SUBJECT: CRITERIA FOR THE INSTALLATION OF STOP SIGNS
POLICY NO.: 200-08
EFFECTIVE DATE: December 2, 1997

## BACKGROUND:

Stop signs are installed to establish right-of-way at intersections, reduce vehicle delay and decrease accidents. Stop signs are placed at entrances to designated through highways or at any intersection designated by resolution as a stop intersection in accordance with Section 82.20 of the Municipal Code. All-way stops are usually installed at the intersections of streets with similar traffic volumes or where justified by other criteria.

## GENERAL:

Only those intersections meeting certain criteria should be considered for stop signs. The criteria contained herein have general national acceptance as factors to be analyzed to determine where stop signs should be installed. In special situations stop signs may not be advisable because of the adverse effect they could cause in a total area traffic pattern despite other justifying factors.

## POLICY:

It is the policy of the City Council that the installation of stop signs shall be made using engineering judgment based on with the following criteria, and that such analyses, measurements, and computations as may be required in determining the appropriate traffic controls shall be the responsibility of the City Manager or designee. The affected City Councilmember and community planning group shall be provided with advance notification at least 30 days before a final decision is made regarding a stop sign installation.

## CRITERIA:

## A. Stop Sign Control Installation Criteria

Stop signs shall be installed facing traffic on each and every street intersecting a through street, as defined in Council Policy 200-11. At other locations, the following criteria is used. The total possible points is 30 . The installation of a stop sign control on a side street approach is justified by 15 or more points or where justified by other criteria in accordance with this policy.

1. Accident Experience - 9 points possible.

Three points are assigned for each accident, susceptible to correction by stop signs, that occurred during a recent three-year period. If three or more accidents have occurred in the period, then the 15 point requirement may be waived and stop signs installed based entirely on accident experience.
2. Visibility Conditions - 9 points possible.

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On the approaches for which stop signs are being considered, if the critical approach speed to the intersection is less than 20 miles per hour, one point shall be assigned for each mile-perhour under 20 miles per hour. The 15 point requirement may be waived and stop signs may be justified if the critical approach speed is 10 miles per hour or less.
3. Traffic and Pedestrian Volumes - 9 points possible.

Points are dependent upon the 24 -hour main street volume and the peak hour side street volume. The side street volume also considers pedestrians crossing the side street during the peak hour.
4. Special Conditions - 3 points possible.

Special conditions include, but are not limited to schools, fire stations, playgrounds, steep hills, bus routes, strip commercial districts, parks, libraries, hospitals, and post offices. Points are assigned on the basis of engineering judgement. The 15 point requirement may be waived and stop signs may be justified based entirely on special conditions.

POINT ASSIGNMENT TABLES FOR STOP SIGNS
$\underline{\text { Traffic and Pedestrian Volumes: }}$

Total of Main Street Approach
Vehicular Volumes
Combined Total of Side Street
Approach Vehicular Volumes and Pedestrians Crossing the Side Street Approaches

| 24-Hour Volume |  | Points |
| :---: | :---: | :---: |
| $0-500$ |  | 0 |
| $501-600$ |  | 1 |
| $601-700$ |  | 2 |
| $701-800$ |  | 3 |
| $801-900$ |  | 4 |
| $901-$ over |  | 5 |


| Peak-Hour Volume |  | Points |
| :---: | :---: | :---: |
| $0-24$ |  | 0 |
| $25-49$ |  | 1 |
| $50-74$ |  | 2 |
| $75-99$ | 3 |  |
| $100-$ over |  | 4 |

## B. All-Way Stop Control Installation Criteria

The total possible points is 50 . An all-way stop is justified by 25 or more points at an intersection that includes a street classified as "Major," at other intersections by 20 or more points, or where justified by other criteria in accordance with this policy.

1. Accident Experience - 15 points possible.

Three points are assigned for each accident, susceptible to correction by an all-way stop, that occurred during a recent three-year period. The 25 -point and 20 -point installation requirement

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may be waived and an all-way stop may be justified if five or more accidents have occurred during the period and attempts using less restrictive controls have not corrected the problem.
2. Special Conditions - 5 points possible.

Special conditions include, but are not limited to schools; fire stations; playgrounds; visibility conditions; steep hills; bus routes; strip commercial districts; parks; libraries; hospitals; post offices; pedestrian, bicycle, and vehicle circulation patterns; and other conditions that may be identified by the community. Points are assigned on the basis of engineering judgement. The 25-point and 20-point requirements may be waived and an all-way stop may be justified based entirely on special conditions, or if the criteria for the installation of traffic signals has been met in accordance with Council Policy 200-06.
3. Traffic Volumes - 15 points possible.

Points are dependent upon the magnitude of vehicular volumes entering the intersection from the main street approaches and the highest-volume side street approach during the four highest hours of an average day.
4. Traffic Volume Difference - 10 points possible.

All-way stops operate best when the traffic volumes on both intersecting streets are nearly equal. The traffic volume difference is calculated by subtracting double the highest-volume side street approach from the total of the main street approaches. If the result is a negative number, then use a traffic volume difference of zero for the purpose of assigning points.
5. Pedestrian Volumes - 5 points possible.

Points are assigned based on the volume of pedestrians crossing the main street approaches during the four highest hours of an average day.

## POINT ASSIGNMENT TABLES FOR ALL-WAY STOPS

Traffic Volumes:

Total of Main
Street Approaches
4-hour Volume Points
$\begin{array}{rr}0-400 & 0 \\ 401-600 & 1\end{array}$
601-800
801-1000 3
1001-1200 4
1201-2600 5
2601-2900 4
2901-3200 3
3201-3500 2
3501-3800 1
3801-over 0

Highest-Volume Side
Street Approach
4-hour Volume Points

| $0-200$ | 0 |
| :---: | ---: |
| $201-300$ | 1 |
| $301-400$ | 2 |
| $401-500$ | 3 |
| $501-600$ | 4 |
| $601-700$ | 5 |
| $701-800$ | 6 |
| $801-900$ | 7 |
| $901-1000$ | 8 |
| $1001-1100$ | 9 |
| $1101-$ over | 10 |

Traffic Volume Difference:
Traffic Volume
Difference Points
0-150 $\quad 10$
151-300 9
301-450 8
451-600 7
601-750 6
751-900 5
901-1050 4
1051-1200 3
1201-1350 2
1351-1500 $\quad 1$
1501 - over 0

## Pedestrian Volumes:

| Pedestrian Volume Crossing <br> Main Street Approaches <br> in 4 Highest Hours | Points |
| :--- | :--- |
| 0 | 0 |
| $1-50$ | 1 |
| $51-100$ | 2 |
| $101-150$ | 3 |
| $151-200$ | 4 |
| $201-$ over | 5 |

## C. Alternative Process

Nothwithstanding other provisions of this Policy, stop signs may be installed by this Alternative Process. If an intersection is found to not satisfy the criteria established in Sections A and B of this Policy upon an initial evaluation, then the following process may be used:

1. Any person or community planning group may request a re-evaluation, bringing forth any additional information that may cause the intersection to satisfy the criteria. The City Manager or designee shall then re-evaluate the intersection based on this request, notify the requesting party of the results, and install the stop signs if the criteria are satisfied.
2. If the criteria are not satisfied upon the re-evaluation, then a community planning group may hold a public hearing to discuss the matter. If the community planning group votes to support the stop signs, then a City Councilmember may request, by written memorandum, that the City Manager either install the requested stop signs or submit a report to the City Council discussing why the stop signs are not recommended. The City Council may subsequently adopt a resolution authorizing the installation of stop signs at the intersection.
3. Stop signs may also be removed by following the steps of this process. Stop signs installed by City Council resolution may only be removed by a subsequent resolution.
4. For stop signs installed or removed by City Councilmember request or by City Council resolution, the City Manager or designee shall submit a report analyzing traffic conditions at the location for the first year after the change.

## HISTORY:

Adopted by Resolution R-172823 09/27/1962
Amended by Resolution R-212198 12/12/1974
Amended by Resolution R-271496 07/25/1988
Amended by Resolution R-280611 09/14/1992
Amended by Resolution R-289500 12/02/1997

