Noise Mitigation

The Ministry of Transportation (MTO) follows an Environmental Guide for Noise to assess noise impacts from its highway projects, which was developed in partnership with the Ministry of the Environment and Climate Change (MOECC).

MOECC approved noise modelling is used to assess possible impacts to Noise Sensitive Areas (NSAs). For any NSAs, including residential areas, which may experience a significant increase (greater than 5 decibels) in the level of noise due to a highway project, the Environmental Guide for Noise requires MTO to:

- Investigate possible noise control measures on the right-of-way
- Mitigate existing ambient noise levels as administratively, economically and technically feasible
- Achieve a minimum reduction of 5 decibels averaged over residences receiving the highest impacts – note that a change in noise level less than 3 decibels cannot be perceived.

The noise impact assessment conducted as part of the Detroit River International Crossing (DRIC) Study involved comparing the projected future noise levels if the proposed Rt. Hon. Herb Gray Parkway was built, versus leaving the pre-existing roadway in place (Highway 3-Talbot Road-Huron Church Road).

In conducting the noise assessment, representative noise receptors (or residences) were identified throughout the corridor. Traffic volumes were established using data collected in 2006. Traffic was estimated for the future years of 2015, 2025, and 2035 for the future Rt. Hon. Herb Gray Parkway and the pre-existing roadway (Highway 3-Talbot Road-Huron Church Road). Other data that was used to model future noise levels for the future Rt. Hon. Herb Gray Parkway and the pre-existing roadway (Highway 3-Talbot Road-Huron Church Road) included distance between the receptors and noise source (roadways), percentage of automobiles, percentage of heavy and medium trucks, speed limit, road elevation and topography.

Based on the noise assessment, it was determined that without noise mitigation measures (including walls, berms, and wall/berm combinations), significant noise level increases (greater than 5 decibels) would be experienced in areas adjacent to the future Rt. Hon. Herb Gray Parkway compared to the pre-existing roadway (Highway 3-Talbot Road-Huron Church Road) sound levels. In order to mitigate these noise level increases, the DRIC Study included extensive commitments to noise mitigation throughout the Rt. Hon. Herb Gray Parkway corridor.

Consultation was completed throughout the design phase, to share information on the proposed noise mitigation measures expected to be installed. Noise walls, berms and noise wall/berm combinations were installed in areas where mitigation was outlined as necessary and feasible to build.

Overall, residential areas along the Rt. Hon. Herb Gray Parkway will be protected from noise level impacts through a combination of international traffic (specifically commercial vehicles) using the below-grade freeway unimpeded by traffic signals, the 11 tunnels, a reduction in the amount of traffic on Highway 3, and using effectively designed noise barriers.

Quick Comparison – Before vs. After

Highway 3-Talbot Road-Huron Church Road	Rt. Hon. Herb Gray Parkway and Gordie Howe International Bridge
• All International Traffic at Grade	• Extensive portion of corridor with International traffic below grade and with 11 Tunnels
• International Traffic on freeway with signals	• International Traffic on freeway without signals
• Continued traffic growth on Highway 3	• Reduced traffic on Highway 3
• Limited existing noise mitigation measures	• Extensive noise mitigation measures

Key Points:

- Noise mitigation is mainly effective within a limited distance from the wall where noise impacts are greatest. As you move further away from the Rt. Hon. Herb Gray Parkway, ambient sounds levels diminish and may be influenced more by other noise sources.

- In comparison with the noise conditions associated with the pre-existing roadway (Highway 3-Talbot Road-Huron Church) if left in place, the Rt. Hon. Herb Gray Parkway will provide substantial noise reduction benefits for adjacent communities.

- The DRIC Study conducted for the Rt. Hon. Herb Gray Parkway committed to providing the highest level of noise mitigation possible for the adjacent communities. In addition to the noise reduction associated with the Rt. Hon. Herb Gray Parkway being below adjacent ground level, the MTO committed to the placement of walls and berms wherever they would provide further noise reduction benefits. In some cases existing noise walls and fences were replaced with new state of the art walls to ensure that the highest possible level of noise reduction was achieved.

- Many of the noise reduction benefits are now being experienced as a result of re-routing of traffic to the new below grade Rt. Hon. Herb Gray Parkway and completion of many of the walls and berms. The noise reductions will continue to increase as more traffic (specifically commercial vehicles), shift to the Rt. Hon. Herb Gray Parkway.

- Once the Gordie Howe International Bridge is fully constructed, the full noise reduction benefits will be experienced by all affected communities.

- The Ministry of Transportation is committed to providing the highest standard of noise protection possible and will continue to investigate and address any noise complaints associated with the Rt. Hon. Herb Gray Parkway.

Please visit www.hgparkway.ca to learn more about the Rt. Hon. Herb Gray Parkway. Updates are posted on Twitter (www.twitter.com/hgparkway) and Facebook (www.facebook.com/hgparkway) and photos and videos are posted on Flickr (www.flickr.com/hgparkway) and YouTube (www.youtube.com/hgparkway).