

DOWNTOWN DARTMOUTH PLAN UPDATE

SHADOW ANALYSIS

Sun penetration and shadow casting play a critical role in determining people’s sense of comfort in an urban environment. In Halifax’s cool and often breezy climate, sun conditions have significant effect on pedestrian comfort, viability of sidewalk cafes, and overall brightness and attractiveness of streetscapes.

Because of the relatively narrow street right-of-ways in Downtown Dartmouth, the height and massing of buildings play an important role in the maintenance of street level comfort. It is critical that these effects be thoroughly understood and carefully considered when decisions are made about future development.



The purpose of this shadow analysis was to asses shadow casting of the proposed three built form scenarios upon:

- Public street right-of-ways;
- Park areas and public open space; and
- Private properties in Downtown Neighbourhood (DN) Zone.

The analysis of the shadow diagrams identifies the typical shadows, which are cast in:

- Spring/Fall Equinox (March 21);
- Summer Solstice (June 21); and
- Winter Solstice (December 21) periods.

These solar solstice periods over the course of the year represent the highest, the mid and lowest points of the sun in the sky.