



Award of Merit Variable Speed Limit System



Consultants

PBX Engineering Ltd. and IBI Group

Owner/Client

BC Ministry of Transportation and Infrastructure

Category

Soft Engineering

The Variable Speed Limit System (VSLS) informs drivers of safe speed limits along three corridors particularly affected by changing and adverse weather conditions. These include: the Sea-to-Sky Highway (30 kilometres), the Coquihalla Highway (40 kilometres), and the Trans-Canada Highway West of Revelstoke (30 kilometres). By analyzing inclement weather, road state, and traffic conditions, the VSLS updates electronic speed limit signs in real-time, distributed along these highways. PBX Engineering and IBI Group designed and deployed all aspects of the VSLS.

There are disparate systems throughout the VSLS, located in remote locations throughout the province. Innovative software design approaches incorporated redundancies and robust strategies to ensure the live system maintains a high level of operational effectiveness. The Advanced Transportation Management System at the Ministry's Regional Transportation Management Centre monitors and controls 53 VSLS sites along the corridors. Computational load is distributed among all VSLS locations and subsystems to provide autonomous operation through drops in communications. As the VSLS is a regulatory system, custom software and design strategies verify that speed limits are displayed correctly.

The VSLS, a first of its kind in BC, has been live since May 2016, operating 24/7 with promising results.

For more information, please contact:

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