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MANAGER'S REPORT NO.	33
COUNCIL MEETING	90/05/07

RE: AN ENVIRONMENT STRATEGY FOR TRANSPORTATION IN BURNABY

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Director Planning & Building Inspection be adopted.

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TO: MUNICIPAL MANAGER 1990 MAY 02

FROM: DIRECTOR PLANNING & BUILDING INSPECTION OUR FILE: 01.215.5

SUBJECT: AN ENVIRONMENTAL STRATEGY FOR TRANSPORTATION IN BURNABY

PURPOSE: To advise Council of a process for developing an environmental strategy for transportation in the Municipality and to obtain Council approval to sponsor an environmental event to raise public awareness of the impact of transportation on the environment.

RECOMMENDATION:

1. THAT Council direct staff to work with the Environment and Waste Management and Traffic and Transportation Committees to prepare for an environmental event to be held during 1990 October 1-5 to raise public awareness of the impact of transportation on the environment.
2. THAT this report be referred to the Environment and Waste Management and Traffic and Transportation Committees for their consideration.

R E P O R T

1.0 INTRODUCTION

The recent discussions on the "Choosing Our Future" review of the Livable Region Strategy identified the environment and transportation as the central concerns to be addressed by a revised Livable Region Strategy. Air quality was identified as the major environmental issue while our dependence on the automobile and the need for alternative transportation was identified as our most pressing transportation problem.

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Clearly the two issues are interlinked and inseparable. Transportation, particularly transportation by motor vehicle, is a significant environmental issue that directly affects the quality of life in Burnaby and throughout the Lower Mainland. Our use of motor vehicles contributes to an array of environmental problems which range in scope from local to global. They are the region's largest source of air pollution every year spewing into the atmosphere hundreds of thousands of kilograms of emissions that poison the air we breathe, contribute to global warming and endanger human health. The GVRD estimates that over 80 percent of airborne emissions contributing to air quality problems in the Lower Mainland come from motor vehicles. Emissions from motor vehicles include hydrocarbons and nitrogen oxides which combine in the presence of sunlight to produce smog, carbon monoxide, particulates, and lead. Internal combustion engines also produce carbon dioxide (approximately 0.67 kg CO₂/litre gasoline), a "greenhouse gas". All of this airborne pollution is inhaled by the people of Greater Vancouver.

Motor vehicles also contribute to water quality and land use problems. Vehicle emissions stick to road surfaces and rust, chips of paint and metal coatings, particulates from brake linings, etc. which fall from vehicles onto road surfaces are carried into lakes and streams by storm runoff. The result is elevated levels of contaminants such as copper, zinc and lead in local waters.

Urban motorists consume over 40 percent of the petroleum used in the transportation sector and are therefore largely responsible for the production and distribution of petroleum products and associated air and water pollution from these sources.

We are incurring these major environmental problems for an essentially energy inefficient and wasteful transportation mode. Private vehicles average the lowest number of passenger-kilometres per litre of gasoline or energy equivalent. One litre of gasoline (or energy equivalent) in a car yields about 10.5 passenger-kilometres; in a public transit bus, about 42 passenger-kilometres; and on a bicycle about 425 passenger-kilometres.

There is a tendency to look to the provincial and regional level of government for solutions to global environmental problems. Municipal government however may be a more effective force for environmental action. The advantages of a municipal approach stem from closer contact with the individual and it is the individual who ultimately as a consumer of transportation must make the practical choices which are required to ensure preservation of environmental quality.

This challenge has been taken up by municipal governments elsewhere in Los Angeles, Toronto, City of Vancouver and others throughout North America. The purpose of this paper is to outline for Council's consideration some of the overall policy directions and actions which could form part of an environmental strategy for transportation in Burnaby. As part of this process however, it will be necessary to raise the awareness of staff and the public to the environmental impacts of transportation. It is proposed to accomplish this through municipal sponsorship of an environmental event.

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2.0 COMPONENTS OF AN ENVIRONMENTAL STRATEGY FOR TRANSPORTATION IN BURNABY

2.1 Transportation Planning

2.1.1 Policy Direction

To address environmental problems, the planning of transportation facilities should focus on two areas: reducing the use of gas and diesel fuel-powered vehicles and reducing the impact of transportation modes on the urban environment.

Reduction in the use of polluting vehicles primarily involves measures to promote the use of less polluting alternatives including public transit, bicycles and walking.

2.1.2 Possible Actions

Actions in the area of transportation planning which are compatible with the policy direction include the following:

- (i) facilitate the operation of public transit on roads
- (ii) develop a system of urban trails for bicycles and pedestrians
- (iii) expand the rapid transit system in Greater Vancouver
- (iv) encourage park-ride facilities near SkyTrain stations and transit exchanges
- (v) design roads to minimize their impact on the ecology and residential areas
- (vi) revise the Burnaby Conceptual Transportation Plan to incorporate a stronger environmental component.

2.2 Land Use Planning

2.2.1 Policy Direction

The orientation of land uses in the community is a major determinant of the demand for travel. Land use planning is therefore an important consideration in reducing the overall need for travel and thus its undesirable impact on the environment.

2.2.2 Possible Actions

Land use planning actions which are compatible with this policy direction include the following:

- (i) locate higher density developments near major transit facilities including SkyTrain stations and transit exchanges
- (ii) attract employment opportunities to Burnaby as a suburban area which is closer to population growth areas

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(III) require developments of new commercial, industrial and high density residential buildings to provide safe pedestrian and bicycle access/storage.

2.3 Municipal Operations

2.3.1 Policy Direction

The Municipality is not only involved in the planning of transportation but is also a consumer of transportation. In this respect Burnaby has a responsibility to ensure that municipal transportation activities are compatible with environmental objectives.

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2.3.2 Possible Actions

Action in the field of municipal operations which are compatible with this policy direction include the following:

- (I) review applicability of alternate fuel usage in municipal vehicles
- (II) encourage municipal employees to switch to carpool or transit for the journey to work
- (III) encourage municipal employees to convert their personal vehicles to natural gas, propane or some other more environmentally acceptable power source
- (IV) support the needs of employees who choose to cycle to work by providing secure bicycle racks and shower and locker facilities.

2.4 Moral Leadership

2.4.1 Policy Direction

The Municipality could also promote measures to protect the environment through its status as a level of government and a large corporate entity. In this capacity the Municipality can influence the actions of other agencies through moral suasion etc.

2.4.2 Possible Actions

Actions which could be pursued include the following:

- (I) request the Federal and Provincial governments, BC Hydro and BC Gas to increase their efforts to promote natural gas vehicles
- (II) request BC Hydro to initiate program to promote electric vehicles.

3.0 PROPOSED INITIATIVES

The foregoing is intended to provide the basis to initiate discussion on the environmental implications of transportation. The end product of these discussions will be an environmental strategy for transportation in Burnaby. Development of this strategy will involve a number of activities and milestones as follows:

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3.1 An Environmental Event

It is suggested that the Municipality plan and host an "environmental event" in 1990 October to indicate municipal commitment to an environmental strategy for transportation. One option would be to combine this event with BC Transit plans to celebrate the Centenary of Transit in British Columbia by declaring Transit Week in Burnaby.

Activities during Transit Week could involve:

- (i) the stationing of a 1950s BC Transit diesel bus on the Municipal Hall plaza area for a week in October. BC Transit is circulating this bus around the Lower Mainland to distribute information on transit.
- (ii) media coverage of Council members taking transit to the Municipal Hall.
- (iii) measures to strongly encourage municipal employees to take transit to work that week, possibly involving reimbursement for transit trips, restrictions on municipal hall employee parking, etc.
- (iv) distribution of printed matter outlining the impact of private vehicles on the environment and actions available to the individual.
- (v) encourage use of bicycles by installing adequate secure bicycle parking at the Municipal Hall.

3.2 A Transportation Strategy for the Environment

The development of a transportation strategy for the environment will begin with the publication of a discussion paper on transportation and the environment. This paper will provide the basis for discussion at the Environment and Waste Management Committee and the Traffic and Transportation Committee of Council.

Consideration of the discussion paper at these committees would provide input into two areas:

- (i) the development of a revised Burnaby Conceptual Transportation Plan in 1991
- (ii) the development of a State of the Environment Report for Burnaby.

Both of these processes would provide the opportunity for full public input.

4.0 SUMMARY

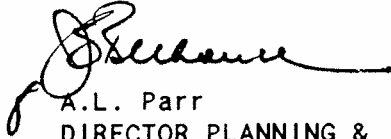
This report is intended to outline some of the actions Council could take to address the environmental impacts of transportation in Burnaby. Some of these activities are already underway through current programs and others would be brought forward for Council consideration as part of a Transportation strategy for the Environment and the State of the Environment Report.

AN ENVIRONMENTAL STRATEGY FOR TRANSPORTATION IN
1990 MAY 02

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To initiate this process it is proposed that Council sponsor an environmental event to raise the awareness of the public to the commitment of the Municipality to addressing environmental problems created by transportation. It is recommended that Council direct staff to prepare for this event.

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A.L. Parr
DIRECTOR PLANNING &
BUILDING INSPECTION

ANP
RG/mcb

cc: Director Engineering
Chief Public Health Inspector