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**MASTER'S THESIS**

**International Requirements on Interurban Solutions  
- Analysis of Market Trends**

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## ABSTRACT

The development of modern technologies and the limitation of land resources have changed the transportation solutions all over the world: from continuously meeting traffic demand by expanding highway networks to reforming the existing networks by adopting advanced technologies. In this way, the transportation network capacity and the service quality can be guaranteed without taking up more land resources and emitting unnecessary tail-gases by waiting in congestion. Because of its effectiveness in solving transport problems, intelligent transport system (ITS) is becoming a widely discussed topic.

Interurban solutions are methods, mainly referred to products of modern technologies, which are deployed on the highway to assist traffic management and solve traffic problems. Technologies are improving so fast that the interurban solutions are developing in a dramatic speed. It is always crucial to stay updated and understand which interurban products will dominate the market in the near future. However, it remains a challenge to sort out the market trend of interurban solutions in different countries. A clear view of market trend in interurban solutions can help to foresee the further development of intelligent transportation systems.

This thesis studies current interurban solutions in China and the United States, followed by the demand and supply analysis in both countries. As the biggest exporter in the World, China has experienced a significant change in the last 20 years and transport is a crucial part in the economic development. Until 2020 China will complete its national highway with a total length of 35,900km. A series of interurban solutions will be accordingly implemented by then. The United States, on the other hand, enjoys relatively completed highway systems across the country. Nevertheless, transport experts in the United States keep improving interurban solutions so that they can be more beneficial in preventing accidents.

Based on market analysis of interurban solutions in two countries, a relative comparison of interurban solutions is made. It provides a better understanding of different focuses in ITS development between these two countries. Based on that, the market trends of interurban solutions can be generated.