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A Bicycle Path Study for The City of SUDBURY

A. W.

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BICYCLE PATH REPORT

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A review of available literature indicates that many progressive municipalities across Canada are taking seriously the need to accommodate bicycles in the urban transportation scheme. There is a tremendous rise in bicycle use, first, as a means of recreation and, secondly, as a means of transportation for all age groups--children, high school and university students on campus, housewives for shopping and a smattering of work trips. The concern here in Sudbury is:

- 1 The number of bicycles used by children and students for trips to schools and to playgrounds
- 2 Recreational use for adults and as a family group in the evenings and on weekends.

It is felt that, if a reasonable path system were developed, the use for shopping and work trips during the summer months would increase rapidly. The rising cost of petroleum fuels for automobiles will definitely accelerate the use of bicycles as an auxiliary transportation means. This happened in Europe and the British Isles after the Second World War, in these areas, bicycles are as important a people mover as automobiles. Our rugged Canadian Winter climate will confine the use of bicycles to the six (6) spring, summer and fall months.

In order to assess the actual bicycle use in Sudbury, a telephone survey was carried out in the Spring of 1974. From this survey, several significant facts were gathered:

The average ownership of bicycles in Sudbury is just over one bicycle per household. As was expected, the majority of the owners were children 13 years and younger. It is estimated that 13,000 bicycles are owned by children 13 years and younger in the City. Also, this age group was the greater users of bicycles. Work trips were a small percentage of the overall trips and only averaged one trip for every second household per week.

Another measure of bicycle usage is, of course, found by tabulating bicycles actually operating on a street. We chose to measure bicycles passing over Nelson Street Bridge since this serves Bell Park, probably our most important recreation area. It also serves the well defined neighbourhood known as the "Lake Section". On Saturday and Sunday, July 6th and 7th, 1974, bicycles were counted crossing Nelson Street Bridge: 561 crossed on Saturday, July 6th, 1974 between 10:00 a.m. and 8:00 p.m., and 411 crossed on Sunday, July 7th, 1974 between 12:00 Noon and 8:00 p.m. These volumes bear out the fact that our general impression is that bicycle use in Sudbury is increasing at a rapid rate.

There is a demonstrated need for a comprehensive bicycle path program. Council has indicated that bicycle paths should be primarily constructed for recreation use. However, our investigation now indicates that there is increasing use of bicycles for work and shopping trips as well, and our long range plan should take these trips into account.

It was felt that public participation in the design of bicycle paths was important and, to this end, two public meetings were held in the Library Auditorium. The first meeting was held on December 6th, 1973 and the second on June 13th, 1974. Both of these meetings gave the Committee some excellent suggestions which have been incorporated into this report. Some noteworthy suggestions were received, indicating that bicycle path arteries should be established to serve schools and shopping areas.

- That some consideration should be given to using the Bicycle Paths in winter for cross-country skiing, a sport that is also gaining rapidly in popularity.
- That, if bicycles are going to be used in such large numbers, we should consider this in our road design and have ramps up onto sidewalks at intersections or use "roll-over" curbs.
- That catchbasin covers be designed with slots running transversely so that a bicycle wheel does not drop into them.
- That more bicycle racks are required in parks and in downtown.

These are only a few of the useful suggestions gained at the meetings. Although these public meetings were not well attended, they indicated that they represented a much larger group.

OPEN SPACE CONCEPT

As was recommended by Council, the bicycle path system should be integrated in the open space framework, which also contains the urban pathway system. The overall bicycle path system for the City has, therefore, been designed to complement and, in most cases, parallel the urban pathway system. In some cases, they will use the same right of way but be divided from one another. Our maps of the bicycle path system have been overlaid on the Planning Board's Plan of the proposed open space framework. A copy of this plan is attached as Appendix "A". This plan envisions approximately 81 miles of bicycle paths ultimately for the City. The plan tries to serve the recreational needs of the City first and, as such, connects all the major recreational areas in the City to one another. It also attempts to serve the schools in the City which, in the spring and fall, generate a great number of bicycle trips. It also connects major shopping areas to the surrounding neighbourhoods. The work trips were found to be minimal and no special attempt was made to serve them. However, the Central Business District, the two major shopping plazas, the University and the three hospitals are served by the Bicycle Path System. All of these are major employers in the City and, when the system is built, we are confident that work trips in the spring, summer and fall will increase greatly.

The system that has been devised is basically a circular route around Ramsey Lake from which spokes run out into Lockerby, the West End, the Central Business District and New Sudbury. Bicycle path routes have been designed for Copper Cliff and Broder Dill. These are shown in Appendices "B" and "C" attached.

The ultimate system will generate the need for associated service facilities, including:

(1) Safe storage of bicycles at trip destinations

- (2) Comfort stations along and at nodes of travel
- (3) Probable rental stations at appropriate and well chosen locations near desirable recreation areas such as Bell Park and Moonlight Beach and Bell Grove.

Although we have gathered a good deal of information on bicycle paths that have been constructed in other areas, we should test these designs in the rather harsh environment of Sudbury. For this reason, we have designed a first phase system. This utilizes all the types of construction that will be incorporated into the final system. The uses, including: 1 - painted lanes on the street; 2 - gravel and paved shoulders; 3 - combined use of the shoulder where sidewalks exist for both pedestrians and cyclists; 4 - the combined use of park pathways for both pedestrians and cyclists where bicycles are presently prohibited. Our present traffic by-law prohibits the riding of bicycles on sidewalks and some changes will have to be made here to accommodate both pedestrians and cyclists on the boulevard. The first phase system envisions five routes:

- 1 Bell Park at the Amphitheatre along Paris Street west to Plaza 69 - See Appendix "D"
- 2 Walford Road between Regent Street and Paris Street Appendix "E"
- 3 A route from the east side of Bell Park at Elizabeth Street, east via Elizabeth, Nelson Street, Lourdes, Lonsdale and the Lonsdale footpath to Bancroft Drive - Appendix "F"
- 4 A route in New Sudbury starting at the Sports Complex at LaSalle and Notre Dame, along LaSalle, Drummond, Lavoie, Montrose, Grandview, Woodbine and Roy to the New Sudbury Shopping Centre - Appendix "G"
- 5 A route through Copper Cliff, starting at Dow Drive in the south - west end, along Power, Godfrey, School, Creighton, Tennis Club Lane, Park, Diorite to Domenico in the north - west - Appendix "H"

It is estimated that these routes can be built this year for \$20,220.00.

Council has approved the construction of this system in 1974 and it will be constructed as quickly as materials and the construction problems can be solved. It is hoped that we will have this system in operation for two months this year.

It is essential that the newly constructed routes be critically examined for: 1 - Safety; 2 - That the routes chosen are the routes that are used; and 3 - Number of bicycles using this facility. A simple questionnaire should be carried out in the field to get a realistic reaction from the people using the paths. It is also essential to establish that the construction procedures are correct so that the paths are easy and reasonable to maintain. They will be examined closely next spring to see how the winter weather has affected them.

Council has approved the setting up of a reserve fund for bicycle path construction which will use the monies accummulated from bicycle licensing. In 1974, it is estimated that \$18,800 will be collected in bicycle license fees. This could be increased by a good public relations campaign coupled with bicycle safety checks done by the School Safety Supervisor, Archie Stewart. Other agencies interested in bicycling in the City, especially bicycle clubs, should be asked for support to get more of the City's bicycles licensed and thus increase the monies available for bicycle path construction.

After the first phase paths are constructed, our evaluation of their use, coupled with additional public meetings in the spring of 1975 should clearly indicate where the needs for the next phase exist. This next phase must follow the master plan as closely as possible. However, the master plan is conceptual and has room for some flexibility. The staging will probably be dictated by overall use and budget considerations.

The Committee of the Whole, at its regular meeting on Tuesday, August 13th, 1974, passed Motion 74-181 as follows:

Davidson - Dow: That the Transportation Department be permitted to develop the first phase bicycle path system outlined in the presentation to the Committee of the whole, August 13, 1974, and the funds for this development be taken from the Bicycle Path Revenue Fund.

The Minutes of this Meeting were approved by the Regular Council Meeting of August 20th, 1974, by Motion 74-590.

DATA COLLECTION AND ANALYSIS

Before designing our Bicycle Pathway System, the following reports were examined:

- 1 The Scarborough Path System
- 2 Guidelines for a Comprehensive Bicycle Route System: Department of Development and Planning, City of Chicago
- 3 Bikeway Planning Criteria and Guidelines
- 4 A Bicycle Path System for the City of Calgary
- 5 Standards for Bicycle Paths by the National Capitol Commission
- 6 Toward a Metropolitan Toronto Bicycle Route System: City of Toronto Study
- 7 Promotion as a Bikeway Planning Factor; by the Ontario Bikeway Coalition
- 8 Bicycling Pilot Project by the City of Guelph
- 9 Windsor Bikeway Distributed by the Ontario Bikeway Coalition
- 10 Planning Criteria for Bikeway by the American Automobile Association.

These reports and studies gave us a great deal of pertinent information on work and planning being carried out in North America. The Canadian reports from

Scarborough and Calgary, we felt, were particularly applicable because they also had to consider design and construction that would winter well in Canada.

A Telephone Survey of significant size was carried out in the Winter of 1974. While this was admittedly a poor time for such a survey, because people had to try and think back to the Summer of 1973, to answer questions on bicycle usage, it did, however, give us a clear indication of the use of bicycles in Sudbury in 1973.

A copy of the Questionnaire used is attached as Appendix "J".

There were many questions we wished answers for so we divided the City into 17 Zones by neighbourhoods so we could assess:

- 1 The number of bicycles per household in each zone
- 2 The use by age groups. Age groups were chosen as: 1 up to 13 years; 14 to 17 years; 18 to 20 years; 20 to 35 years; and over 35 years.

A copy of the City map showing the 17 zones is attached as Appendix "K".

It was found that the preponderance of bicycle usage was by children 13 years and under. The use of this group equalled all the other groups combined. This is shown in Table "L" attached.

It was important to find the purpose of trips which were divided into: l - Recreational; 2 - Work; 3 - Shopping and 4 - Other. These are shown in Charts "M" attached.

It was also found, as was expected, that the heaviest usage of bicycles is mid-summer and that it tapers off to spring and fall. This is shown in Chart "N" attached.

The investigation of ownership by zones shows a high concentration of bicycles in the New Sudbury Area and the Lockerby - Robinson Area. This was one of the reasons we chose to construct our first priority paths

along Paris Street in Lockerby and through New Sudbury, from the Sports Complex at LaSalle and Notre Dame to Roy and LaSalle at the Shopping Centre.

More definite data on bicycle trips was gathered at the Nelson Street Bridge on Saturday and Sunday, July 6th and 7th, 1974. Bicycles were counted for 8.5 hours on Saturday and 7.5 hours on Sunday. 561 bicycles crossed on Saturday and 411 on Sunday. This information is shown in Chart "O". This confirms information gathered in the Telephone Survey made earlier.

Pedestrians were also counted on Saturday and Sunday. On Saturday, during the same 8.5 hours, 836 pedestrians crossed and on Sunday, during 7.5 hours, 620 pedestrians crossed. This points up the need for a combined Bicycle - Pedestrian facility in this area, to replace the Nelson Street Bridge when it is removed. A Graph of pedestrian crossings is shown on Plan "P" attached.

Two public meetings were held at the Public Library Auditorium, the first one on December 6th, 1973. At this meeting, the Chief Transportation Engineer explained the objectives of the Bicycle Path Committee. Since the concept was new to the attending public, their reaction was less than was expected. However, some of the suggestions were:

To try and do what is being done by the National Capitol Commission in Ottawa on Sundays: 1 - Close parts or all of some streets on Sundays to motor vehicles. 2 - Fix up areas that are now being used by cyclists for recreation trips. 3 - That future road construction should consider the addition of a bicycle path at least on one side. 4 - That facilities for safely storing bicycles be provided at the Durham Street Parkette and at Civic Car Parks in the downtown area. A copy of the Minutes of this Meeting are attached as Appendix "Q".

The second meeting, held on June 13th, 1974, brought more reaction from the public. Mr. Bob Hosler of the National Capitol Commission Project Design Division was in attendance. He is designing their Bicycle Paths and gave an excellent slide presentation of the Ottawa System. A film "Bikeways for Better Living" showed what

was being done in cities in the United States to accommodate bicycles. The City Transportation Department also showed a map of the proposed Bicycle Pathway System for the City. The map is enclosed as Appendix "A". The system envisions a circular route around Ramsey Lake with spokes running out from this route to all other sections of the City. There were a great many recommendations from the public attending.

The following comments were made:

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- 1 that bicycle path arteries should be established, firstly to serve school and shopping areas, especially in New Sudbury and Lockerby
- 2 that bicycle paths could be used for cross-country skiing as they are in Ottawa
- 3 that all catchbasins should be placed at right angles to the road to avoid bicycle mishaps
- 4 that roll-over curbs, as they have in Ottawa, are more convenient for the cyclists
- 5 that more bicycle racks are required in the downtown area
- 6 that stone dust can also be used for bicycle paths, though it requires more maintenance
- 7 that funds for bicycle paths in Windsor were raised through bike-a-thons
- 8 that terrain is a major factor in the cost of constructing bicycle routes, and
- 9 that a sample strip should be constructed for test purposes.

A representative of the Conservation Authority was present and, since much of the green belt and, thus, some of the bicycle paths will traverse land directly or indirectly under the control of the Junction Creek Conservation Authority, his support was asked for and received. The Minutes of this Meeting are attached as Appendix "R".

Both of these public meetings were useful in that the many points raised will be studied and incorporated into the final plan. The first priority system will be monitored in the field to assess if its design is suitable. We will also count the number of bicycles using the facility. It is also recommended that the telephone survey be repeated in May, 1975 which should give additional direction on the second phase of operation. Other public meetings would also be useful and, if they were scheduled for early May, ideas might be incorporated in the next phase of the plan. The plan must remain flexible so that it serves the demonstrated needs of those people in the City who ride bicycles.

THE PLAN

The plan, as Council directed to Committee, is incorporated into the proposed open space framework, as approved by the Planning Board. The bicycle paths in many areas parallel the urban pathways laid out by the Planner in the open space framework. The plan is contained in Appendix "A" enclosed. The routes do not represent exact locations, but a corridor that will be served. Each route will have to be developed separately to be compatible with the urban pathway in that corridor and the topography.

The plan is basically a wheel centre section, running around Ramsey Lake which will join all the recreational areas surrounding the Lake, Bell Park, Moonlight Beach, Laurentian Nature Centre, the University Recreational Complex, Bell Grove and the Yacht Club and Canoe Club. From this wheel, spokes will push out to connect all areas of the City -- one will penetrate Lockerby and the Lo-Ellen area; one into the Robinson Southview area; one into the Wembley area; one into the West End, via Victoria and Albinson; one into the White Avenue area; one into the North End, which will push out to connect along the Valley to LaSalle; one into the Flour Mill area, along Laforest and St. George to ervice O'Connor Park. This one will also push on through the old golf course (Ryan Heights) to Notre Dame. One route through the Central Business District will continue north east across the Junction Creek Plan and connect to Attlee

Street and the New Sudbury Shopping Centre; one from Minnow Lake north to the Kingsway and Barrydowne and then to the Barrydowne Ski Hill and recreational area; one north of LaSalle via Montrose and Woodbine Avenue; and another further north along the Hydro transmission line to Maley Drive and then to the Falconbridge Highway. One north from Bancroft Drive, along Second Avenue and Churchill, into the two primary schools and one secondary school near the east end of Hawthorne Drive. A route through Copper Cliff from Dow Drive on the south - west, circling the park and ending in the north - east section known as "Little Italy". A route through Broder Dill from Highway 69 South along Algonquin Road east along Algonquin Road and back into the Lo-Ellen Park, via Field Street, Louisa and Armonstrong Streets.

As was mentioned earlier in the report, permission was given to construct:

1 - The Paris Street Route

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- 2 The Walford Road Route
- 3 The Bell Park to Bancroft Drive via Lonsdale Route.
- 4 The LaSalle Route via Montrose and Woodbine and
- 5 The Route through Copper Cliff this year.

Each of these routes are shown in Maps attached.

Since we have had no experience in the construction of Bicycle Paths, other than from the ten (10) studies we have on file, construction and design standards have been worked out which seem to be reasonable for our area. These are shown as Appendices "S", "T", "U", and "W" attached.

The first phase program will allow us to test our design and construction standards and refine them, if necessary.

IMPLEMENTATION

The first phase of the Bicycle Path Program will be done in the late Summer of 1974. The five (5) routes to be built are as follows:

1 - Paris Street from the Entrance to Bell Park Amphitheatre to Plaza 69 -- 6,000 feet.

This route will use shoulders along Paris Street and, in that section between Nepahwin and Plaza 69, will share the shoulder with pedestrians. We have estimated this route will cost \$3,320.00 -- \$1,960.00 for gravel shoulder improvement, \$375.00 for signs, \$130.00 for curb climbing ramps, \$500.00 for asphalt shoulder improvements and \$300.00 for rock outcrop reduction.

2 - Walford Road from Paris Street to Regent Street --2,200 feet.

This route utilizes bicycle lanes 6 feet wide on each side of Walford Road. Walford Road is paved 40 feet wide, with two bicycle lanes, two 14-foot lanes will be left for motor vehicles.

The cost is estimated at \$590.00 -- \$280.00 for 4,400 feet of white line, \$180.00 for signs, and \$130.00 to change catchbasin gratings so that bicycle wheels will not get caught in them.

3 - Elizabeth Street Entrance to Bell Park via Lonsdale to Bancroft Drive -- 6,200 feet.

This route utilizes a bicycle lane on Elizabeth Street and Edmund. This route crosses the Nelson Street Bridge and continues along Nelson Street to Notre Dame de Lourdes School grounds, along Lourdes to St. Raphael, to Howey Drive which is paved 30 feet wide with 6-foot gravel shoulders. Although the vehicular traffic is heavy, 9000 vehicles per day, the adequate shoulders can accommodate the bicycle traffic. From Howey up Wessex to Lonsdale, along Lonsdale and the Lonsdale footpath to Bancroft. Except for the bicycle lanes on Elizabeth and Edmund, this route utilizes signs.

The cost is estimated at \$7,115.00 -- \$80.00 for lines on Elizabeth and Edmund, \$315.00 for signs and \$3,400. for a new asphalt overlay along the existing Lonsdale Footpath.

4 - LaSalle Route from the Notre Dame Sports Complex to Roy Avenue and LaSalle at the Shopping Centre -- a distance of 6,500 feet.

This route utilizes the shoulders and part of the sidewalk on Notre Dame to Drummond, then we proceed on Drummond, turn on Lavoie, along Montrose where we will use 6-foot bicycle lanes on the 38-foot roadway, down Grandview and Moss to Woodbine and then to Roy and LaSalle. This route utilizes mainly the shoulders of the road with signs. These streets have light vehicular traffic and can safely accommodate the bicycle path. This route serves four (4) public schools.

The cost is estimated at \$2,090.00 for gravel shoulder improvement, \$30.00 for three (3) curb climbing ramps, \$600.00 for traffic lines and \$750.00 for signs -- for a total of \$3,890.00.

5 - The Copper Cliff Route runs from Dow Drive on the south - west to Domenico Street in the north - east -- a distance of 6,200 feet.

Along Power Street, we use the gravel and paved edge of Godfrey Drive which is 32 feet wide. Signs only will be used on this section of Road. School Street from Godfrey Drive to Creighton Road has a 24-foot payement with shoulders which start at 10 feet and narrow to 4 feet past Cobalt Street. However, the light traffic on this street and the presence of the primary and secondary school at the west end encourages what traffic there is to travel at a reasonable speed. Creighton Road is paved 24 feet wide with 6foot shoulders on the south side and a 5-foot sidewalk on the north side. Again, because of the very light vehicular traffic, there should be no problem accommodating a bicycle lane on each side of the street. Signs only will be used for control. Tennis Club Lane and Park Street are also lightly travelled and can be controlled by signs only. We cross the I.N.C.O. tracks, using a long established walkway. Diorite Street is paved 44 feet wide, narrowing to

30 feet at Craig Street. It can accommodate bicycles using signs only. Domenico Street, which leads to the small plaza in the centre of the development, is narrow but, because of the pedestrians, speeds are low. We will use signs here too.

It is estimated the work in Copper Cliff will cost \$2,105.00.

This concludes the immediate action program in 1974.

RECOMMENDATIONS FOR 1975

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- Ramsey Lake Road from Paris Street to South Bay Road. South Bay Road from Paris Street to entrance to University sports complex.
- 2. Second Avenue from Kingsway to Howey.
- 3. Loach's Road is to be rebuilt in 1975 and it should incorporate a bicycle path. We are now working with the Road Design Section on this project.
- 4. Bancroft Drive is scheduled for rebuilding this summer and a bicycle path will be included in this section which serves the Carmichael Arena and the new Minnow Lake Recreational Complex.

We were not able to complete all this work in 1974, it will be completed in the Spring of 1975. The work remaining to be done is:

- All the signs have been prepared but have not been erected.
- 2. The Lonsdale Walkway was improved with ditching and improved drainage but the bituminous overlay was not done.

For 1975, we propose two (2) additional routes be built:

1. Second Avenue from Bancroft Drive to Kingsway. This route will serve the Adamsdale School, Franco-Jeunesse Secondary School and the Adamsdale Play-

ground. It is proposed to build a 10-foot path on the east side of Second Avenue. This route is 5,700 feet long.

Costs:

Improving Shoulder with 3/8" crushed gravel - \$6,000 Erect Signs - 375

 Ramsey Lake Road from Paris Street to South Bay Road and South Bay Road to the Entrance to the Laurentian University Sports Complex. This route is 10,200 feet long and will require the shoulder to be improved on both sides.

Costs:

Improved Shoulders with 3/8" Crushed Gravel - \$12,000 Signs - 800

South Bay Road from this point is lightly travelled and could be used as a bicycle path in its present condition so that, with this section of Ramsey Lake Road and South Bay Road improved, we have connected Bell Park with the Lake Laurentian Conservation and have completed 75% of the proposed ring around Ramsey Lake.

BICYCLE PATH SURVEY

A Telephone Interview Survey was done in the City of Sudbury in the last week of January. A sample question-naire is attached. The object of the Study was to try and get some reaction from the public on bicycle paths. It also attempted to gather some facts on the numbers of bicycles in the City, the age and number of bicycle users and the type of use of this form of transportation.

Bicycle Paths

A significant sample of 380 homes were interviewed. The City was divided into 17 neighbourhoods as used by the Sudbury Area Planning Department so that relationships among neighbourhoods could also be studied. This map is shown as Appendix "K". The fact that the interviews were conducted in January led to somewhat inconclusive or vague answers to the specific questions because the questions asked in January pertained to summer activities six (6) months earlier.

The results of the questionnaire are as follows:

- 1 Number of bicycles per household in the City of Sudbury The information gathered on this phase of the questionnaire is shown on Appendix "L" attacged. This shows the number of bicycles per house per zone. This shows that, last year, in the City there were an average of over one bicycle per household. This means about 24,000 bicycles. Figure 3 grouped zones, geographic and demographic, and shows the same ownership quantities.
- 2 Number 2 is concerned with bicycle usage

The results of this section of the Study are shown in Appendix "M" attached.

This shows the City wide usage of bicycles by age groups, and also shows the percentage by age distribution of bicycle usage. These show the preponderance of use of bicycles in the City is by children 17 years of age and younger. They represent 76% of the total usage.

3 - This section examines trip generation by zones
The numerical information is shown in a group of graphs listed as Appendix "M".

These represent the purpose of trips and are shown separately as: work trips, recreation trips, shopping trips and other.

By far the greatest number of trips are for recreation purposes.

- 4 Number 4 investigates the distribution of usage over the year. This, of course, shows that the biggest usage occurs during the three (3) summer holiday months but that the usage is heavy from May to October. This information is shown in graph numbered Appendix "N".
- 5 Section 5 attempted to get some input from those questioned in that we asked for comments on "What sort of special bicycle facilities would you recommend for the City of Sudbury?". Those wishing to make a specific comment were in favour of the bicycle path concept. Other suggestions were bicycle paths along nature trails, locked racks for bicycles at strategic locations such as Bell Park, C.B.D. and other locations where there will be concentrations of bicycles not in use.

Accidents

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Bicycle accidents are on the rise in the City. This is to be expected with the rise in ownership and use of bicycles and that is evident across the country. In 1971, there were 44 accidents involving bicyclists, this dropped to 35 in 1972 but jumped to 62 in 1973.

Conclusions

In 1973, there were probably slightly in excess of 25,000 bicycles in the City of Sudbury and this number is increasing rapidly. The highest percentage of use is for recreation trips and the predominant users are teenagers and youngsters 17 years of age or younger. The greatest use of bicycles occurs during the three (3)

summer months, but there is considerable usage for the six (6) months from April to November. Bicycle ownership varies a little across the City with a greater number in the outlying areas of New Sudbury, Minnow Lake and the south end of the City -- Robinson - Lo Ellen area.

Bicycle accidents are rising at an excessive rate -- up 75% in 1973 over 1972.

The people of Sudbury questioned agree with the need for bicycle paths primarily for recreation purposes and that there should be facilities for the secure storage at points of concentration, such as C.B.D. and Bell Park.

MINUTES OF FIRST PUBLIC MEETING appendix q

BICYCLE PATH STUDY

PUBLIC HEARING

Sudbury Public Library
Thursday, December 6, 1973

Commencement: 8:04 p.m. Adjournment: 9:33 p.m.

Present

W. J. Ripley, Traffic Engineer, Chairman Sqt. J. Carriere, Regional Police Dept.

A. C. Stewart, Safety Supervisor

K. Dembek, Regional Planning DepartmentB. Samulski, Regional Planning Dept.M. M. Ross, Chief Transportation Eng.

R. Kleven, Recreation Director

R. Hortness, Transportation Technician Wm. Fryer, Acting Director of Parks

I. Robinson, Secretary

Committee Objectives

The hearing commenced with the Chief Transportation Engineer explaining to the public the objectives of the Committee. A map outlining the Green Belt Area was placed on the table for perusal by the public.

Bicycle Path System

The Planning Director showed the public where the Green Belt Area was and explained that, in the future, it would be desirable to have a Bicycle Path System in Sudbury that followed the Green Belt.

Discussion

The Committee requested that the public give some suggestions as to what they wanted. Some suggestions were to close a lane of one of the main arterial streets on a low traffic day, eg. Sunday; to close certain streets in a section of the City on Sundays; or, just to fix some of the areas that are being used now by bicycles. It was suggested that in the future when building new roads that a bicycle path be built on one side of the road.

MINUTES OF OF SECOND PUBLIC MEETING appendix r

THE SECOND MEETING OF THE BICYCLE PATH STUDY COMMITTEE

Sudbury Public Library
MacKenzie Street

Thursday, June 13, 1974 Commencement: 7:30 p.m. Adjournment: 10:15 p.m.

WILLIAM FRYER, CHAIRMAN

Present

Aldermen Zaitz and Yeomans

City Officials

Wilf Ripley, Traffic Engineer; Archie Stewart, Safety Supervisor; Mike Ross, Transportation Engineer; Ray Hortness, Transportation Technician; Bob Kleven, Director of Recreation; J. McKechnie, Secretary

National Capital Commission

Bob Hosler, Landscape Architect

PUBLIC HEARING

Purpose

It was noted that the purpose of this meeting was to have a mutual sharing of ideas, between the Public and City Officials, regarding proposed Bicycle Paths in the Sudbury area. It was hoped that this meeting would stimulate Public Interest in this proposed plan.

Film

For the interest of the committee, a film "Bikeways for Better Living", was presented. Various cities in the United States which have bicycle paths were shown. It was noted that there are three thoroughfares for bicycles. These thoroughfares are:

- Bicycle Paths which are separate from roadways;
- 2. Bicycle Lanes which utilize part of the roadway; and
- Bicycle Routes in which cyclists share the roadway with other traffic

Film (cont.)

It was noted that these thoroughfares are designated by various signs. It was also noted from the film that a cyclist can cover a 5 mile route in 18 minutes at a rate of 10-15 miles/hour. Advantages of riding a bike are that it reduces congestion and pollution within the City, and that it is healthy, convenient and economical to the rider.

Slides

Bob Hosler, of the National Capital Commission, had a slide presentation of the bicycle path system in Ottawa-Hull. It was noted that the pathways in Ottawa are 7 feet wide but will have to be widened due to congestion. It was noted that the paths run along scenic routes to recreational areas such as boating and picnicking sites. Construction of a pathway consists of excavating down 6 inches, filling the excavation with Granular "A", compacting this material and finally applying a coat of asphalt. It was noted that a textured material is used as a warning strip when there is an obstacle or a sharp turn ahead. Steps are used on the pedestrian walkways to discourage bicycle riders. It was noted that the pathways along the Canal in Ottawa had a problem with flooding in the spring. It was noted that the signs in Ottawa are bilingual with international symbols. It was noted that Ottawa has 3 patrolmen on weekdays and 6 on weekends to police the pathways. These patrolmen remove obstacles such as glass from the pathways and help cyclists who are having problems. Since bicycle paths have been established in Ottawa, cycling for recreational and transit purposes have increased greatly. Proposed Bicycle Paths

The Citv's Transportation Department presented a map showing proposed bicycle path routes. It was noted by the Transportation Engineer that the first step would be to establish a circular route around Lake Ramsey. This proposed route would encompass such recreational sites as the Laurentian Complex, Moonlight Beach, Bell Park, the Canoe Club and Carmichael Arena. It was noted that the next step would be to have spoke routes developed off of the main wheel. The proposed arteries, which were shown on a map, were determined by a telephone survey which was undertaken by the City's Transportation Department. It was noted that the Transportation Department favours Bicycle Paths for safety reasons.

The following comments were made:

- that bicycle path arteries should be established firstly to serve school and shopping areas, especially in New Sudbury and Lockerby;
- that bicycle paths could be used for cross-country skiing as they are in Ottawa;
- that all catchbasins should be placed at right angles to the road to avoid bicvcle mishaps;
- that roll-over curbs, as they have in Ottawa, are more convenient for the cyclist;
- that more bicycle racks are required in the downtown area;
- that stone dust can also be used for bicycle paths though it requires more maintenance;
- that funds for bicycle paths in Windsor were raised through bike-athons;
- that terrain is a major factor in the cost of constructing bicycle routes;
 and
- that a sample strip should be constructed for test purposes.

appendix r

Proposed Bicycle Paths (cont.)

Members of the Public put forward a motion to have a detailed plan drawn up to determine costs for the proposed Bicycle Path in the Lockerby Area, on Paris Street, Highway 69, Regent Street and Walford Road East. It was noted by the Chairman that the members of the audience are not a voting body, but that their recommendations will be forwarded to the appropriate departments.

Mr. Caswell, the Chairman of the Conservation Authority, assured the Committee that the Authority would give full cooperation for the development of Bicycle Paths on property under the jurisdiction of the Authority.

The Transportation Department noted that they will be continuing their study into proposed bicycle paths for the Sudbury Area.

Adjournment

The meeting adjourned at 10:15 p.m.

SECRETARY

WM. FRYER, CHAIRMAN