

VANCOUVER AREA CYCLING COALITION

POSITION PAPER

ON CYCLING AND SCHOOLS

FOR THE CITY OF VANCOUVER

Submitted for the Vancouver Area Cycling Coalition by: Mary Sherlock
Bill Hamilton

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Cycling is arguably the only physical activity that provides opportunities for young people of all ages and abilities to participate, at all levels, as a sport or physical activity. Since cycling can be easily integrated into daily life, through riding to school, to work, to shops and socially, it is the one activity that has the potential to make the single biggest impact on the health of the city and has a major part to play in addressing the city's growing transportation problems. Cycling is an essential life skill, which provides opportunities for students to participate in physical activities for life.

Despite the benefits of walking to and from school, cycling provides students with significant additional independent mobility and presents a viable option to driving a car so that more informed transportation modes can be considered as adults. It is very important that students receive sufficient cycling information and experience when they are young.

Vision

To provide a safe, convenient and enjoyable cycling environment that meets the needs of students and encourages cycling to and from school and throughout the community as well as a means of recreation.

Riding a bicycle is a developmental milestone in a child's life. It represents fun, freedom, fitness and fresh air. Riding a bike is a rite of passage as well as a passage to the world beyond the front gate.

Safe bike routes to school are essential for connecting schools to neighbourhoods and producing healthy and fit children and youth. It is vital that we ensure that children and youth have the opportunity to travel in ways that are safe, healthy and convenient for them.

Imagine child and youth friendly community neighbourhoods where everyone is safe using the roads and bikeways and can conveniently bike to and from school. Imagine schools that help to secure a network of greenways for kids to bike to school and where parents are comfortable with their children traveling by bicycle to parks, community centres and friends' homes.

Imagine a generation of students receiving bike safety, maintenance, repair and skills training in a routine fashion, several times throughout the school year and their school career. They will grow up making informed choices about their own transportation.

Imagine all schools with an active and vibrant cycling culture.

Who Benefits

- **Children and youth** benefit from the freedom, fitness, fun and independence to travel safely to and from school and throughout their neighbourhood.
- **Parents** benefit from knowing their children are biking safely.
- **Local residents** benefit from quieter, safer, greener and friendlier streets.
- **Schools** benefit as car congestion around schools lessens, and a very serious safety and health problem is reduced.
- **Car drivers** benefit from reduced traffic and congestion around the city during rush hour. Trips to and from schools account for a fifth of motorists during peak times.
- **Everyone** benefits from less congestion, noise and cleaner air.

Rational

- The appeal of biking to and from school lies in its multiple applications to problems facing today's children and youth. Young people currently face an overall decrease in daily physical activity, poorer air quality, higher rates of childhood obesity, riskier traffic conditions and a loss of independence and skills development. The common denominator is the over-reliance on automobile travel. Getting children out of the back of the family car and on to safe bikeways can substantially improve their quality of life as well as that of their friends and neighbours.
- A biking to school program has the best potential to enhance the quality of life in the community. Promoting cycling has been proven to improve all aspects of health, community, environment and business. Parents who bike to school with their children get to be sociable. According to a survey in the UK, nearly all people who walk or ride to school with their children, see it as an ideal way to meet people. Many said the school entrance was a better place to meet people than pubs, clubs, evening classes and the supermarket.
- Cycling is fun, healthy and inexpensive. Riding allows you to feel active and energetic while reducing stress and anxiety and increases academic potential as the brain works better with exercise. A moderate half hour bike ride will burn 4 calories a minute or the equivalent of over 5 kilograms of fat in a year. Being overweight can cause health problems like diabetes during childhood and research shows that physically inactive children are more likely to grow up to be physically inactive adults. Obesity rates for children have more than doubled in the last 20 years.
- One bike can travel up to 1,030 kilometers on the energy equivalent to a litre of gasoline. Cycling to and from school saves each family over \$1,000.00 in transportation costs and over 500 kilograms of greenhouse gas emissions each year. These emissions are especially harmful to children. They have respiratory systems that are not fully developed. They spend more time at higher activity levels which can cause them to breathe more deeply and take in more air pollution. Children are also more likely to have asthma or other acute respiratory problems that can be aggravated by emissions. Biking to school helps lower the amount of toxic pollution in the air they breathe.
- Approximately 10% of children walk to school regularly and less than 2% bike to school regularly. Even among children living within a kilometer of their school, only 25% are regular walkers. Elementary and secondary students should accumulate at least 30 to 60 minutes of physical activity from a variety of activities all or most days of the week.
- Children, who are limited in their independent mobility, fall behind in personal and social development in comparison to children with more freedom of movement. Research has shown that independent mobility and being able to be outdoors without supervision is essential and that spatial awareness and understanding of how the world is structured is increased by independent travel.

The Issue of Children Cycling Safely

Perception of or the lack of safety is the #1 reason parents currently prevent their children from riding to and from school. Ironically, the vehicle congestion around schools poses the greatest risk to students. Fortunately, serious accidents involving child cyclists are rare and much less common than those involving child pedestrians or car passengers. Surveys show that one in three parents would like to see cycle training in schools. Traffic free cycle routes were twice as popular with parents as cycle lanes on roads.

The risks of cycling are dwarfed by the health risks of lack of exercise. Children need safe routes to bike to school. In just one generation, the percentage of children who walk or bike to school has dropped 75%, while the number of overweight children has tripled.

A recent bike survey indicated that over 30% of students would like to cycle to school, nine out of ten own bikes and currently less than 4% cycle to school.

Proven Solutions:

- Provide safe well maintained bikeways that are separate from vehicles.
- Teach bike skills and bike safety at schools as part of the school curriculum.
- Slow the traffic in neighbourhoods and near schools. Car access to areas surrounding schools should be restricted or speed reduced to 30 km/hr.
- Reducing car congestion around schools is essential. School drop-off zones should be moved at least a block away from the front of schools.
- Improve street design using engineering techniques like speed humps, traffic circles, curb easements for bikes, bike ramps, curb extensions, and crosswalk and sidewalk improvements.

Bike Parking

According to studies in England, providing secure cycle parking has been shown to be one of the most effective ways of encouraging cycling to school. Secure cycle storage was the top requirement of students already cycling to school as well as those considering doing so. Getting the cycle parking right is probably the most effective way in which schools can promote active journeys to school and reduce car traffic in the surrounding neighbourhood. Not only does it allow parents and students to feel more relaxed about the prospect of bringing a bike to school, it acts as a striking way of publicizing cycling and making cyclists feel valued. Inferior racks or poor site planning can expose bikes to theft, vandalism and damage and thereby discourage cycling.

There are several factors to consider when planning cycle parking at a school: quality, location, security, type of parking, amount needed, cost and funding and the involvement of students.

The cycle parking facility must be of high quality and meet the needs of the users. It should be covered, secure, durable, well lit, easy to use and accessible. Other requirements include easy access and separation from car traffic.

The location of cycle parking is critical to its success. It must be situated as close to school buildings as possible (within 50m) and convenient to the main school entrance. A prominent location, in constant view of staff and students, adds security and maximizes use. Storage hidden away at the rear of the building is less safe and less likely to be used. It should also not be hidden underground. A prominent location serves as an excellent educational tool and also emphasizes that the school is keen and committed to promote cycling as a serious mode of transportation. Signs on all school entrances, indicating the location of bike parking, would also be useful.

The bike facility must allow for the frame and wheels to both be locked to a fixture. Cycle stands which only lock the wheel are not secure. The locking of bikes to wire fences should be strongly discouraged because of the likelihood of theft. These fences can be easily cut with wire cutters. Also, bikes used on a daily basis must be protected from the weather – to keep saddles and lubricated mechanisms dry, prevent rust, and tire deteriorations from prolonged daily exposure to the sun. A bike shed would, of course, be ideal.

In general, providing bike parking for 10% of the student and staff population is regarded as a minimum standard.

Examples of bike parking facilities can be found at www.vtpi.org/tdm/tdm85.htm as well as in the booklet “Bicycles at Rest” by John Luton, which is available through Translink.

Cycling Training in the School Setting

All students should receive theoretical and practical training on how to ride a bicycle safely on the road – earning a certification upon completion, as part of the school curriculum. If they have not acquired both practical cycling skills and knowledge of real traffic situations, they are more likely to be involved in accidents. In addition, every car driver who has been a cyclist is better able to behave safely towards cyclists when he or she understands what it is like to be in their position. By choosing to cycle to school at an early age, children also learn implicitly that it is normal to use the car selectively in the city.

- Infrastructure improvement should be matched by education and promotion of all aspects of cycling.
- The Vancouver School Board and the City of Vancouver should seek a partnership to adopt the socially responsible district goal of environmental sustainability promoting green schools and environmental leadership. Inclusive in this goal should be adequate staffing that promotes a cycling curriculum and cycling education for students, teachers and parents.
- Bike rides should be part of the school day through activities during recess and lunch time with schools providing playground trails for technical and practice riding, as well as leading neighbourhood rides and field trips.
- It is vital that children handle their bikes competently and that they know how to ride safely and with consideration of others.
- Children should learn about potential hazards and how to deal with traffic safely.
- Students should experience biking first and foremost as an enjoyable activity, if we are interested in promoting life long cyclists.
- Students should learn basic bike maintenance such as testing brakes, tire pressure and checking whether both lights are working and handlebars and seats are straight and tight.
- Students should be taught the importance of highly visible waterproof clothing.
- Cycle helmets should be taught to be worn snug, secure and positioned squarely with the straps securely fastened.

Integrating Cycling into the Academic Curriculum

Beyond learning cycling skills, safety and bike maintenance, students should be exposed to cycling from an academic perspective. The history of the bicycle is a noble one!

Susan B. Anthony (1820-1906), one of the leading lights of the women's rights movement in the United States, once said "Let me tell you what I think of bicycling. I think it has done more to emancipate women than anything else in the world. I stand and rejoice every time I see a woman ride by on a wheel. It gives women a feeling of freedom and self-reliance."

Suggestions for including cycling in the curriculum include the following:

Social Studies: Students can explore the ways in which the bicycle created and fostered freedom and directly or indirectly led to innovative thoughts and actions.

Geography: Students can map cycle routes and study the effects of car or bike transportation on land use and community planning.

Sciences: Students can measure the effects of excessive car use on climate change and the environment.

Math: Students can calculate the differences in the cost of using a car vs. bicycle for transportation; investigate radius, diameter and circumference.

Physical Education: Students can discover the effects of cycling on personal health and fitness.

Art: Students can create bike logos and designs on or near bike parking facilities.

Shop: Students can design and build bikes, investigate the mechanics of gears, wheels, and brakes.

Conclusions

- The City of Vancouver and the Vancouver School Board must show leadership in striking a partnership to work together effectively, where the city develops safe, student friendly routes to schools and throughout the community, while the School Board provides adequate staffing to promote cycling by providing parking, education and cycling opportunities.
- Over 30% of students would like to bike to school, yet only 2% currently cycle. The City of Vancouver has as a goal of 10% of commuters cycling by the year 2010. It would then be reasonable to set a similar goal of students cycling to school as 10% by 2010.
- The promotion and facilitation of cycle training be integrated in the school curriculum which is essential for the success of any cycling initiative for students.
- Bike parking that is both secure, covered, easily accessible and prominently located is one of the most effective measures to promote cycling at schools.