

# Township of Howell

## Neighborhood Traffic Management Policy

---



---

**Thomas J. Czerniecki**  
Township Manager

*Approved:* February 2007  
*Revised:*



## TOWNSHIP OF HOWELL NEIGHBORHOOD TRAFFIC MANAGEMENT POLICY

---

### Key Findings:

This policy outlines the procedure for action the Township could take to protect neighborhood roadways from traffic diverted from congested arterials. Traffic calming measures may be appropriate in Howell Township where there is a documented need to:

- Reduce neighborhood cut through traffic
- Reduce traffic speeds through neighborhoods
- Accentuate multiple transportation options (pedestrian or bicycle use)

The neighborhood traffic management policy provides guidelines for the following activities:

- Requests for neighborhood traffic management studies
  - Documentation of traffic calming needs
  - Identification and approval of traffic calming strategies
  - Programming and budgeting of traffic calming improvements
  - Design of traffic calming projects
  - Evaluation of traffic calming projects
- 

### INTRODUCTION

The encroachment of external traffic through neighborhood areas is an issue of concern to the citizens in Howell Township. This policy addresses a procedure through which neighborhoods can be considered for filtering external traffic through traffic management measures. Traffic calming is the management of traffic through the use of education, enforcement or roadway design features. Traffic management techniques are most effective if they are both *warranted* and *properly designed*.

Traffic management solutions may be warranted where there is a demonstrated need, and where solutions can be identified that will address the need. Not only must the needs be perceived by the neighborhood, but they must also be documented to be substantive. This policy is also intended to make clear that roads are intended for transportation and not recreational purposes as explained in Appendix A. In order for neighborhood traffic management strategies to be effective, traffic data collection and analysis must validate that 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 management 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 neighborhood traffic management 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
- State regulations

Although warranted and properly designed neighborhood traffic management 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. For example, certain traffic calming devices 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, increase noise and can increase long-term maintenance costs for the Township. 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 neighborhood traffic management studies
- Documentation of traffic calming needs
- Identification and approval of traffic calming strategies
- Programming and budgeting 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:

- The Howell Township Police Department or Engineering Department may initiate a study to verify if traffic calming is appropriate to solve a specific concern with respect to traffic, pedestrian, or bicycle safety operations. This concern may be identified through staff monitoring, or through citizen complaints and Phase 1 or 2 options may be considered. Phase 2 options would require approval of the Township Council.

- Adjacent property owners may initiate the request for a neighborhood traffic calming study. This may be initiated upon receipt by the Howell Township Police Department of a petition signed by at least seventy-five percent (75%) of the property owners facing the street(s) and Block 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 neighborhood traffic management petition shall include, at a minimum, a description of the street to be included in the 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 Howell Township Police Department will review the petition for validity, and will assess whether other streets may be impacted by implementation of neighborhood traffic management strategies. The Township will define the area of potential impact resulting from a proposed traffic calming technique on a case-by-case basis for balloting purposes.

## **DOCUMENTATION OF TRAFFIC CALMING NEEDS**

All neighborhood traffic management studies shall address the following issues:

- Purpose of the study
- Emergency vehicle response
- Improvement and maintenance
- Physical and operational conditions of the street(s)
- Impacts to other streets
- Traffic speed
- Traffic volume
- Through-traffic
- Accident experience
- Vehicle-pedestrian conflicts
- On street parking

The Howell Township Police Department shall be responsible for conducting traffic studies in accordance with these guidelines under the supervision of the Traffic Safety Officer. If the Township so elects, the study may be outsourced to a qualified traffic safety consultant. It is estimated that a typical traffic study will require between 75 and 120 man-hours to complete. The traffic data that will be required will include:

- 24-hour directional traffic accounts.
- Spot speed samples (minimum required will be not more than 4 hours total sample, or 100 vehicles, whichever comes first).

- Review of three years' accident records at the subject location (conducted by police).

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

**Table 1 Local Streets Rating Criteria**

| <b>Criteria</b>       | <b>Points</b> | <b>Basis</b>  |
|-----------------------|---------------|---|
| Speed                 | 0 to 40       | 5 pts assigned for every mph greater than 5 mph above the posted speed [(85 <sup>th</sup> 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 to 5        | 1 pt for each accident/year at one location   |
| School Crossing       | 0 to 10       | 10 pts if children must cross street to get to School   |
| Total Points Possible | 100           |   |

**Table 2 Collector Streets Rating Criteria**

| <b>Criteria</b>       | <b>Points</b> | <b>Basis</b>   |
|-----------------------|---------------|--|
| Speed                 | 0 to 30       | 5 pts assigned for every mph greater than 5 Mph above the posted speed [85 <sup>th</sup> 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 to 10       | 10 pts if no continuous sidewalk   |
| Residential Density   | 0 to 10       | 1 pt for every 50 dwelling units/mile  |
| School Crossing       | 0 to 10       | 10 pts if children must cross street to get to School  |
| Pedestrian Generators | 0 to 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**

Township 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 Township staff shall present relevant strategies as options for traffic calming, as provided in the attached Phase I and Phase II techniques. Phase I includes signing, marking, and other enforcement techniques as explained in Appendix B. Phase II tools includes traffic calming strategies involving designed features as explained in Appendix C. 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. If a Phase II option is chosen, 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 Township will give further consideration to traffic calming implementation.

## **PROGRAMMING OF TRAFFIC CALMING IMPROVEMENTS**

Once each year, Township staff will prioritize those traffic calming strategies within the Township that have been approved within their area of impact. Prioritization will be based on the rating system. The Township will program priority traffic calming improvements within the capital improvement budget, as approved by the Township 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 Traffic Safety Officer, 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 Township 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.

## **HIGH ENFORCEMENT ZONES**

The Township will consider designated areas that do not qualify for traffic calming measures because of State regulations or because they function as a critical emergency response routes as **High Enforcement Zones** (HEZs). Request for this designation must be approved by the Township Council based on a resource analysis from the Howell Township Police Department.

## **APPENDIX A**

### **Purpose of Public Streets**

Streets are designed for the safe and efficient conveyance of people and goods, typically through motorized means. Where commuting also involves bicyclists or pedestrians, the street design will typically include shoulders, marked bike lanes and sidewalks. Under no circumstances are streets designed to accommodate recreational uses. The Township of Howell cannot assume responsibility or in any other way encourage the use of public streets for recreational purposes. Through this policy, the Township confirms its position that utilizing streets for recreation is simply dangerous and discouraged. When the public does utilize the streets for these purposes (i.e. basketball, street hockey, and other activities), they assume responsibility for their safety, that of their family members and may also be liable for the safety of the motorist. Accordingly, Township will reject any request to make physical modifications to street that contribute to false confidence that streets may be utilized for recreational purposes.



## APPENDIX B

### Phase 1 – Neighborhood Traffic Management Options

**Additional Signage:** The Township will evaluate the need to replace and/or supplement existing speed limit signs. The Township will only utilize signs that are consistent with the *Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)*.

**Pavement Striping:** This measure is typically includes edgeline, centerline and transverse markings on the street to provide guidance and information to the driver. Striping can create the perception of narrowing of the roadway, which can contribute to speed reduction. Transverse markings are typically used at curve locations. Pavement markings can also include the establishment of bike lanes.



**Pavement Markings:** Some streets may qualify for pavement markings, where the speed limit is painted to the street. These markings heighten motorists' awareness of the posted speed limit.



**Portable Radar Units:** These signs use radar to provide motorists with an instant message displayed on a reader board them how fast they are driving.



**Police Enforcement (Targeted):** It is not possible to place a police officer on every corner of 300 + miles of roads that exist in Howell Township. Therefore, limited personnel and resources require the Township to place an emphasis on the busiest thoroughfares in the community. The best that can be offered to those living on low volume streets is periodic speed enforcement. However, it must be noted that empirical research demonstrates that after enforcement speeds remain unchanged (see Section



– discussion regarding 85<sup>th</sup> Percentile).

The Township will consider designating areas that do not qualify for Phase 2 traffic calming measures because of State regulations or because they function as a critical emergency response routes as **High Enforcement Zones** (HEZs).

**Keep Kids Alive Drive 25 Campaign:**

In many instances, speeding in residential neighborhoods is a direct result of the driving behavior of residents of that neighborhood. Keep Kids Alive, Drive 25 works to address the problem at the grass roots level by inviting residents to take responsibility for their own driving behavior. The reality is that the problem of residential speeding can best be addressed (and should be addressed) by the people most directly affected by its impact, as reflected throughout the policy.



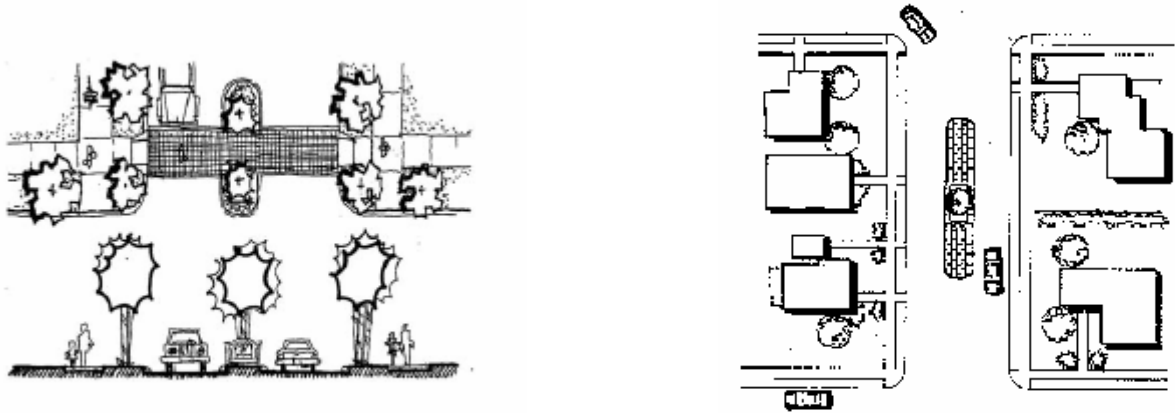
The campaign will include:

- Engaging partners – neighborhood organizations, law enforcement, schools, businesses, Mayor/Council, and other interested civic organizations.
- Development of an implementation plan that would include:
  1. Educational efforts
  2. An initial speed study to gather data on driving behavior on neighborhood streets.
  3. Setting a kick-off date.
  4. Sustain efforts over time. Continue to integrate educational information in newsletters and all media.
  5. Conduct post studies to gather data on the effectiveness of the campaign. These can include speed studies, as well as studies targeting residents’ sense of safety on neighborhood streets.
  6. Re-energize each year. Include new ideas for implementation each year.
- Implement the plan and seek to engage additional partners as the campaign takes root community wide.

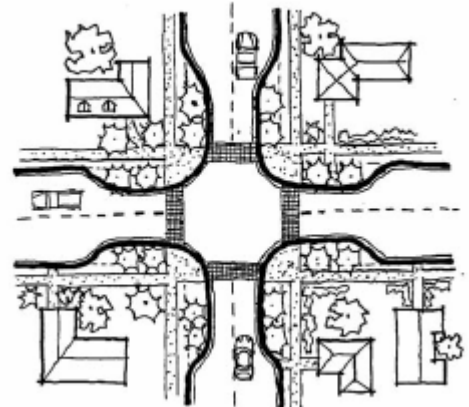
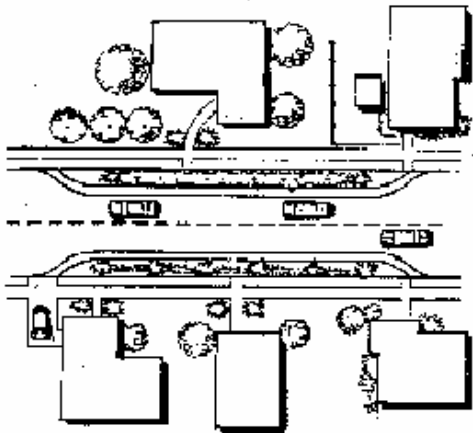


**APPENDIX C**  
**Phase 2 – Neighborhood Traffic Management Options**  
(Subject to Howell Policy Process, Funding Availability and State and Federal Guidelines)

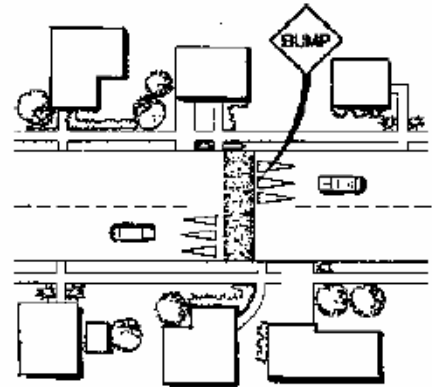
**Entry Treatments, Medians & Pedestrian Safety Islands**



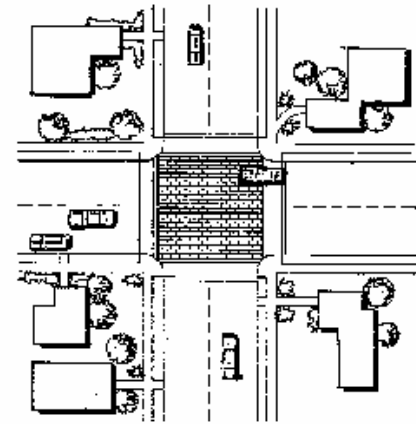
**Roadway Narrowing (Chokers & Neckdowns):**



**Speed Humps, Tables & Raised Crosswalks:**



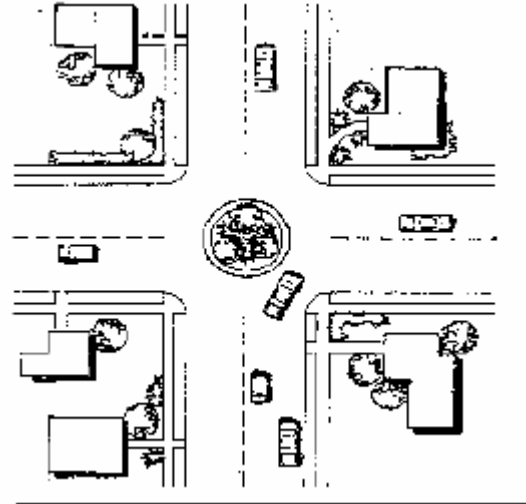
**Raised Intersections:**



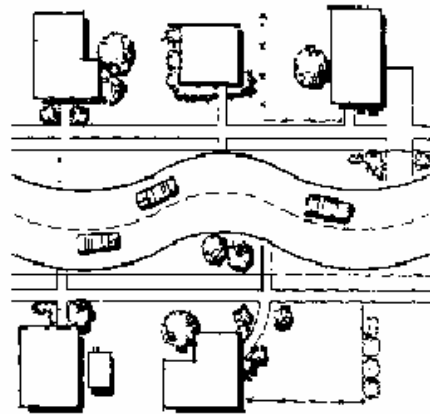
**Stationary Radar Signs:**



**Traffic Circles:**



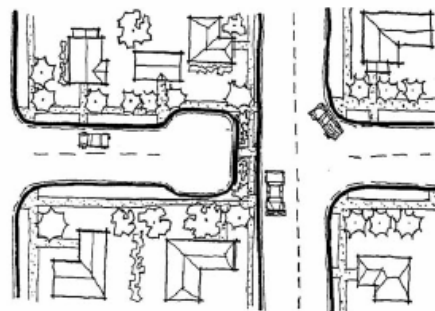
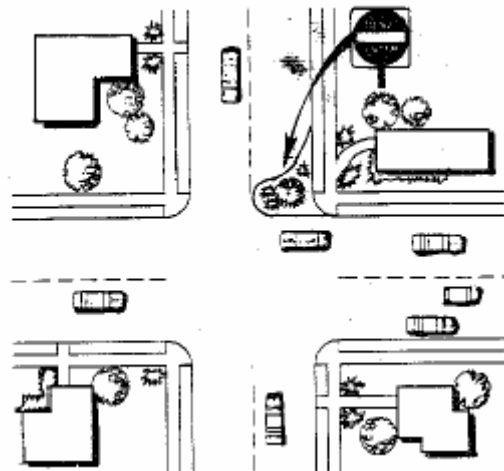
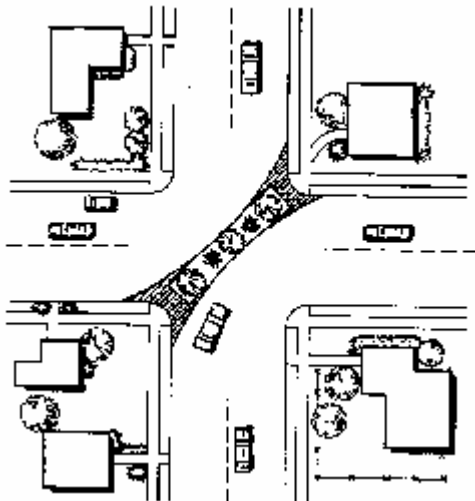
**Chicane:**



**Intersection Realignment:**



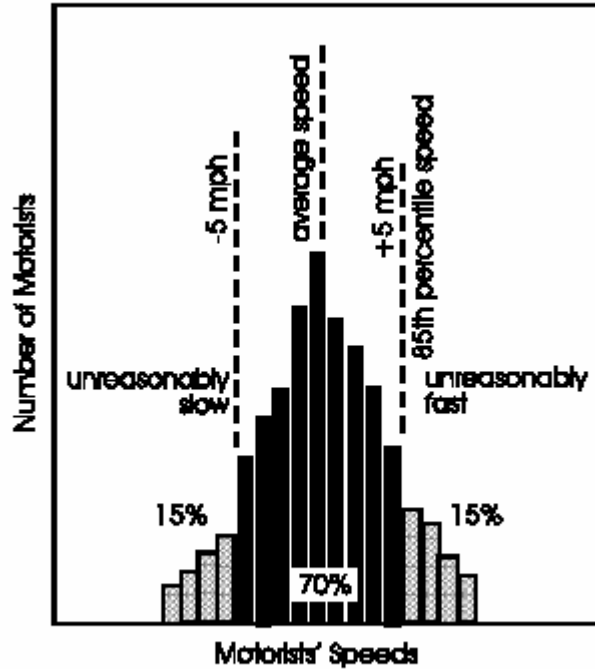
**Full or Partial Closures:**



## APPENDIX D Speed Determination - 85<sup>TH</sup> Percentile Explained

The 85<sup>TH</sup> percentile is the most common factor that states and local governments use in establishing a safe, reasonable and non-subjective maximum speed for a roadway. Under this approach, it is generally accepted by traffic safety engineers that the majority of motorist will select a speed to reach their destination in the shortest time possible while not endangering themselves, others and their property.

Most motorists will travel at similar speeds after evaluating road conditions such as lane widths and access points. Traffic investigations will measure speeds on a section of road over a period of time and determine the 85<sup>th</sup> Percentile speed. Basically, the 85<sup>th</sup> Percentile speed separates the slower 85 percent from the fastest 15 percent.



**Typical distribution of driver speed**

It is also important to point out that simply posting lower speed limits does not decrease motorist's speeds, and in some cases may increase accident rates. The reason that the 85<sup>th</sup> Percentile speed is considered safe has to do with research indicating that the potential for being involved in an accident increases when traveling at a speed that is either much higher or lower than the majority of motorists.

The 85<sup>th</sup> Percentile speed places that majority of motorist into compliance with the law and allows law enforcement to pursue those who truly operate vehicles in a dangerous manner. Reducing speed limits below the 85<sup>th</sup> Percentile creates a situation where permanent enforcement is needed to obtain compliance. Such a sustained effort is not realistic and achievable.

