



# **Kommunale Strassennetze in der Schweiz: Formen neuer Public Private Partnership (PPP) – Kooperationen für den Unterhalt**

**Réseaux routiers communaux en Suisse:  
Formes de nouveaux partenariats publics-privés (PPP) –  
coopérations pour l'entretien**

**Communal road networks in Switzerland:  
Forms of new public private partnership (PPP) –  
cooperation for the maintenance**

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## ABSTRACT

Due to budget restrictions, in a globalized environment, Swiss communes and cities find themselves forced to increase the efficiency regarding the quality of their communal road network, which can only be achieved through efficient cost-benefit structures. To enable communes and cities to secure and expand their locational advantage, new approaches to increase the efficiency of public authorities need to be examined, discussed and introduced if applicable. Proposed and assigned by the Federal Roads Office FEDRO, the present project report examines the approach of a Public Private Partnership (PPP) with the purpose to increase the efficiency of communal road maintenance. As an innovation within current PPP research, formerly mostly dealing with PPP procurement, communal road maintenance is now examined in the context of PPP service compliance.

The project report contains the results gained from the research project FEDRO 2003/007 "Communal road networks in Switzerland: Forms of new Public Private Partnership (PPP) Cooperations for the maintenance". It serves Swiss communes and cities as an action guideline and base for implementation of PPP for communal road maintenance in order to reduce complexity, avoid opportunistic behaviour between partners, and to establish a fair cooperation.

The principal task of the research project consisted in elaborating the fundamentals for Swiss cities and communes in order to assess the procedure of operational and structural road maintenance. The aim is to objectively assess the efficiency of different PPP modes of execution and to recognize their possible potential. The report contains a sequence of fundamentals as follows:

- Definition of relevant terminology concerning Public Private Partnership (PPP) and description of suitable PPP modes of execution
- Specific expenses (average and range) for individual fields of operational and structural maintenance with subject to the size of the communes (road network)
- Performance-based specification of services for the individual tasks of operational and structural road maintenance in communes
- Procedures for analysis of efficiency regarding operational and structural road maintenance by means of economic comparison
- PPP process model, containing all PPP execution processes of communal road maintenance (initiation, tendering, placing, partnering, and service compliance)
- Fundamentals for contractual agreements concerning the use of PPP modes of execution

Through application of the results, decision makers in public administrations can get a first overview about their own execution of road maintenance, directly compared to the averages of specific expenses regarding individual tasks and fields of activity. This enables an effortless detection of possible deficits and potentials of the operational and structural road maintenance. In the context of performance-based specification of services, there is a description of fundamentals on quality orientation in road maintenance, enabling communes to optimize their internal processes without PPP modes of execution.

Further the application of partnering, as shown in the report, offers a potential for increase of efficiency, not only within PPP but also for any contractual relations of the public administration.

A screening test and a two-step PPP economic comparison, developed within the research project, yields first qualified statements regarding the aptitude and cost effectiveness of PPP and provide an approach for individual communes towards the topic of PPP.

Due to lack of experience regarding PPP and communal road maintenance in Switzerland, the term Public Private Partnership (PPP) for road maintenance in Switzerland has been defined according to Swiss standards and by means of an extensive literature analysis. Suitable PPP modes of execution have been formulated and described in detail as well. The procedure PPP economic comparison provides the base to assess the use of PPP modes of execution by means of a scientific analysis of efficiency. The comprehensive description of the developed PPP process model enables communes to convert their communal road maintenance into one of the PPP modes of execution. The contained process models provide detailed information regarding the processes of tendering, placing, and service compliance. They also include the fundamentals regarding performance-based specification of services.

Concerning practical implementations, neither examinations nor deep analyses have been undertaken. The research work has been sourced by practical experience with operational and structural road maintenance, provided by the participation of nine Swiss cities and communes. It is now about time to apply the developed procedures and models onto PPP pilot projects for the purpose of practical verification and scientific support of the findings.

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