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REPORT  
Regular Council Meeting  
1992 February 24

THE CORPORATION OF THE DISTRICT OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR  
AND ALDERMEN

Re: Environment and Transportation Awareness:  
Transportation Demand Management Programs

RECOMMENDATION:

1. THAT Council receive this report for information.

R E P O R T

"1.0 BACKGROUND

Following the Environment and Transportation Awareness Week during October 1990, a report describing a number of Transportation Demand Management programs aimed at Municipal employees was forwarded to the Committee. This report included programs aimed at decreasing the use of single occupant vehicles by Municipal employees by enhancing both the use of carpools and transit. A number of programs were reviewed and the Committee's recommendations to Council, at the regular Council meeting of 1991 February 08, were adopted as follows:

1. THAT staff be directed to allocate 15 spaces in the Municipal Hall/Deer Lake complex as shown on the attached Figure 1 for use by carpools at an estimated cost of \$600.
2. THAT Council approve for consideration within the 1991 Annual Operating Budget the Initial Transit Pass Subsidy Program in the amount of \$13,300.
3. THAT staff be directed to make available for sale, B.C. Transit FareSaver Tickets in the Municipal Hall.
4. That an assessment of these programs be undertaken at the end of a six month period.

The purpose of this report is to provide the Council with information on the status of the program, including the timing of a report assessing the results of the program.

2.0 CARPOOL PARKING

Arising from Council's approval of the first recommendation, 15 carpool spaces have been allocated and signed in the Municipal lot. The initial intention was that the use of these spaces would be relatively self-enforcing. However, the monitoring of these spaces indicates a notable amount of abuse by municipal employees driving single occupant vehicles. The "incentives" created for carpooling employees, are often viewed as unfair restrictions by single occupant vehicle drivers, and as a result, the restrictions ignored. The incentives provided are prime locations close to the Municipal Hall entrance and the easier availability of spaces through the provision of abundant spaces for carpooling vehicle users.

The point has been reached where some additional steps are necessary to ensure the continued availability of the spaces to carpooling employees and to engender a greater feeling of cooperation amongst all municipal employees. A series of measures as detailed below, have and will be taken.

- 1) Through the fall of 1991, notices were placed on vehicles parked in the designated spaces detailing the "rules of use" of the spaces and urging employees to respect the carpool space designation. These were found to have little effect.
- 2) To simplify enforcement of the parking provisions, carpool placards will be introduced, similar to those provided the handicapped. These will be issued to carpoolers who register as a group of two or more, and would be hung from the rear view mirrors when in use. In combination with this, in order to try to minimize the incentive to ignore the restrictions, it is felt that the number of spaces can also be reduced to ten from the present fifteen. This should still give a reasonable amount of convenience and availability to carpoolers, without appearing overly generous to single occupant vehicle users.

### 3.0 TRANSIT INCENTIVES

Recommendations 2 and 3 dealt with municipal programs which would enhance the use of transit amongst Municipal employees. The Employee Transit Pass Program offering employees a 25% discount on monthly transit passes was put into effect beginning in October 1991 with considerable favor amongst employees. The table below illustrates the use of the program by employees and the cost to the Municipality up to the month of February.

MONTH	MONTHLY PASSES SOLD			TOTAL COST	MUNICIPAL COST
	1 ZONE	2 ZONE	3 ZONE		
October	7	12	0	\$ 946.50	\$ 236.63
November	13	21	0	\$ 1684.50	\$ 421.13
December	9	18	0	\$ 1363.50	\$ 340.88
January	16	16	0	\$ 1512.00	\$ 378.00
February	16	20	0	\$ 1740.00	\$ 435.00

The number of employees originally estimated to take advantage of the program, based on the Environment and Transportation Awareness Week survey results, was between 25 and 30. The higher "base rate" of between 30 and 40 illustrated above indicates that the program may have generated a number of additional frequent users. The Municipal costs, however, are still well within budget. Seasonal drops due to Christmas holidays can also be seen in the pass sales for December and January.

Two additional programs, the Transit Pool Pass and the distribution of Faresaver Tickets were also approved by Council to encourage transit usage amongst infrequent users of transit. The Employee Pool Pass program is very similar to the Pool Car program but rather than signing out keys for the use of a Municipal vehicle, a Transit Pass is signed out for use on the transit system. The Faresaver Ticket program is based only on providing employees with the additional convenience of being able to purchase Faresaver Tickets at the Municipal Hall, their is no subsidy on the part of the Municipality. Attachment 1 is a circular sent to Municipal employees announcing the beginning of the additional two programs.

These two programs were purposely delayed because it was felt that they may infringe on the proper functioning and assessment of the Employee Transit Pass Program. As a result, these programs have only been active as of February 1, 1992 and consequently the six month trial period for these programs would not be concluded until the end of July 1992.

In order to allow for adequate time for the possible inclusion of this item in the Provisional Budget for 1993, it is proposed that the program assessment report for all three programs be submitted to the Traffic and Transportation Committee at the scheduled meeting of June 10. At that time the programs could be considered for funding in the 1993 Provisional Budget. The assessment report would then be based on an 8 month assessment of the Employee Transit Pass Program and a 4 month period for the Transit Pool Pass and Faresaver Ticket Programs. Given the greater simplicity of these two programs, it is felt that this shorter period will be adequate.

#### 4.0 CONCLUSION

Directions given to staff by Council with regard to Transportation Demand Management Programs have been implemented over the last few months and appear to be proving successful. Carpool spaces have been provided in the Municipal lot, and despite the requirement for some additional administrative steps, monitoring and enforcement, do provide additional convenience to employees carpooling to work. The Employee Transit Pass Program, as an indication of Council's support for alternative modes of travel, has been welcomed by a significant number of Municipal employees and is well utilized. The two additional Transit Pool Pass and Faresaver Ticket Programs have recently been initiated and will be included in the Program Assessment report to be presented to the Committee in June 1992."

Respectfully submitted

Alderman J. Young  
Chairman

Mr. Peter Miller  
Member

Alderman D. Evans  
Member

Mr. Ernest Neumann  
Member

Alderman D. Lawson  
Member

Mr. Len Werden  
Member

Alderman C. Redman  
Member

TRANSIT INCENTIVE PROGRAMS  
FOR  
BURNABY EMPLOYEES

EMPLOYEE TRANSIT PASS PROGRAM

The Employee Transit Pass Program has been in effect for over four months now with benefits to both Burnaby employees taking advantage of the 25% discount on transit passes as well as to the community at large in the reduction of single occupant vehicles on the road during peak hours.  
CONGRATULATIONS TO OUR TRANSIT USERS !

In order to enhance the opportunity for more employees to realize the benefits of using Transit two additional programs will begin the first week in February.

TRANSIT POOL PASS PROGRAM

Transit Pool Passes will be made available for the general use of employees. The passes can be used by employees either during working hours for trips more conveniently done by Transit (eg. Skytrain downtown or I10 service to Metrotown) or after hours to explore the Transit option for trips to and from work.

Employees will be asked to sign these passes in and out similar to the pool cars and will be limited to two uses per month during non-working hours.

These passes will be available for sign-out at the information desk !

FARESAVER TICKETS

For the additional convenience of Municipal employees faresaver tickets will also be made available at the cashier's counter. These will be sold at the usual Faresaver price providing the usual one free fare for every nineteen purchased.

Thanks again to our present Transit user's ! ... and we urge the rest to

GO GREEN ..... USE TRANSIT !

THE CORPORATION OF THE DISTRICT OF BURNABY  
ENVIRONMENT AND WASTE MANAGEMENT COMMITTEE

HIS WORSHIP, THE MAYOR  
AND ALDERMEN:

SUBJECT: WATER CONSERVATION

RECOMMENDATIONS:

1. THAT Council urge the Regional District to work with the member municipalities to develop region wide policy and programs on water conservation;
2. THAT Council authorize Burnaby's participation with the Regional District to develop public information and awareness programs to promote water conservation; and
3. THAT a copy of this report be forwarded to the Greater Vancouver Regional District.

REPORT

1.0 BACKGROUND

At the regular Council Meeting held on 1991 November 25, Council received and approved the staff report on the 1992 Water Rates. Arising from the discussion, Council referred the subject of water conservation to the Environment and Waste Management Committee for review.

The purpose of this report is to provide Council with the information on the initiatives undertaken by the Province, the Regional District and Burnaby to conserve the water supply and to outline a course of action that can be undertaken at the Municipal and Regional levels to promote water conservation.

2.0 WATER FACTS

Although water is a readily available resource in the Pacific Northwest, high quality water that is expected by each consumer is not an infinite resource and should not be wasted. Burnaby's drinking water primarily comes from the reservoir in the Seymour watershed and is transported to Burnaby's distribution system via the Greater Vancouver Water District's main transmission network.

Presently, Burnaby owns and operates more than 700 km of water mains that deliver water to over 3,000 industrial/commercial properties and 31,000 residential properties. The total volume of water purchased by Burnaby from GVWD in 1991 was approximately 43.2M cubic meters, compared with 41.6M and 40.7M cubic meters in 1990 and 1989 respectively. The average increase of water consumption in Burnaby between 1987 and 1991 is approximately 5.7% per annum while the cost of water charged by GVWD to all member municipalities rose from \$0.0373/cubic meter in 1987 to \$0.0571 in 1991, an average annual increase of approximately 11.2%. Based on the 1992 Provisional budget, the unit cost of water charged to all Greater Vancouver municipalities in 1992 is estimated to be \$0.078, 36.6% higher than that in 1991.

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### 3.0 PROVINCIAL INITIATIVES

Since the first water use legislation passed in British Columbia in 1859, there have been many amendments made to the Water Act in response to the evolving needs of the resource users and environmental concerns. Currently, B.C. Ministry of Environment is undertaking a review of the Water Management Program which includes proposed strategy to incorporate measures for conserving the water resource.

Several initiatives that have been identified and are being considered by the Ministry to promote water conservation are as follows :

- . Restructuring the water price formulas and regulations to more accurately reflect the economic, environmental and social values of the water resource.
- . Educating the public on the importance of conserving water.
- . Developing better irrigation methods, setting up water recycling systems in industrial plants and installing more efficient water fixtures to encourage water conservation.

### 3.0 REGIONAL INITIATIVES

GVRD, under the granted legislative authority has the power to impose restrictions on the amount of water distributed to member municipalities. Following the drought situation in the summer of 1990, the GVRD Administration Board determined that there is a need to develop stringent water conservation measures and subsequently passed a resolution to develop a voluntary program for water conservation in conjunction with the Lower Mainland municipalities. Other initiatives undertaken by GVWD in recent years to promote water conservation and to avoid a supply shortfall are outlined as follows :

- . Development of a Water Shortage Response Plan for the peak summer season to address concern of water storage in Capilano and Seymour reservoirs.
- . In concert with the Water Shortage Response Plan, the Regional District also issued weekly bulletins during the summer period to member municipalities and the general public if necessary, summarizing the water supply condition and identifying any specific conservation measures that may be required.

### 4.0 BURNABY INITIATIVES

As part of the regional commitment to conserve water supply and to reduce energy costs for the conveyance of water, Burnaby has undertaken a number of initiatives and planned programs to reduce water consumption and wastage.

- . Currently, Burnaby is undertaking a comprehensive water supply analysis for the entire municipal distribution network to identify improvements that will enhance the operating efficiency of the system and reduce water losses.
- . Watermain replacement and renewal projects are identified in the annual municipal budget for implementation. The work program is aimed to replace aging and deteriorating watermains in the effort to minimize water losses through broken pipes and to improve services to the customers.
- . A continual phasing out of the high volume discount for metered water users by reducing the last incremental discount in the Burnaby Water Rates Bylaw.
- . In the summer of 1990, due to the prolonged period of dry weather and record low levels in the Regional District's supply reservoirs, Burnaby curtailed all road flushing operation and washing of municipal vehicles. Municipal lawn sprinkling also was restricted during that period to reduce the total water consumption demand.

## **5.0 DISCUSSION - WATER CONSERVATION MEASURES**

### **5.1 Sprinkling Regulation**

Under the current Burnaby Waterworks Bylaw, Council may regulate water consumption to conserve water supply. The imposition of conservation measure such as sprinkling regulation does reduce peak period water demands and provide temporary relief to critical areas with an inadequate water distribution system. However, it should be noted that the restrictions do not necessarily reduce the total consumption but only provide an attenuation effect on the peak period demand. Furthermore, there have been many problems experienced by local jurisdictions associated with the enforcement of the regulation.

A survey of the Lower Mainland municipalities indicated that most municipalities including Coquitlam, North Shore cities, Surrey, Langley and Delta have lawn sprinkling restriction for the summer season. The restriction is primarily based on odd/even day rule with morning and evening watering hours. Presently, Burnaby, Richmond and Vancouver do not have sprinkling restrictions but have power to impose water use regulation under the Bylaw if required.

### **5.2 Universal Metering**

In communities where the water resource is scarce, universal metering of water connections including residential connections has been found as an effective way of encouraging water conservation. However, there is no hard data collected to demonstrate the cost effectiveness of the metering system.

Presently, the Greater Vancouver municipalities have the benefit of the relatively low water cost hence have not moved to adopt the universal metering policy due to the high cost of installing, maintaining and reading the meters. With approximately 31,000 residential connections in Burnaby, it is estimated that it will cost somewhere between \$6M and \$7M to install meters at these locations, plus ongoing administration and maintenance costs.

### **5.3 Public Education and Awareness Programs**

With growing concerns about water quality, increasing costs and water shortages, public relations and public information can be used as an effective means of conveying the necessary message to the public. Through the information program, the public can learn about water-wise landscaping or minor plumbing adjustments to conserve water.

There are many ways to reduce household water consumption that can help homeowners save hundreds and thousands of gallons of water and hot water heating energy cost without any great inconvenience. By reducing the amount of water discharging to the sanitary sewer, it would also reduce the load demand on sewerage treatment plant.

Home water conservation measures that can be undertaken by homeowners include:

- . Low flush toilets
- . Energy and water efficient dish washing
- . Energy and water efficient washing machines
- . Water saving devices for shower heads and toilets
- . Repair water leaks in faucets
- . Restrict outdoor water use including lawn and gardening sprinkling, car washing and driveway cleaning

6.0 CONCLUSION

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Water is a valuable resource. To ensure that the Region can continue to sustain healthy and high quality water, effective ways of conserving our resource must be developed. In concert with the aforementioned initiatives and conservation measures for sustaining the water resource, we recommend:

- a) that the Regional District be urged to develop region wide policy and programs on water conservation; and
- b) that a joint municipal and regional public campaign and awareness program be initiated to promote water conservation. The program could include distribution of informative water conservation pamphlets through the education program. Local newsletter such as Information Burnaby can also be used to convey the message.

Respectfully submitted,

Alderman L.A. Rankin  
Chair

Alderman D.P. Drummond  
Member

Alderman D.G. Evans  
Member

Alderman D. Lawson  
Member

Alderman C. Redman  
Member