

D9 - Urban Motion: Land Utility and Transportation Planning in Urban Centers, Case Studies from Montreal and Victoria

Presentation # 1 title: Transportation Planning: translating between Urban Planners and Transportation Modellers - a case study of the Downtown Victoria Plan.

Presenter:

Charlotte Bathurst - Opus International Consultants

Abstract

As the City of Victoria continues to grow, there is a need to review and update the 1990 Downtown Victoria Plan. This process is well underway. As part of this updating process, the City developed four future (25-year) land use scenarios with varying amounts of future downtown development density. Scenario 3, featuring a relatively high concentration of new downtown residential developments, emerged as the favoured land use scenario through community consultation on the options, undertaken in November / December 2007. The City was interested in evaluating the transportation implications of Scenario 3: "Cross-Town". The Cross-Town option would create a spine of primary density and height focused on the Douglas Street rapid transit corridor, with a secondary density spine along Yates Street. As well, the City wanted to determine the feasibility and effectiveness that Transportation Demand Management (TDM) measures would have on this Scenario. The objectives of this study were therefore to: · review and quantify the transportation implications of Scenario 3; and · determine suitable transportation demand management strategies consistent with Scenario 3 and the principles and goals of the Downtown Plan. To determine the traffic characteristics for Scenario 3, the projected land use characteristics provided by the City were converted into zonal population and employment data based on conversions and assumptions which were agreed upon with City staff. These were then translated for use in the emme/2 model which was developed, maintained, calibrated and by the Capital Regional District (CRD) was used for the analysis, and passed on to the Transportation Modeller. The emme/2 model estimates future traffic volumes based on future population and employment characteristics and the road network characteristics. The traffic generated by the land use within zones and the relative attraction generated by the zones are used to develop an origin/destination matrix. Based on the road network characteristics and the expected travel time, traffic volumes can be forecast, generated and estimated. Based on the results of the emme/2 model's do-nothing scenario various TDM measures were considered for application in Victoria using the principles that: · the measures should be well-suited to meet the target population/trips; · there are a wide variety of alternative measures; and, · the various measures should be promoted and supported by the City. The TDM measures considered were: Pricing-based: · Increase Parking Prices · Reduce Transit Prices Non-Pricing based: · Reduce Parking Supply · Low Maximum Parking Rates for Residential / Workplace · BRT · Traffic Calming / Pedestrianisation · Road Capacity Reduction · Pedestrian and Bicycle Networks The TDM package was translated into emme/2 input by reducing the trip generation primarily to and from the emme/2 downtown zones. The "Scenario 3 with TDM 2026" forecast traffic was then compared to the 2026 Base conditions and the 2026 Scenario 3 conditions and presented to the Planners at the City of Victoria who have brought a holistic approach to the downtown Victoria plan.

Speaker Biography

Charlotte Bathurst is a Transportation Planner with Opus International Consultants. Having spent her co-op placement at Heathrow Airport working on their award winning TDM programme, and awarded her Masters from the Institute of Transport Studies in the UK, Charlotte has been working in transportation planning for over 5 years in both Canada and the UK. Charlotte first showed an interest in transportation at the age of 3-years, and is still passionate about transportation and the role it plays in planning and shaping our communities

Presentation # 2 title: Parking management and real estate

Presenter:

Paul Lewis - Université De Montréal

Abstract

With increased car dependency, cities are pressed to shift their policies from limiting congestion on the road system to a reduction of the number of cars, and a correspondent modal shift from car to transit and to active transportation. The reduction of car use can adopt two strategies, insisting either on cars in motion (road capacity), or cars at rest (parking management). For many years, parking management was not considered as important; parking was added, to accommodate the increase in the number of cars in cities. Instead of controlling cars at rest, public policy was mainly concerned with cars in motion, trying to adjust road capacity to satisfy the increase in demand. But policies have started to shift, and many cities are now trying to restrict the number of cars. Parking management (availability or price) is increasingly being proposed as a mean to control car usage, while maintaining accessibility for all. Parking management can be powerful, as cars have to be parked, most of the time. It can even be more efficient than a restriction of road capacity to insure a modal shift. A reduction in parking capacity can have a major impact on the development of cities. An increase in parking rates can also have a major impact, by modifying attractiveness. In that sense, the impacts of parking controls have to be carefully evaluated, especially that these are not uniform. The presentation will focus on Montreal, Quebec. Montréal has adopted a new transportation plan, which makes a priority of transit and active transportation. The city has therefore proposed to invest in transit development, and to impose restriction on cars. A regional toll has been proposed, as well as restriction on parking. The Montreal's strategy will be presented, and the impacts, discussed, especially the impact on the real estate market of the parking proposals.

Speaker Biography

Paul Lewis is professor with the Urban Planning Institute of University of Montréal since August 1993. He is Director for the Observatoire SITQ du développement urbain et immobilier. He worked as a planner for the cities of Hull (1977-1979) and Gatineau (1979-1980). He also worked for the Québec's Department of Municipal Affairs (1981-1985) and the Québec Council of Universities, as a researcher. Paul Lewis holds a Ph.D. in Environmental Planning (Montréal). He also holds a Masters in Planning (Ottawa). Paul Lewis has written many papers on urban development, transportation and retailing. In the last years, he has written with colleagues three research papers, on the impact of telework on mobility (for Montréal and Québec), on the possibility of improving mobility with land use planning in Montréal, and on the potential for transit and TDM in the Montréal region. These last two reports were written for the Commission responsible for the study of the improvement of mobility between Montréal's Island and the South Shore. More recently he worked on the potential for active transportation for elementary school children.