



June 12, 2015

Thesis Evaluation Committee,  
Faculty of Transportation Sciences  
Czech Technical University  
Prague, Czech Republic

## Master Thesis Evaluation Mr. P. Jandík

Dear Committee,

After reading the Master thesis of **Mr. Petr Jandík**, I recommend that he should be awarded a letter grade **A (Excellent)** for the credit associated with the thesis. I have been working very closely with Petr in developing this thesis work. He spent the Winter 2015 semester here in Montréal to work on a project that I proposed to him. During this time he clearly showed independence, commitment, thoroughness, and creativity. We met regularly to discuss the progress of his thesis and in these meetings, our two way discussions were always challenging, stimulating, and of mature scientific level. He was never shy of understanding new concepts and coming up with genuine arguments.

This thesis has many strong elements to it. First of all it proposes an innovative way towards predicting the state of the traffic. Secondly, the thesis manages, analyses, and fuses various data sources to develop a microsimulation traffic flow model for a real case study in Montréal. Petr used various conventional (e.g. counts) and automated (GPS traces) datasets and mastered the technology to manipulate them. The discussion in the thesis on the analysis of the data is very mature and complete. Thirdly the thesis proposes a simulation based optimization approach to incorporate the GPS data for the micro-level calibration of the traffic flow simulation. The thesis shows strong understanding of the concepts.

It is unfortunate that the thesis is not able to produce complete optimization results. However due to the short duration of the project, it is understandable. Given the innovative nature of the project, I suggest that the student keep on working on the aspects that are still needed to be completed. He should also bring in some scenario analysis (e.g. adaptive signal control). Petr should then try to publish the more complete work in an International journal of transportation research. This will be very helpful for him in his future professional endeavours.

I wish Petr all the best. If you have any questions, please feel free to contact me.

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