TOPIC

Transportation Planning In London: Can London Catch The Bus?

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Better Government through Research

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THIS TOPIC IN BRIEF

The transportation situation one faces as an urban traveller in London varies with one's mode of travel. For the motorist it is good; for members of the car-disadvantaged minorities —the transit riders, the pedestrians and the cyclists— it is mostly fair to poor; for many of the elderly in winter, it is impossible.

A number of trends —car ownership, road construction, transit usage, land development, fiscal restraint— indicate that road congestion will worsen. So must the quality of the inner-city residential environment, unless the traditional stop-gap solutions to traffic congestion —road building and widening— give way to environmentally sensitive solutions. The solutions of the future should also be energy sensitive.

The record shows that London's decision-makers are not sensitive to such solutions. The problem can be traced largely to political and administrative policy-making procedures and structures, and to the absence of a valid strategic transportation plan. While the City's handling of transportation is the primary focus of this report, our observations and recommendations bear to some degree on the entire spectrum of civic affairs.

We make three major recommendations that are designed to improve the situation:

RECOMMENDATION 1: that City Council establish a Transportation Department, the head of which would report directly to the Chief Administrative Officer (CAO) and would be part of the Senior Management Team. The Department's responsibilities are implied by its constituent divisions which would include:

* Transit — comprising the present staff of the London Transit Commission (L.T.C.).

* Parking — comprising (1) the present Parking Enforcement Division of the Finance Department and (2) the present staff of Covent Garden.

* Traffic — comprising (1) the present Traffic Division of the City Engineer's Department and (2) a field implementation staff drawn from the existing staff of the Engineer's Department.

* Planning and Research — comprising the present L.T.C. planner, a research economist, and a policy analyst.

RECOMMENDATION 2: that City Council replace the Board of Control with a Policy Co-ordinating Committee, with membership, functions, and relations as set out in the Report of the City of London Management Committee.

RECOMMENDATION 3: that City Council initiate the development of a new strategic plan (PLAN FOUR) for local transportation that makes maximum use of community resources, has citizen endorsement, and is given effect in public policy statements.

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CAN LONDON CATCH THE BUS?

SECTION I: INTRODUCTION

A. The Facts Of Life In The Forest City:

The central facts of transportation life in London are five:

First, an enterprising driver can make the trip from Dundas and Richmond to any one of the major perimeter roads —Fanshawe, Clarke, Exeter, Sanitorium— in rush hour in 12 to 15 minutes.[1] These times are only 1-3 minutes longer than the corresponding average 1959 times reported by Margison (1960); furthermore, they are about one-half of the 30 minutes required for an average work trip in Toronto (Dewees 1976, p. 69). Yet the populations of people and motor vehicles have increased by 95,000 and 80,000 respectively in the intervening 19 years.[2] Driving in and around London is so easy (and often so necessary) that, according to a recent survey (Marshall, Macklin, Monaghan, 1976, Data Set Table 21), the family car is used for upwards of 91% of all shopping trips.

Second, as Professor Pleva (1978) proudly observed recently, "London is the largest city in North America that is not chopped up by a superhighway system": unfortunately, this is a fortuitous outcome of the local decision-making system, not a deliberate public policy.

Third, if, by force of circumstance or by preference, you are a member of the non-driving minority, your travel in London is one or a combination of: (a) inconvenient, (b) restricted, (c) excessively costly in terms of both money and time, (d) unsafe, and (e) often impossible. We are referring here, of course, to bus riders, pedestrians, cyclists, and those elderly people who are kept from joining the first two groups by prudence and the elements.[3] Recent winters have been particularly hard on the elderly, who testified in force at the recent special meeting of the ST&T Committee to consider sidewalk snow removal (see Agenda and Report, July 10, 1978).[4] These car-disadvantaged minorities probably number in the order of 30% of the adult population.[5]

Fourth, while it is to be expected that the car-disadvantaged do not appreciate their situation, it seems somewhat remarkable (and perhaps a touch ungrateful) that significant percentages of London's general populace do not appreciate their priviledged position. In a recent survey of a representative sample of 225 Londoners, the Chamber of Commerce (1978) found high degrees of dislike for, and displeasure with, the road and traffic situation.[6]

Fifth, and finally, the first four facts of life are changing for the worse, and London is without a valid strategic plan and effective public policies with which to preserve the quality of transportation life.

B. Worse Is On The Way:

In Table I.B.1 we have compared the rates of growth of London's population, its road system, and its motor vehicle registrations over the fifteen-year period from 1961 to 1976.

TABLE I.B.1

	Population (1)	Miles of Roads (2)	Miles of Lanes (3)	Motor Vehicle Registrations (4)
1961	165,815	427	N/A	54,414
1972	230,100	519.4	1085.8	95,000
1976	247,065	567	1,200	120,804
Average Annual Increase				
1961-1972	3.5	2.0	N/A (5)	6.8
1972-1976	1.8	2.3	2.6	6.8

Notes:
(1) City of London, 1977.
(2)&(3) Rowntree, 1974; City of London, 1977.
(4) Police Department, Annual Reports. (This includes passenger cars, trucks, and commercial vehicles.)
(5) N/A: not available.

This table shows that although London's population has increased in the 1970's at about half the 1960's rate, the rate of growth in its motor vehicle population has remained constant. Secondly, it shows that the rate of road construction, and probably of lane-mile addition as well, has increased marginally in the 1970's. This information seems to imply that road-space per vehicle at any given time is on the decline.

The other major variable in roadway congestion caused by the movement of people is the attractiveness of public transit. Table I.B.2 is a compilation of statistics representing the recent performance of the London Transit Commission (L.T.C.).

TABLE I.B.2: The Recent Performance of the L.T.C.

	1971 (5)	1972	1973	1974	1975 (6)	1976 (7)	1977
Revenue Passengers ('000) (1)	14,784	15,114	15,924	17,206	17,733	16,388	16,624
Percentage Increase (decrease)	—	2.2	5.4	8.1	3.1	(7.6)	1.4
Average Annual Increase 1972-1977 = 2%							
Fare Passengers per Capita	—	65.7	68.4	72.7	72.7	66.3	66.2
Revenue Miles (regular; '000) (2)	N.R. (3)	3,992	4,249	4,629	4,085	4,994	N.R.
Percentage Increase (decrease)	—	—	6.4	8.9	(-11.8)	22.3	
Average Annual Increase 1972-1977 = 6.3%							
Excess of Expenditure over Revenue (i.e. net loss in $'000) (4)	65	230	500	857	1,636	1,693	2,037
Percentage Increase	—	253	117	71	91	3.5	20.3
Average Annual Increase 1972-1977 = 157%							
City's Share of Deficit ($'000)	—	—	—	—	833	827	869
City's Share of Deficit (%)	—	—	—	—	50.9	48.8	33.8

Notes:
(1) L.T.C. Staff Report #7, January 12, 1978. Includes Western Wheels, the U.W.O. service contracted from L.T.C., from its inception in 1972 (223,000 passengers) through 1977.
(2)&(4) City of London, Financial Reports, 1971 through 1976 and L.T.C., Annual Reports 1972, 1976, 1977; revenue miles include Western Wheels.
(3) N.R.: not reported in relevant source.
(5)&(7) Fare increases, February, 1971 and March, 1976.
(6) Transit service not available for 9 weeks because of a strike.

While revenue passengers have been increasing at the rate of 2% annually, buses have been increasing their annual mileage by 6.3%, which has led to an ever increasing annual deficit. However, since there are efficiency incentives built into the provincial subsidy program, and the L.T.C. is well-managed, the City's share of the increasing deficit has declined in absolute dollars and in percentage

terms.[7] The current downturn in bus ridership began with the fare increase of March, 1976. Historically, it has taken three years for the L.T.C. to regain riders lost following a fare increase.[8] But, with a fare increase expected in 1979, a three-year recovery this time around is unlikely. And the problem may be compounded by the proposed wholesale route re-organization which is designed to have outer routes radiating from four terminals, anchoring a north-south and and east-west inner-city corridor (L.T.C., 1977).[9] Of course, passengers lost to the buses are gained by cars with obvious implications for congestion. New subdivisions are of course the primary source of demands for transit service; herein lies most of the explanation of the increasing miles/passenger ratio. Transit service is not the only municipal service adversely affected by urban sprawl. Whether or not the proposed terminal system will provide some relief, remains to be seen.

Relative to London's total expenditures, those related to the support of motor vehicles seem modest. For the period 1970 to 1975 London's capital budget requirements for road and bridge construction totaled about $10.2 million. This represented about 21% of all capital budget requirements. Provincial construction subsidies totaled another $11.8 million. Current budget items, such as road and bridge maintenance came to $41.8 million, or 10.3% of the total current budgets for those years.[10] It seems, therefore, that London's transportation services budget does not have much potential as a target of fiscal restraint. At the same time, neither is it likely to increase proportionately. And within that budget there is a distinct possibility that new road construction will lose ground to snow removal, and to local improvements (curbs, gutters and sidewalks) of which there were three-to-four year backlogs, totaling almost $2 million in February, 1977 (ST&T Report, February 28, 1977).

Just prior to the publication of the *Topic*, a private consultant submitted a road needs study to the City detailing $173 million worth of major and minor road repairs to be undertaken over the next ten years (L.F.P., September 26, 1978). This information would appear to reinforce quite strongly our argument that new road construction will suffer for want of money.

It is obvious to most that additional roadway capacity on London's major arteries can no longer be bought for the nominal price of another painted lane-marking, a few feet of abutting front yard, or a few mature trees. The Dundas Street Extension, which consumed 38 mostly residential properties through expropriation, has served notice that the City —unless it overhauls its transportation assumption and planning practices— is heading for a full-fledged Wainfleet. Wainfleet stands here for riding roughshod over the physical and social environment for a marginal return.[11] The protests of the past seem minor compared to those likely to attend the projects currently on the drawing boards and noted in Section III. Again, unless transportation decision-making procedures are revised radically, resistance to large construction projects is likely to become another fact of transportation life. We might mention in passing what appears to be increasing public resistance to major land use proposals on a number of grounds including traffic congestion. Most recently, 350 residents of established suburbs in the area of Sarnia and Hutton roads petitioned City Council to delay a new subdivision in their area. They objected on the grounds of the loss of green space, and of the subdivision's probable congestive effect of "turning Sarnia Road into a long parking lot" (L.F.P., January 27 and July 4).

And finally, a factor that no self-respecting doomsayer would knowingly overlook —ENERGY.[12] In 1972, transportation consumed almost one quarter of Canada's secondary energy (EMR Canada, 1977, Table 6). More than half of this transportation energy was consumed by the automobile, 19.7% in inter-city trips, 33.7% in in-city trips (EMR Canada, 1977, Table 7). Between 1962 and 1972 air and road travel grew annually at faster rates —8 and 5.8% respectively— than did total secondary energy consumption (5.6%)(EMR Canada, 1977, Table 6). It is by now no secret that the automobile is not the most efficient mode of passenger transportation. In inter-city travel the automobile is between 2.5 and 4 times less fuel-efficient than the bus; in urban travel it is almost 5 times less fuel-efficient (EMR Canada, 1977, Table 8).

Federal actions to date in both Canada and the United States[13] have been singularly ineffective in dissuading car drivers from "Going Our Own Way — At 65 mph" (Trippett, 1977). Should stronger measures, such as gasoline rationing befall us, we cannot plead that we weren't warned. The Science Council of Canada (1977, p. 74) has recommended as an immediate step in the changeover to "the conserver society":

> "Prepare to introduce restrictions on gasoline use: As fuel shortages develop and prices rise, social inequities will be aggravated. Gasoline rationing or a two-price quota system will likely be necessary soon to ensure fair distribution and encourage conservation. Preparations should be made."

Gordon MacNabb (1978), the Deputy Minister of Energy, Mines and Resources, came to London this past January to convey this and other messages personally.[14]

C. Transporting Knowledge Into Action:

This recitation of the transportation facts of life, and of the various factors which are conspiring to lower the quality of London life, contains little if anything that is new. Nor is our information privileged or inaccessible for other reasons. Most of it comes from the minutes and reports of elected and appointed agencies charged with transportation planning and policy-making. Not only do these agencies have an adequate awareness of London's current transportation situation and probable future, but they are also aware of a wide range of progressive solutions. This raises both the obvious question, "Why aren't there solutions being applied systematically on a number of fronts?", and a number of obvious but unacceptable answers. For these purposes the answers may be grouped under three heads: procedural tradition, institutional structure, and political will.

In Section II —The Policy-Making Context— we consider the ways procedure and structure influence the making of transportation decisions and the division of responsibility for them. The section's main conclusion is that the responsibility for transportation policy-making belongs to too many agencies that are poorly co-ordinated.

In Section III —Three Past Plans: Breaking Into The Black Box— we analyze three past attempts at strategic transportation planning concentrating on the London Urban Transportation study (LUTS). We conclude in Section IV —Toward Plan Four: Breaking Out Of The Black Box— with an outline for developing a strategic transportation plan that incorporates the lessons learned from the previous sections.

SECTION II: THE POLICY-MAKING CONTEXT

A. The Transportation Decision Tradition:

Mere participation in few other daily activities generates more authorities per participant than urban travel. At least that is the impression one would get, if one were privy to the thoughts and tirades of countless urban travellers, as their ends are daily frustrated by red lights, freight trains, NO PARKING signs, blocked sidewalks and driveways, missed buses and the like. In their reactions could be found all sorts of instant remedies for the transportation network. Most, however, would be self-serving solutions for local or "spot" problems. While appearing in the short term to relieve the original source of frustration, these cures could tend to have the net effect in the long term of merely displacing the problem in space or time.

On close inspection, however, a surprising number of transportation decisions made by Council are reactions to traveller frustrations. Over the years, 1974 through 1977, the Streets, Traffic and Transportation Committee recommended nearly 900 amendments to the City's traffic by-law; the vast majority of these originated in the requests of individual citizens.[15] (One might infer from the responsiveness of City Hall to such complaints and requests, and from the high citizen success rate that, contrary to popular belief, citizen control does indeed prevail in London.)

The investigation of alleged problems by the City's staff, and the consideration by politicians of the staff's recommended solutions, consume much valuable time.[16] So much time, in fact, that there is little time, and evidently little inclination left for considering the "broader policy issues".

B. London's Transportation Huddles:

In Figure II.B, we have identified the structures involved in the formulation and implementation of transportation policy in London. The relationships among these structures are too complex to portray in much detail. We have, however, tried to illustrate the main reporting and advisory relationships among them, and their status in the policy-making hierarchy respectively, by means of connecting lines and top-to-bottom placement. The placement of the L.T.C., the PUC, Covent Garden and the School Board's all special purpose bodies is not to be regarded as an indicator of status.

(1) The Streets, Traffic & Transporation Committee (ST&T)

The ST&T Committee is the principal forum for the formulation of transportation policy. It makes recommendations to City Council, through the Board of Control "where this is required by Statute", i.e. typically where there are budgetary implications. It also performs the preliminary review of spending proposals relating to its jurisdiction. The ST&T Committee's business arises from four sources: (1) City Council and Board of Control; (2) the regular reports of the three subcommittees that report to Council through it; (3) requests and queries from the public; and (4) routine and special reports from those City departments

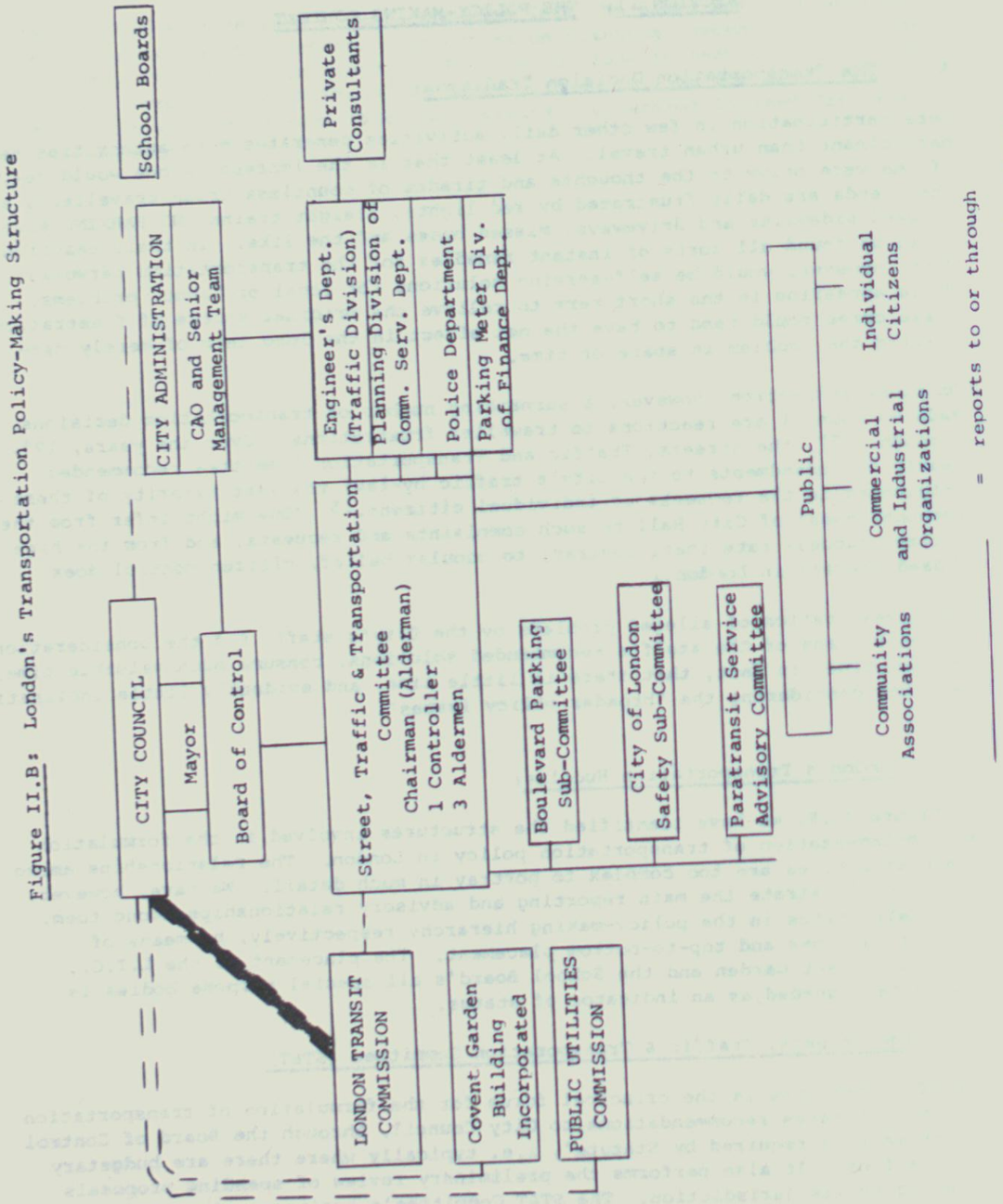


Figure II.B: London's Transportation Policy-Making Structure

(mainly Engineering) with responsibilities corresponding to the Committee's jurisdiction: these reports are often based in turn upon the proposals of consultants.

To illustrate a rather typical decision-making sequence involving the ST&T Committee, Council, the Engineer's Department, consultants, and a community association, we will now present a brief account of the decision to construct a road connection between Upper Queen Street and Nixon Avenue (see map in Figure II.B.1). The case of the Upper Queen Street Extension is also an illustration of the potential for citizen contributions to public policy-making; in this role it serves to balance the impression we left in Section II, A., that citizen proposals are invariably narrow, self-serving, and shortsighted.

a) The Case of the Upper Queen Street Extension: When enough homes in a given area give way to a road construction project, the neighbourhood will also give way. To destroy an established neighbourhood however, it is not necessary to destroy its homes. It can suffice to pollute the environment by directing cars through the neighbourhood in such numbers that long-time residents move away in corresponding numbers. This is the spectre raised recently, and quite reasonably, by the residents of old South London. The object of their disaffection was Council's decision in 1975 to connect Upper Queen Street and Nixon Avenue, the construction of which connection is now in progress. (See map in Figure II.B.1.)

The ST&T Committee, after preparations were too far advanced to be changed, sent letters to the handful of homeowners whose properties would be directly affected by the proposed construction, inviting them to air their concerns at a public meeting in May of 1975. More than 100 South London residents turned up at that meeting. In the words of a brief they submitted to the ST&T Committee the following September, the South London Community Association (SLCA)(1975, p. 1) stated:

> "They recognized in this minor extension a major redefinition of Ridout Street, one which would seriously alter the nature and function of that road, and which would have far-reaching effects upon the community through which it passed."

The SLCA Brief is perhaps the most sophisticated to have come from a residents' association. In sum, it demonstrated convincingly (1) that the proposed connection was not only at odds with basic intentions of the Official Plan, the White Oaks District Plan, and the London Urban Transportation Study, but also with the Planning Department's negative view of the connection; (2) that the traffic data from Margison (1965) that underpinned the proposal were seriously out-dated; (3) that the connection would in all probability congest Ridout Street to the point of damaging the neighbourhood irreparably; and (4) that there were a number of viable alternatives for accommodating trips between the fast-growing White Oaks area to the south, and the Central Business District (CBD).

The ST&T Committee was persuaded by the SLCA's argument and recommended against the Upper Queen Extension. However, City Council voted 10-9 on October 6, 1975, to amend the Official Plan to permit the construction of the connection (C.P.).

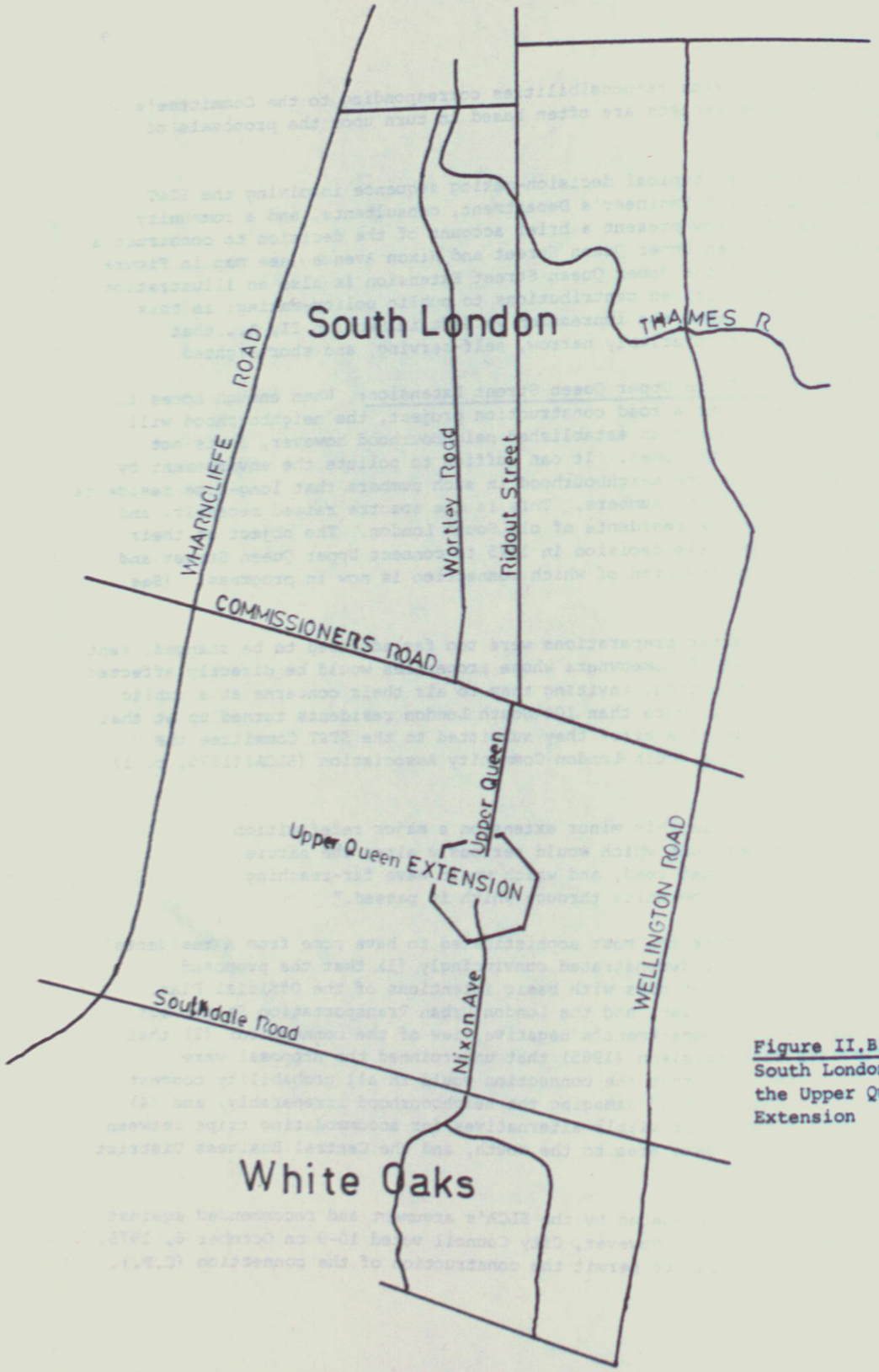


Figure II.B.1: Map of South London, showing the Upper Queen Street Extension

The SLCA responded by retaining a respected firm of transportation consultants to examine South London's through traffic problems (Lea, 1976). The Lea Brief to the SLCA bears certain similarities to the SLCA's own brief. It confirmed that north-south traffic volumes on all arterial and collector streets in South London would increase by 1985 to the point where the level-of-service would probably decline uniformly to something below E.[17] It pointed out that car-users could and would adapt to this deterioration much better than South London residents, whose neighbourhood would also deteriorate in the ways the SLCA had envisaged. It made three proposals which would save public money, improve transit service, provide better service to both local and through traffic, and prevent the deterioration of the community. These were:

* that Ridout-Upper Queens become a priority bus route,
* that through traffic be accommodated on upgraded Wellington and Wharncliffe, and
* that the local north-south collectors in South London be used to give local traffic good access to the CBD.

Finally, the Lea Brief listed nine devices to restrain through traffic, along with sketches of their implementation in Vancouver, Seattle, and Toronto (see Appendix "C" in the Lea Brief).[18]

Late in 1976 the SLCA applied to the City for an amendment to the Official Plan to change the designation of Ridout and Upper Queen Streets from primary collector to a lower level designation. It submitted the Lea Brief in support of this application. In February 1977 the Planning Board supported the recommendation of the Deputy City Engineer, Allan Joynson (1977), that "no change be made at this time" to the designation of Ridout-Upper Queen. This recommendation was also later adopted by City Council. The reason Mr. Joynson gave for his recommendation was that:

> Some of the principles and policies embodied in the proposals and recommendations of the N.D. Lea Brief will have ramifications, if adopted, throughout the rest of the City.

He went on to identify three City-wide ramifications of the Lea Brief which he, incidentally, termed "an excellent report":

(i) Special emphasis on transportation services for predominantly residential planning districts adjacent to the downtown area.

(ii) The reduction of through-traffic within an area to the point where primary collectors in effect have no, or very little, part to play in the overall street network, i.e., there is no intermediate type of road between a secondary collector and an arterial.

(iii) The transfer of a public transit from an arterial road to a secondary collector, or local, street.

He also noted that "the first two concepts involve planning districts and not neighbourhoods". Evidently, there was a fear that, if neighbourhood preservation

comes to mean excluding through traffic from all older residential areas (with populations in the order of 20,000), then commuters will be virtually denied access to the CBD (Interview, February 21, 1978).[19] Council, in turn, allocated $6,000 for a feasibility study of the Lea proposals, which is now underway by the Lea firm.

The case of the Upper Queen Street Extension is significant in at least three ways. Firstly, although it is too early to say, City officials may have taken an enormous and necessary first step toward the revaluation of established neighbourhoods (i.e. upward) vis-à-vis commuting automobiles. Secondly, the SLCA has demonstrated the positive potential for community involvement in decisions affecting local communities —if only City Hall will consult the community before the fact. We have in passing commended the quality of SLCA's Brief; it was thoroughly researched, well-reasoned, and constructively oriented. Obversely, the quality of the SLCA's work seems to call for a review of the role of consultants in such matters. Had the Engineer's Department considered the SLCA Brief on its merits in the first instance, the Lea Brief would probably not have been solicited by the SLCA. When local resources are equal to the task, consultants ought not to be brought in. And thirdly, we find the system of soliciting public views after the fact structurally predisposed toward an adversary relationship between City Hall and the public. Surely there must, to use this example, be a happy medium between a laissez-faire policy toward through traffic and one of complete prohibition —a compromise that could have come from co-operation.

(2) Covent Garden

Covent Garden is a private company, established in the mid-1950's which, through its ownership and operation of three parking garages,[20] has a primary responsibility for off-street parking. Although City Council appoints two of its members to Covent Garden's Board of Directors for liaison purposes, Council has no effective control over Covent Garden's operations.

It is difficult to characterize past relations between Covent Garden and the Council because public reports of their dealings are scarce. Although such reports have not multiplied in the recent past, there is some evidence to suggest that relations between them have soured since the Talbot Square bubble burst in the summer of 1975. A little background on Talbot Square is in order.

Covent Garden Building Incorporated was to finance a parking garage in the Talbot Square development which it would operate along with its three existing garages. The City had guaranteed Covent Garden's debentures in the amount of $2.723 million, which was the original estimate for the garage. The City had also entered into an open-ended agreement with the developer to pay any costs in excess of that amount.[21]

In mid-July of 1975, it was reported that City officials had begun to worry about the three-month stoppage of construction at the Talbot Square site (L.F.P., July 17, 1975). Just three days after construction had resumed on August 5th, it was reported that the Board of Control had agreed to pay more than $116 thousand in interest charges on behalf of Covent Garden. (L.F.P., August 8, 1975.) This money was needed by Covent Garden to meet a debenture payment which had come due on June 30th, and which had been met by the trustee.

For the present purposes, two aspects of this newspaper report are especially relevant. First, the City's Finance Commissioner was reported to have said that the City had been given no warning of Covent Garden's inability to meet its debenture payment. Second, neither the Mayor nor the Board of Control had a ready explanation of how the situation had arisen. In short, Covent Garden's request had apparently struck the City's elected and appointed officials like a bolt from the blue. How, one wonders, was such surprise achieved when City Council had two elected representatives sitting on Covent Garden's Board of Directors for liaison purposes?

Thirteen months after the Covent Garden surprise, in October 1976, the City moved to limit its financial liability by negotiating with the developer a final price of $3.26 million for the garage, i.e. $1.14 million more than the original estimate. As it turned out, this agreement did little to effect the completion of the garage. At this writing (September 1978), the garage remains little more than a hole in the ground which costs the City about $1,000 per week in security charges. The City and the developer have filed suits against each other, and the City must await a favourable judicial decision, before it can arrange for the completion of the project by Bell Canada. In August, City Council accepted Bell's offer to purchase the Talbot Square site for $4 million. Bell intends to build an administrative centre on the site, although the purchase agreement allows Bell to include considerable retail space, and requires that Bell complete the City-owned parking garage by 1981 (G&M, August 17, 1978). Before the deal can close, the City must secure clear title to the site from Talbot Square Limited. Toward this end the City is now appealing a Supreme Court of Ontario ruling of June, 1978, that it post $3 million as a bond against mechanics liens and outstanding bills.

The Talbot Square debacle has led to three reactions, all of which, fortunately, are supported by public reports. Firstly, one of Council's representatives on the Board of Covent Garden, resigned from the Board. After resigning, he recommended major changes in Covent Garden's operation (L.F.P., January 28, 1976). The changes, which were evidently motivated by a combination of disaffection and public interest, included the appointment of both the Chief Administrative Officer (CAO) and the Finance Commissioner to the Board in order to enhance the City's influence.

The second reaction was that of the Finance Commissioner, who was understandably upset that the City had had to bail Covent Garden out, although Covent Garden's retained earnings from parking operations were evidently sufficient to have accomplished that end.[22] "[T]here is a strong case," he wrote (p. 8) "that [Covent Garden's] accumulated surplus has been developed at the expense of the general ratepayer." But the Finance Commissioner was also concerned to revise the relationships between Covent Garden, the L.T.C. and Council. He charged that, in its present position, (1) it "inhibit[ed] priority setting" (pp. 12-3); (2) it probably occasioned "some duplication of administrative staff" (p. 9); and (3) it enjoyed greater powers than were envisaged by the Municipal Act (p. 11). In general, he thought that Covent Garden and the L.T.C., in their autonomy, thwarted the necessary inter-dependence required of parking and public transit policies.[23]

The third, and somewhat belated, reaction was the recent move by Council to

establish "closer relationships between the City and Covent Garden" (Board of Control Report, April 26, 1978). This move consisted in the endorsement by Council (C.P., May 1, 1978) of a series of 16 terms of agreement that can hardly be said to change the relationship significantly. In the City's favour there are but two provisions of consequence, viz., that Covent Garden: (1) will, "subject to the consent of its creditors", pay the City $500,000 from its accumulated surplus, and annually turn over to the City "that portion of its net cash earning which Covent Garden in its sole discretion determines can be transferred"; and (2) will "consult regularly" with the City regarding parking and transit policy. Against these improvements the City (1) waived the right to regular consultation regarding Covent Garden's parking rates, (2) dropped the study of the possible integration of employees and other aspects of parking services, and (3) assumed Covent Garden's ownership interest in the Talbot Square parking garage together with its related debts. This agreement is compatible with the recommendation of the Mann Report (1976, p. 72, emphasis added) that:

> the Council should honour its agreements with Covent Garden...but that, in view of its basic responsibility for municipal parking facilities, the Council should preserve as it may see fit, its authority to make the City's policies relating to municipal parking facilities.

The underlined clause is obviously weak and, more importantly, is an exception, which this recommendation constitutes, to the Mann Committee's reasoning discussed in the next section.

(3) The London Transit Commission

The shaded double broken line between the L.T.C. and Council in Figure II.B is intended to portray the L.T.C.'s recently acquired status. By virtue of a private member's bill initiated by Council and approved by the Ontario legislature in December 1977, the L.T.C. has recently become an "agency of City Council" (L.F.P., December 10, 1977). Its membership of three Council appointees has been increased to five —three citizens and two Councillors— who are to continue to be appointed by Council. The enabling legislation requires the L.T.C. to "consult regularly with Council on transportation system policy", and provides that Council can issue "binding policy directives" to the L.T.C. should the two bodies disagree. However, unless Council begins to attend to broader transportation issues, blanket budget directives of the sort issued last December (L.F.P., December 1, 1977) are likely to continue as poor substitutes for policy.

The new arrangements have only been in force for several months so it is too early to judge their contribution to the integration of transportation policy. However, the changes may be cosmetic rather than substantial, and therefore are likely to be ineffective in the absence of other changes.

The impetus for changing the L.T.C.'s relation to Council can be traced to the Mann Report (1976) which severely criticized local special purpose bodies in general. In the Mann Committee's view, special purpose bodies lead to the

following undesirable conditions (p. 57):

(a) a complicated and diverse local government structure which the citizen finds difficult to understand and to determine where accountability and responsibility rest;

(b) the removal of important functions and activities from effective political control;

(c) weakening of the Council's status as the central governing body;

(d) problems in administrative co-ordination when certain services are divorced from the control of the Council;

(e) in nearly all instances, the members of these special purpose bodies are not directly accountable to the citizens they serve.

In contrast to the accountability rationale of the Mann Committee, the Finance Commissioner (1972) opposed special purpose bodies primarily on the grounds that they preclude an "overall perspective" on policy and that they distort priorities. This view has been strongly reinforced recently by the Stevenson Committee on grants reform (see Ontario, 1977b). Special purpose bodies, it observed (p. 29), have "become an understandable irritant to municipal councils":

> They are relatively independent in terms of their budgetary decisions; they have varying degrees of requisitioning power; and as a rule, their budgets cannot be weighed by councils against all other requirements . . . . In fact, the combined forces of school boards and other special purpose bodies may exert such pressure on mill rates that municipal councils feel forced to exercise more restraint in activities they control directly than is exercised by these bodies for which they raise property taxes.

With specific regard to the L.T.C., the Mann Committee made the following analysis to which it gave point in a rhetorical question (p. 61):

> 6.19. In our Committee's view, plans and policies for operation of the public transportation system are vitally-related to every other major problem of City growth and development. If the Council is to be answerable to the electorate for the economy and quality of City services, it must be able to view the bus service, for example, as it affects and is affected by the programs for housing and for other new development, for downtown redevelopment and for the City's other large capital investments in streets, traffic controls, water supply and sewer systems.

> 6.20. If we were "starting from scratch" to organize a practical form of City government today, with our awareness of the high capital and maintenance costs for the City's plant and equipment —especially our increasing awareness of the need to achieve a balance of private and public facilities for transportation— would anyone seriously consider the separation of the bus services from such services as streets and traffic control, putting them in separate administrative hierarchies, with only a tenuous link at the planning and policy-making level?

Having said this, the Committee then went on to recommend what amounted to little more than a name change for the L.T.C. In recommending a Public Transportation Agency Board, the Committee parted company both with its previous argument, and with three dissenting members who (more wisely in our view) would have made the L.T.C. a regular service department of the City. Fortunately, nothing came of the proposed Board which, with its three citizen members and no Council representatives, would doubtless have further frustrated the Committee's own goal of a more integrated transportation policy. In contrast, the present "agency concept" merely maintains the level of frustration.

(4) The Public Utilities Commission and The School Boards

The PUC is included in Figure II.B more as an illustration of the depths to which relations between Council and such bodies can descend, than for its bearing on transportation. In the latter regard, its importance attaches primarily to the fact that its parks and recreation facilities are major traffic generators, and that it has been given the responsibility for the development of bikeways.

The Mann Report (1976, p. 53) recommended that the PUC's Parks and Recreation Department be made a division of the City's Community Services Department. But after initially deciding not to adopt the recommendation, City Council has recently reversed its thinking. By a large margin, Council voted (C.P., August 8, 1978) to effect the transfer by January 1, 1980. The immediate causes of the reversal are to be found in the PUC's reactions to Council's reductions in its budget demands (L.F.P., January 20, 1978). Specifically the PUC decided to close eleven wading pools and not to replace broken or burned out street lights —two programs that seemed calculated to arouse the public's ire against Council.

While many are inclined to the view that the arguments against special purpose bodies hold equally in the case of school boards, they are included here because of the implications of their decisions for transportation. School board decisions regarding the size and location of schools offer one of the most persuasive demonstrations of the intimate relation between land use and transportation.

The General Manager of the L.T.C., Gordon Arblaster (1976) has observed that the London Board of Education's policy of building large regional schools (e.g. Saunders Secondary) has created a costly demand for its own bus service. Such schools draw students in such large numbers, at peak demand times for the L.T.C., that it cannot accommodate the student demand. In consequence,

the Board must operate its own charter bus service. Thus, while the taxpayers are heavily subsidizing the L.T.C. which has excess capacity in off-peak hours, their education taxes are paying to transport students on a separate service.[24] Although the student demand is falling with declining enrollment, the resulting school consolidations with their implications of longer trips suggest that student busing costs will remain high. Although the incentive to integrate the student bus services with the public service has been recognized for some time, efforts to date have come to naught. Solutions are admittedly scarce. Mr. Arblaster, in the letter alluded to earlier, suggested and quickly dismissed the only obvious one: that school hours be changed to 0700 - 1400 h so that the L.T.C. could carry the students on its regular runs. In our view, this is only to say that the problem is not susceptible to a two-party solution.

(5) The Engineer's Department

Of the remaining structures shown in Figure II.B., the Engineer's Department —together with the consultants who report through it— is doubtless the most influential in the making of transportation policies. The main reasons for this are that the Traffic Division is part of the Engineer's Department and that the implementation of virtually every ST&T decision requiring some physical change —and most decisions do— involves that department. Given the advantage in policy initiation that is recognized to rest with the administration,[25] the preference for physical solutions to political problems in London should not be surprising.

(6) Toward An All-Party Huddle

Up to this point, a number of basic interdependencies in the transportation network have been reasonably proposed by several groups and individuals: between and among bus service, housing, downtown redevelopment, parking, motoring, schools, and population movements. It follows from these interdependencies that a major problem in any one part of the network will not be amenable to a one-party solution. Yet, our review of London's policy-making procedures and structures suggests that there is a persistent predisposition toward just such solutions. What is needed, therefore, is an all-party huddle that, unlike the present huddles, is open to all affected interests, particularly the general public.

A major step toward an all-party huddle in transportation can be taken by centralizing responsibility structurally. Metropolitan Toronto Transportation Plan Review (1975, p. 16) found that the key organizational issue facing Metro was the absence of:

> a single agency capable of integrating transportation policy, planning, pricing and operations among the differenct modes of transportation including parking.

This theme has been echoed in a number of recent reports on the operations of other local governments in Ontario (Silcox, 1976; Robarts, 1977; Stewart, 1978). Indeed it is part and parcel of the current consensus of informed opinion that City Councils should have direct control of local government responsibilities. It is now thought best by many to transfer transportation services delivered by

special purpose bodies, to line departments in City administrations. But, while public accountability would almost certainly be enhanced, it is not clear that policy integration would follow. That is, structural integration is no guarantee against failures in co-ordination such as the recent breakdown between the City Engineer's Department and the L.T.C. regarding advance notice of street repair sites (L.F.P., July 19, 1978).

However, all things considered —including the fact that it has only been about three years since the organizational overhaul recommended by Peak, Marwick (1975) began— we support the current consensus regarding special purpose bodies.

RECOMMENDATION 1: That City Council establish a Transportation Department, the head of which would report directly to the CAO and would be part of the Senior Management Team. The Department's responsibilities are implied by its constituent divisions which would include:

* Transit - comprising the present staff of the L.T.C.,

* Parking - comprising (1) the present Parking Enforcement Division of the Finance Department and (2) the present staff of Covent Garden,

* Traffic - comprising (1) the present Traffic Division of the City Engineer's Department and (2) a field implementation staff drawn from the existing staff of the Engineer's Department,

* Planning and Research - comprising the present L.T.C. planner, a research economist, and a policy analyst.

In order to prevent the proposed Transportation Department from becoming a "protective huddle" into itself to the detriment of more comprehensive policy development, another measure is required. Recall that the Mann Committee found City Council to be too much involved in matters that should properly have been left to its administration. In consequence, Council tended to ignore what it called the "larger policy issues", one of which is the "City's basic strategy for balancing the modes of transportation" (p. 46). To disabuse Councillors of the notion "that executive duties are an important part of their responsibilities" (see pp. 33-40) the Mann Committee proposed that the four standing committees and the Planning Board be known as "Policy Committees" and, more importantly, that they be co-ordinated by a "Policy Co-ordinating Committee". This Committee was to replace the Board of Control which was found to be an anachronism (see esp., pp. 43-5). We find the reasoning of the Mann Committee in these respects to be sound and persuasive and endorse it in the following recommendation.

RECOMMENDATION 2: That City Council replace the Board of Control by a Policy Co-ordinating Committee, with membership, functions, and relations as set out in the Report of the City of London Management Committee.

SECTION III: THREE PAST PLANS: BREAKING INTO THE "BLACK BOX"

A. Planning And Policy-Making:

Our main concern in this *Topic* is transportation planning. Yet most of our discussion to this point has been about transportation policy-making. Although the terms "plan" and "policy" are used frequently by politicians, administrators, and observers of local government, their meanings are too loose and varied to be used in critical analyses of government operations. The purpose of this section is to present our concept of public policy and of plans and to show how the two are related.

Donna Kerr's (1976) approach to the problem of distinguishing valid public policies from the host of misnomers is helpful here. Public policies, as she identifies them, have the following traits. The statement of a public policy appoints a person (or persons) —often, a civil servant— and directs him to take certain actions under certain conditions which are expected to occur repeatedly. All those whom the policy can be expected to affect must be able to obtain the policy statement. Furthermore, the policy-makers must intend to honour their policy, although they may change the policy from time-to-time. Public policies, according to Kerr, may fail in three ways: (1) in implementation; (2) instrumentally —that is, when a successfully implemented policy fails to achieve its stated ends; and (3) in normative justification —that is, when it can be shown to be "wrong", "bad", "cruel" or "unjust".

One observer, Desjardins (1973), has characterized the urban transportation planning process of the 1960's as a "black box", incomprehensible to everyone but the computer-oriented planners most intimately involved in it. It is imperative, therefore, that we approach the reports of transportation planners with a healthy skepticism, giving special attention to their language.

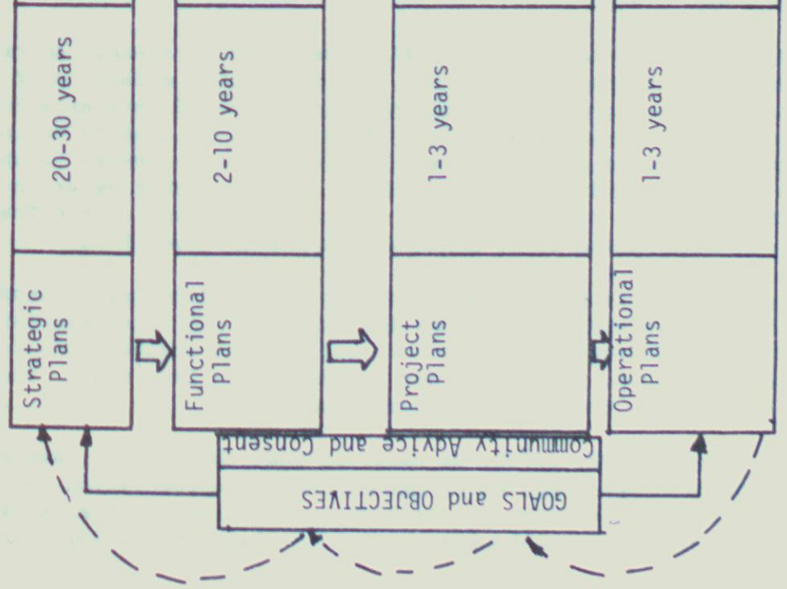
Transportation planners commonly identify a number of "levels" or a "hierarchy", of plans and planning (see e.g., Hutchinson, 1974, pp. 24-6; Pill and Soberman, 1975, Ch. 6). By this they mean that the degree of detail, the time horizon, and possibly the place of the planning group in the political hierarcy, vary with the planning level. To illustrate this hierarchy, we have taken Figure III.A.1, from Robarts (1972, Vol. 2, p. 241) and adapted it slightly for our purposes with the help of (Hutchinson, 1974 and RTAC, 1977).

Ideally the three lower level plans ought to be derived from, and ought to be compatible with, the strategic plan, although changes deemed necessary in any of the former should generate corresponding changes in higher level plans. This could be occasioned by changes in the substance or ranking of the community's goals and objectives which, also ideally, should provide the raison d'être of all plans. Notice that although Figure III.A.1 implies community involvement in transportation planning, it says nothing about the mechanics of that involvement.

We see strategic transportation planning or policy development as a community exercise involving the setting and ranking of goals and objectives, the formulation and weighing of alternative courses of action, and the adoption of

Figure III.A.1: The Hierarchy of Transportation Plans

Elements	Time Horizon	Linkages	Typical Means of Expression	Examples
Broad goals and objectives	20-30 years	Other strategic and general plans	The Official Plan	Margison(1960) Margison(1966) LUTS(1974a)
Major lines and facilities, priorities	2-10 years	Local official plans, capital plans and forecasts	5-, 10-year capital budget program	LTC "Terminal System Concept"
Detailed design, cost estimates, construction schedules	1-3 years	District official plans, zoning by-laws, plans and operations of public utilities	Annual capital construction program	Hutton-Wonderland connection; Nixon-Upper Queen connection; E.L.B.A. pedestrian mall
Improvements in service based upon relatively minor physical change	1-3 years	Transportation system users and operators	Annual operating budget, multi-year operations and capital plans	CBD arterial parking restrictions; Kensington area through-traffic constraints.



the set of courses that holds the best promise of meeting the goals and objectives. Lower level plans should flow from, and be checked regularly, against the strategic plan —again with the regular assistance of the citizenry. None of these planning exercises is justified unless inter-related, consistent, and successful public policies are created from them.

In the remainder of Section III, we review London's three major attempts at strategic transportation planning, dwelling at length on the London Urban Transportation Plan.

B. The Margison Reports:

In the first of the two Margison Reports, transportation planning meant little more than physical planning in support of motor vehicles, as can be seen in this excerpt from its conclusion (1960, p. 101):

> Present and future requirements to provide an efficient transportation plan for...London...with particular reference to the central traffic district, have been evaluated and recommendations made for a major street plan, highway connecting routes, railway and river-crossing facilities and traffic operational improvements.

Its recommended plan for the period 1954 - 1980 consisted of extensive roadworks in each of the classes just noted, to be constructed in stages. Among the most significant of these construction projects were five full-blown expressways, three of which were to have converged from the north, east, and south in the area of Talbot, Kent and Maple Streets. The City's core was to have been criss-crossed by a system of four and six lane quasi-expressways (i.e. "major arterials"); their objective was to reduce congestion in the Central Business District (CBD) caused by "through traffic".

A few years later the same consulting firm was hired presumably to broaden the earlier plan which had been overtaken by the major 1961 expansion of the City through annexation. Although, according to its terms of reference (Margison, 1966, p. 1, emphasis in original), "the study is not to justify the proposals (of 1960) but to analyse the new data", the 1966 Report appears to us to be little more than such a justification. This is to say that we are not persuaded of the substance of such changes as the downscaling of the Thames Valley Expressway, to an arterial to be known as the Thames River Road.

The method of the Margison Reports was typical of transportation studies of that era. "Traffic" or "travel demand" and its distribution were calculated by projecting population increases by district, taking into account such factors as projected car ownership, passengers per car trip, and land uses. Then the road system was expanded to provide the required capacity.

In an earlier report (BMR, 1970), we observed that the general (and negative) effect of transportation planning by travel demand extrapolation is to calcify current dominant travel habits. Accordingly, we called for the incorporation of a new set of assumptions into transportation planning (p. 20). In essence,

we urged that the differential impacts of transportation policies on social classes be recognized, and that policies favouring the car-disadvantaged be given higher preference. We also urged that the underpricing of automobile driving be remedied through various pricing schemes, such as road tolls.

Frankena (1974, p. 1) has observed that the transportation studies of the 1960's commonly recommended congestion-reducing schemes regardless of cost, without benefit of "serious benefit-cost analyses". To him, this was "in part a reflection of the fact that these...studies were carried out by engineers and planners rather than economists." As a comment on academic and professional specialization, this point is well taken. However, quite apart from the fact that the cost-benefit analysis of transportation systems is by no means foolproof (see e.g. Hutchinson, 1974, Ch. 10, and Poon, 1976), we would not feel any more comfortable entrusting transportation planning to economists. To Frankena's explanation of the popularity of reducing congestion, we would contribute our earlier observation regarding the bias for physical solutions imparted to engineers in their training.

C. The London Urban Transportation Study:

(1) The Promise of LUTS

The professional study team for LUTS was comprised of engineers and planners from the consulting firm of DeLeuw Cather and was assisted in various tasks by consultants from three other firms.

The consultants were supported by a Technical Advisory Committee and three subcommittees of municipal, provincial, and railway company officials[26] of whom engineers constituted a clear majority (see 1974a). In these respects, LUTS strongly resembled the Margison exercises and portended another black box affair. There were, however, a number of differences in the set up of LUTS that appeared significant and reassuring. Firstly, four local politicians were appointed to the three supporting subcommittees: the Mayor and a Controller to the public participation subcommittee; an Alderman to the land use subcommittee (on which the Chairman of the Planning Board also served); and an Alderman to the railway subcommittee. The other notable differences were to be found in the terms of reference (see 1974a, App. C). Most notable, perhaps, were (1) the general condition that,

> "Social and environmental issues will be considered, and citizen participation will be encouraged throughout the Study. Therefore it will be necessary to keep people informed and to obtain their views for consideration during the preparation of both Phase I and Phase II of the Study."

and (2) the Phase I requirement that,

> Goals and Objectives, to be set out at the beginning of the Study, will be used as a framework to ensure that full consideration is given to social, physical, environmental, economic, and land use factors in the development of the alternative transportation systems.

As noted above, LUTS was designed to proceed in two phases. In Phase I, entitled "Alternative Transportation Systems and Immediate Action Program", "A number of alternative conceptual long-range transportation systems will be developed, and one system will be recommended for adoption". The immediate action program was to consist of a series of low-cost corrective measures for parking, public transit, and traffic operations. In Phase II, "A plan will be developed for the implementation of the transportation system adopted by Council". This plan was to include two five-year, and one ten-year, expenditure programs for all modes of transportation —cars, trucks, buses, bicycles, feet. Even from this abbreviated account of its terms of reference one gets the impression that LUTS was to be all things to all people. Unfortunately, in the end —which came prematurely— it represented only a modest improvement over the black box planning.

LUTS was a lengthy affair that issued a formidable array of reports (see Bibliography). It is quite beyond the scope of this *Topic* to recount and critique the study process in all its details.[27] Our comments will be restricted to the genesis, substance, and implementation of the major recommendations, with special attention to the disposition of social and environmental considerations, the make-up of the goals and objectives, and the use of citizen "input".

(2) The Plan

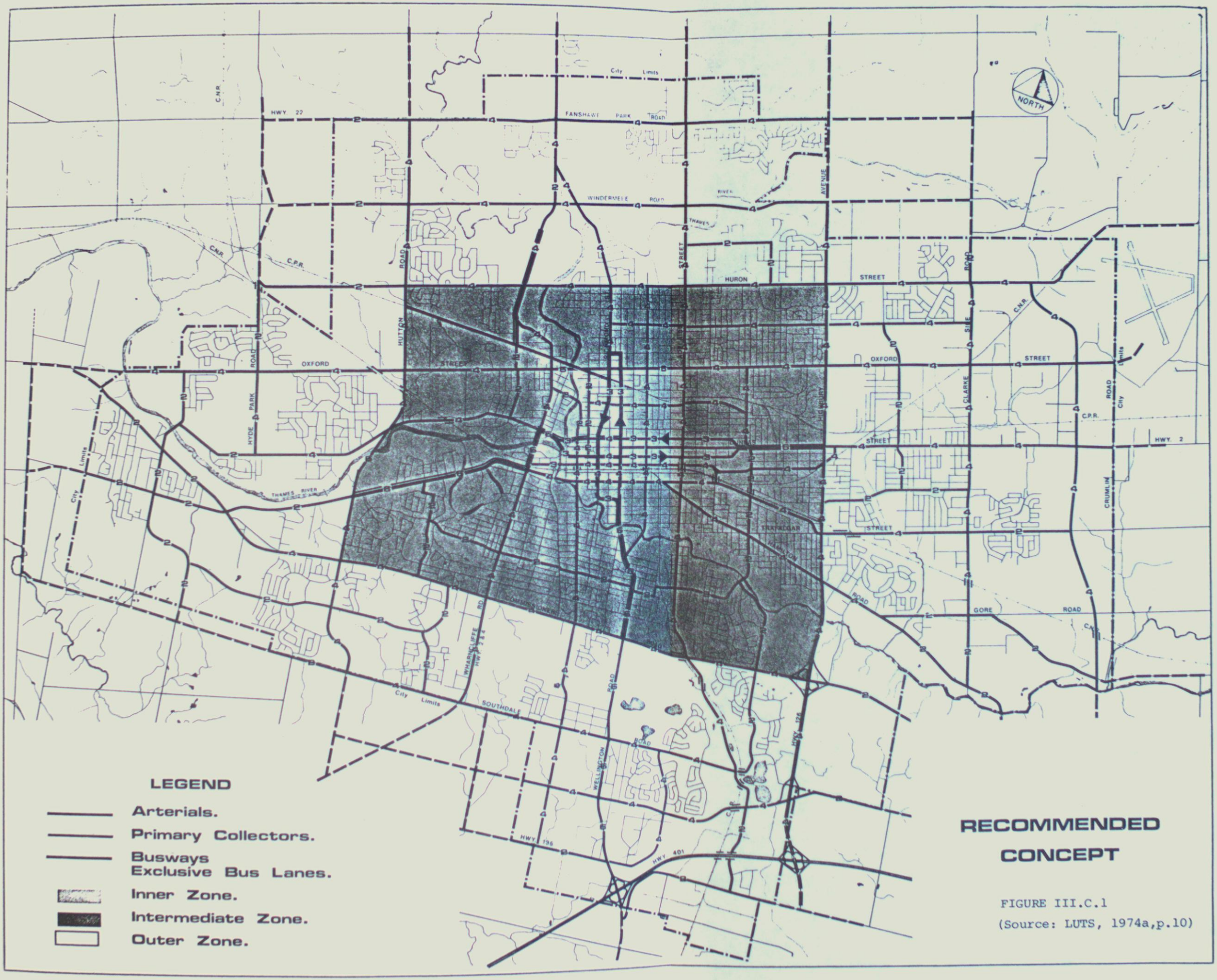
The conceptual plan recommended for adoption at the end of Phase I of LUTS comprised three "concepts" —the transportation concept, the downtown concept, and the railway relocation concept (p. 1).[28] According to the study team, these concepts

> "establish the broad framework of a transportation plan and a railway consolidation plan which are in accord with the goals and objectives of the study and fulfill the transportation demands of the study area." (p. 1). Furthermore, "The concepts are inter-related. Full implementation of one requires the implementation of the other two." (p. 2).

The transportation concept tellingly labelled "The Recommended Concept" in the report is shown in Figure III.C.1. Essentially, it is a map of recommended roadworks in the Margison tradition. As can be seen from the number of four- and six-lane arterials and primary collectors running through, and radiating from, the inner City, the Margison in-City expressway spirit lives on. As the Urban League (1974c) observed:

> The Preferred General Concept [i.e. the Recommended Concept before final fiddling] bears a remarkable similarity to the program of road construction which had been indicated in the London Area Traffic Plan of 1966 (i.e. Margison, 1966).

However, in contrast to Margison, LUTS attempts to soften the proposed pavement by providing for a number of busways and exclusive bus lanes. The study team insists that it offers a "balanced transportation system", which insistence and which balance are revealed in this key excerpt (p. 105, emphasis in original):



RECOMMENDED CONCEPT

FIGURE III.C.1
(Source: LUTS, 1974a,p.10)

> Compared with the existing transportation system, the recommended concept contains much greater emphasis on public transportation. Comparative percentages of transit ridership are given below:
>
> | Percentage trips by transit | 1971 | 1991 |
> |---|---|---|
> | city-wide, all day | 11 | 15 |
> | city-wide, peak hour | 16 | 30 |
> | downtown, peak hour | 18 | 50 |
>
> This does not mean that all the City's transportation resources must be committed to public transportation. On any given weekday, 85% of all trips would be by some mode other than public transportation, the majority of them by private car....
>
> We have endeavoured to plan a balanced transportation system; balanced in the sense that the City's resources are allocated to whichever mode makes the most offective [sic] use of these resources in any given area. At the same time we have recognized environmental restraints, both social and physical, which must be included in any comparison of mode.

The gross capital costs of the system were estimated at $99.6 million for roadways, $6.5 million for downtown parking, and $22.1 million for transit (see Table 1.3, p. 15).

We referred above to Frankena's (1974) criticism that cost-effectiveness evaluations of alternatives in LUTS do not aim at an efficient allocation of resources.[29] The simple absence of a most rudimentary cost-benefit analysis that incorporates the value of mature trees, front yards, and neighbourhoods that would suffer from road widenings, should warrant the suspicion that environmental considerations were given short shrift in LUTS. A reading of pages 97 to 102, where the widenings of Huron, Windeomere, Horton, Commissioners, Ridout and Colborne streets are considered, confirms that suspicion. In each of these cases, environmental preservation easily gives way without a fuss to cars and pavement.

What are we to make of the planned increases in transit trips relative to all trips, say of the 4% City-wide, all day increase by 1991? To the ardent proponent of public transit, it probably seems so modest as to suggest tokenism. To the person who knows that the average increase in transit ridership in recent years is 2%, and who takes strikes, fare increases, and fiscal restraint into account, a 4% improvement might look realistic. Fortunately, a more objective perspective on the situation is possible.

Dewees (1976, 65) reports that urban transit systems in North America typically "carry well under 10% of all urban passenger trips"; in Toronto, which is an exception, about 20% of all trips are made by transit. From this perspective, London's transit share of 11% in 1972 is quite commendable, and a goal of 15%[30] looks a little ambitious, but realistic. But, when the central thesis of Dewees' article and the volume of new road construction proposed by LUTS are considered, the 15% goal becomes positively ambitious and, other things being equal, probably something of a pipe dream.

Dewees' main purpose is to evaluate the effectiveness of mass transit as a substitute for the automobile. Using a model that incorporates the value of time,[31] he demonstrates convincingly that the private costs to the automobile driver of a transit service of such quality that it will entice him from his car are comparable to the private costs of driving (see Table 2, p. 63). Let's entertain for a moment the impossibility that City Council decides, on grounds of social costs and benefits, to provide just such a high quality transit service at enormous public cost in dollars. What will it gain? In the short run transit ridership should improve substantially. But in the medium term, according to Dewees' analysis and historical experience, most of the newly-won riders will revert to using their cars. This is because the initial removal of their cars from the road reduces congestion, thereby lowering the private costs of driving. In a paragraph summarizing the relation between transit and motoring, Dewees writes (p. 71):

> Upon relection, it should not be surprising that transit promotion is a poor way to reduce motoring. The inherent limitations on the quality of mass transportation service, based upon the value of time and the necessity to serve many people at once, mean that mass transit will ordinarily be slower than the automobile. Furthermore, it would be unusual if promoting a commodity that now satisfies less than 10% of the market could substantially reduce the total quantity sold of the competing commodity that currently absorbs 90% of the market. To put it another way, the best limitation is direct intervention.[32]

Dewees' analysis should fuel our suspicions about the balanced transportation system envisioned by LUTS. LUTS proposed to spend roughly 5 dollars on roadways and parking for every dollar spent on transit. On the face of it, then, we ought seriously to doubt that such a spending balance will alter the car/transit balance of 89/11 in favour of transit.

Appended to the Recommended Concept was an extensive network of bicycle paths (pp. 125-8). We use the word "appended" to reflect our doubt that the bike network was intended seriously. For it was not costed in the report, and bicycle paths do not appear as an item in Table 1.3, "Gross Cost Estimates - Recommended Concept".

The downtown concept —the second major recommendation of LUTS— applies to the area bounded by Wharncliffe, Oxford, Adelaide and Horton streets. In essence, it is a plan for traffic circulation based on the

> premise that pedestrians should be given priority over vehicles and that public transportation should be given priority over private in the peak hours (p. 17).

Toward that end a number of conventional automobile disincentives such as higher parking rates and exclusive bus lanes to be "applied gradually" are listed. The approach is referred to several times as "the carrot and stick approach" although the only stick to be found seems embarrassingly small.[33] "The heart of the downtown concept is a system of pedestrian streets" (p. 136). A two-street

system —Clarence from King to Central, and Dundas from Wellington to the Thames River— was proposed, the second of which was suggested for fairly immediate conversion into a permanent pedestrian mall.

London has a way of refashioning pedestrian malls as busways. Thus, the Dundas Pedestrian Mall emerged later as the Dundas busway from Wellington to Ridout and was endorsed by Council in January 1975 (C.P., January 20, 1975). The construction of Talbot Square in the Dundas-Ridout area moved the ST&T Committee to suspend consideration of the busway until Talbot Square was completed (Report, March 10, 1975). It was also thought desirable to postpone its implementation until The Boulevard, the commercial name of the East London Businessmen's Association (ELBA) "busway-mall" results were in (Rowntree, 1976).

The ELBA mall deserves notice here as one of the most ineptly planned transportation projects imaginable. The ELBA mall experience is likely to discredit unjustly the idea of pedestrian malls in London for a good long time. As its name suggests, the mall was initiated by East London businessmen primarily as a way to promote business. We could find no evidence that any market or social impact studies were done prior to the construction of the mall at a cost of $390,000. The costs were split between the City (i.e. the taxpayers) and ELBA, $230,000 to $160,000. The Boulevard opened November 25, 1976, that is, just as winter weather was beginning to make strolling along an open-air shopping concourse quite unpleasant. Although the mall was not scheduled to be evaluated for a year, ELBA requested after only four months of operation that the City re-open it to traffic. The main reason advanced was that the mall created "resentment in motorists forced to detour around the street" (Proctor, 1977). At least that is the public rationalization for what appears to be a loss of business by at least some of the merchants, although, to our knowledge, no evidence regarding the extent of the losses was ever presented. Neither were casual connections between and among the mall, the detouring motorists, the (poor) economic climate, and the loss of business, publicly established. It seems, moreover, that the ELBA vote to make the re-opening request was anything but unanimous, namely, 15 to 10 (Proctor, 1977). The smaller merchants were apparently content to let the mall live out its one-year trial period. Notwithstanding all of these considerations, City Council voted by a wide margin in May, 1977, to re-open the mall to traffic. Two of the larger merchants contributed $7,000 towards the cost of converting the mall back.

The third major recommendation of LUTS was the railway relocation concept. It called for the combining of both the CPR and CNR lines on the latter's right-of-way and for moving the centrally located yards of both companies to the east of the City.

We should remind the reader that the conceptual plan we have presented and discussed in this section was the product only of Phase I of LUTS —which Phase cost the City of London and the Province of Ontario $393,000. Council decided not to go ahead with Phase II as detailed in the consultant's appraisal (LUTS, 1974c). Several of the Mayor's comments in a letter to the ST&T Committee (Bigelow, 1974) will perhaps serve as an adequate proxy for Council's attitudes, if not its reasoning:

> I have carefully reviewed the LUTS appraisal Phase II and wish to express my dissatisfaction with it. It was certainly not worth $9,000.
>
> ...The consultant in the previous Phase of the Study, provided us with five concepts, in total. The concept accepted by Council was called a "combination concept", although a thorough analysis would indicate that the term "combination" was a serious misnomer. Were these concepts not based on what was considered a needs study for the next twenty years? If so, why do we need a further study at $134,9000 and, if not, how were any of these concepts legitimately developed?

(3) The Genesis of The Plan and The Role of The Citizenry

Phase I of LUTS comprised two cycles. In Cycle One, five transportation concepts[34] were formulated. In Cycle Two, they were evaluated and modified issuing eventually in the Recommended Concept.

In Cycle One, 57 meetings were held with various segments of the public involving something in the order of 1,200 people; almost 2,000 people were involved in 77 meetings in Cycle Two. The study team reported (p. 25) being disappointed in the turnout at public meetings, especially in Cycle Two. Inasmuch as LUTS offered Londoners their first opportunity for mass participation in planning, the turnout probably could not have been helped —at least in Cycle One. That the planners may in part have engineered their own disappointment in Cycle Two is quite possible.[35] That is, their strategy for involving the public in the first cycle may have had the effect of depressing public interest in the second cycle. That strategy was, in their words, the "clean slate approach": a "low key, non-issue oriented approach to transportation" (p. 30).

The planners adopted the "clean slate approach" so they would not appear to be manipulating public opinion. They learned to their chagrin that the participating citizens were driven by an urgent desire "to come to grips with specific (local) issues and possible solutions" (p. 30). Although we risk the charge of benefitting from hindsight, the planners do seem to have erred badly in failing to distinguish between educating and informing the public on the one hand, and manipulating public opinion on the other. After all, at any given time, the number of average citizens with a grasp of the City-wide transportation network, not to mention reasonable systemic alternatives to it, could be seated in an L.T.C. bus. As a review of LUTS's catalogue (1973a, between p. 21 and p. 22) of public comments shows the citizens' interest in transportation tended strongly to be self-interest. As a review of ST&T Committee's Agendas over the post-LUTS years shows, that interest has not changed discernibly. In sum, the structure of the interaction between planners and public in Cycle One yielded the only result possible: a fragmented collection of self-serving and (therefore) often conflicting proposals for what we earlier called "spot" problems. That many of these are classified in the reports (see e.g. 1974a, p. 33) under the heading of "Systems Planning", seems purely a function of the planners' expectations and requirements. Similarly, the five transportation systems planning concepts generated in Cycle One are the creations, however unwilling, of the planners.

Cycle Two. The purpose of Cycle Two was to gather public reactions to the five transportation concepts, five railway concepts,[36] and to the five goals and twenty-five objectives of the urban transportation study (see Appendice to this *Topic*). The devices used to gather these reactions were public meetings and a questionnaire. The questionnaire respondents could deposit their completed questionnaire with the planners at public meetings in their respective districts, or they could mail them in free of charge. The questionnaire was supported by a multi-coloured brochure describing the competing concepts and illustrating them through maps.[37] They were mailed to all 75,000 London households, a mere 3% (2,353) of which returned them. The study team reported (p. 39) that "This return was lower than expected, although not unusually low for a mail-in questionnaire". We disagree. The return rate for self-administered mail-out survey questionnaires is typically in the order of 20%, making 3.1% rather dismal. While there are many factors that might contribute to a complete explanation of this failure, in the nature of the case their respective contributions cannot be determined with certainty. Despite this, we propose that the brochure-questionnaire exercise was simply too demanding, in part because it was too complex. This conjecture would seem to be supported by the fact that the planning districts with the higher socio-economic statuses, had the highest return rates.[38] It would also appear to be supported by the fact that the rapid transit concept was "liked" or thought "acceptable" by the highest percentage of respondents (66.0%), and "disliked" by the lowest percentage (17.0%). It is also plausible that cynicism engendered by the Cycle One public participation program contributed to the low return rate.

We do not think it worthwhile to discuss the questionnaire results at length since there is every reason to doubt that they are representative of the City's population. Additional, and stronger, reasons are: the questionnaire's simplicity was inconsistent with the complexity of the issues it purported to test; the respondents did not have sufficient cost-benefit information to decide intelligently; and the individual concepts were, as we noted earlier, loaded. It will suffice here to note the use made by the study team of the results favourable to rapid transit. The study team's assessment of the results led to its recommendation that rapid transit be considered beyond the planning period. Its reasoning may be found in this statement (p. 41, emphasis added):

> Although the rapid transit concept was liked by the greatest number, some of these respondents felt this concept was too expensive and London did not have the population to warrant such a system at this time. These respondents suggested that by the end of the planning period (1991) London might be in a better position to support a rapid transit system therefore the bus transit or combination concepts could be an interim solution to traffic problems.

Thus an unspecified "some of these respondents" appears to have had a disproportionate influence on the study team's analysis. This raises not only the question of the role of public participation in LUTS, but also the suspicion which permeates the study team's report regarding how the alternatives were evaluated, namely, that the chief merit of the Recommended Concept was that it accorded with the planners' predispositions.

The competing concepts were evaluated following Cycle Two of public participation (see Ch. 6). The study team summarized the process in these words (p. 89):

> Three different types of input from different sources were brought together to determine a preferred general concept which was then modified and evaluated to produce the Recommended Concept.

It also portrayed the process in a flow chart (LUTS, 1974a, Figure 6.1). We will restrict our specific comments to the three "types of input".

The first type of input is described as "technical input". This rather pretentious label refers to a series of subjective rankings, of the competing alternatives, of the goals and objectives, of the former against the latter, and of the accordingly ranked concepts against their capital costs. The rankings were done by 7 members of the Technical Advisory Committee and 6 members of the study team. It is on the basis of these rankings that the study team claimed, as reported above, that the recommended transportation and railway plans "are in accord with the goals and objectives[39] of the study". In order to assess this claim we must first present these goals and objectives.

Five goals, each with a number of contributing objectives, were formulated by the study team and, in its words (p. 90) "had been subject to public review and approved by Council and the Technical Advisory Committee" before the study began. They are presented in Appendix A. Evidently, a number of major weaknesses in these goals and objectives, which do seem rather obvious on close inspection, went undetected.

For the team later found that

> The evidence from the public participation program was clear that some objectives rated much higher in importance than others.[40]

and that the goals and objectives

> are not ideally suited to a cost-effectiveness evaluation [and T]here is some overlap between objectives and others tend to be ambiguous.

These weaknesses notwithstanding the Technical Advisory Committee resolved not to change them for purposes of the evaluation (p. 90). Politically, the Committee made a wise decision, for to have changed the goals and objectives in midstream would have constituted a rather obvious "fix". But, in the circumstances, no decision could have compensated for the inherent weaknesses in the goals and objectives. There is, then, no reason why the conclusion of the "technical input" —a tie between the bus transit and combination concepts (p. 91)— should be regarded as persuasive.

Nor should it be regarded as necessarily more persuasive than the public input. That it should be the only possible implication the study team could intend when it reports (p. 91) that "In comparison with the technical input, the public

input received was by its nature very subjective and much more difficult to analyze...." The public's collective preferences for rapid transit and for preserving and enhancing the natural and physical environment have already been noted. Yet the study team concluded (p. 92) "from an assessment" of the same material discussed above that

> the preferred concept for the 20-year planning period should combine elements of the bus transit and combination concepts. In addition, however, the plan should make allowance for the implementation of a rapid transit system towards the end of the planning period.

The third source of input was Council. Council members were interviewed in both cycles of public participation, and were given the opportunity to react to various proposals. Evidently, they were also invited to go through the subjective ranking exercises described above under technical input. Some... "at least partially completed" (P. 93) those exercises.

We can understand why Councillors might have either declined the invitation, or failed to complete the exercise. It does seem curious, however, that "no individual elected representative indicated any favoured concept" (p. 93). Councillors may have been sidestepping a commitment to which they might later have been held, or merely had the same problem as other citizens in trying to complete the complex rankings intelligently.

However that may be, the study team, secure in its belief that none of "the three categories of input...revealed [a] clear preference for any...concept" (p. 93), pressed on to formulate first a Preferred General Concept, and finally the Recommended Concept.

(4) The Disposal of The Plan

City Council's formal response to Phase I of LUTS consisted in approving, on October 2, 1974, a long and multi-faceted recommendation of its ST&T Committee (see Report of September 18, 20, 23 and 30, 1974). It thus accomplished two things: (1) the adoption "in principle" of the Recommended Concept —albeit the Lower Level of Service alternative, in which the capital costs of road construction were reduced by $18 million— "subject to the modifications which are listed as part of the requirements for Phase II"; and (2) the approval of an Appraisal for Phase II (LUTS, 1974c) which would meet a broad set of requirements. Collectively, these twelve requirements seem quite sensitive to non-car alternatives, as reflected by these examples:

> (d) That consideration be given to the use of one-way road systems as an alternative to widening streets in residential areas;
>
> (g) That the bicycle path study be proceeded with as an identifiable separate programme [and] that the potential of this vehicular mode...be explored... both as a means of private transportation and as a means of recreational activity;

> (i) That where a reasonable choice can be made between widening arterial streets or providing added Public Transit, the emphasis be primarily on the Public Transit or secondarily on an alternative route improvement.

The Mayor's critical letter quoted earlier was written in response to the consultant's appraisal. In general, she thought the proposed Phase II program suffered from "the study syndrome" and would not prove effective even at the proposed cost of $284,450 (Bigelow, 1974). In contrast, the Administration took a generally favourable view of both the proposal and the results of Phase I. The Chief Administrative Officer defended them point-by-point in responses to the Mayor's criticisms and to those made by the Urban League (1975a).

Of more than passing interest is the CAO's defence of the Mayor's charge to the effect that the consultant had expediently relaxed the condition of interdependence among the transportation, downtown, and railway concepts. The consultant (1973c, p. 3) had suggested that the Systems Planning Study could "proceed despite the fact that an assumed railway relocation is an integral part of the transportation concept" even if no provincial approval for a railway study were received before the Phase II work commenced. The CAO's response was that

> "The Recommended Concept is broad enough and variable enough to accommodate land use changes that would occur with any railway relocation without dramatically invalidating the general overall transportation concept."

In our view, a plan that is so loose that its meaning can vary so significantly from one observer to another, and from one moment to another, is no plan at all. Notwithstanding his apparent preference for proceeding with Phase II in accordance with the Appraisal, the CAO did put forward an alternative approach in which Phase II would be done by City staff. He noted, however, that

> In-house work will be subsidized by the province only if it can be proven that the in-house staff spends its full time over several months to the study.[41]

By April of 1976 the Appraisal for Phase II lay in tatters. The ST&T Committee (Report, April 27, 1976) was unsuccessfully advancing to Council, the CAO's recommendation that a road planning division be established in the City Engineer's Department. This division, later renamed a "Transportation Systems Planning Unit"[42] (ST&T Report, July 26, 1976), was to carry out the road needs, and downtown parking studies proposed in the Appraisal. By September of 1977, all that remained of Phase II was the road needs study which Council assigned to DeLeuw Cather (C.P., September 6, 1977).

Thus Council abandoned LUTS in midstream, and with it the prospect of a detailed plan for implementing the Recommended Concept. However, this has not meant the abandonment of the latter. Proceeding in a quick unsystematic way, the City has since undertaken eight major construction projects, including

the Nixon-Upper Queen connection discussed earlier.[43] Most of the recommendations associated with the Immediate Action Programmes for traffic and transit operations (see LUTS, 1973c, 1973d) have been implemented (Rowntree, 1974b, 1976). An auditor looking for returns on the investment in LUTS will have to be content, it is sad to say, with benefits of this low order.

D. Summary:

As an exercise in strategic transportation planning, the London Urban Transportation Study appeared at the outset to be a marked improvement over the Margison exercises that preceded it. Most notably, (1) it was to proceed from a comprehensive set of goals and objectives, (2) it was to be environmentally sensitive, and (3) it was to actively involve the citizenry, to whose concerns it was to be responsive. Implicit in its terms of reference were conceptions of urban transportation and urban transportation policies that were fundamentally different from those of the Margison era. That is, in LUTS all modes of transportation, and major land uses, together with the policies affecting each of them, were to be regarded as an interdependent system. This systems view should have rendered obsolete transportation planning by travel demand extrapolation, the primary technique used by Margison; it implied that transportation policies would be used to bring about certain desirable global end-states (e.g. an 85:15 car-transit ratio), instead of merely alleviating spot problems of congestion. LUTS was, in a word, to result in a genuine plan.

Did LUTS fulfill these expectations? The answer has to be "No"; it didn't even come close. There are, as can be expected in an exercise of such magnitude, a number of extenuating factors. Londoners were not accustomed in 1973 to contributing to public decisions that affected them: their well-founded skepticism and cynicism had to be overcome. To judge from their attendance at meetings, their response to the questionnaire, and the comments on the public participation program by those who did return the questionnaire,[44] this resistance was not overcome. The study team was anything but an innocent victim of a closed political culture. In using its "clean slate approach" in Cycle One, it seems to have squandered the valuable good will of many of the initial participants. Then there was the ill-conceived and rather capricious process by which it arrived at the Recommended Concept that flew in the face of recorded public sentiment. That, together with Council's adoption of the study team's recommendation, made the public participation program an "utter farce", as the Urban League (1974c) contended. In sum, local political cynicism was probably more deeply entrenched after LUTS than before.

Even had Council bought Phase II for its exorbitant asking price, it is clear that a transportation system[45] satisfying certain consensual values and objectives, would not have resulted. This is because the conceptual systems formulated at the outset were grounded in black box methodology and data —that is to say, in Margison (1966).

The upshot of this review of the London Urban Transportation Study is that London still does not have a valid strategic transportation plan. In the absence of such a plan, it will be difficult, for example, to appraise the functional plan for the implementation of the L.T.C.'s terminal system concept

now being formulated by consultants. Similarly, it is idle to raise questions concerning the consistency and compatibility of lower level plans and individual projects. But perhaps worst of all, no one can say with any certainty what London's overall transportation situation will be like ten or twenty years hence.

Knowing what we do about current transportation frustrations, and alternative possibilities, it seems irresponsible to remain content with the identification and whimsical elimination of bottlenecks in the road system. For, although it is nowhere declared, bottlenecking is London's dominant transportation policy at the moment.

RECOMMENDATION 3: That City Council initiate the development of a new strategic plan (PLAN FOUR) for local transportation that makes maximum use of community resources, has the endorsement of the majority of the citizenry, and is given effect in public policy statements.

SECTION IV: TOWARD PLAN FOUR: BREAKING OUT OF THE BLACK BOX

The purpose of this concluding section is to present the outline of a program for developing Plan Four. While the program is doubtless a major departure from tradition and current practices, it is inspired in large measure by local precedents. These and other precedents will be acknowledged as appropriate. The main idea behind the program is to develop Plan Four simultaneously from the bottom up and from the top down, using existing manpower and monetary resources where possible, and many citizen volunteers. We repeat that this is an outline, whose details will have to be filled in by program participants.

A. Plan Four From The Top Down:

The top down part of the program would be the responsibility primarily of the proposed Policy Co-ordinating Committee and the Senior Management Team. Its main task will be to lead and co-ordinate the development of a set of goals and objectives for local transportation, which is probably the most important step in strategic planning.[46] In contrast to the goals and objectives of LUTS, the set to be developed should be unambiguous, internally consistent, testable, and equipped with directives for the resolution of unforeseen conflicts. Moreover, the "goals system should possess the attributes of efficiency, equity, comprehensiveness, and implementability" set out by Bobo, et al. (1976). These criteria were derived from a review of the impressive Dallas and New Orleans goals programs, which are valuable sources of goal statements and procedures (see e.g. Nininger et al., 1975a, 1975b). The recently published Urban Transportation Planning Guide (RTAC, 1977) is also a good source of sample goals and objectives. Appropriate here is its admonition (p. 11) that

> The process of goal determination must be a political one. There must be ample opportunity for participation by the public at large and particularly by interest groups within an affected region.

In order to set meaningful and realistic goals and objectives, Council must have a detailed knowledge of the existing transportation system. This should include systematic data regarding both its objective characteristics (e.g. traffic volumes, and origin-destination sets), and the preferences of its various users by groups and classes. The collection of these basic data should be done in-house where possible, rather than by consultants whose role in Plan Four should be minimal. Specifically, data collection should be the responsibility of the proposed Planning and Research unit of the Transportation Department, the research section of the Planning Division, and the data processing section of the CAO's Office. Much of the field work could, following the SLCA's example in the Upper Queen Extension case, be carried out by citizen volunteers.

The Policy Co-ordinating Committee may also want this research team to explore the development of a computer-based land use/transportation simulation model. If deemed worthwhile, such a model could be used to evaluate the impact of both systems alternatives and individual projects, and to update the plan that is

finally adopted. As RTAC concludes (1977, pp. 155-6):

> With computer facilities and appropriate software programs available to all municipalities and the relative ease of inter-relating land use and street system data files with transportation programs, there is every opportunity for any municipality to have the 'in-house' tools for continuous [plan] update.

If a model is developed, safeguards should be devised to ensure that the model remains an aid to planning and does not become the chief planner-dictator.

Since the essence of the bottom up part of the Plan Four program is citizen participation, it is appropriate here to augment briefly the accounts of citizen participation given in connection with LUTS and the Upper Queen Extension.

Those accounts suggest that, even at this advanced stage in the evaluation of public participation, many at City Hall still question its desirability and legitimacy. A number of recent district planning programs, and the program to determine the site of the medium security penitentiary, reinforce the impression that the development of citizen participation in London is seriously retarded.

A number of descriptive case studies (Campbell and Pearce, 1976; Lovelock, 1977; Zatko, 1976) and one critical account (Paolosini, 1977) of citizen participation have emerged in the last few years. Several of their findings are instructive. From Campbell and Pearce (1976) we learn that almost half of the sample questioned about the West London District Plan exercise reported that they were poorly or never informed adequately even when they attended meetings. There are two especially informative statistics to be found in Paolosini's 1977 study of the North Central London District Plan process: (1) a mere 1.4% of eligible citizens attended the meetings to elect members to the Citizens' Advisory Group and (2) although there were three hand-deliveries of information circulars to every house in the district, only about one-half of the residents on average reported being aware of the proposed district plan. On the basis of findings such as these, Paolosini (p. 94) ended by suspecting that City Council's "minimal support" of the Planning Division, which directed the planning process, was an insincere gesture toward consensus planning.[47]

It is in failures in participation such as these that we find a good part of the explanation why invitations to citizens to participate in determining their future, are turned down by so many. Thus, only three persons from a community association of 500 registered members turned out recently to hear about plans for upgrading their parks (L.F.P., March 10, 1978). Thus, the L.T.C. received only 140 replies when it polled 1,250 homes in a recent survey of route and schedule preferences (L.F.P., May 13, 1978). We are suggesting that justified political cynicism, more than apathy, is at play in such cases. The bottom up program is designed to break this vicious circle of participation and cynicism.

B. Plan Four From The Bottom Up:

A bottom up program which could be instituted is one built mostly on the local precedent of the district planning program, albeit much accelerated. Insofar as they can be identified, its principal sources are the Metropolitan Toronto Transportation Plan Review (1975), Toronto's planning experience (e.g. Shepherd, 1978), the early experience of Britain's "New Regime" in transport planning (see Gwilliam, 1976), our old standby, the City of London Management Committee (1976), RTAC (1977), Whitehead (1976), and Taraska et al. (1976).

Two of its fundamental ideas must be put before the program itself. The first comes from the review of a series of reports on public participation in structure planning in Britain by Whitehead (1976, p. 381), who concluded that:

> The fundamental message which comes out of the majority of the reports is the importance of Councillor participation. The concept of a three-way process of participation involving the public, local authority officers, and Councillors is a clear one. In a representative democracy, the elected members must make the decisions or the very basis of the system may begin to crumble. If the Councillors do not feel part of the process then it will not influence their actions. They will become divorced from its value as a learning process, and other parties —the officers and the public— will become frustrated, possibly angry.

The second idea is to institutionalize London's district plan exercises after the fashion of Winnipeg's Community Committee - Residents' Advisory Group system (Taraska et al., 1976, Part IV, Chs. 3 and 4). This system was established by the City of Winnipeg Act of 1971. Twelve community committees of elected Councillors were formed "to provide ready access by the people to the local government system" and to administer certain services. To complement the community committees and to assist them in the first purpose, a corresponding number of resident advisory groups were elected at community conferences. The Taraska Committee found that, mainly owing to ambiguity and looseness in the enabling legislation, the community committees had not "been able to play any significant role in the delivery of services" (p. 85) and that the residents' group arrangements had met with "indifferent success" (p. 98). Nevertheless it was impressed enough with the potential of the system to recommend that it be continued with modifications.

Of most interest here are its recommendations: (1) that the community committees be reduced from twelve to six to broaden what it found to be parochial attitudes; (2) that they not be involved in the delivery of services but that they concentrate with the residents' groups on preparing and implementing "the district and action area plans"[48] —which concentration would make them better able to continue to hear applications for zoning changes; and (3) that the representation on the residents' advisory groups be broadened by appointing one representative from every community association to the group in its geographical "community".

The bottom up program, then, is this. The 18 Aldermen from the 18 wards as proposed by the Mann Committee, could be appointed to one of four community committees, whose communities of jurisdiction would each be comprised of five geographically contiguous Planning Districts.

A citizens' advisory group (CAG) corresponding to each community committee would be elected, at a community conference called for the purpose, for a term corresponding to City Council's. Every citizen, business, and school association whose membership is locality based (e.g. South London Community Association, Downtown London Association) would be entitled to appoint a representative to the CAG for its area. The primary responsibilities of each community committee, with the active assistance and counsel of its CAG would be, (1) to draft a community transportation plan and a secondary plan for each of its planning districts, and (2) to respond in the first instance —through a full-time office in its community staffed by at least one secretary and one planner, and through regular meetings— to the concerns of citizens that are now typically handled by City Hall or the four standing committees.

The community transportation plans would cover the matters of traffic circulation (including speed limits, signals, crosswalks, and bus/bike lanes), off-street, on-street, and boulevard parking, bus routes and schedules, snow removal, and road and sidewalk construction, replacement, and maintenance. They would be implemented by means of policies and programs, formulated by the committees and citizens, and recommended to Council for adoption within, say, two years. The district plans would follow. We hope that, by focussing initially upon community transportation issues —a subject that is more immediate for, and more easily understood by, more citizens than is land use planning— with which they are equipped to deal effectively, the community committees will soon gain the confidence of the citizenry.

The proposed program is expected to result in more efficient use of the Aldermen's constituency time, estimated to amount to close to half of their duty time (see Powell et al., 1976, Part II). That is, the practice of complaining to one's Alderman privately may (and should be encouraged to) give way to attendance at meetings. This, in turn, ought to have the effect of instructing the more self-serving citizens in constraints and compromise and, in consequence, of reducing frivolous complaints. For similar reasons City Hall staff should have more time to develop policy proposals regarding the larger policy issues.

The integration of the top down and bottom up phases of Plan Four development would be the responsibility of the Policy Co-ordinating Committee and, more generally of Council. The main vehicle for integration will be the Official Plan, into which Plan Four, and its lower level (constituent) plans will be incorporated. Obviously before this program could be instituted, the costs would have to be examined along with a closer analysis of actual procedures which have led to previous successes and failures of CAG.

We have, in conclusion, presented the outline of a program for the development of a strategic plan for local transportation. All that is required for the initiation of the program is that City Councillors and administrators and Londoners generally, heed the Mayor's advice to the recent London Toward 1986 Conference, to:

"Stop patting themselves on the back about the City they live in and get down to defining and planning the way they want the community to grow."

Charles K. Bens, Executive Director
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APPENDIX A

London Urban Transportation Study

GOALS and OBJECTIVES

Goal I - Transportation: To provide a transportation system which will accommodate present and future needs for the movement of people and goods.

Objectives:
1. To develop a transportation plan that is compatible with provincial and regional transportation concepts and adequately serves present, intermediate, and long-term land use and travel patterns and forecasts.
2. To provide a flexible system which will permit modification to accommodate change during and beyond the stages of implementation of the transportation plan.
3. To achieve a balanced and integrated system of public and private transportation.
4. To provide a transportation system that is safe, efficient and convenient.
5. To achieve a level of capital investment in public and private transportation facilities which will provide increased benefits to the user compatible with the adopted goals.
6. To provide vehicular parking compatible with the transportation system.
7. To improve the public transit system.

Goal II - Land Use: The integration of a transportation system compatible with the land use as proposed in the 1971 Official Plan.

Objectives:
1. To locate transportation facilities to promote the development of the desired land use pattern as expressed by the 1971 Official Plan.
2. To promote orderly development and redevelopment.
3. To encourage the establishment of industries in areas where they can best be serviced with the least disadvantage to the environment.
4. To promote the development and use of suitable park lands, other recreational areas and open space in order to reduce the disruption of community, cultural, and recreational facilities.
5. To relocate existing transportation facilities which may hinder desired development.
6. To encourage the preservation of rural land as designated in the 1971 Official Plan.
7. To encourage the preservation of historical sites and structures of architectural merit.
8. To improve transportation service to institutions to meet their special requirements.

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7. To encourage the preservation of historical sites and structures of architectural merit.
8. To improve transportation service to institutions to meet their special requirements.

7 For comparison, Hamilton's share of the deficit for the Hamilton Street Railway rose from 50.6% in 1975 to 66% in 1977. (Stewart et al., 1978, Table 10.2).

8 Thus the loss of 6.4 and 8.1% incurred following the fare increases of November, 1965, and February, 1971, were made up in 1968 and 1974. (See L.T.C., Minutes, January 9, 1975.)

9 A $40,000 feasibility and detailed implementation study of the proposal is currently underway.

10 The capital budget figures were calculated from the Capital Budget Program for the years 1970-1975, while the current budget figures were calculated from the City's Financial Reports for the same years. The latter figures include sidewalks, roadways, road cleaning, traffic control and parking and exclude transit. The parking meter department more than pays for itself through collection and fines. For comparison, Hamilton spent in the order of 15% of its current budget for corresponding services between 1972 and 1977 (Stewart, 1978, Table 7.1).

11 The reference is to the Ontario town of Wainfleet located on a 9-mile stretch of "Heritage Highway", along which the Ministry of Transportation and Communications recently marked 200 two-century-old trees for cutting. Its objective was to widen the highway by 2 feet, and to add six foot shoulders, so it would meet provincial standards for highways with its posted speed limit of 80 k.p.h. (see G&M, July 1, 1978, p. 4).

12 The origins and outlines of the energy crisis should be familiar to anyone with even a passing interest in public affairs. For those who want a concise account of the energy crisis as it affects Canada and Ontario, we recommend our recent Topic "What Can Municipalities Do About Energy?", March 1978, pp. 2-7.

13 Canadian government actions to date include: (1) an excise tax on heavy cars, (2) a gasoline tax of 10¢ per gallon imposed in 1975, (3) a special excise tax of $100 on all new automobile air conditioners, (4) a minimum fleet average fuel efficiency standards of 24 m.p.g. in 1980 and 33 m.p.g., and (5) allowing the price of Canadian crude oil to rise to the international level (this policy has been manifested locally as a 5¢ per gallon increase in the price of gas at intervals of 6 months which does not seem to have affected car travel). For its part, the Ontario government has reduced highway speed limits and raised fees to further increase the relative cost of licensing large cars.

14 The probability of fuel rationing was conceded in the question period following Mr. MacNabb's speech.

15 Based on a BMR examination of ST&T Agendas and Reports.

16 Had we more space we would demonstrate this through a case study of the processing of a complaint from a resident of Cheapside Street (see ST&T Agenda and Report, February 14, 1977 and C.P., February 21, 1977). Briefly he complained about the abuse of a limited (2 hours) parking zone across from his house in connection with a suspected business being conducted in violation of a zoning by-law. The complaint was found by the Traffic Director not to warrant corrective action. However, against his recommendation, corrective action in the form of a by-law amendment, was proposed by the ST&T Committee and approved by Council. This complaint entailed the time-consuming personal attention of the Chief of Police, the police traffic sergeant, parking enforcement officers, the traffic director, the zoning administrator, the ST&T Committee and the secretarial staff that typed the mass of correspondence and reports.

17 Traffic engineers use six level-of-service ratings lettered A through F (see Lea, 1976, App. A). A is the highest and "corresponds to a condition of free (traffic) flow, with low volumes and high speeds"; F is the worst and "connotes forced-flow operation at low speeds and (traffic volumes below (roadway) capacity). This is stop-and-go traffic operation" (cited in Lea, App. A).

18 Lea need not have gone so far afield for his evidence. He might have used the example of the Kensington neighbourhood in London where the Traffic Division, in consultation with residents, worked out an effective system of physical barriers to discourage through traffic (see Morgan, 1976).

19 The L.T.C. also expressed concern that, if the idea of using a secondary collector as a bus priority route were "expanded into 3 or 4 areas of the City, the result would be an entirely different (transit) system" than the terminal system Council had approved in principle (Staff Report #3, April 27, 1978).

20 These are: the Market parking building for which it is named, the parking garage beneath City Hall, and the parking building at St. Joseph's Hospital. Covent Garden is to operate the Talbot Square parking garage if and when it is completed, and has recently been nominated to assume the management of the financially troubled East London parking garage.

21 The reason given officially for such a loose agreement was to encourage urban renewal (see L.F.P., October 12, 1975). The agreement would have had the safeguard of a performance bond had there been more than one developer contending for the contract.

22 They were reported (L.F.P., March 3, 1977) to have stood at $1.9 million, of which $850,000 was cash, as of September 1976.

23 For the Finance Commissioner, the Talbot Square troubles must have seemed the ideal evidence of the disadvantages of relying on special purpose bodies, a case he had made several years earlier (see Date, 1972).

24 In 1972, the L.T.C. subsidy was $150,714 (L.T.C., 1972), while the public and separate school boards spent $622,400 and $108,700 respectively (LUTS, 1974b, p. 5).

25 It may be appropriate to note Harold Kaplan's finding that from 1953 to 1965 over two-thirds of the policy issues that came before Metro Toronto were defined and initiated by key Metro department heads (cited in BMR, 1970, p. 4).

26 The close working relation between the consultants and their employees, City's elected and (particularly) appointed officials, means that criticism directed at LUTS necessarily implicates the City's officials. While we think the City relies too heavily on consultants, we think they do have a legitimate contribution to make. There is, then, no intention here to make scapegoats of them.

27 The most comprehensive review of LUTS is Frankena's (1974). Although it was written before the final systems report (1974a) was published, his criticisms are generally valid for it as well. We have summarized them here, and will be alluding to several of them later in the text: (1) in indicating their preferences among the alternative concepts, Londoners had no cost-benefit information with which to decide intelligently; (2) the consultants did not perform benefit-cost analyses early on, and thus dismissed options prematurely and arbitrarily; (3) the cost-effectiveness evaluations actually done by the consultant do not aim at an efficient allocation of resources, and may or may not reflect Londoners' preferences; (4) LUTS ignores the income distributional effects of alternative policies; (5) LUTS uncritically promotes the CBD as the City's major social, commerical, and cultural centre, partly on the basis of suspect data; (6) LUTS uncritically promotes the status quo in travel habits; (7) LUTS fails to consider pricing policies, and neglects certain regulatory policies, which could have furthered its objectives; and (8) the consultants methods of ascertaining public preferences led to invalid and unreliable data, and seemed to be aimed more at public acceptance of the recommended plan.

28 Page references standing on their own in this section are to LUTS, 1974a.

29 "A policy is acceptable on the grounds of efficiency when the aggregate benefits accruing to all members of society exceed the aggregate costs, and the excess of benefits over costs is as great as that of any alternative policy." (Frankena 1974, p. 5.) The most obvious benefit is reduced travel time, while costs include capital and operational dollar costs and social costs such as environmental destruction and pollution.

30 In another place (p. 9) this percentage is given as "15-20%".

31 The formula is $RCOST^m = T_i^m VT_i + C^m$ where: T_i^m is the amount of time in activity i for mode m; VT_i is the value of time in that activity; and C^m is the dollar cost to the traveller for this mode. He cites empirical studies showing that "the value of travel time is approximately one-third the hourly wage rate; waiting time, which includes standing at a bus stop

or subway station platform, is about one and one-half times the value of travel time; and walking time is three times the value of travel time" (p. 61).

32 Dewees then goes on to evaluate several policies for pricing motoring one of which is a CBD parking tax. A recent field experiment to promote transit usage through marketing in Kingston, Ontario, has reaffirmed Dewees' observation regarding transit promotion. The study concluded that promotion resulted in (1) no short-term economic pay-offs in terms of increased ridership and (2) no measurable impact in improving the (already positive) overall attitude towards transit and transit usage (reported in L.T.C., Staff Report #4, March 17, 1977).

33 We are referring to higher parking rates, the functional equivalent of Dewees' CBD parking tax. Dewees (1976, p. 73) found it to "be appropriate to reflect externalities near the parking facility, but...a poor way to correct the general under pricing of urban motoring". This is because the long-distance commuter and the short-distance shopper each pay the same, although the former contributes more to congestion and other social costs. High parking rates have been found to discourage short but not long trips.

34 The initial five concepts were: (1) Rapid Transit Oriented Concept. (2) Bus Transit Oriented Concept, (3) Roadway Oriented Concept, (4) Auto-free Downtown Concept, and (5) Combination Concept(s). See LUTS, 1973.

35 The planners' analysis of attendance at public meetings in Cycle Two showed that only six percent had also attended meetings in Cycle One (p. 39). This suggests a significant element of disaffection, and a problem of educating the newcomers, among other things.

36 The five railway alternatives were: north of the City, CPR corridor, south of the City, existing facilities with grade separations, and —the one that was finally recommended— the CNR corridor. Poon (1976) has done a cost-benefit analysis of railway relocation in London, under the supervision of Professor Frankena, in which the total costs outweigh the total benefits for the CNR alternative $24.23+ million to $15.10+ million. While, as Poon contends, this result may (i.e. a number of social costs and benefits not susceptible to dollar pricing were excluded) mean the project is economically unjustifiable, the dollar spread does not appear to us to strain social justification.

37 The brochure also mapped a network of bicycle paths, although it was not included in the descriptive summary which showed gross cost figures for the other plans; nor was it mentioned in the questionnaire.

38 E.g. Oakridge (10.78%), Westmount (10.70%), Westminister (6.98%), Byron (6.31%), Masonville (5.71%), Medway (5.61%), Stoneybrook (5.38%), and North London (5.07%) (p. 41).

39 In LUTS (App. B) a goal is "an end to which a planned course of action is directed", an objective is "a point to be reached toward the achievement of a goal and which is capable of both attainment and measurement".

40 During Cycle Two of the public participation program, the team collected 546 usable paired comparison sets, in which five statements "chosen to be representative of the study goals and objectives" were compared with one another. These were, with resulting rankings given in parentheses (p. 43).

A	Minimize the total cost to the taxpayer	(5th)
B	Maximize personal mobility	(4th)
C	Improve public transit and restrict use of the automobile	(2nd)
D	Preserve and enhance the natural and physical environment	(1st)
E	Preserve local neighbourhoods	(3rd)

Like the questionnaire, this device seems entirely too glib to do justice to the nuances of the issues involved.

41 The costs of Phase I, and of the Appraisal for Phase II, were split between the City and Provincial government on a 25:75 basis.

42 This proposed unit is part of the inspiration for the Planning and Research Division of our proposed Transportation Department.

43 These are:
1. Highbury Avenue Widening - Florence to Brydges.
2. Continuing phase of the London East Industrial Access Road (Airport Road).
3. Fanshawe Park Road Bridge over Stoney Creek Replacement and Widening.
4. Continuing phases of the Hulton Wonderland Connection.
5. Oxford-Richmond Intersection Improvement.
6. Oxford Widening - Clarke to Industrial.
7. Dundas Street Extension.
8. Nixon-Upper Queen Connection (Joynson, 1978).

44 The study team content analyzed 460 separate comments (1974a, p. 27). While only 15-20 comments "could be regarded as directly hostile to public participation", one of the two major themes running through the responses was scepticism that participation would have any effect on the plan adopted.

45 A set of travellers using different modes of transportation and facilities, whose interactions are known and can be fairly accurately predicted and controlled by applying knowledge of their objective and incentive systems (see Wildavsky, 1973, p. 141).

46 It may come as a pleasant surprise that City Council, in June of 1977 (C.P., June 20, 1977), formed a special committee, subsequently known as the Corporate Planning Committee (CPC) to "set broad community goals and objectives". The Committee grew quickly to include 14 of Council's 19 members, only about six of whom have shown, by their attendance, a continuing interest (CPC, "Highlights"). While nothing covered has emerged so far, Alderman Siess, its Chairman expects that something will emerge this fall. Since the

CPC has been discussing the complete range of goals, and since transportation goals overlap necessarily, Council may wish to broaden the strategic planning exercise to include more than just transportation.

47 In its disappointing district planning programs London is not alone. Its experience seems to be consistent with that of Toronto, Hamilton, Winnipeg and Vancouver, as reported by Anderson (1977) who interviewed 43 planners in those cities. A lesson for London may be drawn from Anderson's conclusion (p. 43): "The experiences of area planners have indicated that no one is going to hand the power of decision-making to people who don't come asking for it. Representative democracy and community-based planning can be made compatible only when people decide to make their representatives responsible to them on a daily basis, not just once every two years."

48 The review committee reasoned that: "It is in the formulation of these plans that there can be developed the greatest measure of communication between the people and their government; and it is in the guidance and control of development, in accordance with these plans, that there can be developed a scale of local involvement in the control of the local environment."

BIBLIOGRAPHY

Anderson, Grant — 1977 "Local Area Planning: The Dream and the Reality", City Magazine, (2:7) March, pp. 35-43

Arblaster, Gordon — 1976 Letter to ST&T Committee, November 18

Ayer, G.A. — 1972 Public Participation in the Transportation Planning Process, Toronto: Ministry of Transportation and Communications

Baker, Alden — 1978 "Ruling Metro: Private Deals, Outer Serenity", Globe & Mail, January 1

Barzun, Jacques — 1964 Science: The Glorious Entertainment, Toronto: U of T

Bobo, J.R. et al — 1976 "Metropolitan Goals Programs: A Model and Evaluation of the Dallas and New Orleans Programs", Town Planning Review, January, pp. 43-55

Bigelow, Jane — 1974 Letter to ST&T Committee, December 6

Bureau of Municipal Research
- 1970 "Transportation: Who Plans? Who Pays?", Civic Affairs, Autumn
- 1978 "What Can Municipalities Do About Energy?", Topic, Mareh

Campbell D. and Pearce S. — 1976 Citizen Participation and the West London District Plan: Case Study, Honours essay, Kings College School of Social Work, London, January

City of London
- 1967-1975 Capital Budget Program
- 1967-1975 Current Revenue and Expenditure Budget
- 1977 Municipal Yearbook
- 1974-1978 Council Proceedings (as noted in text)
- 1976 Official Plan - 1971, Consolidation, September 13, 1976
- n.d. Policy Manual

City of London Management Committee
- 1976 Report on the City's Policy-Making Institutions, London, February. (Also known as the Mann Report after its Chairman, Robert Mann.)

Date, Dennis
- 1972 "Special Purpose Bodies", position paper, mimeo
- 1976 "Position Paper on the Provision of Off-Street/On-Street Parking Facilities and Public Transit Services", October, mimeo

Desjardins, B.J. — 1973 The Hamilton Transportation Strategy Study: A New Direction in Urban Transportation Planning, Toronto: Roads and Transportation Association of Canada, May

Dewees, Donald N. — 1976 "Travel Cost, Transit, and Control of Urban Motoring", Public Policy (24:1) Winter, 1976, pp. 59-79

Energy, Mines and Resources Canada
- 1977 Energy Conservation in Canada: Programs and Perspectives, Report EP 77-7, Ottawa: Ministry of Supply and Services
- 1978 Energy Update 1977, Report E178-2, Ottawa: Ministry of Supply and Services

Frankena, Mark — 1974 "An Economic Evaluation of Urban Transportation Planning in Canada with a Case Study of London", Economics Department, U.W.O., January, mimeo

Gibb, Don — 1978 "City Hall's Attitude to Budget Restraints", L.F.P., April, p. A7

Globe & Mail — Various issues as noted in text

Gwilliam, K.M. — 1976 "Appraising Local Transport Policy: The New Regime, Town Planning Review, 47 January, pp. 26-42

Hickey, Paul — (?)1973 Decision-Making Processes in Ontario's Local Governments, Toronto: TEIGA, n.d.

Huffman, Donald W. — 1977 "Ethical Perspectives on Urban Transportation", Alternatives (6:2) Winter, pp. 32-7

Hutchinson, B.G. — 1974 Principles of Urban Transportation Systems Planning, Washington, D.D.: Scripta

Illich, Ivan — 1973 Tools for Conviviality, New York: Harper and Row

Joynson, Allan
- 1976 Memo to ST&T Committee, February 20
- 1977 Memo to Planning Board, February 4
- 1978 Letter to Bureau of Municipal Research, July 21

Kerr, Donna H. — 1976 "The Logic of 'Policy' and Successful Policies", Policy Sciences, pp. 351-63

Lea, N.D. and Associates Ltd.
1976 Brief to South London Community Association regarding Through Traffic Problems, Oakville, November 18

London Chamber of Commerce 1978 "Londoners' Attitudes Toward London", background paper "London Toward 1986" Conference, U.W.O., May 1, 1978

London Free Press (L.F.P.) Various issues as noted in text

London Transit Commission
1974-1978 Minutes and Staff Reports as noted in text
1972,1976a,1977a Letter to James Snow, Minister of Transportation & Communications, February 5
1977b "Terminal System Concept", August

London Urban Transportation Study (LUTS)
1973 Range of Transportation Concepts for Study, February
1973a Public Participation Program Cycle 1. Summary and Evaluation, February
1973b Environmental Appraisal, September
1973c Final Report - Volume 1: Traffic Operations, April
1973d Final Report - Volume 2: Transit Operations, November
1974a Final Report - Volume 3: Systems Planning and Railways - Phase I, February
1974b Final Report - Volume 4: Summary, April
1974c An Appraisal for Phase II, November
(All titles published by DeLeuw Cather, Ltd., London)

Lovelock, D.J. 1977 "Community Involvement: A Study in Conflict Resolution", unpublished essay, Department of Geography, U.W.O.

Maclean, M.E. 1975 Letters to City Council November 5

MacNabb, Gordon M. 1978 "Notes for an address by G.M. MacNabb, Deputy Minister, Energy, Mines and Resources, London Energy Seminar", January 25

Marshall, Macklin, Monaghan 1976 London-Centred Retail Study, November

Margison, A.D. and Associates Ltd.
1960 London Area Traffic Plan, 1959-1980, Toronto, January 30
1966 Traffic Planning Study Draft Report, Toronto

McDougall, J.L. 1965 A Report to the Mayor and Council of the Corporation of the City of London on Current Transit Problems, Kingston, December 1

Metropolitan Toronto Transportation Plan Review
1975 Choices for the Future: Summary Report, Toronto, January. (Also known as the Soberman Report)

Morgan, Jack
1975 Letter to ST&T Committee, May 1
1976 "Traffic Operational Measures in the Kensington Neighbourhood", memo to ST&T Committee, September 27

Nininger, J.R. et al
1975a Goals for Dallas 'A': An Experiment in Community Goal Setting, Toronto: Local Government Management Project
1975b Goals for Dallas 'B': An Experiment in Community Goal Setting, Toronto: Local Government Management Project

Ontario
1977 Social Indicators for Ontario 1977, Toronto: TEIGA, August
1977a Report of The Provincial-Municipal Grants Reform Committee, 2 Vols., Toronto: Queen's Printer. (Also known as the Stevenson Report)

Paolosini, A.T. 1977 Citizen Participation in Local Municipal Planning: An Evaluation of the North Central London District Planning Process, Honours essay, University of Waterloo, April

Peat, Marwick and Partners 1975 City of London Organizational Study, February

Pill, Juri and Richard Soberman
1975 Transportation Organization in Metropolitan Toronto, background report for the Royal Commission on Metropolitan Toronto, April

Planning Division, City of London
1977 "Estimated Population Capacity for the City of London"

Pleva, E.G. 1978 Address to the "London Towards 1986" Conference, U.W.O., May 1

Police Department, City of London
1965-1977 Annual Report

Poon, C.L. 1976 Urban Railway Relocation: An Economic Evaluation, Ph.D. Thesis, Dept. of Economics, U.W.O., London

Powell, J. et al 1976 Political Life in Metropolitan Toronto: A Survey of Municipal Councillors, Staff Study for the Royal Commission on Metropolitan Toronto, April

Proctor, G.W. 1977 "Hot Time on the Boulevard Strip", Satellite News, April 26

Roads and Transportation Association of Canada
1977 Urban Transportation Planning Guide, Toronto: U of T Press

Robarts, John 1977 Report of the Royal Commission on Metropolitan Toronto, 2 Vols., Toronto: Queen's Printer

Rowntree, Keith 1974a Memo to ST&T Committee, January 24
1974b Memo to ST&T Committee, March 28
1976 Memo to ST&T Committee, April 27

Science Council of Canada 1977 Canada as a Conserver Society, Report No. 27, September

Shepherd, Harvey 1978 "Are the Good Years about to End for Toronto's Professional Planners?", Globe & Mail, March 29

Silcox, Peter 1976 Essex County Local Government Restructuring Study, Toronto: Queen's Printer

Statistics Canada 1977a Perspective Canada II: A Compendium of Social Statistics, Ottawa: Ministry of Supply and Services
1977b Canada Yearbook 1976-77, Special Edition, Ottawa: Ministry of Supply and Services

Stewart, H.E. et al 1978 Report of the Hamilton-Wentworth Review Commission, Toronto: Queen's Printer

Streets, Traffic and Transportation Committee
1974-1978 Agendas and Reports as noted in text

South London Community Association
1975 A Report on Traffic in South London with Specific Reference to the Proposed Upper Queen Street Extension, Brief to the ST&T Committee, September 4

Taraska, Peter et al 1976 Report of the Committee of Review, the City of Winnipeg Act, Winnipeg: Queen's Printer

Trippett, Frank 1977 "Going Our Own Way - At 65 m.p.h.", Time, November 21

The University Practicum in Rapid Transit
1973 Light Rapid Transit: The Immediate Answer for Edmonton, 2nd ed., Edmonton

The Urban League of London 1974a The Need for the Coordination of Planning, Housing, and Education Policies, Brief to The Honourable John White
1974b A Brief to the Street, Traffic & Transportation Committee on the London Urban Transportation Study, May
1974c Letter to Council, October 7
1975 Letter to Council, November 7

Watson, C.N. and Winter, J.O.
1976 City of London Housing Policy Study, London: City of London

Whitehead, P.T. 1976 "Public Participation in Structure Planning: A Review Article", Town Planning Review, 47 October, pp. 374-383

Wildavsky, Aaron 1973 "If Planning Is Everything, Maybe It's Nothing", Policy Sciences, 4, pp. 127-53

Zatko, G. (?)1976 Citizen Participation in Planning Decision-Making: A Case Study in London

INTERVIEWS

Bigelow, Jane
Date, Dennis
Joynson, Allan
Mackenzie, Charles
Robinson, Don
Siess, Tom
Sommerville, S.
Tikalsky, J.

CORPORATE

Allstate Insurance Company of Canada
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