Cottonwood Heights
City between the canyons

Stop Sign Removal Policy

November 2009

GILSON ENGINEERING

GILSON ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Stop Sign Removal Policy

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Background:

Stop Signs are regulatory traffic signs that are used to prevent unexpected traffic conflicts between opposing streams of traffic. A stop sign is used where two roadways intersect and additional information regarding right-of-way is needed. The consequence of failing to heed a stop sign can result in vehicular conflicts and bodily injury or even death. As such, *it is very important* to use stop signs only in locations that warrant their use. Excessive use of a stop sign for other purposes, such as traffic calming, can diminish its message and encourage casual observance at intersections with high consequence conflict points.

The use and placement of regulatory stop signs is based on guidance from the Manual on Uniform Traffic Control Devices (MUTCD) which is produced by the United States Department of Transportation Federal Highway Administration (FHWA). The MUTCD established national standards for the design and use of traffic control devices. The MUTCD lists criteria that must be met in order to use a stop sign in conformance with national standards.

In Cottonwood Heights there are many stop signs that do not meet MUTCD standards. It appears that these stop signs were originally installed for traffic calming purposes. The City has adopted a proactive traffic calming policy that provides appropriate traffic calming options for areas that experience high speeds. As explicitly stated in the MUTCD, stop signs should not be used for the purpose of calming traffic. Some of these signs are poorly or improperly placed, and, as a result, many motorists fail to stop, which decreases safety and increases the potential for an accident.

Definitions:

- Major Street / Minor Street: The two intersecting roadways are categorized as major and minor based on a comparison of average daily traffic (ADT) for each roadway. The roadway with the larger ADT is considered the major street, while the other road is then the minor street
- Stopping Sight Distance: The distance required for a driver to react to a hazard in the roadway ahead and bring his vehicle to a complete stop
- Actual Sight Distance: The sight distance provided by the roadway as designed
- MUTCD: Manual on Uniform Traffic Control Devices
- 85^{th} Percentile Speed: Is the speed at or below which 85 percent of the motorists drive on a given road unaffected by slower traffic or poor weather

Stop Sign Removal Policy:

As conditions warrant and at the request of local residents, the City has prepared the following criteria that must be met before a non-warranted stop sign shall be considered for removal:

1. **Local resident or elected city representative requests evaluation of an Existing Stop Sign.**

2. **Determine whether the stop sign meets MUTCD warrants:**

   A. STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:
      1. Intersection of a minor road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
      2. Street entering a through highway or street;
      3. Unsignalized intersection in a signalized area; and/or
      4. High speeds, restricted view, or crash records indicate a need for control by the STOP sign.
   B. STOP Signs should not be used for speed control.
   C. STOP signs should be installed in a manner that minimizes the number of vehicles having to stop. At intersections where a full stop is not necessary at all times, consideration should be given to using less restrictive measures such as YIELD signs.
   D. Once a decision has been made to install two-way stop control, the decision regarding the appropriate street to stop should be based on engineering judgment. In most cases, the street carrying the lowest volume of traffic should be stopped.

E. The decision to install a multi-way stop sign should be based on an engineering study. If the volumes of the intersecting roads are approximately equal and one of the following criteria is met than a multi-way stop sign may be warranted.
    - The vehicular volume entering the intersection from the major street approaches (sum of both approaches) averages at least 300 vehicles per hour for any 8 hour average day.
    - The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approach averages at least 200 units per hour for the same 8 hours.
    - The 85th-percentile approach speed of the major street traffic exceeds 40 mph.
    - There is a history of 5 or more accidents in a 12-month period that are susceptible to correction by a multi-way stop sign installation.
    - There is a specific need to control left-turn conflicts.
    - There is a specific need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes.
    - This is a location where a road user, after stopping, cannot see conflicting traffic and is not reasonably able to safely negotiate the intersection unless conflicting cross traffic also stops.

3. One or more of the following conditions exist:

a. The stop sign is frequently violated.
b. The stop sign visibility is restricted.
c. An accident history suggests detrimental reliance on a sign that does not stop traffic.
d. The stop sign appears to be used primarily for speed control.
e. The use of stop signs is not used uniformly throughout the neighborhood.

4. Engineering judgment shows that the use of the stop sign fails to meet uniform traffic control standards and that traffic safety is not improved by its use. Some of the conditions used in the traffic safety analysis shall include the presence of critical facilities or other factors, including:

a. Bicycle and pedestrian volume;
b. 85th percentile speed and traffic volume; and
c. The presence of steep hills, bus routes, commercial districts, parks, libraries, critical care facilities, post offices or other essential facilities.

5. **Adherence to the following stop sign removal regime.**
    a. Install sign(s) on opposing street(s) that says, “Opposing Traffic Does Not Stop”.
    b. Remove stop bars.
    c. Bag the sign in a brightly colored bag for 30 days.
    d. Neighborhood noticing via flyer and City website.
    e. 14-day message board in each direction, indicating that the stop sign will be removed.

Only the intersections that meet these criteria (1-5) should be considered for removal. The criteria, has been adopted from the MUTCD’s warrants to justify the use of stop sign installation. In certain situations, standard engineering judgment may show that stop sign removal may not be advisable because of circumstances not covered in the policy.

Flow Chart #1 Stop Sign Removal Policy

1) Local resident or elected city representative requests evaluation of existing stop sign

2) Does stop sign meet MUTCD warrants? (See Flow Charts)

- Yes → Stop Sign Must Remain
- No → 3) Do any of the following conditions exist?
  - Stop Sign is frequently violated
  - Stop sign visibility is restricted
  - Stop sign appears to be used primarily for speed control
  - The stop sign is not used uniformly throughout the neighborhood

3) Do any of the following conditions exist?
- No → Stop Sign Must Remain
- Yes → 4) Does engineering judgment show that the use of the stop sign fails to meet uniform traffic control standards and that traffic safety is not improved by its use. Factors analyzed include:
  - Bicycle and pedestrian volume
  - 85th % Speed and traffic volume
  - Presence of steep hills, bus routes, commercial districts, parks, libraries, critical care facilities, post offices or other essential facilities

4) Does engineering judgment show that the use of the stop sign fails to meet uniform traffic control standards and that traffic safety is not improved by its use. Factors analyzed include:
- No → Stop Sign Must Remain
- Yes → 5) Stop Sign may be removed following a specific removal regiment
  - Install sign(s) on opposing street that says "Opposing Traffic does not Stop"
  - Remove stop bars
  - Bag the sign in a brightly colored bag for 30 days
  - 14-day message board in each direction, indicating that the stop sign will be removed

Flow Chart #2
Stop Sign Installation
MUTCD Warrants

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- Should be used if one or more of the following conditions exist
  - Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law
  - Street entering a through highway or street
  - Unsignalized intersection in a signalized area
  - High speeds, restricted view, or crash records indicate a need
- Additional Guidance
  - Stop Signs should not be used for Speed Control
  - Stop Sign should be installed in a manner that minimizes the number of vehicles having to stop
  - A stop sign should not be installed on a major street unless justified by a traffic engineering study

Flow Chart #3
Multi-Way Stop Sign
MUTCD Warrants

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Decision to install or keep a multi-way stop sign should be based on a engineering study. If the volume of the intersecting roads are approximetly equal than a mutli-way stop sign may be warranted.

Criteria Considered

- The vehicular volume entering the intersection from the major street approaches (sum of both approaches) averages at least 300 vehicles per hour for any 8 hour average day.
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required
- The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approach averages at least 200 units per hour for the same 8 hours
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required
- The 85th-percentile approach speed of the major street traffic exceeds 40 mph
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required
- Is there a history of 5 or more accidents in a 12-month period that are susceptible to correction by a multi-way stop sign installation?
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required

Optional Criteria

- Is there a specific need to control left-turn conflicts?
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required
- Is there a specific need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes?
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required
- Is this a location where a road user, after stopping, cannot see conflicting traffic and is not reasonably able to safely negotiate the intersection unless conflicting cross traffic also stops?
  - Yes → Stop Sign Required
  - No → Stop Sign Not Required

Application for Removal of Stop Signs in Cottonwood Heights

This is a citizen initiated application to request removal of stop signs in neighborhoods. Cottonwood Heights adheres to the proper use of stop signs as per federal MUTCD standards. In the past, some stop signs may have been installed as traffic calming measures and do not meet traffic warrants. If you feel you have such a stop sign in your neighborhood, please fill out this application including the attached "Neighborhood Consensus for Study" petition, and turn it in to the Cottonwood Heights Public Works Department. Upon receiving the application, the City Engineer will study the intersection to determine if the stop signs are warranted and give a recommendation as to whether or not they should be removed. If you have further questions, please consult the Cottonwood Heights Stop Sign Removal Policy.

Name of Applicant: _____

Address: _____

Telephone Number: _____

Email Address: _____

2) Briefly describe the reason for removal of the stop sign ?

_____

_____

_____

3) Describe any community discussions regarding the removal of the stop sign in question ?
(i.e. meetings with community, church groups, ect.)

_____

_____

_____

4) Please describe any pedestrian safety issues in area?
(i.e. lack of sidewalks, narrow streets, elementary or junior high school walking route.)

_____

_____

_____

Neighborhood Consensus for Stop Sign Study Petition

	Name	Address	Support (Y/N)	Remarks
1				
2				
3				
4				
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