



Policy Title: Installation of 'Out of Sequence' Traffic Signals Policy

Policy Number: TP007

Report Number: OD85-116

Approved by: City Council

Effective Date: 1985 December 2 and amended 1986 January 13

Business Unit: Roads/ Transportation Planning

BACKGROUND

It has been the policy of the City's Transportation Department to install traffic signals only when intersections meet the installation criteria and funds for the installation have been included in the Traffic Capital Budget Program 130. Over time requests have been made by developers to install traffic signals which have not been included in the approved construction program. In some cases, the developers have offered to assist The City with financing and the construction.

Prior to 1975, the costs for new traffic signals required by developments were negotiated with the developer. However, after 1975, the need for new signals was so great that The City of Calgary began to install them as expeditiously as possible. With the reduction in available funding since 1982, The City policy in effect prior to 1975 was again deemed to be appropriate.

With the growth of the City and development increasing, special requests for traffic signal installations were coming from mainly non-residential developers, who saw a business need for the enhanced access that could be provided by a traffic signal. In this case, developers wanted to install signals in order to enhance access to certain buildings such as shopping malls and grocery stores and saw the installation as crucial to the economic viability of the development.

In any case, developers of property adjacent to existing traffic signals are routinely required to pay the cost of any modifications to the traffic signal made necessary by the development.

As such, based on the number and variety of requests by developers, it was necessary for The City of Calgary to define the circumstances under which traffic signals may be installed outside of the normal priority rating and budgetary procedures and how the installation costs might be financed.



DEFINITION

WARRANTED TRAFFIC SIGNALS:

Signals that have been identified in reports by The City Transportation Department as priority installation locations. These locations are those with high volume traffic and current and/or potential concerns with congestion. As such, warranted signals are those that promote access, and enhance the flow of traffic, while decreasing congestion and providing optimal safety. In addition, the construction of priority signals is approved at City budget deliberations.

RECENT DEVELOPEMENTS

The Board of Commissioners has approved proposals made by developers wherein traffic signals will be installed. The developers will pay the full cost of the signals installation and will be refunded a portion of the cost if the signal becomes warranted within five years.

PURPOSE

This policy provides guidelines and procedures for the installation of 'out of sequence' traffic signals in The City of Calgary. It serves to identify priority locations in the City through a needs assessment based on traffic volume, flow and safety considerations. In addition, it provides an equitable procedure to address the number of requests for traffic signals in advance of their proven need.



POLICY

[See attached policy document.](#)

PROCEDURE

[See attached policy document.](#)

AMENDMENTS

1986 January 13 0D85-116 Draft Policy for Installation of 'Out of Sequence' Traffic Signals Relative to Council's Approved Construction List.

The policy was amended by the addition of the sentence "Signals required because of traffic generated by the development should be installed with the full cost charged to the developer." and

The deletion of the words "When a traffic signal" and by the addition of the words "For developments already approved and when a traffic signal", therefore.

COMMISSIONERS' REPORT TO THE OPERATIONS AND DEVELOPMENT COMMITTEE

493

1985 DECEMBER 2

OD85-116 RE: 'DRAFT' POLICY FOR INSTALLATION OF 'OUT OF SEQUENCE'
TRAFFIC SIGNALS RELATIVE TO COUNCIL'S APPROVED
CONSTRUCTION LIST

BACKGROUND

In recent years, it has been the policy of the Transportation Department to install traffic signals only when intersections meet the installation criteria and funds for the installation have been included in the Traffic Capital Budget Program 130. Recently, requests have been made by developers to install traffic signals which have not been included in the approved construction program. In some cases, the developers have offered to assist the City with financing the construction.

Prior to 1975, the costs for new traffic signals required by developments were negotiated with the developer. However, after 1975 the need for new signals was so great that the City began to install them as expeditiously as possible. With the reduction in available funding since 1982, the City policy in effect prior to 1975 is again deemed to be appropriate.

In 1984, City Council approved a proposal made by Melcor Developments Ltd. that, in return for speedy installation of a traffic signal at the intersection of Nose Hill Drive and Ranchlands Boulevard N.W., they would pay the interest charges on the cost of the signal from the time of installation to the date when the signal would normally have been built.

Recently, Trizec Equities Ltd. has offered to pay one-quarter of the cost of a traffic signal on Bonaventure Drive at the South Centre entrance. Significant increase in accessibility would also accrue to adjacent recreational facilities.

Canada Safeway Ltd. has proposed that a traffic signal be installed on 32 Avenue at 34 Street N.E. to serve an entrance to a new food store. The projected traffic volume does not presently meet the warrant criteria. The developer has suggested that he pay the debenture charges until such time traffic volumes increase to meet warrant criteria, at which time the City would take over the payments.

Developers of property adjacent to existing traffic signals are; however, routinely required to pay the cost of any modifications to the traffic signal made necessary by the development.

The problem to be resolved is to define the circumstances under which traffic signals may be installed outside of the normal priority rating and budgetary procedures, and how the installation costs might be financed.

RECENT DEVELOPMENT

The Board of Commissioners has approved two proposals made by developers wherein traffic signals will be installed. The developers will pay the full cost of the signal installation, and will be refunded a portion of the cost if the signal becomes warranted within five years.

INVESTIGATION

Each year City Council considers a Transportation Department report identifying priority locations throughout the city where traffic signals are warranted. Subsequently at budget deliberation approval is given to construct a number of the priority installations.

With the backlog of warranted locations on the waiting list for signal installations, it is essential that an equitable procedure be developed to address the growing number of requests for traffic signals in advance of their proven need.

COMMISSIONERS' REPORT TO THE OPERATIONS AND DEVELOPMENT COMMITTEE

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RE: 'DRAFT' POLICY FOR INSTALLATION OF 'OUT OF SEQUENCE'
TRAFFIC SIGNALS RELATIVE TO COUNCIL'S APPROVED
CONSTRUCTION LIST

With the current financial restraints, it is not possible to agree to developers requests to have traffic signals installed unless new funding sources are developed. Funds could come entirely from the City, entirely from developers, or be shared between the parties.

Special requests for traffic signal installations usually come from non-residential developers, who see a business need for the enhanced access that can be provided by a traffic signal. Such installations are considered by the applicant to be crucial to the economic viability of the development. Installation is therefore requested before the development is complete. The requested locations generally fall into one of three priority categories.

1. Locations at which a traffic signal is warranted or close to being warranted, and traffic generated by the development would cause congestion, delays, and/or safety problems. Many of these locations would eventually require a traffic signal when traffic volumes dictated the warrant.
2. Locations where the development itself when completed would generate sufficient traffic to warrant a traffic signal.
3. Locations where a traffic signal cannot be justified even using projected traffic volumes generated by the proposed development.

Besides the numerical warrant priority, the effect the proposed signal would have on traffic flow on the street, and its compatibility with other traffic control devices, must be considered. The quality of traffic flow on a road is extraordinarily sensitive to the spacing of traffic signals. Good synchronization of traffic signals cannot be obtained if they are unevenly spaced, or if a number of signals are placed in close proximity. The placement of traffic signals at intersections located unfavourably, relative to other existing or planned signals, should be discouraged.

The third major consideration is the financing of the proposed traffic signal. Should the taxpayer bear the cost of a signal that benefits only a commercial venture? Should a developer pay the entire cost of a signal that provides as much or more benefit to the general public as to his development? Should one developer pay the entire cost of a signal that will significantly benefit future adjacent developments?

A survey was made of practices in other Canadian cities (See Attachment 1). In general, the practice appears to be that the developer pay for any traffic signals required by the development.

A draft report was circulated to the Urban Development Institute of Calgary (U.D.I.) for comments. A meeting was held to discuss the draft report and subsequently U.D.I. submitted a response (see Attachment #2). The report has been amended to meet some of U.D.I.'s objections. This report has been sent to U.D.I. and their representatives will be in attendance to make a presentation.

CONCLUSIONS

Large scale non-residential developments generate significant traffic volumes which, in the eyes of the developer, require traffic signals regardless of whether the City's criteria for the installation are met. The timing of construction of these developments is beyond the control of the City.

COMMISSIONERS' REPORT TO THE OPERATIONS AND DEVELOPMENT COMMITTEE

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RE: 'DRAFT' POLICY FOR INSTALLATION OF 'OUT OF SEQUENCE'
TRAFFIC SIGNALS RELATIVE TO COUNCIL'S APPROVED
CONSTRUCTION LIST

It is not unreasonable to require a developer, who wishes to have the City adjust its normal procedures and to modify its warrant criteria, to pay the cost of same. At the same time, before any location is approved for a traffic signal, it should be subjected to technical scrutiny to ensure that the installation does not impede the area traffic flow, and that the location chosen is the most suitable on a signal synchronization basis.

When new developments are in the approval stage, locations for traffic signals should be identified. Signals required because of traffic generated by the development should be installed with the full cost charged to the developer.

For developments already approved, traffic signal installation can take place through the present planning and budgeting procedures.

If, subsequent to project approval, a developer identifies a need and/or desire for a traffic signal, it should be installed, subject to the following conditions:

1. The developer pay the estimated installation cost in advance.
2. If the signal is not warranted, the cost should be discounted at 20% per year until the signal is warranted (to a maximum of 5 years). If the signal is warranted at the time of the request, the full cost would be refundable. In either case, the refund would be made only when funds have been approved as part of the regular budget process.

The 20% rebate is based on the present borrowing term on debenture issues for traffic signals (i.e., 5 years).

RECOMMENDATIONS

That Operations and Development Committee recommend to Council that the following policy be adopted on the installation of traffic signals 'out-of-sequence' relative to the Transportation Departments' construction priority and Council's appropriation list:

1. During the development approval process, traffic signal requirements be identified and the signals installed at the time of development with the total cost charged to the developer.
2. When a traffic signal is requested by a developer and is not currently scheduled for construction within the Council approved budget appropriation, the signal may be installed provided the developer pays the full cost of the signal in advance of construction.

If the signal is warranted at the time it is requested, the developer will receive a full refund of the cost, without interest, when funds have been approved as part of the normal budget process.

If the signal is not warranted at the time it is requested, the cost of the signal will be discounted at a rate of 20% per year until such time as the signal is warranted (to a maximum of 5 years), and the discounted amount will be refunded to the developer, without interest, when funds have been approved as part of the normal budget process.

3. This policy does not apply to a location where the Transportation Department studies indicate a traffic signal would have a negative effect on traffic flow.

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COMMISSIONERS' REPORT TO THE OPERATIONS AND DEVELOPMENT COMMITTEE

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RE: 'DRAFT' POLICY FOR INSTALLATION OF 'OUT OF SEQUENCE'
TRAFFIC SIGNALS RELATIVE TO COUNCIL'S APPROVED
CONSTRUCTION LIST

STANDING POLICY COMMITTEE ON OPERATIONS AND DEVELOPMENT, 1986 JANUARY 13

NOTE: Aldermen Clark and Duerr left the Committee Room prior to discussion of this item because of a potential conflict of interest.

Mr. R. Nolan of the Urban Development Institute appeared before the Committee and expressed his concerns.

RECOMMENDATION OF THE STANDING POLICY COMMITTEE
ON OPERATIONS AND DEVELOPMENT, 1986 JANUARY 13

That the Recommendations contained in Clause OD85-116 be approved.

(Alderman C. Reid - Opposed)

ATTACHMENTS

1. Policy of Canadian Cities Relative to Traffic Signal Installation.
2. Letter dated 1985 November 19 from U.D.I.

POLICY OF CANADIAN CITIES RELATIVE TO TRAFFIC SIGNAL INSTALLATION

1. METROPOLITAN TORONTO

(i) Developer pays full cost of signal warranted within 5 years of development.

(ii) Developer pays 50% of cost of signal required due to growth of existing development.

2. WINNIPEG

Developer pays full cost of signal required by development.

3. REGINA

Developer pays full cost of signal, but may be reimbursed up to 50% if provincial cost sharing available.

4. EDMONTON

Developer pays full cost of signal.

5. VANCOUVER

Developer pays full cost of signal.



URBAN DEVELOPMENT INSTITUTE CALGARY CHAPTER

3030 - 2ND AVENUE S.E.
CALGARY, ALBERTA T2A 5N7
PHONE 248-0005

November 19, 1985



The City of Calgary
Transportation Department
Box 2100, Station A
Calgary, Alberta
T2P 2M5

ATTENTION: Mr. Rick Walshaw

Dear Sir:

Further to our meeting of November 15, 1985 concerning "out of sequence" traffic signals please find enclosed the draft policy on the matter which has been revised from the draft you provided to us.

We see no particular need to change policy at this time except to standardize front ending requirements for those developers wishing to have lights installed adjacent to their developments installed in advance of meeting the warrant criteria and City Council approval.

To summarize, we feel the City's policy on traffic light installation should be as follows.

During the development approval process, any proposed traffic signals would be categorized into one of the following:

Class 1 - A signal required solely because of traffic generated by the development. These signals would continue to be paid for in advance of installation by the developer.

Class 2 - A signal benefitting several developments or the City in general.

Under our proposal Class 2 signals would continue to be installed at the City's cost when they are warranted and receive Council approval. Should the developer wish to have the signal installed "out of sequence" he would then front end the construction cost to the City and receive a rebate of the full construction cost when and if the signal satisfies the warrant criteria and receives Council approval. We see no reason to further discount the developers rebate as the carrying cost is already being borne by the developer through the front ending.



URBAN DEVELOPMENT INSTITUTE CALGARY CHAPTER

3030 - 2ND AVENUE S.E.
CALGARY, ALBERTA T2A 5N7
PHONE 248-0005

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November 19, 1985

We are available to discuss this matter further at your convenience.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Ron Nolan', is written over the typed name.

for Ron Nolan
Executive Director

cc: G. Martin
C. Wallace

RN/dvm
Enclosure

03-86-73
Motion Arising
✓ L86-01
Sunday Closing

MOVED BY ALDERMAN HARTMAN, SECONDED BY ALDERMAN HODGES, that the Administration report to the 1986 March 3 Meeting of the Standing Policy Committee on Legislation with respect to possible wording for a question to be put to the electorate proposing retail outlets closing one day per week.

RECORDED VOTE:

YEAS: Aldermen Clark, Hodges, Duerr, Bardsley, Reid,
Baxter, Hawkesworth, Bell, Hartman and Mayor Klein 10
NAYS: Aldermen Scott, Gilchrist and Leigh 3

MOTION CARRIED

OPERATIONS AND DEVELOPMENT COMMITTEE REPORT - 1986 JANUARY 13

NOTE: Aldermen Clark and Duerr stated that they wished to abstain from voting on Clause OD85-116 of the Report of the Standing Policy Committee on Operations and Development, dated 1986 January 13, Re: 'Draft' Policy for Installation of 'Out of Sequence' Traffic Signals Relative to Council's Approved Construction List, and left the Chamber at 5:52 p.m.

03-86-74
Amendment
Rec. No. 1 698
OD85-116
Out of Sequence
Traffic Signals

MOVED BY ALDERMAN SCOTT, SECONDED BY ALDERMAN HODGES, that Recommendation No. 1 of the Commissioners as contained in Clause OD85-116 of the Report of the Standing Policy Committee on Operations and Development, dated 1986 January 13, Re: 'Draft' Policy for Installation of 'Out of Sequence' Traffic Signals Relative to Council's Approved Construction List, be amended by the addition of the sentence "Signals required because of traffic generated by the development should be installed with the full cost charged to the developer."

MOTION CARRIED

03-86-75
Amendment
Rec. No. 2
OD85-116
Out of Sequence
Traffic Signals

MOVED BY ALDERMAN SCOTT, SECONDED BY ALDERMAN HODGES, that Recommendation No. 2 of the Commissioners as contained in Clause OD85-116 of the Report of the Standing Policy Committee on Operations and Development, dated 1986 January 13, Re: 'Draft' Policy for Installation of 'Out of Sequence' Traffic Signals Relative to Council's Approved Construction List, be amended by the deletion of the words "When a traffic signal" and by the addition of the words "For developments already approved and when a traffic signal", therefor.

MOTION CARRIED

03-86-76
As Amended
OD85-116
Out of Sequence
Traffic Signals

MOVED BY ALDERMAN BAXTER, SECONDED BY ALDERMAN BARDSLEY, that the Recommendation contained in Clause OD85-116 of the Report of the Standing Policy Committee on Operations and Development, dated 1986 January 13, Re: 'Draft' Policy for Installation of 'Out of Sequence' Traffic Signals Relative to Council's Approved Construction List, be adopted, as amended.

MOTION CARRIED