

FEDERAL ROADS OFFICE (FEDRO)

## RESEARCH PROJECT VSS 2011/705: LIFE CYCLE COSTING FOR MANAGING ROAD MAINTENANCE



Client Federal Roads Office (FEDRO)

Processing period 2012 - 2015

Project costs CHF 97'300

R+R has carried out a research study on behalf of the Swiss Association of Road and Traffic Professionals (VSS) on Life Cycle Costing in road maintenace. The report represents a general guide and manual for improved maintenance strategies, providing basic knowledge as well as specific instructions.

Life Cycle Costing (LCC), as a tool to minimise life cycle costs, is not restricted to mere analysis, but also includes a design task. An iterative process leads to the definition of optimal system boundaries (maintenance strategy, construction

variant, etc.) resulting in minimal costs over the entire life cycle of the road infrastructure. Function and benefits are predetermined.

The research study presents a process sequence that highlights the individual elements and steps belonging to a comprehensive LCC. Irrespective of the actual decision-making scenario, this process sequence is the same for all subsystems in accordance with SN 640 900. The specific method of evaluation, the period under observation and the risk analysis are to be determined on a situational basis.