

Note: Revised and expanded : an earlier version of this report was emailed to Council on January 7. It has since been revised and expanded. Please review it for significant new information.

This submission is endorsed by : Chatham-Kent Chapters of the Heart and Stroke Foundation, and The Canadian Diabetes Association, The Lung Association; The Chatham-Kent Family Health Team; the Healthy Living Chatham-Kent Coalition, the Kent Medical Society, and the Chronic Disease Management, Medicine Program, and Stroke Coordination Units of the Chatham-Kent Health Alliance. It also has the support of Cycle Chatham-Kent.

Active Transportation in Chatham-Kent Executive Summary

Introduction

The Transportation Master Plan which Council is considering includes a major step forward for Chatham-Kent in the inclusion for the first time of a section addressing Active Transportation needs. We thank the Transportation Department for this initiative. It provides Chatham-Kent with the opportunity to address some critical needs and realize some major benefits in this area. In this report we attempt to list and describe those needs and benefits.

To grasp this opportunity decisive action by Council is needed to assign a timetable of action and a supportive budget allocation.

Without a timetable and budget, this is not a plan - it is only a wish.

A. The need is real

Daily physical activity can save the lives of our adult population and extend the lives of our children. Active transportation can make that activity a part of the pattern of our daily lives.

Active Transportation also addresses other major issues in our community and society: global warming, air quality, obesity, improved learning and productivity, infrastructure costs, fuel prices, livable communities, traffic safety, and community competitiveness.

B. The cost/benefit advantage is extreme

Economic benefits produced by Active Transportation amount to many times the investment in infrastructure that is required to facilitate it.

C. There is a legal obligation to do it

Traffic accidents on non-conforming streets and roads create exposure to legal action for negligence.

D. The behavior change is achievable:

Proven programs have already been identified and initiated to generate the choice of active transportation on the part of our school children, working people, and retirees.

E. Council commitment is needed:

- Set objectives for a significant shift from motorized transportation to active transportation.
- Give budget priority to Active Transportation infrastructure, to accomplish a "catch-up".
- Recognize the Active Transportation budget as separate from the recreational trails budget and the Greenway budget.
- Develop a rolling five year Active Transportation infrastructure development plan.
- Revise bylaws and the Official Plan to require provision of Active transportation infrastructure and facilities in new developments under specified criteria.
- Develop a program and schedule to bring municipal facilities into compliance with the standards contained in the revised bylaws and Official Plan.

F. Organize For Accountability

- -Establish an Active Transportation Committee of Council and require an annual report to council on progress on the Active Transportation plan
- -Establish a Transportation Demand Management Coordinator role in the Planning Department.

ACTIVE TRANSPORTATION IN CHATHAM-KENT

A. The Need is Real

Several Active Transportation initiatives came up in 2007:

1. In June 2007 Council passed a resolution mandating the creation of a Bicycle Use Municipal Plan.
2. In the Transportation Master Plan (TMP) Council was presented for the first time in November 2007 with a set of decisions focused on Active Transportation. Previous TMPs have not included such a section. This move in the direction of Active Transportation is consistent with the community Strategic Objectives, and particularly our commitment to be a healthy community and a green community.
3. The Board of Health has highlighted the importance of Active Transportation as one way of responding to a heart health crisis in Chatham-Kent, in the War on Heart disease endorsed by Council in December 2007. Medical research indicates that thirty minutes of moderate exercise per day five days per week is required for good health. That basic requirement can be met through daily active commuting to school or to work. Council endorsed this concept in a resolution passed at the February 4 2008 meeting calling on Administration to develop an Active Transportation plan for implementation in 2008.

At the same time a number of additional factors have come together to put the spotlight on Active Transportation:

- Ongoing research has repeatedly identified the importance of physical activity in prevention of Diabetes, Cancer, Lung Disease, and Osteoporosis.
- The Global Warming crisis has made reduction in greenhouse gas emissions an urgent necessity, and communities around the world are adopting modal shift from motorized transportation to active transportation as one important strategy in this area.
- Chatham-Kent continues to have among the worst air quality indexes in Ontario, raising serious health concerns and affecting our ability to attract new residents.
- Obesity has become a national concern as a life-limiting contributor to a variety of health problems. A recent Board of Health study shows this problem clearly existing in Chatham-Kent. The life expectancy of the present generation of children will be shorter than that of their parents if this issue is not addressed quickly.
- Accumulating research shows that children learn better in school and adults perform better in all types of work if they get regular daily exercise.
- Costs of infrastructure for motorized transportation are skyrocketing. Roads and bridges built in the middle of the last century are still in use. They are beyond their design life and are handling much heavier traffic than they were designed for. A sustained peak of repairing, rebuilding and new building will be required if we continue with present auto-centric travel patterns.
- The looming inevitability of "peak oil" and rapidly rising costs of fuel for motorized transportation make other transportation alternatives increasingly attractive.
- Advanced urban planning concepts have moved away from "specialized sprawl" to "mixed-use intensification". One of the objectives of this shift is to create more livable, walkable, bikeable neighborhoods.
- Recent traffic accident statistics show that the incidence of traffic accidents involving bicycles in Chatham-Kent is almost four times the Ontario average. This clearly signals unsafe cycling infrastructure in Chatham-Kent, which will also contribute to vehicle-to-vehicle damages.
- Other communities with which we compete for economic growth are moving strongly on these issues. One sign of that is the increasing prevalence of Transportation Demand Management roles within municipal planning departments, with responsibility for generating shifts from single-occupant motor vehicles to other transportation options including Active Transportation.

- In summary: heart health, diabetes, cancer, lung disease, global warming, air quality, obesity, infrastructure costs, the livability of our communities, traffic safety problems, and competition from other communities are together issuing an urgent call for strong action on Active Transportation.

We emphasize the words “strong” and “urgent”. Less than “strong” action will not save lives or noticeably enhance the livability of our communities. Less than “urgent” action will abandon today’s generation of children to poor health, shortened life spans, deteriorating environment, unsafe travel conditions, crumbling infrastructure, dramatically increased costs of travel, and a deteriorating municipal economy. Active Transportation is not the sole answer to these issues, but it can be an important part of our response.

B. The Cost/Benefit Advantage of Active Transportation is Extremely Strong.
“Active Transportation Doesn’t Cost, It Pays”

Data below will show the extremely strong cost/benefit case for investment in Active Transportation.

The following two tables show the annual monetary value of costs saved or revenues generated as a result of increased use of Active Transportation. The figures assume a shift to 12% of trips made by walking and cycling combined by 2015, and 18% of trips by 2025, from the present level of 6%.

Annual Economic Benefits @ 2015 -12% Share of Trips*	Walking	Biking	Total
Projected Savings in Direct Costs of Health Care	\$550,000	\$1,100,000	\$1,650,000
Roadway Cost Savings	\$50,217	\$318,769	\$368,986
Traffic Congestion Relief	\$78,600	\$502,170	\$580,770
Roadway Safety	\$98,251	\$1,257,608	\$1,355,858
Parking Costs Savings	\$277,722	\$527,497	\$805,218
GHG Reduction Value	\$54,584	\$327,502	\$382,086
Air Pollution Reduction Savings	\$113,534	\$729,238	\$842,772
User Travel Cost Savings	\$650,637	\$4,161,459	\$4,812,096
Workplace Productivity	\$433,204	\$845,779	\$1,278,983
TOTAL ANNUAL ECONOMIC BENEFITS QUANTIFIED	\$2,306,749	\$9,770,022	\$12,076,769

Council will be asked to commit to spending approximately \$500,000 per year on construction of Active Transportation infrastructure to obtain a benefit for the community that will start immediately and will total at least \$12,000,000 per year by 2015.

This is not an incremental, added \$500,000 to be recovered from tax payers, but \$500,000 on Active Transportation infrastructure instead of an equal amount that would have been spent on infrastructure for motorized transportation. If \$25,000,000 is budgeted for roads, the first \$500,000 will be diverted to Active Transportation infrastructure, leaving \$24,500,000 still to be spent on roads. These benefits to the community will be obtained at zero incremental cost. They will flow from a strategic priority adopted by Council.

As shown below, the cost/benefit advantage becomes even greater as time goes on, and a higher percentage of trips are made by Active Transportation.

Annual Economic Benefits @ 2025 – 18% Modal Share	Walking	Biking	Total
Projected 2015 Savings in Direct Costs of Health Care	\$1,033,333	\$2,066,667	\$3,100,000
Roadway Cost Savings	\$105,236	\$668,019	\$773,255
Traffic Congestion Relief	\$164,717	\$1,052,359	\$1,217,076
Roadway Safety	\$205,896	\$2,635,473	\$2,841,369
Parking Costs Savings	\$582,000	\$1,105,434	\$1,687,435
GHG Reduction Value	\$114,387	\$686,321	\$800,708
Air Pollution Reduction Savings	\$237,925	\$1,528,208	\$1,766,133
User Travel Cost Savings	\$1,363,491	\$8,720,853	\$10,084,344
Workplace Productivity	\$866,408	\$1,691,559	\$2,557,967
TOTAL ANNUAL ECONOMIC BENEFITS QUANTIFIED	\$4,673,393	\$20,154,893	\$24,828,286
OTHER BENEFITS NOT QUANTIFIED			
Property Tax Increases			
Tourism Revenue			
Economic Development			

These figures do not reflect the virtually certain large increase in the cost of motorized transportation which would dramatically increase the User Savings benefit; nor do they show the almost infinite value of greenhouse gas reductions likely in 2025 when global warming effects have reached crisis stage.

** The terms “Modal Share” and Modal Shift” have become common in transportation planning and will be used throughout this document. The word “modal” refers to types of travel such as walking, cycling, driving, etc. The term “modal share” refers to the percentage of trips made by a particular type of travel – for example, a 10% modal share for walking would indicate that 10% of trips were made by walking. “Modal shift” refers to a change from one “mode” of travel to another – for example, from driving to cycling.*

Several things to note about this data as you review it:

-Some benefits take a period of time to emerge as monetary savings. Health benefits accumulate over time. Increased life expectancy is a future benefit. The payoff for longer-lasting infrastructure spreads out over time. Such benefits are “banked” but not “drawn down” for a number of years.

-Some benefits don’t flow directly to the municipality’s budget. Infrastructure cost savings and increased property tax revenues would, but reduced travel costs are a direct benefit to citizens and don’t flow through municipal coffers. Reduced health care costs would flow to Federal and Provincial budgets, and lobbying may be required to recover this value at the municipal level.

- All data is drawn from credible sources: Canadian Medical Association (CMA), the Public Health Agency of Canada (PHAC), Statistics Canada (Statscan), the Transportation Association of Canada (TAC), Canadian Automobile Association (CAA), etc. and references are available on request.

-Data has been adjusted to reflect local conditions. Where data from major urban centers may bias the calculation, unit costs have been reduced to C-K levels (e.g. parking, traffic congestion).Data have been adjusted to reflect C-K’s unique problems with heart disease, bicycling accidents, and air quality.

C. There is a Legal Obligation

The Municipal Act States the General Obligation

Section 284 of the Municipal Act reads:

“Every highway and every bridge shall be kept in repair by the corporation the council of which has jurisdiction over it or upon which the duty of repairing it is imposed by this Act and. In case of default, the corporation, subject to the Negligence Act, is liable for all damages sustained by any person by reason of such default.”

The term “highway” includes municipal roads and the sidewalks and the shoulders of the traveled road. This statutory duty has been interpreted by the courts as requiring that a particular road should be “kept in such a reasonable state of repair that those requiring to use the road may, using ordinary care, pass to and fro upon it in safety.” “Repair” of highways has been broadly interpreted to include

design, construction and maintenance. Failure to design and construct the road to commonly accepted standards may constitute non-repair resulting in municipal liability.

Many Chatham-Kent Streets and Roads Don't Meet Commonly Accepted Standards

The Ontario Ministry of Transportation has developed design guidelines regarding the shared-use of roads by motorists and cyclists and published *Ontario Bikeways: Planning and Design Guidelines*. At defined levels of traffic volumes and speed these guidelines require separation of motor vehicle and bicycle traffic. Such separation is generally not provided in Chatham-Kent.

Accident Frequencies Show a Real Liability Exposure

Bicycle accidents per 100,000 population are approximately 80% above the Ontario average. Accidents per 1000 bicycle trips in Chatham-Kent are estimated to be approximately 400% of Ontario average.

D. It Can Be Done

Canadians Are Willing To Make This Change

In recent Canadian surveys, 82% of adults said they would like to do more walking, 66% said they would like to do more cycling, and 75% of students said they would rather walk to school or ride their bikes instead of being driven to school by their parents or on the bus. Canadians are ready to adopt more active lifestyles.

It Is Being Done In Other Communities

In many European communities over 25% of trips are made by bike, and those percentages are continuing to increase. North American communities are setting high modal share goals for active transportation and are moving towards them. Victoria is already above 15% share. Seattle, Portland, Boulder, Chicago, and New York have set bicycle share targets of 10% to 15%. Share targets for walking are commonly in the area of 10%.

The Successful Strategies

These results are being achieved by a three-pronged strategy:

- Supportive infrastructure, including sidewalks, dedicated walking and cycling pathways, bike lanes on roadways, bike parking facilities, and shower/change/locker facilities at major destinations.
- Skills and awareness for pedestrians, cyclists and motorists to share transportation infrastructure safely and enjoyably.
- Promotional programs to stimulate the lifestyle change, involving programmed active participation, not just persuasion.

This strategy is often embodied in programs referred to as "Active and Safe Routes". In these programs, walkers and cyclists in schools, workplaces, and seniors centers are involved in identifying their routes to these locations and other favorite destinations, and red-flagging the sections of those routes made dangerous or uncomfortable by inadequate infrastructure. This data is referred to the appropriate authorities to correct the problem. Maps are created of these improved routes to encourage others to use them. Group commutes are organized for the enjoyment of all and with adult accompaniment for the safety of younger students. Distances walked and ridden are recorded for "fun" motivational purposes (for example: "Walk Across Canada" or "Bike around the World" group projects). "Active Commuter" clubs are organized within workplaces. Cycling skills courses for all ages are offered in these communities. Driver education emphasizes drivers' responsibilities for interacting safely with pedestrians and cyclists. Children are taught how to be safe pedestrians and cyclists. Police enforcement programs remind people of the rules for all travel modes.

Chatham-Kent is Ready for Implementation

In Chatham-Kent, groups stand ready to implement these programs. The Public Health Unit has already committed to supporting the Active and Safe Routes to Schools program, and has tied C-K

into a tri-county In Motion program. The newly-built Children's Safety Village offers education on safe walking and cycling for elementary school children. Sunrise Rotary stands ready with a program to provide excellent bike racks at wholesale prices for C-K organizations and businesses. The Active Routes program can be readily implemented in workplaces and seniors' centers. Cycle Chatham-Kent looks forward to working with the municipality and other stakeholders on plans for cycling infrastructure, through the Bicycle Use Municipal Plan mandated by Council in June of 2007.

E. Council's Steps To "Walk The Talk"

Set an Aggressive Objective for Shifting to Active Transportation

To achieve the many and substantial benefits available to the Chatham-Kent community through Active Transportation requires a shift from motorized transportation. This "modal shift" objective is usually expressed in terms of "percentage of trips, as described above. Without a significant objective in this area most of the benefits will not be realized. This objective will drive and guide future action. For each decision, we will ask "Will this support our modal shift?" and "Will this move the modal shift fast enough to meet our objective?"

Set Budget Priorities to Meet The Modal Shift Objective

For a period of years, Active Transportation must be given first claim on Transportation Department construction budgets to bring the Active Transportation system up to a 21st century standard. An immediate (2008) beginning commitment of \$500,000 per year is needed, subject to review when a long-term Active Transportation construction plan has been developed.

The Active Transportation construction budget is separate from the Trails budget and from the Thames River Greenway budget.

Active Transportation infrastructure must be included in all street and road building or rebuilding projects and budgeted therein, and not charged to the Active Transportation budget allocation in those cases.

Require the Development and Maintenance of a Rolling Five-Year Construction Plan for Active Transportation Infrastructure

This plan is needed to ensure that the budget allocated actually results in infrastructure being constructed. It has been a common experience in other municipalities that planning and engineering delays have prevented Active Transportation expenditures from happening on schedule.

Make Revisions to Bylaws and the Official Plan to Reflect the New Standard for Active Transportation in Chatham-Kent

A "Complete Streets and Roads" policy is needed which specifies the provision of Active Transportation infrastructure to specific criteria in all new road and street construction, and road and street rebuilds. This policy should specify the conditions (e.g. traffic volume and speed) under which sidewalks and/or bike lanes must be provided, and the minimum design specifications for those facilities.

Destination facilities supportive of Active Transportation should be required to specified criteria in all new development. This would include provision for bicycle parking appropriate to the size of the establishment (multi-unit residential, commercial or industrial) and shower/change/locker facilities where large numbers of people are employed.

A plan and schedule to bring all municipal properties up to these standards should be announced at the time the standards are introduced.

A campaign to encourage existing commercial and industrial facilities to upgrade to meet the new standards should be heavily promoted.

F. Organize For Accountability

Establish an Active Transportation Committee of Council

This Committee should have representation of all significant stakeholders. It should make a report to Council on the status of the Active Transportation Plan implementation in May of each year, identifying any deviation from the plan and/or the Active Transportation Design Guidelines and the rationale for such deviation.

Create a Role of Transportation Demand Management (TDM) Coordinator

This role is normally located within the Planning Department with responsibility for coordination of the Active Transportation and other TDM initiatives, and provides staff support to the Active Transportation Committee.

G. Set a Timetable for Implementation

A timetable is needed to move Active Transportation from being just a wish to being a real plan. The table below is offered for Council consideration:

Active Transportation – When?

Immediate	<ul style="list-style-type: none"> -Adopt this timetable. -Adopt Modal Shift Targets -Adopt Official Plan and Bylaw Amendments -Authorize establishment of an Active Transportation Committee of Council. -Authorize establishment of a Transportation Demand Management role (partial) in the Planning Department
By March 31 2008	-Administration recruit the Active Transportation Committee and hold its first meeting.
By April 30 2008	<ul style="list-style-type: none"> -Administration complete an inventory of bike racks needed to meet the adopted Destination Facilities municipal standard and submit a purchase order. -Cycle Chatham-Kent complete an initial canvass of local businesses to promote installation of bike racks. -Public Health Unit complete initial consultations with school officials and major employers re Active and Safe Routes Program implementation.
By May 31 2008	-Transportation Dept. Submit for Council approval a 2008 Active Transportation infrastructure construction plan.
June 2008	<ul style="list-style-type: none"> -Active Transportation Month Bike Racks installed throughout municipality WOW2- Walk Or Wheel To Work Mayor's Rides Community Tours Walking/Biking School Bus demonstrations
By October 30, 2008	Administration submit an estimate of the overall cost of completing the proposed Active Transportation infrastructure, for incorporation into the Lifecycle budget for the 2009 budget cycle, and a five year (2009-13) Active Transportation infrastructure construction schedule.
June 2009	Active Transportation Month #2