

NEIGHBORHOOD TRAFFIC CALMING POLICY

I. PURPOSE

The City of Kent continually strives to strengthen and protect its neighborhoods by improving the quality of life in residential areas. Traffic conditions on residential streets can greatly affect neighborhood livability. Speeding traffic and unnecessary through-traffic in neighborhoods create safety hazards on residential streets. When traffic problems become a daily occurrence, our sense of community and personal well-being are threatened.

The City of Kent's *Neighborhood Traffic Calming Policy* was developed to guide city staff and inform residents about the processes and procedures for implementing traffic calming on residential streets. Under this policy, the Community Development Department will work with residents to identify traffic problems in their neighborhoods and seek appropriate solutions.

Citizen participation is an important part of all traffic calming projects. Experience in other cities has shown that traffic calming projects that are implemented without involving the neighborhood are frequently unsuccessful, often resulting in the future removal of traffic calming measures. The City's goal is to give the people who live and work in the project area the opportunity to become actively involved in the planning and decision-making process

What Streets will be addressed under this Policy?

This Policy addresses residential minor arterial, principal collector, minor collector, local and local service streets. As the City of Kent does not currently have a comprehensive document, which classifies its existing minor arterial, principal collector, minor collector and local service streets, this Policy contains the following general descriptions that will help identify appropriate streets.

Minor Arterials interconnect with principal arterial roadways and includes all arterials not classified as principal. *This system places more emphasis on land access than the higher system does and offers lower traffic mobility.* The main role of a minor arterial is to provide intra-city mobility. In many cases, bus routes are located on minor arterials. *Ideally, minor arterials do not penetrate identifiable neighborhoods.*

Collector streets are somewhat more difficult to define. Collector streets are typically streets that provide access between local streets or from local streets to arterial thoroughfares. Collector streets often carry some amounts of through-traffic. To be considered under this Policy, a collector street must be primarily residential. In order to allow flexibility for land uses like parks and schools, no exact standard will be set. However, as a general guideline, "primarily residential" means that at least 75% of the properties with frontage on the street are in residential zoning or have existing land use that is residential.

Principal Collector streets can be found in residential, commercial and industrial area, *providing land access and traffic circulation.* Typically, major collectors have greater right-of-way and paving widths and wider traffic lanes than minor collectors. Principal collectors frequently have left turn lanes.

Minor Collector streets are found only in residential neighborhoods and provide a high degree of access to individual properties. As a rule, both right-of-way and paving widths are narrower than principal collectors and designated left turn lanes are infrequent.

Local streets provide direct and full access to private property and are laid out so that their use by through-traffic is discouraged. Local street systems usually do not contain bus routes.

Local Service streets are intended to provide secondary and in some cases primary access to private property. They are generally located within a commercial or high-density zoning area and are commonly known as “alleys”. Available right-of-way is limited on local service streets.

Residential local streets make up the majority of Kent’s street system. These streets serve local circulation needs for motor vehicle, bicycle, and pedestrian traffic and provide access to residences and some businesses on occasion. Local streets are not intended to carry significant volumes of through-traffic.

II. STREET EVALUATION AND PRIORITIZATION

Initiation

All streets will be evaluated by street segment. A segment is that portion of the street that lies between two thoroughfares or collector streets, or other logical feature that may separate portions of a street, such as changes in land use, major driveway entrances, particular road conditions, or historic boundaries. A street segment can be added to the list of streets to be studied for potential traffic calming in a number of ways:

- A citizen or group of citizens contacts the Community Development Department directly to express their concerns about speeding traffic or excessive volumes of traffic on their street. The Community Development Department sends a questionnaire to the resident or residents that asks for additional information about the problem areas and allows multiple residents to sign on to the request. Once Community Development staff receives this questionnaire, the street segment will be added to the list of streets to be studied. *This information will be forwarded to the Traffic Safety and Engineering Committee for review.*
- A recommendation to study is made by City Council, the Planning and Zoning Commission, or the Traffic Safety & Engineering Committee. This recommendation may follow a request to one of these public bodies from a citizen or group of citizens; or the concern may surface during the regular business of these public bodies;
- The Kent Police Department recommends the addition of a street to the list based on their enforcement efforts and/or citizen concerns;

Preliminary Evaluation

The Community Development Department *with the Public Service Department* will visually inspect the street, review the city ordinance to determine the established speed limit, and collect traffic volume and speed data. The data collection will normally be done using electronic automatic traffic recorders over a period of days. The following data will typically be collected:

- Speed data to determine the 85th percentile speed as well as the median speed and average speed. The 85th percentile speed is the speed exceeded by the fastest 15% of vehicles.
- The volume of traffic for a typical day. Preferably, both weekdays and weekends will be included to provide a complete depiction of traffic conditions.
- The speed and volume data will typically be in a form that enables specific times of day to be evaluated in order to determine peak hour traffic volume and to identify any specific times of day when traffic speeds are higher.
- Determination if the street is a main emergency response route. No application can result in an increase of emergency response times greater than 4 minutes from the primary response station.

- The application chosen will need to provide for efficient snowplowing and other maintenance operations.
- Occasionally, vehicle classification data (cars, trucks, buses, motorcycles, etc.) will be collected if deemed necessary by the Community Development Department.

The first step in the preliminary evaluation will be to determine whether the posted speed is appropriate. Under the current ordinance, unless specifically identified in the ordinance, all residential streets have an established speed limit of 35 mph, regardless of the type of use, volume of traffic, or physical and geometric features.

The *Traffic Safety & Engineering Committee* will determine the appropriate speed for streets being evaluated under this policy by conducting an engineering study that considers the following factors:

- the speed data collected;
- geometric features of the roadway including but not limited to horizontal and vertical alignment, sight distance, lane width, shoulder width, and the presence of sidewalks;
- the type of roadside development;
- the proximity of houses and other development to the street;
- pedestrian and bicyclist activity;
- The density of driveways that intersect the roadway.

Typically, speed limits on residential local streets will be set at 25 mph, while speed limits on residential collector streets will be set at 30 mph. These speed limits may be set lower based upon the above factors.

The primary purpose of the preliminary evaluation is to determine whether the speeding or traffic volume problem is significant enough to warrant further study and prioritization. For streets to be considered for prioritization the measured 85th percentile speed must be more than 5 mph higher than the posted speed limit or the total traffic volume on the street must be greater than 1000 vehicles per day. In the event that a street does not meet these criteria, the City of Kent recognizes that a traffic problem may still exist on the street. However, relative to other streets in the city, the extent of the problem does not warrant the use of the city's limited resources to resolve by this program.

At times, the City may receive more requests than can be evaluated immediately due to staffing limitations. When this happens, using knowledge of the City's streets and neighborhoods, and engineering judgment the *Traffic Safety & Engineering Committee* will choose to first study the streets which are likely to exhibit the worst traffic problems.

Prioritization

Street segments that meet the above qualifications will advance to selection scoring and prioritization. At this time, a more detailed field review and study of the street will be completed. The detailed evaluation will typically include the following:

- The traffic speed and volume data collected under the preliminary evaluation;
- Additional speed and volume studies as needed for more detail or to get updated data;
- An evaluation of the roadway geometry to determine the *location* of sidewalks, to identify sight distance problems, and to identify any other conditions of concern for traffic safety;
- A review of auto accident history for the prior three years to determine the total number of collisions and to identify any significant auto accident trends (i.e. type of collisions, locations, time of day, days of the week).

This detailed evaluation will generate information about several rating criteria to be used in prioritizing streets. These criteria will be given varying weights in the rating chart based on the following descriptions:

- Speed is given the most importance, since high speed usually affects safety and livability the most. It is also the condition that can be improved the most using traffic calming measures.
- Traffic volume is also considered because it contributes to the general traffic conditions on the street.
- Cut through-traffic can negatively impact neighborhood street by increasing traffic volume.
- Auto accident history gives an indication of existing safety problems with the street. A high level of auto accidents can be an indicator of limitations of the street design that may be difficult to quantify. In addition, reducing traffic speed and volumes has been shown to reduce auto accidents on residential streets.
- Roadway geometry is an important factor in traffic safety in neighborhoods. Roadway geometry features can restrict visibility; creating hazards for motorists and pedestrians. *Also many residents must back out of narrow driveways into the street.*
- Residential density also affects traffic conditions; higher densities typically generate more pedestrians and vehicle turning movements. In addition, projects on high-density streets benefit more people than projects on low-density streets.
- Other criteria such as the presence of sidewalks and pedestrian generators like schools, parks, and bus routes are important because they relate to pedestrian safety. Vehicle travel speeds and volumes directly affect the potential for pedestrian injuries and fatalities.

Rating Chart

Criteria	Points	Basis for point assignment
Speed	0 to 35	4 points assigned for every mph greater than 5 mph above the posted speed limit (using the full day 85 th percentile speed)

Volume	0 to 20	1 point for every 200 vehicles per day.
Cut through-traffic	0 to 10	1/2 point for each 1% the percentage of cut-through-traffic exceeds 20%.
Auto accident history	0 to 10	1 point assigned for each 0.3 recorded auto accidents per year per mile of roadway (based on the past three years)
Pedestrian generators	0 to 10	4 points for each elementary or middle school within 500 feet of the project area. 2 points for each other school, bus route, park, or community center within 500 feet of the project area. 2 points should be given if any (not for each) retail, commercial, or other institutional (including churches) uses exist within 500 feet of the project area.
Roadway Geometry	0 to 8	Each street segment will be rated on a scale of 0 to 8 for potentially hazardous roadway geometry and other factors. Factors to be considered include horizontal and vertical curvature, street width, proximity of homes to the street, stopping sight distance, intersection sight distance, and driveway sight distance and geometry.
Sidewalks	0 or 7	5 points assigned if there is no continuous sidewalk on at least one side of the street.
Total Points Possible	100	

III. PRELIMINARY USES OF THE PRIORITIZED LIST

The prioritized list will be used in several ways by different departments in the city. The primary purpose of the list is to identify streets and areas for traffic calming projects. However, due to limited resources, some areas may not be identified and funded for a project for significant periods of time. In addition, developing a traffic-calming project can take months, adding to the delay experienced by residents. Therefore, interim strategies may be used to provide citizens with some improvement of their traffic problems.

Police Enforcement

The prioritized list and the speed and volume data will help the Kent Police Department enforce speeding laws more efficiently. The data tells officers which streets have the most significant speeding problems. In addition, specific information about the speed profiles for the street can help officers focus their efforts on the most serious offenders.

Traffic Speed Display Signs

The City of Kent may utilize speed display signs that use radar technology to show drivers the speed they are travelling. The Police Department and the Public Service Department may place these signs on streets where speeding problems have been identified. The prioritized list with information about the level of speeding on various streets will help these departments place these signs more effectively. Some of these types of signs also have the ability to record traffic counts and traffic speed information. While these signs do not force scofflaw drivers to slow down, many drivers speed in neighborhoods without realizing how fast they are travelling. Reminding these drivers that they are exceeding the speed limit on a street can encourage them to drive more slowly.

Low-Cost Traffic Control Device Strategies

Under some circumstances, placement or removal of various traffic control devices such as signs and markings can improve the traffic problem on a residential street. If the City's *Traffic Safety & Engineering Committee* determines that a low-cost strategy may be beneficial, the strategy may be implemented as soon as personnel resources are available. Some examples of possible strategies are:

- Removing on-street parking restrictions can reduce speeds. For low-volume residential streets, parking on one side of streets will normally be allowed on streets with curb to curb widths of at least 20 feet, and parking on both sides of the street can normally be allowed on streets with widths of at least 24 feet. Any changes that will allow parked cars to effectively narrow the street must be approved by the Kent Fire Department. On streets with volumes over 1500 vehicles per day, a queuing analysis that considers traffic volume and the density of on-street parking may be necessary before allowing parking that would narrow the street down to one lane.
- On streets with parking allowed on only one side of the street, parking can be alternated from side to side along the length of the street to break up the visual continuity of long, straight streets. No parking zones must be overlapped to avoid potential barriers to emergency response vehicles.

IV. TRAFFIC CALMING PROJECTS

Traffic Calming Measures

As described below under Project Development, residents will be given a “toolbox” of traffic calming measures that can be used to reduce traffic problems on residential streets. This policy does not include a list of traffic calming measures and definitions, or the criteria or limitations for installation. Community Development staff feels that specifically listing traffic calming measures for use on City streets might limit the potential solutions to traffic problems, as new or modified ideas for calming traffic are constantly being developed. In addition, including all the necessary information about traffic calming measures would make this document quite cumbersome. Several excellent publications and web sites provide definitions, descriptions, benefits, consequences, costs, and design guidelines for traffic calming measures.

Community Development Staff will use these documents and other resources to present a “toolbox” of traffic calming measures to residents during the project development process. In addition, staff may make general presentations about traffic calming measures to the public or to specific organizations. Residents who are interested in learning more about traffic calming on their own are encouraged to make use of valuable resources on the Internet. The web site for the Institute of Transportation Engineers (ITE) contains excellent information and several links concerning traffic calming. <http://www.ite.org/traffic/index.htm>

Project Selection

In many cases, several neighboring streets have similar speeding and cut-through-traffic problems. Implementing traffic calming on one street can cause the problem to get worse on other streets, or create traffic problems where there were not significant problems before. Therefore, traffic calming projects will often need to include several streets in the same area. Some flexibility in selecting projects from the prioritized list will be necessary in order to accommodate appropriate grouping of streets. The City's goal is to provide traffic calming in all regions of the

city where the data indicates that it is needed. Additional flexibility in project selection is necessary to allow this goal of regional equity to be realized.

Due to the criteria used, the rating chart will give higher scores for residential collector streets. However, it is important to have traffic calming projects on both residential collector streets and residential local streets. Therefore, to select traffic calming projects, separate lists shall be created for collector streets and local streets. Projects will be alternately selected from each list.

Residents or a homeowners association may elect to pay for 100% of the construction costs via petition to implement a low priority project faster, provided the other high priority projects remain on schedule.

Project Initiation

Once an area has been selected for a traffic calming project, Community Development Staff will contact neighborhood representatives and identify a committee of 4 to 6 neighborhood representatives who will assist in notifying and petitioning other residents. Preferably, the project will be supported by an established neighborhood association. The committee and Community Development staff will work together to identify the petition area. Typically the petition area will include properties on all street segments within the actual project area, on cross streets up to the next parallel street (or up to 300 feet from the project streets), and on any other street that must use the project streets as primary access. Projects on collector streets will generally have a relatively large petition area.

The citizen committee will be given petition forms along with information about the project area and basic information about traffic calming to provide to the residents in the petition area. In order to move on to the next phase of project development, signatures must be gathered from at least 60 percent of the households (owners and renters) within the petition area.

In addition to the petition, in some situations, surveys may be distributed to residents of the petition area, to further measure support for the project and obtain additional comments about traffic from residents who may not be able to attend the project development meetings described below.

Meetings for Project Development

Community Development Staff will work with residents of the petition area to set up a public meeting. All the residents of the petition area will be invited to attend. Facilitators will be used to assist in the process, and depending on the size of the project, consultants may be on hand to help with the project. Representatives of the Police, Fire, Public Service and Community Development Departments will be invited to attend the meeting and participate in the discussion. The following activities will take place at this meeting:

- Preliminary activities and introduction including a map for residents to use pushpins or dots to show where they live or have their business.
- Staff will present the data and analysis for the traffic problems in the project area. This process may include slides of the streets to help illustrate the problems.
- Participants will be offered a “toolbox” of physical traffic calming measures or other solutions for the traffic problems on their streets. This toolbox will be in the form of a verbal presentation accompanied by slides, handouts and/or other visual media.
- Participants will be asked to provide one-sentence descriptions of specific traffic issues within their neighborhood. Ideally, about 20 to 40 issues will be listed and posted on the wall.

- Citizens will have a chance to vote on the issues that are their highest priorities by using the “dot technique.” (Participants are given colored dot labels to stick next to the issues that concern them the most. This process brings out a list of primary issues within the project area.
- Residents will split into groups of 6 to 10 people and work around a map laid out on a table. Using their top issues prioritized in the previous activity and their “toolbox” of possible solutions, residents will discuss specific solutions for the traffic problems on their streets. Creative ideas from the residents that are not included in the toolbox will also be considered. Using the maps provided, participants will create a neighborhood traffic-calming plan with their proposed solutions. Community Development Staff will be available to answer any technical questions and provide guidance.
- Each of the groups will present their maps and give a summary of their discussion. These reports should be videotaped to assist staff in eventual project development.
- A final group discussion to get consensus about differences in the plans will give Staff final guidance.

Conceptual Plan Development

Community Development staff will create a conceptual plan for the neighborhood based upon the recommendations and proposed solutions from the residents. Any necessary field measurements will be taken to ensure that the proposed treatments will fit within the context of the street and to help with design. The proposed solutions will be evaluated for their appropriateness for the project area, and adjustments will be made as necessary. The plan development should include an analysis of whether or not the proposed measures will negatively affect nearby residential streets. The conceptual plan and report by Community Development Staff will be reviewed by Police, Fire and Public Service Department personnel as well as representatives of other departments and divisions as needed. The City’s Community Development Department will prepare a final report and conceptual plan that incorporates any comments from these reviews.

Final Report to Neighborhood

Community Development Staff will present the final report along with the conceptual plan at a public neighborhood meeting where all of the residents of the petition area are invited to participate. A map of the project area and visual aids will be used to summarize the treatments. Approximate project costs and installation information will be presented as well. Meeting participants will be asked to provide comments and help refine the recommended design. Community Development staff will refine the design as necessary to address the concerns and comments from this meeting.

Final Approval Process

With information about the project and petitions provided by the Community Development Department, the citizen committee will petition residents of the petition area to determine the level of support for installation of the proposed traffic calming measures. Both residents and non-resident property owners may be included on the petition. Signatures are required that represent at least 70 percent of the households in the petition area. In addition to the petition, a survey of residents in the area may be conducted to further assess the level of community support. Once the necessary level of support is determined, projects will be funded based upon their prioritization.

Design and Construction

Once the project is approved and funded, *Public Service Department* will complete the detailed design. The final plans will be reviewed by the Police, Fire and *Community Development* Departments, other City departments and divisions as needed, and representatives of the neighborhood. The traffic calming measures will be constructed by City crews or by a contractor. The design and construction phase may take up to 6 to 10 months

In the event that the traffic calming measures are very costly to install, or if the potential effectiveness of the measures is unknown, the *Traffic Safety & Engineering Committee* may elect to install temporary traffic calming measures to determine their effectiveness.

Many traffic-calming measures offer significant opportunities for landscaping. Appropriate City of Kent staff will be invited to participate in the project development process in order to help address landscaping issues. Neighborhood residents will be responsible for installation and maintenance of the landscaping. Landscaping must be installed in accordance with the Tree Ordinance, and as approved by the Tree Commission. Before the project is constructed, an agreement or agreements must be signed between the City and the residents that state that residents are responsible for installation and maintenance landscaping. Preferably, these agreements will be between the City and a neighborhood association or other organization. However, if this is not feasible, an agreement may be made with individuals for specific traffic calming measures.

Project Evaluation

Six months after the project is installed, the *Traffic Safety & Engineering* will complete an evaluation of the effects of the project. Comments will be solicited from residents in the project area by the use of a formal survey or through press releases. Traffic speed and volume data will be collected and any change in traffic volumes and speeds on the treated streets will be documented. In addition, traffic diversion and impact on nearby residential local streets will be measured. If any unacceptable impacts are identified, corrective measures will be taken. In some cases, traffic calming measures might be removed. If temporary traffic calming measures were used initially, the City may opt to install permanent measures at this time.

TABLE 1. Summary of the Process Outlined in This Policy

Step #1	<ul style="list-style-type: none"> • Citizen(s) contact staff with concern or a study is initiated by City staff or a City-based public body. • Community Development staff sends questionnaire to resident(s). • Citizens return completed questionnaire to City staff.
Step #2	<p><i>Traffic Safety & Engineering Committee:</i></p> <ul style="list-style-type: none"> • Conducts a preliminary evaluation including a basic speed and volume study; • Recommends reduced speed limits if necessary; and • Determines whether the traffic problem is significant enough to warrant further study and prioritization for traffic calming measures.
Step #3	<ul style="list-style-type: none"> • City staff conducts a more detailed evaluation and study of the street. • The data collected from the evaluation is input into the rating chart in order to create a prioritized list of street segments that have significant traffic problems.
Step #4	<ul style="list-style-type: none"> • City staff uses the prioritized list to help implement some interim strategies to provide citizens with some improvement to their traffic problems. These strategies may include: <ul style="list-style-type: none"> • Police enforcement; • Speed display signs; • Awareness campaigns; and • Low-cost traffic control device changes.
Step #5	<ul style="list-style-type: none"> • Projects are selected based on the prioritized list and the connectivity of streets in specific areas. • A citizen committee of residents who live on or near the project streets is formed. • Staff and the committee identify the petition area for the project, and the citizen committee gathers signatures from residents within the petition area. • At least 60% of the households in the petition area must be represented on the petition in order to move on to the next step.
Step #6	<ul style="list-style-type: none"> • City staff works with neighborhood residents to hold a public meeting to develop the project. • Staff presents the data for the project area and a “toolbox” of traffic calming measures. • Citizens and City staff work together to identify the key problems and recommend solutions for the neighborhood.
Step #7	<ul style="list-style-type: none"> • Community Development staff develops a draft conceptual plan based on the recommendations from the neighborhood meeting. • This plan is reviewed by representatives of other City Departments. • A final plan is developed based on any internal comments.
Step #8	<ul style="list-style-type: none"> • Community Development staff presents the final report and conceptual plan to the neighborhood at another public meeting where meeting participants comment on the conceptual plan. • Community Development staff refines the design as necessary
Step #9	<ul style="list-style-type: none"> • Citizens petition residents of the petition area to determine the level of support. • Signatures must be obtained that represent at least 70% of the households in the petition area.
Step #10	<ul style="list-style-type: none"> • <i>The Public Service Department</i> completes the detailed design. • Agreements are signed between the neighborhood and the City stating that the neighborhood will install and maintain any landscaping. • Traffic calming measures are installed.
Step #11	<ul style="list-style-type: none"> • After six months, <i>Traffic Safety & Engineering Committee</i> evaluates the project. • Additional data is collected. • Comments are solicited from neighborhood residents and other citizens. • Corrective measures will be taken if necessary.