Bike and Ride: An Examination of the Integration of Cycling and Transit in Four Canadian Cities Anne Aurelia Fritzel

Executive Summary

The auto-dominated (transportation) system simultaneously affords the adult driving majority with unprecedented mobility of those with ready access to cars. In contemporary urban regions most destination are virtually unreachable, even by able-bodied adults, without a car. For those unable to walk substantial distances to and from transit stops, effective mobility is particularly limited. Alan Altshuler, *Equity in Transportation*, U.S. Department of Transportation, 1980.

In Canadian cities, a new vision of urban transportation is emerging which emphasizes transit, cycling and walking as modes of transportation while relegating the automobile to play a more balanced role. The implementation of the plans and policies containing this vision is expected to take some time as land-use patterns change, new automobile pricing structures are implemented, and attitudes change. One way to examine the emergence of new urban transportation trends is to examine the implementation of some of the initiatives. While walking, cycling, and transit are not expected to be dominant modes of transportation in their own right, the integration of cycling and transit has the potential to serve low-density, suburban areas with alternative transportation.

There are two ways to integrate cycling and transit, permitting and facilitating bicycles to be carried on public transit vehicles, and providing secure bicycle storage at transit stops. Only the latter, called "bike-and-ride", has been studied in detail. There are precedents for integrating bicycles and transit in Europe and Japan where substantial proportions of commuters use bike-and-ride in a transportation system which is economically,

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environmentally and socially beneficial from the perspective of the commuter and the transit agency.

In this report, four Canadian cities which have made plans towards and urban transportation system which balances the role of the automobile with other modes of transportation were compared for their bicycle and transit policies, and their implementation of integrated cycling and transit strategies. All four cities, Toronto, Ottawa, Calgary and Vancouver have studied bike-and-ride, or have initiated pilot projects. The results are summarized in the following table.

	Toronto	Ottawa	Calgary	Vancouver
Provincial Policies to support bike- and-ride	Land Use Planning Guidelines (1995) and Sustainable Transportation Strategy (1995)	Land Use Planning Guidelines (1995) and Sustainable Transportation Strategy (1995)	Not supportive	Growth Strategies Act (1995) Going Places Transportation Plan (1994)
Regional Policies	Not supportive	Draft Official Plan (1996)	Transit Friendly Design Guide (1995) Sustainable Suburbs Study (1995)	Livable Region Strategic Plan, Transport 2021.
Local policies to encourage bike-and-ride	Toronto Bicycl e Plan 2021 (1996)	City of Ottawa Comprehensive Cycling Plan (1994)	Calgary Transportation Plan (1995) Calgary Cycle Plan (1996)	Greater Vancouver Bicycle Policy Recommendations (1993)
Bike Storage at transit stations	Bicycle racks at all stations, no weather protection	Bicycle racks at some stations, will expand to all. Weather protection at a few stations	Bicycle locker pilot project and bicycle racks at all other stations, locker expansion planned	Bicycle locker pilot project and bicycle racks at all other stations, major locker expansion planned
Integration with local bike-ways	Some integration at points where intersecting with bike ways.	Where intersecting with transit and in new construction.	Planned with LRT project planning local bike routes on station maps.	Some integration where intersecting with bike ways.
Funding Mechanism	Project dependent	Project dependent	Funding for bicycle facilities incorporated into existing budgets for station facilities	Project dependent, Assistance from provincial cycling network program.
Marketing/ Promotion	Bike-and- ride promotional cards (1992).	Large promotion program when new facilities (1993), nothing focused since.	Transit-Bicycle mar s with parking shown, fliers promoting transit and cycling	Transit-bicycle parking shown on regional bike maps, promotion initially and since start

Comparison of Bicycle and Transit Programs in Four Canadian Cities.

The major lessons learned from the study are policy and implementation factors which affect decision making processes in implementing bike-and-ride, and in physical factors which affect bike-and-ride usage rates. Ottawa and Toronto, though existing policies support and encourage the idea of bike-and-ride, have few facilities to provide high security bicycle parking, and consequently are subject to low levels of bike-and-ride behavior. Skepticism at the decision-making level, and restricted budgets due to tight provincial funds and falling transit ridership levels may be factors in this slow implementation.

On the other hand, Calgary and Vancouver, with ridership increas s, are well on their way to successful bike and ride programs. Though at this point, a limited number of highsecurity bicycle lockers are supplied at transit stations, they are well used. Higher levels of year-round bicycle use in Vancouver may contribute to the success, while in Calgary, though expectations are low for a modal shift to bike-and-ride, providing for cyclists at transit stations has become institutionalized into planning and budgeting decisions. Vancouver, which currently has 60 lockers in 4 transit transfer points in the city can provide some information into user preferences.

Finally, the lessons learned from these four cities have been applied to the city of Victoria on Vancouver Island, a city with a very high cycling potential due to year-round mild climate, and high potential for bike-and-ride with a light rapid transit system proposed for the year 2010. The summary or recommendations for the area is as follows.

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Summary of Recommendations for Bike-and-ride in Victoria

Short Term Recommendations For Local Governments For BC Transit . Continue to expand bicycle infrastructure, education and Introduce bicycle racks on buses to serve cyclists other programs which support cycling . Do not expand the current locker program, however, pilot projects involving suburban employers may be worth exploring. Long Term Recommendations (with LRT) For Local Governments For BC Transit Implement future programs which support walking, • Plan to integrate bikeways into station designs. cycling, and public transit over provision for the private Supply high security bicycle parking at all LRT stations automobile. Include bicycle racks at LRT station in locations which can be visually supervised. Reserve space for guarded bicycle parking, particularly at downtown terminals and major access points

Although the combination of cycling and transit cannot be expected to solve urban traffic

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problems, it is a low cost way to make existing transit systems more efficient, reduce

automobile emissions, and provide a wider range of mobility choices to Canadians.