	Community / precinct	Design	As built	Operation	Planning	Other

Country	US, piloting in Canada, New Zealand, South Africa, Taiwan, United Arab Emirates	Sustainability criteria	<p>There are seven credit categories with 48 different activities: 1. Project requirements (PR - all credits must be achieved and are not worth points) 2. Environment & water (up to 21 pts, which is 19% of voluntary credits (VCs), excluding custom credits) 3. Access & equity (up to 30 pts, 28%) 4. Construction activities (up to 14 pts,13%) 5. Materials & resources (up to 23 pts, 21%) 6. Pavement technologies (up to 20 pts, 19%) 7. Custom credits (up to 10 pts).</p> <p>The 11 Project requirements are mandatory: Environmental review process; lifecycle cost analysis; lifecycle inventory; Quality control plan; Noise mitigation plan; Pollution prevention plan; Low impact development; Pavement management system; Site maintenance plan; Educational outreach. In addition, there are 118 points available for voluntary credits. Note that decisions regarding the location, type, timing, feasibility or other planning level ideas for roadway projects are excluded.</p>
Deployment & developments	<p>Concept development began in 2007 as a research project at the University of Washington funded by several U.S. transportation agencies and research partners, with input by numerous design and construction industry partners, notably CH2M HILL.</p> <p>There are currently 7 certified projects (all in U.S.), over 40 registered valued at over \$4 billion USD, including pilots.</p>		
Applicants	<p>This is a project-based tool, although it can be used to support decision-making for planners and public works agencies. Typical applicants include public and private roadway owners, design consultants, and contractors (especially those involved in alternative delivery projects). All parties may participate actively in the certification process.</p>		
Government endorsement	<p>Initial research funding for development of the rating system came from Transportation Northwest, the State Pavement Technology Consortium, Oregon Department of Transportation, Western Federal Lands Highway Division.</p>		
Support to applicants	<p>An initial free consultation with Greenroads staff is available to understand how to score a project cost-effectively. The evaluation process involves a preliminary review part-way through the design process. Manuals are available to download online. An abridged version outlines requirements and documentation required for each credit and may also be navigated online. A full version of the manual includes examples, strategies, research and references.</p>		
Fee	<p>Fees vary depending on project value. The minimum cost for certification is \$US 4,995 for projects \$10 million or less. Larger projects are charged a fee that is a very small percentage of the project cost.</p>	Assessment: scoring, performance levels, evidence collection	<p>In addition to PRs, there are VCs worth points. There are four levels of certification: Bronze (requires achieving at least 32 VCs); Silver (>42 VCs); Gold (>53 VCs); Evergreen (>63 VCs)</p> <p>Required project documentation includes environmental and design reports, plans and specifications that are often normally prepared in the process of project development or as part of construction planning. Additional documents such as short narratives describing a particular decision-making process or supplementary calculations to show how many points are earned from tracking construction work are requested for some credit activities. The rating process occurs all online at the Greenroads Website.</p> <p>A design can be scored, but it cannot be certified until it is constructed.</p>
Fee	<p>Fees vary depending on project value. The minimum cost for certification is \$US 4,995 for projects \$10 million or less. Larger projects are charged a fee that is a very small percentage of the project cost.</p>	Tailoring	<p>No tailoring. PRs must be met, then the number of VCs achieved determines certification level.</p>

Case study

Project name: South Division Street Promenade

Location: Auburn, WA, USA

Proponent: City of Auburn

Award: Bronze

Brief Project Description: This project reconstructed and revitalized three vital blocks (0.19 miles) of Auburn's business core by creating a more pedestrian-friendly, walkable downtown. The project also improved utilities for future redevelopment and enhanced urban aesthetics. The project includes pavement reconstruction and new sidewalks as well as a variety of pedestrian amenities and stormwater, sewer and other utility work. Interesting design features include permeable concrete pavement for stormwater management and light-emitting diode (LED) lighting fixtures to reduce energy use. Additionally, the project incorporated several types of Intelligent Transportation Systems (ITS) technologies for traffic control.



A Greenroads rating logo



View of the revitalised street block