

Park/Pine Interchange

For Access to the Mountain

At the request of McGill University and the City of Montreal, five students from McGill University's School of Urban Planning developed a new design for the intersection of Pine at Park Avenue. The students wanted a plan that would allow efficient transportation but also would improve the livability of the area and respect the beauty of the mountain.

Context

The interchange borders several important areas including Mount Royal Park, a place to discover nature and enjoy panoramic views of the city; the residential community of Milton Park and the campus of McGill University. The interchange was designed in the 1960s to provide an efficient movement of traffic.

However, today it stands more as an obtrusive interconnection of overpasses, underpasses and on/off-ramps that disregard the needs of pedestrians and cyclists.

Problems

Within the next 10 to 15 years, the interchange will require major structural repairs. Although it is possible to repair the existing structure, doing so will not resolve many of the problems that presently concern the surrounding communities.

The design of the interchange is confusing. Drivers have difficulty finding the entrances to various streets. There are no signs for pedestrians or cyclists so crossing the roadway can be difficult for those on foot or on bicycle. People living near the interchange (including patients and

staff at the Royal Victoria and Hôtel-Dieu) also suffer from the effects of traffic on the interchange. They must deal with air and noise pollution as well as the vibrations caused by cars and trucks. Finally, the design interferes with the interplay between the mountain and the city.

Solution

Because change to the interchange would affect traffic patterns throughout the downtown area, the study was not limited to the area immediately surrounding the Park/Pine Interchange. The student consulting team developed several plans. They then evaluated the proposals by looking at problems of traffic efficiency, environmental hazards, pedestrian and cyclist safety and financial costs. The team tested

various proposals with a transportation planning software. The program allowed them to see the consequences of various changes made to the interchange.

The recommended design is basically a street-level, four-way intersection. Only the heaviest traffic flow from Pine Avenue West to Park Avenue North is tunneled under. The plan has several strong points including: improved security and accessibility by the addition of traffic lights, sidewalks and wider medians; strengthened physical and visual links with the mountain and elimination of Jeanne-Mance and Hutchison Streets as through

ways to access Sherbrooke and Pine. The proposed plan includes bike paths throughout the area (as well as adequate places to store and/or lock bicycles) in order to discourage use of the car.

(The consulting team included Rudayna Abdo, Maya Chaaban, Derek Hansen, David Johnson and Suiping Wang.)