# Dossier: SOLAR ROADWAYS INCORPORATED

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,343.00

**Award Date:** 2024-05-10

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Solar Roadways Incorporated (SRI) aims to revolutionize infrastructure by replacing traditional asphalt roadways, parking lots, and sidewalks with structurally engineered solar panels. These hexagonal panels are designed to withstand heavy vehicle traffic, generate clean electricity, and provide advanced features such as embedded LED lighting for road markings, heating elements to prevent snow and ice accumulation, and a cable corridor for utilities. Their core mission is to create a sustainable, intelligent infrastructure system that reduces reliance on fossil fuels, improves safety, and generates renewable energy, ultimately contributing to a cleaner and more efficient future for transportation and energy sectors. Their unique value proposition lies in the multi-functionality of their panels, offering electricity generation, infrastructure management, and enhanced safety features in a single product.

**Technology Focus:**

* Interlocking hexagonal solar panels made from tempered glass designed to withstand heavy vehicle traffic. Early prototypes claimed to be able to withstand 250,000 lbs per panel, but verifiable testing has been limited and real-world deployments have shown durability issues.
* Embedded LED lighting within the panels for creating dynamic road markings, lane guidance, and safety warnings.
* Heating elements within the panels designed to melt snow and ice, improving road safety in winter conditions.

**Recent Developments & Traction:**

* Limited traction beyond early prototypes and demonstrator projects. Public reports suggest no significant large-scale roadway installations.
* Received a Phase I SBIR grant from the Air Force Research Laboratory in 2018, focusing on applications for flight line taxiways. No public information on follow-on funding or commercialization through the AFWERX program.
* In 2019, announced continued testing and improvement of their panels, but details on specific advancements are scarce.

**Leadership & Team:**

* Scott Brusaw (CEO): Co-founder of Solar Roadways. Background primarily in electronics and engineering, with limited prior experience in large-scale infrastructure projects or energy sector commercialization.
* Julie Brusaw (President): Co-founder of Solar Roadways. Role focuses on communications and marketing.

**Competitive Landscape:**

* Competitors include traditional road construction companies and alternative energy companies focusing on rooftop solar.
* Key differentiator: SRI's integrated approach combining solar energy generation with road infrastructure and smart features, targeting the entire road surface as a revenue-generating asset. Competitors typically focus on either infrastructure or energy generation, not a combined solution. However, the lack of large-scale deployments and proven durability raise concerns about their actual competitive position.

**Sources:**

1. [https://www.solarroadways.com/](https://www.solarroadways.com/) (Company Website - limited updated information)

2. [https://www.snopes.com/fact-check/solar-roadways/](https://www.snopes.com/fact-check/solar-roadways/) (Fact-checking article detailing performance challenges and overpromises.)

3. [https://www.airforcemag.com/article/solar-roadways-plans-oklahoma-air-force-base-installations/](https://www.airforcemag.com/article/solar-roadways-plans-oklahoma-air-force-base-installations/) (Report on Air Force Research Laboratory SBIR grant - dated information from 2018.)

4. [https://www.wral.com/news/local/story/17924477/](https://www.wral.com/news/local/story/17924477/) (Local news report highlighting a failed prototype installation, emphasizing durability issues.)