Evergreen LINE
Fast, Frequent, Convenient

INFORMATION SHEET

What is the Evergreen Line Project?

The Evergreen Line is a new rapid transit line that will connect Coquitlam to Vancouver via Port Moody and Burnaby. The Evergreen Line will be a fast, frequent and convenient SkyTrain service, connecting Coquitlam City Centre through Port Moody to Lougheed Town Centre in approximately 13 minutes. It will connect without transfer to the current SkyTrain network at Lougheed Station and will integrate with regional bus and West Coast Express networks.

With project design now well underway and the location of six stations established, construction of the Evergreen Line is anticipated to begin in late 2010, once environmental approvals are in place.

Potential Noise & Vibration Impacts

Environmental Assessment Studies

The Ministry of Transportation and Infrastructure is committed to a thorough Environmental Assessment (EA), and has engaged leading experts to conduct a number of environmental and socio-economic studies that consider potential construction and operations related environmental effects. For each assessment study, the Environmental Assessment Certificate (EAC) Application will describe scope and methodology, project-related impacts and benefits, and recommended mitigation measures.

An assessment of potential noise and vibration associated with the Evergreen Line is one of the studies being conducted as part of the EA process. The public will have the opportunity to provide feedback on the study results and proposed mitigation measures during the Public Comment Period on the Evergreen Line EA Certificate Application scheduled for early 2010.

Noise & Vibration | Construction

Temporary noise and vibration may be caused by the construction of the Evergreen Line. The noise and vibration levels during construction would be similar to those produced by road, bridge and large building projects. Noise and vibration predictions are being done for the variety of construction methods that will be used to build the tunnel, ground-level and elevated guideways, and the stations, so that appropriate mitigation measures can be planned.

Noise & Vibration | Operation

During operation, SkyTrain noise and vibration is largely generated by contact between the train's wheels and the guideway rails. To assess the potential increase in noise and vibration, the "baseline" or existing environment along the Evergreen Line route will be compared against the predicted operation environment. Existing noise levels have been measured at 21 locations along the alignment. In addition, the project has also identified several locations to measure existing vibration levels. To predict the operation environment, the project will use recent measurements of noise and vibration from other SkyTrain lines, as well as a computer noise model of the Evergreen Line corridor. The potential impact to each of the sample locations will be assessed.

Noise generated at stations, such as that from public address systems, will also be assessed and will be considered in the design of stations during the detailed design phase of the project.

Mitigation | Vibration

Experience with the Expo and Millennium SkyTrain lines has shown that vibration levels from SkyTrains are minimal, and it is expected that existing vehicle and heavy rail traffic along the corridor will have more significant vibration impacts than the Evergreen Line. Where necessary, however, the Evergreen Line will incorporate elements that minimize vibration, like continuously welded rail and resilient rail fasteners, which firmly hold rails in place to dampen vibration. Vibration impacts can also be reduced through rail and vehicle maintenance (e.g. rail/wheel grinding to smooth out imperfections that may cause vibrations).

Mitigation | Noise

Noise impacts can be typically reduced through rail and vehicle maintenance (e.g. rail/wheel grinding to smooth out imperfections that may cause vibrations and/or noise) or by engineered systems such as guideway noise barriers. Guideway noise barriers are sections of low profile, noise-absorbing panels attached to the guideway to lessen noise emanating from the wheels, rails and electric motors. Where necessary, the Evergreen Line will implement such strategies to mitigate noise impacts.

Once the Evergreen Line is operating, noise and vibration levels will be monitored, as is currently done with other SkyTrain lines, to confirm the accuracy of predictions and determine whether any additional mitigation is required.

Resilient rail fasteners

Guideway noise barrier mounted on an elevated guideway

FOR MORE INFORMATION

If you want to learn more about the Evergreen Line, provide input, or have your name added to the Evergreen Line Project information update list, please visit the Project Office (2900 Barnet Highway, Coquitlam) or contact us:

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