The Turcot and Cote-St-Paul: Alternatives for Visual Improvement

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Research Aims:

Since the late 1960’s, the Turcot Interchange has imposed itself on the visual landscape of Montreal. In the area of Cote-St-Paul, the Jean Lesage autoroute cuts a path across a working-class residential district, a feature of the daily lives of some 6,500 residents. With the Turcot nearing the end of its useful life, several proposals have been put forth for its redevelopment. While these proposals have taken into account sustainability, economic development, and the mobility of Montrealers at large, the visual impacts of an urban highway have been largely ignored.

We proposed to explore the question of whether three different scenarios for the autoroute – the existing structure, a lowered highway on grass-covered embankments, and a buried highway – were significantly different in terms of visual quality. Our goal was not only to assess whether the highway was more or less visible in each of the different scenarios, but also whether the visibility of the structure mattered to residents, and if so, how much. Other questions we wanted to answer included:

- Are residents of Cote-St-Paul more sensitive to the visual impacts of the autoroute?
- Is visual quality directly related to proximity to and/or height of the highway, or are there other confounding factors?
- What landscape features can be used to mitigate against potential negative visual impacts?

Key results to date:

Our online survey generated 92 valid responses. Virtual models of the three scenarios were developed for use in the survey. Below are computer generated images of one intersection in Cote-St-Paul in each of the three models. Five such series were presented.

Our initial results show an interesting trend. The intersections with the lowest existing visual quality show significant improvements as the structure is first lowered, then buried. The intersections with higher existing visual quality, however, show little change across the different models.

This could be caused by several different phenomena, the two most likely being either that at the intersections with higher existing visual quality the highway is least visible and as a result changes to the model had little impact, or there is a hard limit to the visual quality of an urban landscape with a highway present, whether the highway is on raised stilts, on lowered embankments, or buried. More in-depth analysis of the survey results will hopefully provide an answer to this question and to the others mentioned above.

1Data from Statistics Canada 2001 Census of Canada 2003