

Noise and construction work on the Réseau express métropolitain

The Réseau express métropolitain (REM) is the largest public transit project launched in Québec in the last 50 years. The construction work, which will be spread out along a 67-km route, will enable an electric light rail system to be installed in a dedicated corridor and 26 stations to be built.

Our objective during the work
avoiding or mitigating impacts on local residents as much as possible by implementing appropriate measures

Noise during construction

During the construction phase, NouvLR limited partnership (NouvLR), the consortium responsible for the work, will have to comply with noise management requirements. These requirements include those set by government authorities and others specified in the contract with NouvLR for the construction of the REM.

Fixed site work (construction of stations and related infrastructure)

Day (7 a.m. to 7 p.m.) <i>Average over a 12-hour period</i>	Evening (7 p.m. to 10 p.m.) <i>Average over a 1-hour time slot</i>	Night (10 p.m. to 7 a.m.) <i>Average over a 1-hour time slot</i>
55 dBA <u>or</u> ambient noise prior to work	55 dBA <u>or</u> ambient noise prior to work	45 dBA <u>or</u> ambient noise prior to work

Linear work (construction of railway lines and roads)

Noise criteria (in dBA)						
Zone and land use	Day (7 a.m. to 7 p.m.)		Evening (7 p.m. to 11 p.m.)		Night (11 p.m. to 7 a.m.)	
	Criterion (L ₁₀ ¹)	Maximum peak (LAFmax)	Criterion (L ₁₀)	Maximum peak (LAFmax)	Criterion (L ₁₀)	Maximum peak (LAFmax)
Noise-sensitive zones	75 <u>or</u> ambient noise + 5	85 <u>or</u> 90 for impact noise	Ambient noise +5	85	Ambient noise +5 (if ambient noise <70) <u>or</u> Ambient noise +3 (if ambient noise >70)	80
Commercial zones	80 <u>or</u> ambient noise + 5	None	Ambient noise +5	None	None	None
Industrial zones	85 <u>or</u> ambient noise +5	None	None	None	None	None

Ambient noise (i.e. noise present before the project) was measured through a field campaign conducted in the spring and summer of 2018. This campaign targeted several dozen locations along the route, identified as more sensitive environments.

The expected noise during construction will be carried out prior to the start of work in each area where sensitive receptors are present and the results will be compared to the limits to be respected. If necessary, mitigation measures will be identified and put in place to mitigate the impact of the work. These measures are detailed below.

¹ L₁₀: noise level reached or exceeded 10% of the time during the measurement interval. The measuring time is 30 minutes.

Planned mitigation measures

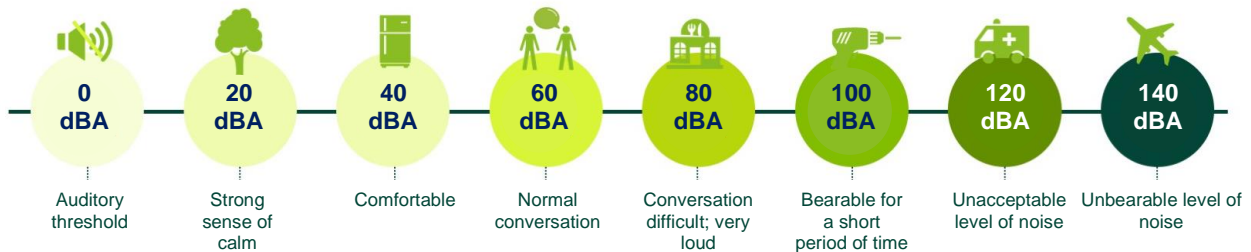
The REM project office, together with NouvLR, aims to minimize noise during the work by implementing a series of mitigation measures according to the sectors and nature of the work, most specifically:

- Using silencers on equipment
- Using temporary acoustic barriers
- Adapted backup alarms on trucks
- Work schedule planned according to the constraints of the work to carry out and adding sensitive receptors
- Continuously raising workers' awareness
- Noise monitoring and follow-up program, including a team of dedicated supervisors
- A rigorous complaint management procedure

Nearby residents will also be proactively and regularly informed, through a number of different channels, of upcoming work before it takes place.

Some basics about noise

Sound intensity is measured in decibels (dB). This is a logarithmic scale. For example, an increase of 3 dB is only slightly perceptible to the human ear, while an increase of 10 dB is perceived as twice the initial noise level. Environmental noise is generally expressed in "A-weighted" decibels (or dBA), which incorporate the range of frequencies picked up by the human ear. The scale below shows some examples of noise levels.



Airplane taking off less than 50 m away

To contact us and stay up-to-date on the work

- For complete information on upcoming work, visit rem.info/en
- **1 833 rem-info (736-4636)**
- Info@rem.info