REPORT Regular Council Meeting 1980 JULY 21

THE CORPORATION OF THE DISTRICT OF BURNABY

File: 1763

TRANSPORTATION COMMITTEE

HIS WORSHIP, THE MAYOR AND MEMBERS OF COUNCIL 1980 July 09

Madam/Gentlemen:

RE: BURNABY COMPREHENSIVE TRANSPORTATION PLAN -IMPLEMENTATION STRATEGY/SCHEDULE REVIEW

RECOMMENDATIONS

- 1. THAT Council lift from the Table the Comprehensive Transportation Plan Implementation Strategy (report dated 1979 November 22) and reconsider it relative to the review of the Transportation Committee.
- 2. THAT Council adopt in principle the Comprehensive Transportation Plan Implementation Strategy as amended in this report.
- 3. THAT Council approve the continued use of the Ten-Year Implementation Schedule (as amended) as the basis for planning capital expenditures for transportation in the Capital Improvement Program.
- 4. THAT Council authorize the use of the amended Implementation Schedule as the basis for discussion with adjacent municipalities, the G.V.R.D. and the Ministry of Transportation and Highways relative to the project programming of those agencies.
- 5. THAT Council request the Transportation Committee to annually review the Implementation Strategy and Ten-Year Implementation Schedule.
- 6. THAT Council in its consideration of short term project priorities relative to financing include the projects that are scheduled for 1981 to 1983 inclusive (listed in Table I).
- 7. THAT Council request the Transportation Committee, in consultation with staff, to give further consideration to the alignment, jurisdiction, and scheduling of the Marine Way/10th Avenue Connector.
- 8. THAT a copy of this report as approved by Council be sent to the Capital Improvement Program Committee for their review and report to Council.

SUMMARY AND CONCLUSIONS

As a result of their review of the Comprehensive Transportation Plan - Implementation Strategy (and Ten-Year Project Schedule), the Transportation Committee has drawn the following conclusions as summation:

- 1. The Comprehensive Transportation Plan is based on framework provided by the Transportation Policies for Burnaby and therefore represents an integrated approach to the solution of Burnaby's pressing transportation problems. The Comprehensive Transportation Plan - Implementation Strategy was established to provide a systematic basis for the development of the Comprehensive Transportation Plan.
- 2. In its review the Transportation Committee has found that the Implementation Strategy is still valid, and flexible enough to accommodate new developments such as the Annacis Project.

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REPORT Reglar Council M^eting 1980 JULY 21

Transportation Committee Report 1980 July 09 - Page 2

84

- 3. A Ten-Year Implementation Schedule has been proposed by the Transportation Committee in order to define how the Comprehensive Transportation Plan could be achieved in accordance with the stated transportation goal and policies for the municipality. The Committee recognizes that it is unlikely that the plan will be implemented according to this schedule. Accordingly, it was the intention of the Committee that the Implementation Timetable should be used as the basis for municipal transportation planning and that it should be reviewed and updated annually.
- 4. The Committee has reviewed the recent transportation developments in the municipality and the immediate region relative to the Implementation Schedule and minor adjustments to the Schedule have been proposed as discussed in this report. Recent agreement with the Ministry of Transportation and Highways now provides that some projects which were initially considered a wholly municipal responsibility will be eligible for cost-sharing.
- 5. Members of the Transportation Committee still have reservations regarding the necessity for advancing certain major projects relative to the Annacis Crossing. In particular, it is the view of the Committee that the alignment, function, jurisdiction and scheduling of the Marine Way/Tenth Connector should be reviewed as a matter of urgency relative to the Annacis project. It is considered that improvements to the Griffiths/19th/20th route may be required in advance of the completion of the Annacis System.
- 6. The Committee recognizes that financial strictures necessitate priorization of major municipal road works. However, it wishes to reiterate that a comprehensive and systematic approach should be taken in the development of the Comprehensive Transportation Plan. Accordingly, it suggests that Council, in its consideration of road projects relative to financing, include for purposes of priorization the projects scheduled for 1981 to 1983 implementation as listed in this report.

REPORT

1.0 INTRODUCTION

The purpose of this report is to review the Implementation Strategy/Schedule for the Comprehensive Transportation Plan Review as recommended to Burnaby Council by the Transportation Committee in a report dated 1979 November 21. At their meeting of 1979 November 26, the Municipal Council adopted the recommendations of the Transportation Committee and the report was forwarded to concerned parties including the Ministry of Transportation and Highways. Subsequently, Council elected to reconsider this report and tabled the matter.

In the development of the Implementation Strategy and Project Schedule, it was the intent of the Transportation Committee that these items would be reviewed annually. In the course of this review, the Implementation Schedule would be revised to account for progress made relative to the Implementation Strategy and to reflect any major developments in land use and transportation. This annual review process is imperative because of the programming and budgeting constraints of other agencies as well as the need for the Municipality to annually review and update its Capital Improvement Program (as discussed below).

> The present review of the Implementation Strategy/Schedule has been precipitated by the recent agreement between the Municipality and the Ministry of Transportation and Highways regarding the Comprehensive Transportation Plan, the announcement of the Annacis System development and the expressed desire by members of Council to establish Municipal priorities relative to consideration of a financing program for capital improvements.

Accordingly, this report will provide a preliminary review of the Comprehensive Transportation Plan Implementation Strategy/Schedule and suggest a basis for establishing Municipal implementation priorities.

2.0 REVIEW OF RECENT MAJOR TRANSPORTATION DEVELOPMENTS

- 2.1 PUBLIC TRANSPORTATION On 1980 April O1, the Greater Vancouver Regional District officially assumed responsibility for planning the provision of public transportation services in the Lower Mainland in the context of the Urban Transit Authority Act legislation. The day-to-day operation of bus services is now the responsibility of the Metropolitan Transit Operating Company, a Crown Corporation which has been set up to take over this function. The other partner in this tri-partite arrangement is the Urban Transit Authority which was established as an agency of the Provincial Government. Thus, henceforth, the Municipality will have to look to the Greater Vancouver Regional District and the Urban Transit Authority to provide public transportation improvements in accordance with the Comprehensive Transportation Plan adopted by Council. The Transportation Committee has recently met again with officials of both the U.T.A. and the G.V.R.D. and they have expressed their support for the Municipality's Comprehensive Transportation Plan and general agreement with the Implementation Strategy/Schedule.
- 2.2 ACCEPTANCE OF THE MAJOR MUNICIPAL ROAD NETWORK The agreement between the Ministry of Transportation and Highways and the Municipality (report of the Transportation Committee to Council dated 1980 April 08) regarding the configuration of the major municipal road network was a prerequisite step to the ultimate implementation of the Comprehensive Transportation Plan. The agreement ensures that the municipality is now eligible for Revenue Sharing capital grants for major municipal roads which increase network capacity. The joint agreement to the road network description also ensures that both the Municipality and the Ministry of Transportation and Highways work towards a common goal in the improvements to the road system. The agreement further provides for the establishment of a technical working committee of Municipal and Highways' staff to address items of mutual concern, including the unresolved issues relative to the Conceptual Transportation Plan. Municipal staff have developed an agenda for this joint technical committee with priorities for discussion based on the Implementation Strategy developed by the Transportation Committee.
- 2.3 THE ANNACIS SYSTEM Recently, the Ministry of Transportation and Highways announced the development of a new crossing of the Fraser at Annacis Island. The initial assessment of the ramifications of this proposal have been considered by the Transportation Committee which has reported to Council on this matter. Inasmuch as the Queensborough Bridge will be used as the Fraser North Arm Crossing, the road network configuration proposed by the Transportation Committee in South Burnaby has been judged to be adequate to cope with the projected increase in traffic flows. However, there may well have to be some alteration to time tabling of project implementation to accommodate the Annacis project's completion.

At this stage it is anticipated that the Griffiths/19th/20th Route will have to be improved concurrently with upgrading of the Queensborough bridgehead. Other major projects such as Stormont/Newcombe and the Marine Way/10th Connector may also have to be advanced so that their completion coincides or precedes the completion of the Annacis System. The necessity for this, however, will best be determined when Municipal staff complete the computer model study of future travel patterns in the Municipality. This study is projected to be finished within this calendar year and, consequently, there will be sufficient time to alter the Implementation Schedule, if necessary, in order to accommodate the 1984 completion date of Annacis.

> Municipal staff have met with the Ministry of Transportation and Highways staff in preliminary discussion on the proposed design and road lay-out of the Queensborough north bridgehead. Subsequent to further staff level meetings, it is anticipated that the Ministry will place before New Westminster and Burnaby Councils, for its respective consideration, a proposed design for the bridgehead.

3.0 IMPLEMENTATION STRATEGY

The Implementation Strategy proposed by the Transportation Committee is depicted on Figure 1 (see <u>attached</u>). This strategy was defined to allow for flexible yet ordered approach to the development of the Comprehensive Transportation Plan. The strategy fully reflects the priorities implicit in the Transportation Policies adopted by Council and therefore it is recommended that any priorization of projects should accord with the intent of the Implementation Strategy. A re-examination of the project linkages relative to the preceding discussion and a review of major projects indicates that the strategy is still valid. For example, one of the key major projects in the strategy, which is beyond municipal jurisdiction, is the improvement to Cassiar between the Freeway and the Second Narrows Bridge and it is understood that the M.O.T.H. is currently progressing the design in anticipation of early construction.

Although the original strategy did not explicitly address the Annacis Project a revised version of the project linkages diagram is reproduced herewith to show how the Annacis system might fit in.

4.0 IMPLEMENTATION SCHEDULE REVIEW

The Implementation Schedule previously proposed is a decade timetable for achievement of the Comprehensive Transportation Plan. It is, however, recognized that this period of time may well be "stretched" by financial constraints of both the Municipality and other agencies and the Implementation Strategy establishes a framework for adjusting the scheduling of projects to accommodate this fact. All of the projects in the schedule are reviewed in Appendix I <u>attached</u>. The Committee recommends the following changes to the Implementation Schedule proposed in the Implementation Strategy Report of 1979 November 22.

4.1 PROJECTS TO BE ADVANCED TO 1981 - 1983 FOR IMPLEMENTATION

The Committee recommends that the timetable for implementation of the following projects be advanced to the 1981 - 1983 period as discussed below.

- 4.1.1 GILMORE AVENUE It is recommended that the scheduling of this relatively minor improvement project be advanced given the proposed development of the Discovery Park adjacent to Willingdon.
- 4.1.2 GRIFFITHS STREET/19th/20th DIVERSION Although this project is scheduled for late in the decade, the provision of the Annacis System requires that its timetabling be advanced so that improvements are in place concurrent with the opening of the new river crossing.
- 4.1.3 DOVER/OAKLAND/BURRIS This project is now eligible for revenue sharing. It is recommended that the scheduling of this project be advanced to coincide with improvements to Moscrop/Price/Deer Lake. The proposed road link will reduce the pressure placed on residential streets by traffic demand for movement between Metrotown and the Deer Lake area.

4.2 PROJECT(S) TO BE DEFERRED BEYOND 1983

It is recommended that the scheduling of the following project be deferred beyond 1983:

4.2.1 BYRNE ROAD - Preliminary engineering work has indicated that upgrading Byrne to the proposed standard is prohibitively expensive even though the project is now eligible for Revenue Sharing. Accordingly, it is proposed that this project be indefinitely deferred. Use of Byrne Road between Marine Way and Marine Drive as a part of the Marine Way/ 10th Connector will be re-evaluated relative to other options.

4.3 PROJECTS ELIGIBLE FOR COST SHARING

Given the agreement between the municipality and the M.O.T.H. on the definition of the major municipal road network the range of projects considered eligible for cost sharing has been increased. The following municipal road projects should be placed in the "Cost Shared Projects" category:

- 4.3.1 PHILLIPS (North of Broadway)
- 4.3.2 DOVER/OAKLAND/BURRIS
- 4.3.3 MOSCROP/PRICE/DEER LAKE
- 4.3.4 BYRNE ROAD
- 4.3.5 BROADWAY (Lake City Way to Underhill)
- 4.4 PROJECTS REQUIRING FURTHER CONSIDERATION

A number of projects are currently under review by staff (Municipal and M.O.T.H.) as "unresolved" issues outstanding from the agreement between the Province and the Municipality on the major road network. Pending completion of the review it would be unwarranted to change the scheduling of any of these projects. However, the Transportation Committee is of the opinion that the following project should be reviewed as a matter of some urgency.

4.4.1 MARINE WAY/10th AVENUE CONNECTOR - Although this road project is considered for the latter half of the decade, it may be necessary to advance it subsequent to further examination of the effects of the Annacis crossing. The precise alignment of this route requires further study and alternatives to the alignment using Byrne Road should be considered because of the high cost associated with upgrading Byrne. Because this project links two Provincial arterials consideration should be given to requesting that the M.O.T.H. take prime responsibility for its implementation.

5.0 FINANCIAL IMPLICATIONS

The first six years of the Implementation Schedule were the basis of the major road component of the 1980-1985 Capital Improvement Program (C.I.P.) for the Municipality. It should be noted that the inclusion of projects in the C.I.P. does not necessarily imply a Council commitment to implementation of a particular project. Projects are generally approved on an individual basis and whilst the initial year of the C.I.P. does tend to reflect the priorities of Council, projects scheduled for subsequent years traditionally have not. For example, there are projects in the current C.I.P. that first appeared within municipal capital programs more than 5 years ago and are likely to appear in future programs unless financing for their implementation is resolved.

. 87

REPORTS Regular Council Meeting 1980 JULY 21

Transportation Committee Report 1980 July 09 - Page 6

88

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The financial implications arising from the ten-year implementation schedule previously proposed are detailed in the attached report. The revisions to project timing and project categorization (relative to revenue sharing) of course alter that analysis. In lieu of re-evaluating the ten-year implementation schedule at this time, it would be more fruitful to concentrate on shorter term priorities implicit in the Implementation Schedule (as revised). This approach is more sensible in view of the uncertainty inherent in any longer term planning and programming of transportation improvements. (For example, the M.O.T.H. cannot commit itself to future spending on arterial improvements in Burnaby or guarantee the availability of revenue sharing monies to Burnaby).

Table I below lists the major municipal projects scheduled for 1981-1983 along with the project costs. It is presumed that any short term municipal program for implementing major road improvements would be comprised of or drawn from this list. This list is broken down into three priority categories in accordance with the importance of particular projects relative to the Comprehensive Transportation Plan objectives.

TABLE I

MAJOR MUNICIPAL ROAD PROJECTS* SCHEDULED FOR 1981-83

	Costs \$000's (7		
Priority Group/Project	Municipal	Total	
GROUP "A"		•	
B.N.R. Overpass Kensington - Sprott to Laurel Nelson - Marine Drive to Marine Way	\$2,750 190 130	\$8,000 380 260	
	\$3,070	\$8,640	
GROUP "B"			
North Road Boundary Road Stages 2 & 3 • Griffiths/19th/20th Sprott - Douglas to Freeway	\$ 525 500 500 160 \$1,685	\$2,250 2,000 1,000 320 \$5,570	
<u>GROUP "C"</u> Royal Oak - Grange to Canada Way Phillips/Bainbridge Moscrop/Price/Deer Lake Beaverbrook Gilmore - Lougheed to Still Creek Street Oakland - Royal Oak to Sperling	\$ 750 275 600 220 190 350	\$1,500 550 1,200 220 380 700	
* Exclusive of Traffic Management, L.I.P., Development Cost Projects.	\$2,385	\$4,550	

It should be noted that the above costs are in 1979 dollars and accordingly, the financial impact of financing these projects has been assessed relative to the 1979 tax base and mill rate. For the "pay as you go" financing option it has been assumed that expenditures are spread uniformly over the three year implementation period and in the case of the "borrowing" option the capital cost as lump sum has been amortized over a 20 year period at 10% (and the duration of the construction period has been neglected).

TABLE II

FINANCING OPTIONS FOR MUNICIPAL ROAD PROJECTS

· · · · ·		Scheduled Group A+B	Projects Group A+B+C	
Total Cost (\$000's)	\$8,640	\$14,210	\$18,760	
Municipal Share (\$000's)	\$3,070	\$ 4,755	\$ 7,140	
"PAY AS YOU GO" FINANCING OPTION (3 YEAR CONSTRUCTION PERIOD)				
Annual sum to be raised (\$000's)	\$1,023	\$1,585	\$ 2,380	
Mills (1)	1.6	2.5	3.8	
% increase in mill rate ⁽²⁾	3.5	5.5	8.2	
"BORROWING" FINANCING OPTION (20 YEAR LOAN @	<u>10% P.A.</u>)		• 4 1	
Annual sum to be raised (\$000's)	\$ 360	\$ 560	\$ 840	
Mills ⁽¹⁾	0.6	0.9	1.3	
% increase in mill rate ⁽²⁾	1.2	1.9	2,9	

NOTES (1) In 1979 one mill raised \$622,265.

(2) The 1979 general purpose and debt mill rate was 46.5 mills

The above analysis presumes that the Municipality would receive maximum cost sharing for all eligible projects. The Province, however, has limited funds available (as determined annually) for revenue sharing grants and consequently an accelerated program (i.e. as scheduled) would probably involve a much greater financial commitment than implied in the above table.

It presumes also that the Municipality can meet its share of the cost. However, this remains to be proven. The Municipality has obligations other than the provision of transportation services and it has a staff committee named the Capital Improvement Program Committee entrusted with the task of fitting the capital needs of the community to the financing available to the community, including borrowing. One of the recommendations of this report will be that the Capital Improvement Program Committee be asked to review this report and report to Council.

Respectfully submitted,

Alderman W. A. Lewarne Chairman

Alderman G.D. Ast, Member

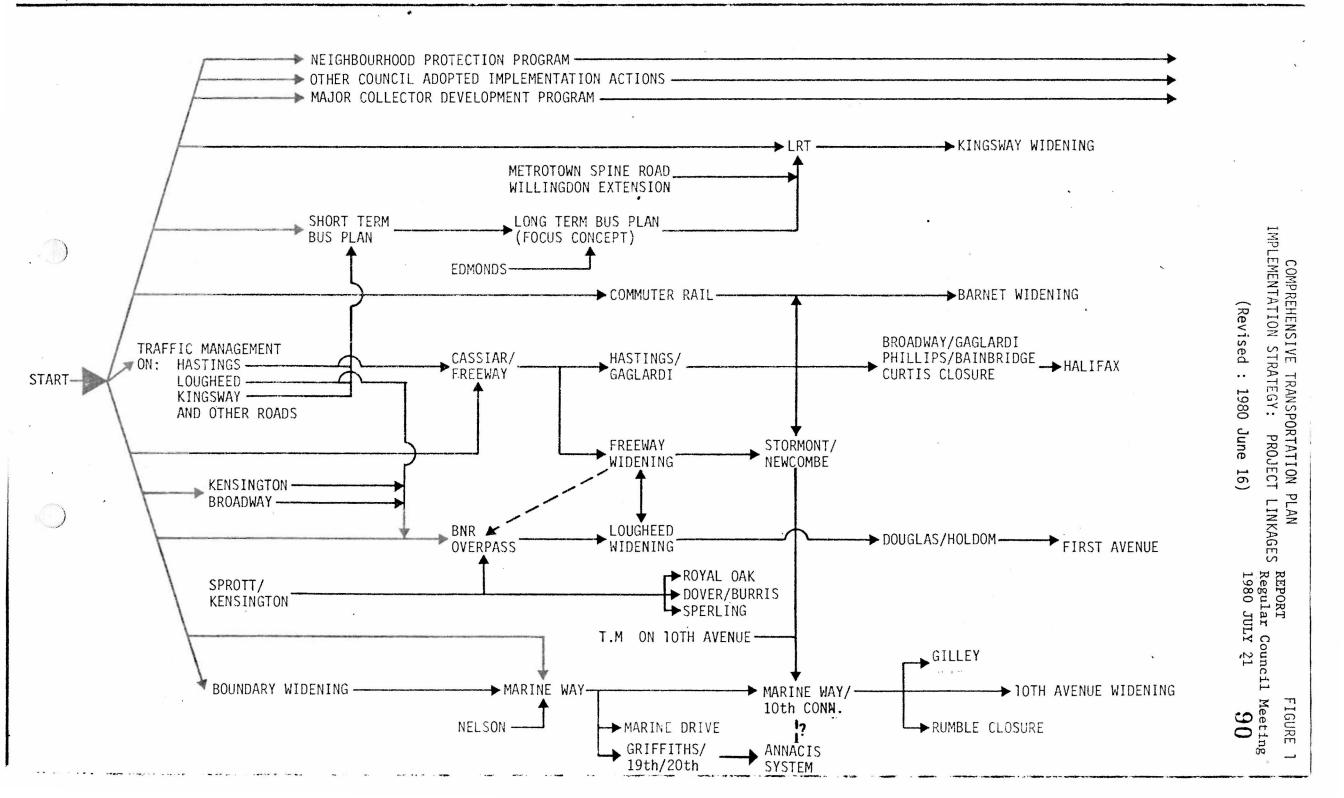
Alderman D.N. Brown Member

Mr. G.W. Ramsell Community Group Representative

Mr. R.W. Tarling Community Group Representative

PL/hf

Attach.



REPORT Regular Council Meeting 1980 JULY 21

APPENDIX A

A REVIEW OF THE TRANSPORTATION PLAN 10 YEAR IMPLEMENTATION SCHEDULE

The projects listed in the "Implementation Strategy" report of 1980 November are reviewed below in order of their appearance in the aforementioned report. The discussion includes proposed amendments to project scheduling and/or categorization.

A.1 PROJECTS CONSIDERED A G.V.R.D./U.T.A. RESPONSIBILITY-

- A.1.1 SHORT TERM BUS IMPROVEMENTS The bus transit services currently offered are essentially the same as those previously provided by B.C. Hydro. It is expected that it could take one or, perhaps, two years before substantial improvements to the bus service appear on Burnaby's streets. In part, this is due to the fact that the G.V.R.D. is now in the process of establishing an organization to cope with its new transit function but a more important constraint is the obsolescence and size of the present fleet of buses. Although the Urban Transit Authority has ordered new vehicles, it will be some time before they are delivered and thus initial improvements to bus transit will be primarily related to operational efficiency. It is expected that Report 3 of the Greater Vancouver Regional District's Rapid Transit Project, "Short Term Bus Improvements for Greater Vancouver", will be the basis for the initial thrust of changes to the bus transit system. These proposed improvements accord with the direction of the Comprehensive Transportation Plan and the Implementation Strategy.
- A.1.2 LONG TERM BUS IMPROVEMENTS The short term bus improvements that the Municipality has proposed (as discussed above) will lay the groundwork for the implementation of the transit "focus" concept proposed in the Comprehensive Transportation Plan. The longer term improvements will not only require operational restructuring of routes and schedules in accordance with the focus concept but also the provision of fully developed interchange facilities.
- A.1.3 LRT The Burnaby Transportation Committee and Municipal Council have considered the preliminary design for the LRT alignment and station locations in Burnaby. Council recommendations on these matters have been forwarded to the G.V.R.D. which has extended the deadline for Municipal comment on these matters to 1980 June 02. Presumably, action by the G.V.R.D. board on the rapid transit study staff committee recommendations will await the G.V.R.D. report on Municipal input regarding alignments and station locations. The decision to implement LRT will have to be a joint one by the Greater Vancouver Regional District Board and the Urban Transit Authority Board. It is noted that the Urban Transit Authority staff have carried out a review of the G.V.R.D. Rapid Transit Study and their conclusion is that "the long term economics of LRT as they directly affect transit costs are positive to all first priority options. In addition, the LRT produces substantial indirect benefits including a positive role incurred in more efficient use of land use."
- A.1.4 COMMUTER RAIL Both the G.V.R.D. and the U.T.A. have published reports regarding the feasibility of a commuter rail service between downtown Vancouver and the Northeast Sector along Burrard Inlet rail line. Although both studies suggest that there would be limited demand for this service as well as a limited capacity available, it would appear that such a service could be an economic proposition. It would appear that both agencies regard a commuter rail service as a longer term option to be judged relative to bus service improvements in this corridor. However, the Transportation Committee recommends that the scheduling proposed for this project not be revised at this time.

91

APPENDIX A - Page 2

REPORT Regular Council Report 1980 JULY 21

A.2 PROJECTS CONSIDERED A PROVINCIAL RESPONSIBILITY

- A.2.1 TRAFFIC MANAGEMENT In past discussions, Ministry of Transportation and Highways staff have been supportive to proposed traffic management improvements to major arterials. It is anticipated that this matter will be given priority consideration by the Joint Staffs Committee and discussions have commenced on a jointly shared Design Studies for Kingsway, Lougheed and Hastings.
- A.2.2 HASTINGS/GAGLARDI CONNECTOR The provision of the Hastings/Gaglardi Connector is one of the unresolved differences between the Province and the Municipality and subject to further examination by the Joint Staffs Committee. However, at this time, there would appear to be no justification for altering the scheduling of this project.
- A.2.3 BROADWAY FROM GAGLARDI TO NORTH ROAD No scheduling change proposed although the Municipality of Coquitlam has expressed reservations about the continuity of a Broadway/Como Lake arterial.
- A.2.4 WIDENING OF THE FREEWAY FROM BOUNDARY TO STORMONT No scheduling change proposed. Staff will continue to promote this needed project with the Highways Department.
- A.2.5 STORMONT/NEWCOMBE/McBRIDE CONNECTOR This project is scheduled for 1986-87, however, its timing may have to be advanced relative to Annacis. The design of this link will be further considered by the Municipal and Provincial staffs.
- A.2.6 MARINE WAY The Marine Way project is now under construction and its completion is assured given the Province's commitment to implement the Annacis System. The M.O.T.H. will now be completing the road (by the end of 1981) through to Queensborough rather than progressing it in two stages.
- A.2.7 WIDENING TO PROVINCIAL ARTERIALS None of the widenings proposed in the Implementation Schedule is imminent. The M.O.T.H. has expressed a desire to advance the widening of Barnet and this will be considered in the context of the Joint Study of the Hastings/Gaglardi project. At this time there is no reason to believe that the timetable shown can not be met or should be altered.

A.3 PROJECTS CONSIDERED A MUNICIPAL RESPONSIBILITY

- A.3.1 NEIGHBOURHOOD PROTECTION PROGRAM This is to be a continuing program during the course of which each residential neighbourhood would be examined in turn to determine what measures, if any, could be implemented to reduce the amount of extraneous traffic and to ensure that vehicular travel patterns reflect the road hierarchy of the Conceptual Transportation Plan. Although an overall Municipal program has not been developed, initial work is proceeding on the Hastings Corridor. The terms of reference for a consultant's study to evaluate problems and propose solutions for the Hastings Corridor have been defined and financial support has been sought from the Provincial Government (1980 Municipal Planning Grant Program). This Corridor Study is to be completed in this calendar year and will provide traffic management plan for the Hastings arterial and the adjacent residential areas. A comprehensive approach has been taken in order to ensure that extraneous traffic is not merely shunted from one neighbourhood to another.
- A.3.2 COUNCIL ADOPTED IMPLEMENTATION ACTIONS A number of Council implementation actions arose from Council adoption of the Transportation Policies for the Municipality. These actions (listed in Appendix I of the "Comprehensive Transportation Plan for Burnaby") are not related to major capital expenditures but rely on staff resources. Their progression is contingent upon the availability of staff resources relative to other priorities.

52

REPORT Regular Council Meeting 1980 JULY 21

93

APPENDIX A - Page 3

- A.3.3 TRAFFIC MANAGEMENT A sum of \$500,000 has been budgeted for Traffic Management improvements in 1980, in accordance with the Transportation Plan Implementation Schedule. The sum is based on what was judged to be a necessary level of municipal expenditure during the course of the next ten years and includes the municipal share of transportation improvements on major Provincial arterials. The municipal share of the cost of improvement to the Burris/Canada Way junction will be funded from this traffic management budget.
- A.3.4 COST SHARED PROJECTS -
 - (a) NORTH ROAD/NEW WESTMINSTER FREEWAY This project is expected to be progressed as scheduled.
 - (b) BOUNDARY ROAD Stage I of this project, scheduled for completion in 1980, is presently underway, and at this time it is expected that subsequent stages will be progressed according to schedule.
 - (c) B.N.R. OVERPASS Progress on this project has been held in abeyance pending further review by Council, however, if the project is approved, the scheduling indicated can be achieved.
 - (d) WILLINGDON AVENUE EXTENSION Implementation of this road is primarily related to the development of Metrotown and the LRT system.
 - (e) NELSON AVENUE It is anticipated that this road will proceed according to schedule inasmuch as it is related to the Marine Way project which is now under construction.
 - (f) MARINE WAY/10th AVENUE CONNECTOR Although this road project is considered for the latter half of the decade, it may be necessary to advance it subsequent to further examination of the effects of the Annacis crossing. The precise alignment of this route requires further study and alternatives to the alignment using Byrne Road should be considered because of the high cost associated with upgrading Byrne. Because this project links two Provincial arterials consideration should be given to requesting that the M.O.T.H. take prime responsibility for its implementation.
 - (g) ROYAL OAK AVENUE At this stage, there appears to be no discernible need to alter the scheduling of Royal Oak improvements.
 - (h) DOUGLAS ROAD/HOLDOM AVENUE/BNR OVERPASS Although this project is scheduled for late in the decade its implementation is now being reconsidered by Council relative to the BNR Overpass in the Sperling Corridor.
 - (i) KENSINGTON AVENUE (SPROTT TO LAUREL) The timing of this project is related to the scheduling of the BNR Overpass improvement.
 - (j) GILMORE AVENUE It is recommended that the scheduling of this relatively minor improvement project be advanced given the proposed development of the Discovery Park adjacent to Willingdon.
 - (k) GRIFFITHS STREET/19th/20th DIVERSION Although this project is scheduled for late in the decade, the provision of the Annacis System requires that its timetabling be advanced so that improvements are in place concurrent with the opening of the new river crossing.
 - (1) SPROTT STREET, DOUGLAS TO FREEWAY The timing of this project is related to the proposed BNR Overpass improvements.
- A.3.5 LOCAL IMPROVEMENT PROJECTS (MAJOR COLLECTORS) At this stage, there is no apparent necessity to alter the scheduling of these projects. It should be noted that the LIP improvement to Kensington is scheduled for 1980 and is to be progressed accordingly.
- A.3.6 DEVELOPER COST PROJECTS The timing of these projects is, of course, contingent upon development. The Carleton (Gilmore)/Kincaid connector route is currently being progressed relative to the B.C.I.T. Discovery Park development.

APPENDIX A - Page 4

. 94

- A.3.7 OTHER PROJECTS The projects originally placed in this residual category were initially assessed to be not eligible for Revenue Sharing Grants. The agreement with the M.O.T.H. now provides that some of these projects, as indicated below, should be placed in the "Cost Shared" category.
 - (a) RUMBLE STREET Closure no change to scheduling proposed.
 - (b) PARKER/CURTIS no change to scheduling proposed.
 - (c) PHILLIPS/BAINBRIDGE Connector This project is eligible for Cost Sharing. The extension of Phillips south of the Lougheed is to be the subject of examination by the Joint Staffs Technical Committee but this study has no bearing on the timing of the proposed improvements north of Broadway.
 - (d) DOVER/OAKLAND/BURRIS This project is now eligible for revenue sharing. It is recommended that the scheduling of this project be advanced to coincide with improvements to Moscrop/Price/Deer Lake. The proposed road link will reduce the pressure placed on -residential streets by traffic demand for movement between Metrotown and the Deer Lake area.
 - (e) MOSCROP/PRICE/DEER LAKE This project scheduled for 1982/83 is considered eligible for revenue sharing. No change to its timing is proposed.
 - (f) NORLAND/STILL CREEK This project is not eligible for Revenue Sharing. The majority of this industrial collector is now developed between Lougheed and Douglas.
 - (g) BEAVERBROOK EXTENSION No change to category or scheduling is proposed.
 - (h) BYRNE ROAD Preliminary engineering work has indicated that upgrading Byrne to the proposed standard is prohibitively expensive even though the project is now eligible for Revenue Sharing. Accordingly, it is proposed that this project be indefinitely deferred. Use of Byrne Road between Marine Way and Marine Drive as a part of the Marine Way/10th Connector will be re-evaluated relative to other options.
 - (i) CARIBOO ROAD No change in scheduling is proposed.
 - (j) GOVERNMENT ROAD No change in scheduling is proposed. The upgrading of this road to industrial collector standard is eligible for cost sharing.
 - (k) BROADWAY The improvement of Broadway from Underhill to Bainbridge should continue to be scheduled for completion in 1984 but the whole of the work should be scheduled for 1984. The portion of the improvement from Lake City Way to Underhill qualifies for Revenue Sharing.