
1. TRAFFIC CALMING POLICY

Key Findings:

This chapter of the report outlines the procedure for a proactive action the City could take to protect neighborhood roadways from traffic diverted from congested arterials. Traffic calming measures may be appropriate in Fayetteville where there is a documented need to:

- Reduce neighborhood cut through traffic
- Reduce traffic speeds through neighborhoods
- Accentuate pedestrian or bicycle use
- Control intersection traffic flow

The traffic calming policy provides guidelines for the following activities:

- Requests for traffic calming consideration.
 - Documentation of traffic calming.
 - Identification and approval of traffic calming strategies.
 - Programming of traffic calming improvements.
 - Design of traffic calming projects.
 - Evaluation of traffic calming projects.
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INTRODUCTION

The encroachment of external traffic through neighborhood areas is an issue of concern to citizens in Fayetteville. This policy addresses a procedure through which neighborhoods can be considered for filtering external traffic through traffic calming measures. Traffic calming is the management of traffic through the use of roadway design features. Management of traffic can include grouping traffic, diverting traffic, altering speeds, and encouraging a change of emphasis in transportation mode. Traffic management through traffic calming is most effective if the features are both *warranted* and *properly designed*.

Traffic calming solutions may be warranted where there is a demonstrated need for traffic calming, and where solutions can be identified that will address the need. The needs to manage traffic through traffic calming devices might include the following:

- Reduce neighborhood cut through traffic
- Reduce traffic speeds through neighborhoods
- Accentuate pedestrian or bicycle use
- Control intersection traffic flow

Not only must the needs be perceived by the neighborhood, but they must also be documented to be substantive. In order for traffic calming strategies to be effective, traffic data collection and analysis must validate that calming needs are legitimate. These traffic studies may include:

- Speed studies
- Vehicle and pedestrian counts

- ❑ Through-traffic surveys
- ❑ Accident records
- ❑ Intersection capacity analysis

Effective solutions for valid needs also require that the selected traffic calming strategy be appropriate for the need, e.g., a strategy to reduce traffic speed and not to divert traffic should be used if the documented problem is excessive speed.

Once an effective strategy for traffic calming has been selected, it should be properly designed in accordance with the relevant design parameters. These should include consideration of:

- ❑ Traffic volume
- ❑ Design speed
- ❑ Americans with Disabilities Administration (ADA) compliance
- ❑ Design vehicle characteristics

Although warranted and properly designed traffic calming strategies can have the desired benefits of managing traffic, they also can create disadvantages to adjacent streets and neighborhoods and to the traveling public at large. Traffic calming could have the potential of shifting an existing traffic problem to another street or neighborhood. Traffic calming may also increase delay for emergency response vehicles, and can increase long term maintenance costs for the City. Because of the controversy and potential disadvantages, traffic calming should be implemented only with the majority consent of those directly impacted.

This policy therefore provides guidelines for the following traffic calming activities:

- ❑ Requests for traffic calming consideration
- ❑ Documentation of traffic calming need
- ❑ Identification and approval of traffic calming strategies
- ❑ Programming of traffic calming improvements
- ❑ Design of traffic calming projects
- ❑ Evaluation of traffic calming projects

REQUESTS FOR TRAFFIC CALMING CONSIDERATION

Traffic calming consideration can be initiated in two ways:

- ❑ City staff may initiate a study to verify if traffic calming is appropriate to solve a specific concern with respect to traffic, pedestrian, or bicycle safety or operations. This concern may be identified through staff monitoring, or through citizen complaints.
- ❑ Adjacent property owners may initiate the request for a traffic calming study. This may be initiated upon receipt by the City Engineer of a petition signed by at least one member of seventy-five percent (75%) of the property ownerships facing the street(s) on which the traffic calming study is requested. A block shall consist of every developed property having frontage on the street to be studied between successive intersecting streets. A typical traffic calming petition shall include, at a minimum, a description of the street or streets which are to be included in the calming study and the signature of at least 75% of the property owners on those street(s). Where more than one person is listed as owner for each property, only one person shall be entitled to vote or sign a petition. Likewise, if multiple properties are owned by the same person or persons, the owner(s) will only be entitled to one vote or signature on the petition. This definition of property owner shall apply throughout this policy document.

The city staff assigned to administer traffic calming studies will review the petition for validity, and will assess whether other streets may be impacted by implementation of traffic calming strategies. The city staff will define the area of potential impact resulting from the traffic calming implementation on a case by case basis.

DOCUMENTATION OF TRAFFIC CALMING NEEDS

All traffic calming studies shall address at a minimum the following issues:

- ❑ Purpose of the study
- ❑ Emergency vehicle response
- ❑ Improvement maintenance
- ❑ Physical and operational conditions of the street(s)
- ❑ Impacts to other streets

Other issues that may need to be addressed include:

- ❑ Traffic speed
- ❑ Traffic volume
- ❑ Through-traffic
- ❑ Accident experience
- ❑ Vehicle-pedestrian conflicts
- ❑ On street parking

City staff shall be responsible for conducting traffic calming studies in accordance with these guidelines under the supervision of the City Engineer. If City staff so elects, the study may be outsourced to a qualified traffic engineering consultant. It is estimated that a typical traffic calming study will require between 50 and 120 manhours to complete. The traffic data that will be required will include:

- ❑ 24 hour directional traffic counts (conducted by police)
- ❑ Spot speed samples (minimum required will be not more than 4 hours total sample, or 100 vehicles, whichever comes first). (conducted by police)
- ❑ Review of three years’ accident records at the subject location (conducted by police)

A rating system will be utilized to compare competing local traffic calming projects. Table 6-1 provides rating criteria for local streets, and Table 6-2 provides rating criteria for collector streets.

Table 1-1 Local Streets Rating Criteria

Criteria	Points	Basis
Speed	0 to 40	5 pts assigned for every mph greater than 5 mph above the posted speed [(85 th percentile speed limit – 5 mph – posted speed limit) x 5 pts]
Volume	0 to 40	ADT divided by 100
No Sidewalks	0 to 5	5 pts if no continuous sidewalk
Traffic Accidents	0 or 5	1 pt for each accident/year at one location
School Crossing	0 or 10	10 pts if children must cross street to get to school
Total Points Possible	100	

Table 1-2 Collector Streets Rating Criteria

Criteria	Points	Basis
Speed	0 to 30	5 pts assigned for every mph greater than 5 mph above the posted speed [(85 th percentile speed limit – 5 mph – posted speed limit) x 5 pts]
Volume	0 to 20	5 pts for every 1,000 ADT on any one street
Traffic Accidents	0 to 15	1 pt for every 2 accident/year at one location
No Sidewalks	0 or 10	10 pts if no continuous sidewalk
Residential Density	0 to 10	1 pt for every 50 dwelling units/mile
School Crossing	0 or 10	10 pts if children must cross street to get to school
Pedestrian Generators	0 or 5	5 pts if pedestrian generator
Total Points Possible	100	

A traffic calming study must score a minimum of 60 points in order to be considered for traffic calming improvements.

IDENTIFICATION OF TRAFFIC CALMING STRATEGIES

City staff shall present to the residents living within the area of potential impact the results of the traffic calming study and rating, at a meeting called for that purpose. Where traffic calming may be appropriate, as determined by a rating 60 or greater, the City staff shall present relevant strategies as options for traffic calming, as provided in the attached strategy toolbox. The Appendix C strategy tool box is subdivided into two phases. Phase I includes signing, marking, and other enforcement techniques. Phase II tools includes traffic calming strategies involving designed features. The advantages and disadvantages of each strategy will be presented at the meeting. A vote will be conducted at the public meeting to identify the preferred strategy. A ballot will be sent out to all residents in the area of potential impact presenting the preferred option for endorsement of the preferred strategy. Support of sixty percent (60%) or more of the property owners in the area of potential impact is required before the City will give further consideration to traffic calming implementation.

PROGRAMMING OF TRAFFIC CALMING IMPROVEMENTS

Once each year, City staff will prioritize those traffic calming strategies within the City that have been approved within their area of impact. Prioritization will be based on the rating system. The City will program priority traffic calming improvements within the capital improvement budget, as approved by the City Council. Those traffic calming improvement locations not selected, will remain in consideration for up to three years.

DESIGN OF TRAFFIC CALMING PROJECTS

The design of traffic calming devices must meet the following criteria:

- The posted speed may not be more than thirty (30) miles per hour.
- The street shall have an ADT of less than 4,000.
- Limited to streets having only one lane of through traffic in each direction.
- Streets must not be primary emergency routes.
- At the discretion of the City Engineer, certain traffic calming measures may not be used if they would create an unsafe condition for motorists driving at normal speeds under average driving conditions.
- Streets must not be through truck routes unless an acceptable alternative route is identified and approved. Design of traffic calming features shall accommodate a single unit truck.

EVALUATION OF TRAFFIC CALMING PROJECTS

Six months following the completion of the traffic calming improvements, the City staff will undertake a follow-up study to determine if the traffic calming features have achieved the initial purpose of the project. If unacceptable impacts are identified, corrective measures may be taken.

Traffic calming measures may be removed after the evaluation period for any of the following reasons:

- Emergency response is significantly impacted.
- The problem for which the traffic calming was implemented has been transferred to another street.

At least sixty percent (60%) of the property owners in the defined area of impact sign a petition to remove the traffic calming measures. This option will result in complete removal of all measures. All property owners within the defined neighborhood will be assessed for the removal of the calming measures. This procedure for removing traffic calming devices will not be considered for a minimum of three years following completion of the construction.