University Boulevard Bike Lane Performance Report

Gordon Lovegrove, P.Eng. M.Eng., MBA Director, Transportation Planning

UBC TREK Program Centre

July 2001

This is a performance report of the University Boulevard bike lane improvement project at the University of British Columbia. There had been a call for improved cycling facilities on this major route to campus since 1971. With sufficient funding from Cycling Network Program (CNP) of BC Transportation Financing Authority (BCTFA), as well as Translink, ICBC, UBC Alma Mater Society (AMS) and UBC TREK Program Center, the four narrow traffic lanes on University Boulevard from Blanca Street to Wesbrook Mall was converted into two lanes for vehicles and two lanes for bikes by August 31st, 1999. Since the completion of project, bike trips increase from 531 in 1999 to 799 in 2000 during rush hours.

Background

University Boulevard, between Blanca Street and Wesbrook Mall, is a major arterial route for motorists, cyclists, and pedestrians. It was a four-lane road with extremely narrow lanes. Cyclists were forced to use a parallel off-street pathway on the south side of the road. Frequent accidents due to humpy paving, narrow width, poor lighting, as well as conflict with pedestrians, opposite cyclist traffic, and trees, had been reported.

Three options had been studied: off-street pathway, wide curb lane, and bike lane. The Bike lane option was recommended and upon public consultation and negotiation with various stakeholders, it was recommended to the Ministry of Transportation and Highway that the two vehicular traffic lanes be converted to one lane vehicular traffic lane and one bike lane. The project started on July 20, 1999 and was substantially completed on August 31, 1999, and the deficiencies were corrected by November 16, 1999.

Ridership

Table 1: 2-way Bicycle Trips Along University Boulevard (1998-2000)

Year	Rush Hours	Annual Growth	Daytime Hours	Annual Growth
	Ridership		Ridership	
Oct 1998	518	-	755	-
Oct 1999	531	2.5%	767	1.6%
Sept 2000	799	50.5%	1024	33.5%

Table 1 shows the number of bicycle trips along University Boulevard on year 1998, 1999 and 2000. Rush hours are defined as 7:00am - 9:00am and 3:00pm - 6:00pm. Daytime hours are defined as 7:00am - 10:00am, 11:30am - 1:30pm, and 3:00pm - 6:00pm. Rush hour ridership has increased from 531 in October 1999 to 799 in September 2000. Daytime hour ridership has increased from 767 in October 1999 to 1024 in September 2000. It appears that most of the increase in ridership is in the number of commuters to UBC for school or work, but there has also been an increase in use of this facility by the general community.

During daytime hours, bicycle mode share on this route alone (based on a three day manual count in October 2000) is more than five times the average on all routes to and from the University. 16% of all person trips along University Boulevard are made by bicycles in 2000, as opposed to only 7% in 1997.

It would appear from the numbers above that the bike lane has been whole heartedly embraced by the community, as illustrated by the figures above.

Safety

The designated bike lanes provide a sense of security for bikers on the road. Widening at bus stops provide sufficient space for motorists and buses to pass stopped buses without running up onto the landscaped median. No parking is allowed on the road. Vehicle turning and bus stopping is infrequent, and pedestrians are separated from cyclists. Catch basins have been demarcated with paint lines. Conflicts among cyclists, buses, and motorists are minimal.

In terms of ridership and safety, the new University Boulevard bike lane serves as a good example of how improved biking facilities in accordance with arterial road design standards truly encourage increased bicycle.