Abstract

Ahmed O. Idris

Investigating the Transportation Impacts of Interior Health Authority’s Building Relocation: Survey Design, Data Collection, and Preliminary Analysis.

Interior Health Authority (IHA) will be co-locating ten programs to a new office location in downtown Kelowna, BC by October 2016. As a result, approximately 900+ staff members will be commuting to the downtown core every day. This number of attracted daily trips will increase traffic congestion and parking pressure at peak periods at the new site, which is already suffering from parking constraints. Moreover, the projected number of parking stalls available for employees is not sufficient to meet the anticipated parking demand. The economic, social, and environmental impacts associated with increasing parking capacity makes finding alternative strategies more desirable. This research adopts a threefold approach to study the travel patterns and mode choices of IHA employees before designing a Transportation Demand Management (TDM) plan to alleviate traffic congestion, parking pressure, and Greenhouse Gas (GHG) emissions at the new office location. First, a revealed/stated preference survey was designed and conducted to collect information on the travel behaviour of IHA staff. Second, analytical tools were developed to identify the determinants of mode choice of IHA staff. Third, an implementation strategy was recommended to maximize transportation mode shift and reduce the number of parking stalls required. Implementation strategies included: carpooling programs, incentivizing the use transit non-motorized modes, and educating IHA employees on the carbon footprint associated with their choices.