Record Nr. UNINA9910864189703321 Autore Flintsch Gerardo W Titolo Pavement, Roadway, and Bridge Life Cycle Assessment 2024: ISPRB LCA // edited by Gerardo W. Flintsch, Eugene A. Amarh, John Harvey, Imad L. Al-Qadi, Hasan Ozer, Davide Lo Presti Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031615856 3031615859 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (360 pages) Collana RILEM Bookseries, , 2211-0852;;51 Altri autori (Persone) AmarhEugene A HarveyJohn Al-Qadilmad L OzerHasan Lo PrestiDavide Disciplina 691 Soggetti **Building materials** Materials - Analysis Engineering geology Transportation engineering Traffic engineering Industrial management **Building Materials** Materials Characterization Technique Geoengineering Transportation Technology and Traffic Engineering **Industrial Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Quantitative Measures of Social Sustainability for Pavements --

Assessing the ecological impact of different asphalt mix designs following a cradle to gate approach -- Effect of Transportation on Environmental Burdens of Blended Cements Made with Imported and Domestic Supplementary Cementitious Materials -- Updates and

Demonstration of the FAA Airfield Life Cycle Assessment Tool A Taxiway Case Study -- Recommended to Include Relevant Material Performance in the Construction Material Environmental Product Declarations -- Life Cycle Assessment of Asphalt Concrete Construction Stage and Impacts of Construction Equipment Idling -- Life Cycle Cost and Environmental Impacts of Portland Limestone Cement and Calcium Sulfoaluminate Cement as alternative binders in Concrete -- RolRoad LCA a web based application for estimating the excess fuel consumption and environmental impacts due to the rolling resistance of passenger cars.

Sommario/riassunto

An increasing number of government agencies, academic institutes, and industrial organizations are embracing the principles of sustainability in managing their activities. Life Cycle Assessment (LCA) is an approach developed to provide decision support regarding the environmental impact of industrial processes and products. LCA is a field with ongoing research, development and improvement and is being implemented world-wide, particularly in the areas of pavement, roadways, and bridges. The Proceedings of Pavement, Roadway, and Bridge Life Cycle Assessment contain contributions to the International Symposium on Pavement, Roadway, and Bridge Life Cycle Assessment 2024 (Arlington, VA, USA, June 6-8, 2024) covering research and practical issues related to pavement, roadway and bridge LCA, including data and tools, asset management, materials, environmental product declarations, structure types, procurement, planning, vehicle interaction, and construction. Pavement, Roadway, and Bridge Life Cycle Assessment Proceedings will be of interest to researchers, professionals, and policy-makers in academia, industry, and government who are interested in the sustainability of pavements, roadways, and bridges. An increasing number of government agencies, academic institutes, and industrial organizations are embracing the principles of sustainability in managing their activities. Life Cycle Assessment (LCA) is an approach developed to provide decision support regarding the environmental impact of industrial processes and products. LCA is a field with ongoing research, development and improvement and is being implemented world-wide, particularly in the areas of pavement, roadways, and bridges. The Proceedings of Pavement, Roadway, and Bridge Life Cycle Assessment contain contributions to the International Symposium on Pavement, Roadway, and Bridge Life Cycle Assessment 2024 (Arlington, VA, USA, June 6-8, 2024) covering research and practical issues related to pavement, roadway and bridge LCA, including data and tools, asset management. materials, environmental product declarations, structure types, procurement, planning, vehicle interaction, and construction. Pavement, Roadway, and Bridge Life Cycle Assessment Proceedings will be of interest to researchers, professionals, and policy-makers in academia, industry, and government who are interested in the sustainability of pavements, roadways, and bridges.