Agenda Item No. (Q)

Source:
John Glascock

TO: City Council

FROM: City Manager and Staff

DATE: May 21, 2009

RE: Traffic Calming Update

FISCAL NOTES:

City Fiscal Impact Enter all that apply:	
$0	City's current net FY cost.
$0	Amount of Funds Already appropriated
$0	Amount of budget amendment needed
$0 $0	Estimated 2 yr net costs: One-time Operating / On-going
Program Impact:	
N	New program/ agency (Y/N)
N	Duplicates/expands an existing program (Y/N)
N	Fiscal impact on any local political subdivision (Y/N)
Resources Required:	
N	Requires add'l FTE personnel? (Y/N)
N	Requires additional facilities? (Y/N)
N	Requires additional capital equipment? (Y/N)
Mandates:	
N	Federal or state mandated? (Y/N)

EXECUTIVE SUMMARY:

Staff has prepared for Council consideration a report concerning active traffic calming requests. The attached table lists this information and is arranged by Ward.

DISCUSSION:

Staff conducts traffic calming requests according to an adopted Traffic Calming Policy. The attached table shows the status of active traffic calming requests. The table is arranged by Ward and does not include non-active traffic calming projects due to either completed or rejected projects.

Traffic calming studies are initiated by a citizen petition letter to staff, by the Public Works Director, or by City Council motion. Streets that meet the criteria for traffic calming are reported to Council. Next, Council may direct staff to work with impacted citizens to develop a traffic calming plan. Finally, plans and costs are given a public hearing for Council approval or rejection of the project.

Staff is waiting to begin studies on several streets due to major projects as follows:

- West Broadway preliminary design from Garth Avenue to West Boulevard.
  - Proposed design concepts include a raised median that may limit turns at some intersections.
  - Traffic volume will likely be reduced on streets that are limited to right-in right-out movements by the potential Broadway median.
  - Traffic volume will likely be increased on streets that have full access to Broadway.

- Range Line Street construction from Big Bear Boulevard to Route VV.
  - Staged improvements displace vehicles from the congested construction zone to other roadways making it difficult to anticipate post-construction conditions.

FISCAL IMPACT:

No fiscal impact.

SUGGESTED COUNCIL ACTIONS:

Acceptance of the report.

Streets with Active Traffic Calming Requests

Street	Ward	Tracker	Request Year	Status
McBaine	Ward 1	Tracker 2006 & 2037	2008	Waiting for preliminary design of W. Broadway.
Alexander	Ward 1	Tracker 2006 & 2037	2008	Already has Speed Humps; Study again after preliminary design of W. Broadway
Sanford	Ward 1	Tracker 2006 & 2037	2008	Waiting for preliminary design of W. Broadway.
Hirth	Ward 1	Tracker 1594 & 2006 & 2037	2008	Report sent to Council March 2009; Study again after preliminary design of W. Broadway
Ridgeway	Ward 1	Tracker 2006 & 2037	2008	Waiting for preliminary design of W. Broadway.
Anderson	Ward 1	Tracker 2006 & 2037	2008	Waiting for preliminary design of W. Broadway.
4th Avenue	Ward 1	No Tracker	2006	Waiting for Petition Letter
3rd Avenue	Ward 1	No Tracker	2006	Waiting for Petition Letter
Grand	Ward 1	No Tracker	2006	Waiting for Petition Letter
Mikel	Ward 1	No Tracker	2006	Study Started.
Greenwood	Ward 1 & 4	No Tracker	2007	Waiting for Petition Letter and for preliminary design of W. Broadway
Glenwood	Ward 1 & 4	No Tracker	2008	Waiting for Petition Letter and for preliminary design of W. Broadway
Rain Forest	Ward 2	Tracker 1455	2007	Neighborhood deciding if 50% are in favor of Speed Humps.
War Admiral	Ward 2	No Tracker	2007	Waiting for completion of Rangeline.
Kennesaw Ridge	Ward 2	No Tracker	2007	Waiting for completion of Rangeline.
Saddlebrook	Ward 2	No Tracker	2007	Waiting for completion of Rangeline.
Shoemaker	Ward 2	No Tracker	2007	Waiting for completion of Rangeline.
Derby Ridge	Ward 2	No Tracker	2009	Waiting for Petition Letter
Herlford	Ward 2	No Tracker	2008	Waiting for Petition Letter
Kelsey	Ward 3	No Tracker	2007	Study Started.
Rice	Ward 3	No Tracker	2007	Study Started.
Hanover	Ward 3	No Tracker	2006	Waiting for Petition Letter
Rollins	Ward 4	Tracker 2308	2009	Study Needed.
Highridge	Ward 4	Tracker 2000	2008	Study Started.
Edgewood	Ward 4	Tracker 1493	2007	Waiting for preliminary design of W. Broadway.
Ridgefield	Ward 4	No Tracker	2006	Waiting for Petition Letter
Ridgemont	Ward 4	No Tracker	2006	Waiting for Petition Letter
College Park	Ward 4	No Tracker	2006	Waiting for Petition Letter
Middlebush	Ward 4	No Tracker	2006	Waiting for Petition Letter
Longview	Ward 4	No Tracker	2007	Waiting for Petition Letter
Westwood	Ward 4	No Tracker	2007	Waiting for Petition Letter and for preliminary design of W. Broadway
Redbud	Ward 4	No Tracker	2007	Waiting for preliminary design of W. Broadway.
Faurot	Ward 4	No Tracker	2007	University of Missouri studying speeds.
Defoe	Ward 4	No Tracker	2007	University of Missouri studying speeds.
Rothwell	Ward 4	No Tracker	2007	University of Missouri studying speeds.
Sunset	Ward 4	No Tracker	2006	Waiting for preliminary design of W. Broadway.
Martinshire	Ward 4	No Tracker	2007	Waiting for Petition Letter
Brookfield	Ward 5	No Tracker	2008	Study Started.
Muirfield	Ward 5	No Tracker	2008	Study Started.
Royal Heritage	Ward 5	No Tracker	2008	Waiting for Petition Letter
Brookline	Ward 5	No Tracker	2006	Waiting for Petition Letter
Godfrey	Ward 5	No Tracker	2006	Waiting for Petition Letter
Northampton	Ward 6	No Tracker	2008	Study Started.

TRAFFIC CALMING POLICY

A. Mission Statement

Public Works Department Traffic Calming Mission:

It shall be the mission of the Public Works Department to provide traffic calming solutions to vehicular uses of streets that adversely impact the neighborhood quality of life and the safety of the residents in that neighborhood.

The department will work closely with residents to properly identify the concerns, conduct appropriate studies to quantify any problems and develop options for dealing with the quantified problems.

B. Traffic Calming Procedure

Traffic Calming is the application of techniques at a specific location which result a reduction in vehicular speeds, traffic volumes, traffic noise and accidents. The techniques may include educational programs, neighborhood speed watch programs, improvements in traffic signing, increased enforcement, reduction of speed limits or physical alterations to the roadway to change driving patterns. The support of the residents where traffic calming is being considered is critical to the success of any neighborhood traffic management program and they must therefore be an integral part of any process.

It is the goal of the Public Works Department to achieve solutions to traffic related problems in a manner least intrusive to the neighborhood. To accomplish this goal, the department has developed this procedure to assure a systematic and comprehensive approach to each situation.

A study is necessary in order to determine if there is a traffic concern which can be effectively addressed by installing traffic calming practices. The two most common concerns the program addresses are speeding and cut through traffic in residential areas.

A study can be initiated by one of the following methods.

a. A neighborhood association or citizen group may request a study by letter to the Public Works Department.

b. The Director may authorize a study of a traffic problem area identified by city staff.

c. The City Council may direct staff to conduct a study.

Upon receipt of a request or a direction to conduct a study, the Public Works Department will make a preliminary site visit and review available data, including accident reports to determine if there is a readily apparent safety problem. Speed studies and traffic volume counts may also be conducted at this time. Should it be determined that the location is not appropriate for a traffic calming project requiring physical alterations to the roadway or that the concerns can be addressed in some other form, a meeting will be held with the party initiating the request or in the case of City Council directive, a report will be prepared

stating the conclusions and recommendations of staff. In the event that there is a justification for a major traffic calming project or there is specific direction to proceed with one, the following process will be followed.

1. Traffic Calming Study

a. Efforts will be made to identify a key contact person in the neighborhood for purposes of communicating information and coordinating any neighborhood meetings

b. The geographic area that would be impacted by modifications to traffic patterns will be identified.

c. All residents and property owners within the identified impacted area, as well as the Police Department, Fire Department and Utility service providers will be contacted by letter advising them of the traffic calming study and surveyed as to their observation of any specific traffic related problems.

d. Speed, traffic volume and accident investigations will be conducted, if not done in the preliminary evaluation, to determine the extent of safety problems.

e. Site surveys will be made to inventory site specific information which may contribute to traffic concerns. Area inventory shall include review of visual obstructions, street grades, street widths, street network, sidewalk network, major thoroughfare plan, sidewalk and bicycle plans, existing traffic control, parking prohibitions, speed limits, school zones, and future CIP projects which may affect the traffic in the study area.

f. A neighborhood meeting will be held inviting all persons in the identified area of impact and any neighborhood associations in the area. The purpose will be to present findings of the study and gather input as to desired actions to address concerns.

g. A preliminary report will be prepared indicating results of studies, surveys, and resident requests. The report will contain staff recommendations for action and cost estimates. The preliminary report will be provided to residents and other impacted city departments for review and final comment prior to being submitted to Council.

2. Report to City Council

Upon completion of the report, it will be submitted to city council with a staff recommendation. The report will explain the results of the traffic calming study, indicate the presence of safety concerns and determine if warrants for installing Traffic Calming are met.

3. Traffic Calming Project Design

If a traffic calming project is authorized by city council, the traffic engineer will work with the neighborhood to develop a plan within the Traffic Calming Guidelines to address the traffic concerns which were warranted by the Traffic Calming Study.

4. Public Hearing

A public hearing will be held by the city council for the authorization to install the traffic calming project. Discussion will include: project design. goal, neighborhood involvement and endorsement, cost estimate, funding source, construction, and public discussion.

C. Criteria and Warrants for Installing Traffic Calming Practices

1. Conditions for Installation of Traffic Calming Practices

a. Traffic calming devices may be installed by the City when the study clearly indicates a traffic problem does exist on the basis of excessive speeds, accidents or roadway design deficiencies. At least 50% of the residents of the impacted area must demonstrate support of the project by signature of a petition for projects of this nature.

b. Traffic calming devices may be jointly installed by the City and residents of a neighborhood when a clearly identifiable traffic problem does not exist but there can be shown to be a general public benefit in the form of aesthetics or improved safety. At least 65% of the residents of the impacted area must demonstrate support of the project by signature of a petition for projects of this nature.

c. Traffic calming devices may be installed by the residents of a neighborhood when there is no clearly identified traffic problem or public benefit provided the Director determines that the installation of the devices will not be detrimental to the general public. The traffic calming shall be installed under terms of a right of use permit approved by City Council. At least 75% of the residents of the impacted area must demonstrate support for projects of this nature by signature of a petition.

d. Traffic calming devices shall not be allowed where no traffic problems are identifiable and the installation of the devices would inconvenience or potentially endanger the general public.

e. No traffic calming device shall be installed or placed on any street without approval by the Director.

2. **Criteria and Warrants**- The necessity for traffic calming shall be based on the following warrants:

	Criteria	Warrant
1	Speed	85% Percentile Speed is 10 mph over posted speed limit
2	Volume	Cut through traffic exceeds 25 % of the total volume
3	Accidents	Accident history indicates 3 accidents in a 18 month period which can be corrected by installation of traffic calming.

When any of the warrants exist, traffic calming should be implemented. When any of the following conditions exist, traffic calming may be warranted if supported by the traffic study.

1	**Elementary Schools**	**20-mph school zone on the project street**
2	**Pedestrian Generators**	**Public facility that generates a significant number of pedestrians on the street**
3	**Bicycle Routes**	**Street is a designated bicycle route**
4	**Transit Streets**	**Street is a designated transit route**
5	**Pedestrian Facilities**	**No continuous sidewalk on at least one side of the street**

Traffic calming may also be warranted as alternative to all way stop controls and to correct a roadway design deficiency which can be addressed.

A. Guidelines for Installing Traffic Calming Practices

The objectives of traffic calming can frequently be met without physical changes to a roadway. The least intrusive solution is always the preferred one from a traffic engineering perspective. When engineered solutions are necessary, the following are most commonly applied and shall be in accordance with the guidelines established by the department.

1. **Speed Humps**- Speed humps are raised sections of the roadway constructed to reduce vehicular speeds. Similar to a speed bump, the speed hump is wider and has a more sloping side taper. The physical impact on passing vehicles is less severe at slow speeds than at higher speeds. Studies show that speed humps can reduce speeds by approximately five to six mph. Also, speed humps reduce vehicular speeds between intersections, something multi-way stops cannot address.

   Speed humps may be used only on local residential streets where excessive speeding has been determined. Speed hump design and installation shall follow *The Guidelines for Design and Application of Speed Humps, a Recommended Practice of the Institute of Transportation Engineers*.

2. **Traffic Circles** - A traffic circle is a large circular area in the middle of an intersection meant to control the right-of-way of vehicles. The circle is used to decrease vehicular speeds on a residential street and may decrease traffic volume as well. Traffic approaching the intersection must drive around the circle and yield to those cars which have already entered the circle.

   Designated either by markings or a curbed island, a traffic circle breaks-up a driver''s line of sight. The driver is less sure of what to expect ahead and will generally lower his or her driving speeds. Traffic circles can also provide a refuge for pedestrians when they are crossing the street

   Traffic circles may be used at four way intersections of local residential streets where a speeding problem has been determined or when an accident problem exists but does not meet warrants for a four way stop installation.

3. **Chicanes-** A chicane is created by staggered curb extensions, that are placed on both sides of the street. These curb extensions alternate on the street and force motorists to substantially decrease their speed when driving around them. In addition, depending on the design, motorists may have to yield to oncoming traffic, when the curb extension is designed to allow only enough space for one car to pass at a time. The extensions, often landscaped with bushes and trees, decrease the driver''s line of sight, and therefore, decrease the speed with which he or she can drive with comfort.

   Chicanes can be costly to construct and because of the drastic physical changes to street characteristics, they need strong residential support. However, the drastic changes have a more immediate and forceful affect on decreasing speeding and through-traffic.

4. Project Evaluation

After the installation of traffic control devices, staff shall conduct follow up monitoring of traffic volumes, speed and accident occurrence at six months, one year and five years to determine the effectiveness of the project.

5. Funding For Installation of Traffic Calming Practices

1. Traffic calming devices may be installed at the City's expense subject to availability of funds when the study clearly indicates a traffic problem does exist on the basis of excessive speeds, accidents or roadway design deficiencies and when supported by a minimum of 50% of the residents in the impacted area as evidenced by signed petitions.

Traffic calming devices may be jointly inaugurated by the City subject to availability of funds and by residents of a neighborhood when a clearly identifiable traffic problem does not exist but there can be shown to be a general public benefit in the form of aesthetics or preventive safety. A petition signed by at least 65% of the residents in the impacted area will be required. The proportionate share of each party shall be based on a determination by City Council of the amount of public benefit provided by the project.

Traffic calming devices may be installed by the residents of a neighborhood at their expense when there is no clearly identified traffic problem or public benefit provided that the Director determines that the installation of the devices will not be detrimental to the general public. A petition signed by at least 75% of the residents in the impacted area will be required.