TOWN OF QUEEN CREEK ARIZONA

Neighborhood Traffic Management Program

INTRODUCTION

The Neighborhood Traffic Management Program exists so that residents and Town staff can partner together in an effort to mitigate existing traffic related issues that may affect the livability of the community. It is the desire of Town staff that efforts to implement the Neighborhood Traffic Management Program within a residential community be a collaborative effort that includes the direct involvement of the Home Owner's Association (if one exists) or a small group of interested property owners.

The Neighborhood Traffic Management Program works in cooperation with residential neighborhoods to preserve the character of Queen Creek's neighborhoods, and to help improve the overall quality of life. The Program is designed to address traffic concerns on ***local or collector streets*** in residential areas of the Town that may have a negative influence on the health, safety, and welfare of its citizens. Traffic concerns may include:

- Traffic using a street as a shortcut or detour;
- An excessive volume of traffic; or
- Traffic operating at excessive speeds.

Program Goals

The Neighborhood Traffic Management Program incorporates the following goals:

1. To improve the quality of life for the residents of Queen Creek;
2. To increase public health, safety, and welfare;
3. To develop and maintain a transportation system that accommodates travel demands and discourages unnecessary use of local residential and collector streets; and
4. To enhance accessibility for all street users including pedestrians and bicyclists.

Program Objectives

In order to accomplish the Program Goals, the following are objectives of the Program:

1. Achieve safe, slow speeds for motor vehicles appropriate for local residential and collector streets in residential neighborhoods;
2. Reduce unnecessary cut-through traffic;
3. Improve safety for all street users;
4. Work in cooperation with Home Owners Associations (*if one exists*) or a small group of residents throughout the process;
5. Implement residential street design standards for local residential and collector streets for the development of subdivisions that discourages excessive speeds and cut-through traffic in neighborhoods; and
6. Promote the adoption of right-of-way width standards for arterial streets sufficient to accommodate capacity demands.

POLICIES AND PROCEDURES

The goals and objectives of the Town of Queen Creeks Neighborhood Traffic Management Program (NTMP) are achieved by meeting minimum criteria in the following policies and procedures. To provide a user-friendly and streamlined program based on community involvement, the Neighborhood Traffic Management Program will consist of a process that utilizes the "**3 E's**" of **E**ducation, **E**nforcement and **E**ngineering:

NTMP Process:

1. Initial contact (HOA if one exists or resident – completed application form)
2. Education
3. Enforcement
4. Engineering
   - Traffic Studies
   - Petitions/Obtain Consensus (neighborhood meeting, etc)
   - Implementation
5. Evaluation

1. Initial Contact

The initial contact to begin the Neighborhood Traffic Management Program in an existing residential subdivision will typically be made through a Home Owners Association (HOA) if one exists. If an HOA exists and a resident makes contact with the Town in an attempt to begin the process, they will be referred to the HOA to begin the process. After initial contact is made with an HOA or concerned resident, Staff will provide information about the Program as well as a Request for Neighborhood Traffic Management application.

If after reading through the provided information the HOA / resident is interested in the Program, a completed Neighborhood Traffic Management application should be submitted to the Town – *it should be noted that this form is not a "petition" for traffic calming features*. The form requires that 10 signatures from 10 households on the street in question (multiple forms may be required when more than one (1) street is involved in the process) where an issue exists. If 10 homes do not exist on the street, 50% plus 1 will be required. The request form will list the location and the problem that has been observed. By signing the application form a resident agrees that the listed issue exists.

After receiving the Request for Neighborhood Traffic Management form, staff will make contact with the person listed on the form as the neighborhood coordinator to explain the next step(s) in the process. If needed, staff may conduct a cursory inspection of the area, or document the existing traffic control devices (stop signs, speed limit signs, traffic signals, pavement markings, schools, school crossings, playgrounds, traffic generators, etc.) within the area in question. From this initial investigation, staff will determine if any traffic control devices need to be installed, replaced, maintained, upgraded, or removed), and if existing conditions would likely contribute to the reported issue.

2. Education

In the Education portion of the process, Staff will work closely with the neighborhood coordinator to enlist their assistance in targeted education in the neighborhood.

The Education component of the Program is achieved through the implementation of the Neighborhood Speed Awareness Program (NSAP). The components of this program may include:

- Installation of a speed awareness device (speed trailer, portable driver feedback sign, etc.)
- Speed awareness signing ("*It's Your Town Please Slow Down*")
- Flyers and/or other types of communication with area residents
- An informal radar speed study

3. Enforcement

If it is determined that excessive speed or other types of driving behavior exist that may be correctible by enforcement, a deputy from the Maricopa County Sheriff's Office can provide additional patrol and enforcement support. This type of direct contact can also aid in the education portion of the Program.

4. Engineering

Prior to moving into the Engineering phase of the program, both the Education and Enforcement portions should be implemented in an attempt to change driver behavior. If those measures are not successful, Staff may elect to move the project into the Engineering phase. The steps in the Engineering phase are discussed below.

It is critical for residents to understand the differences between the types of streets where Traffic Calming devices can be used, and on which type of streets the different types of devices are allowable.

There are three types of streets that are eligible to participate in the Program. The Local Residential street with homes fronting (TOQC Standard Detail R-107 "Urban Local") with a posted speed limit no greater than 25 mph; the Residential Collector (TOQC Standard Detail R-105 "Urban Residential Collector"); and the Major Collector (TOQC Standard Detail R-103 "Major Collector") both with posted speed limits between 25 mph and 35 mph – other classification of streets are not eligible.

Vertical deflections (speed humps, speed tables, raised intersections), horizontal shifts and roadway narrowing are intended to reduce speed and enhance the street environment for non-motorists. Closures (diagonal diverters, half closures, full closures, and median barriers) are intended to reduce cut-through traffic by obstructing traffic movements in one or more directions. ***Table 4.1*** describes the different types of devices that can be utilized and the corresponding street types where they may be utilized if warranted.

Table 4.1 – Traffic Calming Devices

Type of Device	Local Residential	Urban Residential Collector	Major Collector
Speed Humps	X		
Speed Tables/Raised Intersections*	X	X	X
Traffic Circles		X	X
Neighborhood Traffic Circle	X		
Median Islands		X	X
Bulb Out / Choker Detail	X	X	X
Choker / Pedestrian Table		X	X
Intersection Pedestrian Table		X	X
Pedestrian Refuge		X	X
Chicane		X	X
Center Island Narrowing		X	X
Closure**	X		

**Speed Tables can be used on Local Residential Streets as can Raised Intersections. Raised Intersections can be used on Collector streets only where a multi-way stop control exists to provide at-grade pedestrian crossings.*

***Full or partial street closures will require a greater of community involvement.*

Traffic Study

Prior to initiating a Traffic Study, Staff will discuss the process and potential outcomes (including potential costs associated with the outcome of the study) with the neighborhood coordinator. The neighborhood coordinator will submit a check in the amount of $500.00 to cover the initial costs for the traffic study. These funds are not refundable but may be applied toward the costs of any future traffic calming devices.

Staff will arrange for volume and speed counts to be taken at predetermined locations within the study area. Staff will evaluate the collected data and compare to the requirements contained in ***Table 4.2*** to determine if the addition of traffic calming devices are warranted.

Table 4.2 – Minimum Criteria by Street Classification

*Street Classification***	*Average Daily Traffic Volume (veh/day)*	*Average Volume in Peak Hour (veh/hour)*	*85th Percentile Speeds (MPH)**
Local Residential	***700***	***70***	***5 over posted***
Residential Collector	***1000***	***100***	***5 over posted***
Major Collector	***3000***	***300***	***10 over posted***

**The 85th Percentile speed represents the speed at which 85% of drivers are driving at or below. This speed represents the greatest number of drivers, or what is more commonly known as the "average driver".*

***All streets shall be a minimum of 660' in length to be eligible.*

If devices are determined to be warranted, the collected data and street classification of the streets being studied will be used to determine the most appropriate types of devices and locations. At this time the Neighborhood Traffic Management Program committee (consisting of representatives from Traffic Engineering, Engineering, Streets, Fire, and MCSO) will meet to discuss the outcome of the study and evaluate the proposed locations and device types. This committee will evaluate the locations and devices for applicability, drainage, long term maintenance and emergency vehicle response times. This committee will have final approval on the project based upon safety, drainage and maintainability.

Traffic studies will only be undertaken by Town Staff within fully built-out residential subdivisions.

Evaluation Criteria

Local Residential Streets - any street that is at least 660' long, meeting both the traffic volume and speed criteria above is eligible for traffic calming features through the NTMP. Streets that do not meet the volume criteria may be eligible if the 85th Percentile speeds are determined by Traffic Engineering staff to be sufficiently high enough for traffic calming devices to be effective.

Residents living on streets that are not eligible, but are still interested in implementing traffic calming measures may request that another traffic study be conducted after a minimum of 12-months have passed from the date of the last study to see if minimum criteria can be satisfied. If a neighborhood chooses to reapply, staff will first complete a site visit to determine if any significant changes in traffic patterns and/or circulation have occurred. If it is determined that changes in traffic patterns or circulation have not occurred Staff may elect not to conduct a traffic study at that time.

Collector Streets - collector streets are not eligible for speed humps or other types of vertical deflection except at multi-way STOP controlled intersections where raised intersections may be added to provide for at-grade pedestrian crossings. Exceptions may be granted if both of the following two (2) criteria are satisfied:

1. The street has one travel lane in each direction not including bike lanes or parking lanes; and
2. The street has homes fronting.

The Town Traffic Engineer will make the final determination as to the type and location of any proposed traffic calming device installation.

Neighborhood Consensus - once it is determined that the installation of traffic calming devices is warranted, the consensus portion of the process will begin.

Town staff will determine the most appropriate area to be used to obtain consensus considering:

- Residents who's home fronts onto a street where, if installed a traffic calming device would be installed in close proximity to their property; or
- Residents who would be forced to cross, or would likely cross the traffic calming device if installed.

All petition forms shall be prepared by Town staff and will be provided to the neighborhood coordinator. A map showing the location of the traffic calming devices and the petition boundary area will also be included. Petition boundary limits will be determined by Town staff on a case by case basis for the individual features / locations identified through the traffic study. In general, petition boundaries will be determined based on the degree to which the properties adjacent to a traffic calming device installation are affected compared to those included in the entire study area.

Staff may elect to undertake the petition portion by mailing individual notification (voting cards) to each property within the predetermined petition boundary.

In either case, 75% of those surveyed must sign or return their petitions, and 70% must be in favor of the addition of traffic calming devices, with 100% of those directly adjacent to a traffic calming device in favor.

Each home is eligible for a single vote – other residents in the same home that are of driving age who wish to sign the petition will be allowed to do so, but the total vote for each property will only add (equal) to one (1). For example, if two people in the same home wish to sign the petition, each vote will count as half; if three then thirds). Signatures on petitions for traffic calming devices may be that of the property owner or renter. All properties within 100 feet of a proposed device installation location will require the signature of the property owner.

If a multi-family dwelling (i.e. apartments, duplexes, etc.) is within the petition boundary area, the property will be counted as one unit and the property manager or owner will be requested to sign the petition. The exception to this would be in cases where the units are individually owned; each unit would be counted separately in this case.

Petitions must be completed and returned to the Town within six months from the date that they were provided to the neighborhood coordinator or they will expire. A one-time extension of ***one month*** may be requested if necessary.

Only signatures on the official petition forms prepared and provided by the Town of Queen Creek will be accepted. No photocopies or substitutions will be allowed. If a person signing the petition decides to change their vote and would like to remove their name from the petition, the person has three business days from the date the petition was received by Staff to submit a letter to the Town stating in writing that they would like to rescind or change their vote on the petition.

The same petition boundary and petition process shall be required for the removal of any approved and installed traffic calming device through the Neighborhood Traffic Management Program process, or by a developer. Traffic calming devices must have been in place for a minimum of 1-year before residents can request a petition for removal.

A petition process will be required. A minimum of 70% in favor of removal within the petition boundary with at least 75% of the residents within the petition boundary signing the petition (or returning the ballots).

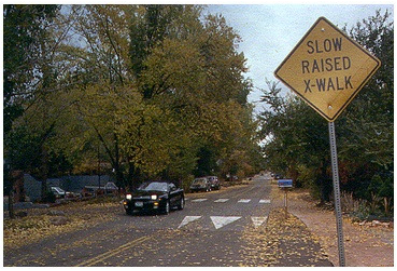
Costs / Financing

Typically, all costs associated with the design and installation (materials and labor if contracted to an outside vendor) will be the responsibility of the Home Owners Association or residents where the devices are to be installed.

The HOA or residents will be responsible to fund entirely any removal of a traffic calming device placed either through the Neighborhood Traffic Management Program process, or by a developer.

A Traffic Study Fee in the Engineering Phase of $500.00 will be collected prior to any study beginning as a part of the NTMP. These funds are not refundable but the $500.00 can be applied to any future traffic calming device installation.

EXAMPLES OF TRAFFIC CALMING DEVICES

No Parking Signs		**Turn Prohibitions**	
Speed Humps		**Speed Tables**	
Traffic Circles		**Chicane**	
Median Island		**Island Diverter**	
Right-Turn Diverter		**Speed Cushion**	

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM PROCESS

1. A Home Owners Association representative or resident makes contact with the Traffic Engineering staff by phone, email, Queen Creek Connection, or by visiting the Municipal Services Building to report a traffic concern in their neighborhood where excessive traffic volume and / or speeds exist. If a resident initiates contact they will be referred to their Home Owners Association if one exists;
2. An Application for Neighborhood Traffic Management form is provided and must be completed and returned prior to any investigation by staff being initiated;
3. Staff will make contact with the listed neighborhood coordinator on the Neighborhood Traffic Management form to discuss particulars;
4. Staff may conduct an initial site visit to the area in question and document the existing traffic control devices (stop signs, speed limit signs, traffic signals, pavement markings, schools, playgrounds, etc). Staff may also conduct an informal radar speed study at this time as well;
5. Staff will determine if any signing or pavement markings need to be installed or if maintenance is needed on existing devices;
6. Staff will discuss the results of the initial site visit with the neighborhood coordinator. If at this time it is determined that the Education phase would be useful, discussion as to type and location of educational devices and / or any possible flyers or other print material to be made available to area residents;
7. Speed awareness devices can be installed at locations throughout the neighborhood if needed;
8. Staff can coordinate additional presence / enforcement in target locations if needed or deemed to be helpful.

At this point the process could end if there appears through site visits and available data that a traffic issue does not exist. If it appears that a traffic issue may exist, the following steps can be taken if the neighborhood chooses to continue:

1. To begin the Traffic Study portion of the program, the Home Owners Association or residents will be required to submit a check in the amount of $500.00 to cover the initial costs of the study. These funds can be applied to any future traffic calming device installation;
2. Staff will conduct a formal data collection study on all applicable streets and will compile the data to determine if conditions suggest that a safety problem exists;
3. Once the data has been compiled and reviewed, Staff will make contact with the neighborhood coordinator to review the outcome of the study and discuss any potential solutions;
4. If appropriate, Staff will determine where traffic calming devices should be placed and the limits of the petition area. An Engineers Estimate will be prepared to determine the approximate cost of the project;
5. Depending on the extent of the area under study a neighborhood meeting may be scheduled to discuss the study results and inform residents of the next steps. If applicable, maps showing the type(s) of proposed devices and locations will be available. Copies of the study results will be made available to residents that are unable to attend. Areas of discussion may include:

a. Original complaint;
b. Limits of study area;
c. Discussion of initial study, and the Education and Enforcement steps;
d. Discussion of results of Traffic Study;
e. Proposed traffic calming devices and locations;
f. Expected results;
g. Review of associated costs and responsibility (Engineers Estimate);
h. Consensus process;
i. Timeline for implementation of traffic calming;

6. If there is consensus to proceed, Staff will prepare maps, petitions and / or mail out ballots covering the predetermined survey area. Copies of the prepared petitions as well as documents outlining the associated costs that the Home Owners Association and / or area residents will be responsible for, Pro's and Con's statements will be provided to the neighborhood coordinator for circulation; OR, ballots and supporting documents will be prepared by Staff and mailed directly to individual homeowners allowing them to cast their vote and return it by direct mail;
7. Petitioning / balloting can continue up to 6-months with an allowable 1-month extension if requested;
8. Once petitions / ballots are returned they are reviewed to determine if the minimum number of votes and type were obtained;
9. If consensus is obtained, Staff will make contact with the neighborhood coordinator to request any funding necessary to begin the project. All funds will be required to be secured, delivered and available to the Town prior to any materials being purchased or securing a contractor for the work;
10. Staff will be present for any installation work, and will conduct follow-up reviews / studies to determine if the devices have aided in controlling any traffic related issues.

TOWN OF
QUEEN CREEK

Application for Neighborhood Traffic Management

We, the undersigned, believe that the conditions listed below exist as described within our neighborhood. We request review within the Town's Traffic Management Program. The following signatures, representing at least ten households in the neighborhood, indicate our commitment to work with the Town of Queen Creek to determine if a resolvable traffic issue exists. We also understand that after review of the traffic issue in our neighborhood Town staff may or may not recommend the addition of enhancements (parking restrictions, STOP signs, speed humps, etc), and that this study does not guarantee that any enhancements will be made. We also understand that changes to existing traffic control devices (STOP signs, pavement markings, etc.) may also occur as a result of the review.

	Name	Signature	Address	Phone
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Neighborhood Coordinator:
Name: _____ Daytime Phone: _____
Address: _____
Neighborhood Name: _____

List the specific concerns at the above location (include any particular times of day):

*After completing the form, either mail it to the Town offices, attention "**Traffic Engineering**" or drop it off at the front counter of the Municipal Services building.*

A. Advantages and Disadvantages to Neighborhood Traffic Mitigation Device Installation

The Town of Queen Creek has established a mechanism by which traffic calming devices (*speed humps and other high impact traffic calming measures*) can be installed to address validated speed concerns on residential streets. In established neighborhoods, speeds humps (or other such devices) are the most commonly used devices. Speed humps, or other such devices have both advantages as well as disadvantages. Some of those are listed below:

Advantages	Disadvantages
Significant reduction of travel speeds ***at or near the device(s)***. For effective speed reduction, a series of devices will be installed.	Inability to reduce travel speeds to a desired level for the neighborhood.
The devices provide 24-hour, year round service in an attempt to control high travel speeds along residential streets.	May slow response times by emergency vehicles.
May discourage cut-through traffic that is using residential streets due to congested conditions on adjacent arterial or collector streets.	May divert traffic onto neighboring streets – transferring the problem to another area.
Average daily traffic volumes may decrease on residential streets thus reassigning traffic volumes to appropriate street classification usage (collector, arterial).	Increased noise level due to vehicle acceleration/deceleration of vehicles near the device installation.
Speed humps, in particular are relatively inexpensive when compared to other types of devices.	Some residents may find speed humps and associated signing and pavement markings aesthetically unpleasing.