Executive Summary

Overview

A pedestrian friendly environment has been called the key factor for successful transit-oriented development (TOD) (Calthorpe, 1993). Despite the recognized importance of walkability, researchers have lamented that much of the academic work on TOD has focused on the process of financing such projects rather than addressing the inherent pedestrian design difficulties (Forsyth and Jacobson 2008; Schlossberg and Brown, 2004).

The objective of this report is to assess the physical qualities of the built environment related to walkability in four Metro Vancouver communities: Metrotown, New Westminster, Richmond Centre and Surrey City Centre. All four selected sites are connected to the region's rapid rail transit network (SkyTrain) and have been designated as *Regional City Centres* in Metro Vancouver's *Regional Growth Strategy*.

Methodology

Using both geographic information systems (GIS) and a pedestrian audit, the research attempts to determine to what extent the physical factors, thought to enhance the pedestrian environment, either exist or are lacking in these neighbourhoods. Combining both GIS and an observational audit allows these sites to be assessed at two different scales: a *neighbourhood scale* where pedestrian connectivity is of primary importance, and a *street scale* where micro-attributes will be assessed. After evaluating and comparing the results for each neighbourhood, the report offers recommendations on how to improve the pedestrian quality of these sites through design.

Conclusions and Recommendations

Analysis revealed similar strengths and weaknesses among the four neighbourhoods. Because similar weaknesses exist among the study areas, some recommendations apply for multiple sites. A list of the applicable neighbourhoods is provided for each respective recommendation.

Recommendation #1
Enhance pedestrian connectivity and route choice by creating additional streets within a 400-metre radius of the SkyTrain station.
Neighbourhoods: Surrey, Richmond and Metrotown

Recommendation #2
Add street furniture to transit adjacent and prominent retail streets.
Neighbourhoods: Surrey, New Westminster and Metrotown

Recommendation #3
Add street maps on transit adjacent and prominent retail streets showing the user's location and both the direction and distance to places of interest.
Neighbourhoods: Surrey, New Westminster and Metrotown

Recommendation #4
Ensure new buildings on new and existing streets are oriented towards the street and create policies to encourage attractive "active" facades.
Neighbourhoods: Surrey and Metrotown

Recommendation #5
Balance space for all street users on major thoroughfares by widening sidewalks and exploring opportunities for separated bike lanes.
Neighbourhoods: Surrey

Recommendation #6
Implement pedestrian signals that "invite" the pedestrian to cross the street and do not require him to "apply" to do so.
Neighbourhoods: Metrotown, New Westminster, Richmond and Surrey

The specifications of these recommendations will be different in each case due to the different roles of these neighbourhoods and their streets. While the studied streets are all within a 400-metre radius of the transit station and therefore assumed to be important to the neighbourhoods' walkability, it is recognized that each plays a different role in both local and regional transportation. Implementation of these recommendations will therefore require further studies involving public consultation to better understand how these design interventions may affect the transportation network.