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Investigation of traffic noise from additional tolling lanes at
Portage toll plaza

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Electronic toll collecting systems quickly and efficiently move traffic through toll facilities by automatically collecting tolls from individual vehicle transponders. An ongoing study investigates the addition of three electronic toll lanes to the existing twelve lanes at the Portage toll plaza on the Indiana Toll Road (Portage, Indiana, USA), scheduled to be completed by December 2008. The study aims to predict noise levels of the plaza after the addition of the lanes, the hypothesis being that the additional lanes will have little or no effect on the toll plaza noise levels. Noise measurements are being made at locations in the vicinity of the existing plaza with consideration for a nearby residential area. An outdoor noise propagation software (SoundPlan) is used to create a comprehensive traffic noise model for the area under investigation. Test data from the existing site will be compared to the model and used to predict future noise levels.