Baltimore County, Maryland

Department of Public Works

Neighborhood Traffic Management Program



May, 2003 Revised September 2007 Revised July, 2016 Baltimore County Department of Public Works 111. W. Chesapeake Ave. Towson, MD 21204

Table of Contents

Introduction
Goals
Implementation Procedures
Overview4
Application Process5
Application Process Flowchart
Worksheet
Point System Criteria9
Neighborhood Traffic Management Program Solutions
Passive Traffic Control Measures10
Physical Alteration Control Measures
Appendix

Introduction

The Neighborhood Traffic Management Program (NTMP) for residential streets represents the commitment by Baltimore County to promote and maintain the safety and livability of the County's residential neighborhoods. As congestion along the highway network has grown in frequency, magnitude, and duration, resourceful motorists have found bypass routes through local residential streets. Aggressive driving and a diminished respect for other motorists, pedestrians, traffic control devices and general "rules of the road" have become more common. Increased traffic volumes and vehicular speeds have negatively impacted the livability of many residential communities.

In an effort to reduce the negative impact of traffic in our neighborhoods, the Neighborhood Traffic Management Program provides a process for identifying, evaluating and addressing undesirable traffic conditions relating to speed, volume and cut-through traffic in our residential neighborhoods. By working with the community and conducting the necessary traffic engineering studies, the Department of Public Works will assist the community in developing a plan to deal with these undesirable traffic conditions.

Goals

The overall goals of the Neighborhood Traffic Management Program are as follows:

- 1. Improve neighborhood livability by reducing the speeds and impact of vehicular traffic on residential streets, while providing for the safe, efficient and economical movement of persons and goods through the County.
- 2. Promote safe and pleasant conditions for residents, pedestrians, bicyclists and motorists on neighborhood streets, while preserving access for emergency vehicles, buses and other users.
- 3. Encourage and promote citizen involvement in all phases of the Neighborhood Traffic Management Program.
- 4. Make efficient use of County resources by ranking requested streets according to their Neighborhood Traffic Management Program point assignment scores and other factors.
- 5. Make periodic evaluations of the policy to ensure the stated goals are being met.

Implementation Procedures

Overview

A number of strategies are available to treat the described motorist behavioral problems. The overall effort is popularly referred to as "traffic calming". Although "livability" issues are real, a traffic calming program should be needs driven. Traffic calming initiatives must be responsive to identified problems that can be quantified, ranked, and measured against acceptable uniform standards. Many of the traffic calming strategies have potential negative impacts including operational problems, public acceptance, and resource limitations.

A point system has been developed with equal weights given to the three main sources of undesirable traffic on residential streets. From this rating scale, the Department of Public Works will determine the severity of the problem and the appropriate level of response. Once this determination has been made the community must demonstrate adequate support using a petition process before any traffic calming devices will be considered for their street. After final design and community approvals, the Department of Public Works will use the street's individual rating and available funding to prioritize construction. For streets that do not meet the required ratings or lack community support, alternative passive measures will be identified.

There are two primary strategies to help the community minimize negative traffic impacts to the neighborhood. The levels of traffic control measures include: Passive Measures, and Physical Alteration Control Measures. Each level of traffic control measures has several options available. The descriptions and limitations of the available options under each category can be found later in the text.

Application Process

Steps for consideration in the Neighborhood Traffic Management Program are listed below. Following the written description of the application process is a flowchart and worksheet that corresponds to each step of the application process. In addition, there are blank forms located in the appendix.

- 1. The Community requests the Department of Public Works in writing to consider a street in their community for a Neighborhood Traffic Management Program. The request shall include the community representative's address, daytime phone number and street to be studied. Additionally, a brief description of the community's concerns should also be included and the location on the street where speeds seem to be the highest. This action initiates Phase I of the evaluation.
- 2. To complete Phase I of the evaluation and proceed to Phase II, a street must meet four basic requirements. The requirements are as follows:
 - The road segment to be studied must be at least 1000' long.
 - Dead end streets and cul-de-sacs will not be considered.
 - The majority of the property adjoining the street must be residential and homes front on the street.
 - The street must be within the urban rural demarcation boundary**
 ** Consideration will be given to residential neighborhoods outside of the URDL that have an average lot size of 2 acres or less for the entire street.

Streets failing to meet these basic requirements will only be eligible for Passive Traffic Control Measures see page 11.

- 3. After the Department of Public Works has verified the basic requirements of Phase I of the evaluation have been met, the Department of Public Works will schedule Phase II of the evaluation, which consists of measuring traffic volume and average speed for the requested street.
- 4. Once the speed and volume counts are obtained, they will be analyzed by the Department of Public Works. Points will be assigned for the highest one hour traffic volume and the average speed of all vehicles over a 48hr period. <u>Streets failing to meet the minimum requirements of Phase II will only be eligible for **Passive Traffic Control Measures**. Roadways with a one hour traffic volume above 350 vehicles will not be eligible for speed humps.</u>
- 5 Additional points will be added for phase III for lack of sidewalks or in a school zone.

- 5. The Department of Public Works will develop a custom construction plan for the community's approval. The plan and a map showing which homes need to be petitioned will be sent to the community representative. The petition requires an overall approval rate of 75%. Included in the 75%, ALL of the homes immediately adjacent to a proposed calming device being must sign on the plans in favor of the installation.
- 6. If the required approvals are obtained, the Department of Public Works will proceed with final design and schedule the project for construction using the ultimate point value and available funding.

Removal of an approved device:

Once calming devices have been installed they will be considered permanent. After the device has been installed for one year the Community may request the County to remove the device. The request must be accompanied by a petition signed by 75% of the community requesting the removal.

Requests for re-study of streets that did not qualify

If the initial study shows that the minimum traffic volume have been met but the average speed requirements were not the community may request the County to re-study the street. The Community shall provide the County with the exact location where the counts should be taken. If the re-study indicates that the street still does not qualify the Community may resubmit an application 9 months after the date of the second study. Streets that did not meet the minimum traffic volume requirements may submit a new application 9 months after the date from the first study.

Traffic Calming Flow Chart

Community Request to Department of Public Works Phase I Minimum Requirements (Road Characteristics) Phase II Evaluation (Speed & Volume) Phase III Evaluation Other considerations Develop Concept Plan with Community

Community Petition 75% Approval

Final Design and Construction

			YE	ES NO	
				l	
1. Is the requested street a	t least 1,000' long?			<u> </u>	
2. Is the requested street a dead end or cul-de-sac?					
3. Is the majority of the pro-	perty adjoining the requeste	ed			
street residential, and ho	. , ,				
4. Is the street inside the ur	rban rural demarcation bour	ndary**			
If not, only Passive Traffi ** Consideration will be g	the highlighted box must be ic Control Measures will be given to residential neighbor acres or less for the entire s	applied to the request. rhoods outside of the U			
PHASE II					
1. Traffic Volume					
	red by Vehicles per Hour (V nts are awarded based on tl		ır		
VDII	VDU	VDU	VDU	Awai	
VPH	VPH 150 to 250	VPH 251 to350	VPH <u>351 plus</u>	Poi	
100 to 149					
15 Points	20 Points	25 Points	0 points		
15 Points		25 Points	0 points		
15 Points 2. Traffic Speed Traffic Speed is measure	20 Points ed by the Average Mile per	Hour (MPH) for all vehi	cles.		
15 Points 2. Traffic Speed Traffic Speed is measure	20 Points	Hour (MPH) for all vehi	cles.		
2- Traffic Speed Traffic Speed is measure Points are awarded base	20 Points ed by the Average Mile per led on the difference betwee MPH	Hour (MPH) for all vehi n the average speed ar MPH	cles.	Awa	
2. Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10	Hour (MPH) for all vehi n the average speed ar MPH 11 plus	cles.	Awa	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awa Poi —	
2. Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awa Poi —	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awa Poi —	
2. Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awai Poi	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awaı Poiı —	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awa Poi Total	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awa Poi Total	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awai Poii Total	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu PHASE III	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points ust be 40 points or greater to	Hour (MPH) for all vehi n the average speed ar MPH 11 plus 25 Points	cles. nd the posted speed lir	Awai Poi Total	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu PHASE III 1. Other Consideratio	20 Points ed by the Average Mile per led on the difference between MPH 7 to 10 20 Points ust be 40 points or greater to	Hour (MPH) for all vehich the average speed and MPH 11 plus 25 Points or proceed to PHASEIII.	cles. nd the posted speed lir	Awa Poi Total	
Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu PHASE III 1. Other Consideratio If a School Zone or Pede	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points ust be 40 points or greater to	Hour (MPH) for all vehich the average speed an MPH 11 plus 25 Points or proceed to PHASEIII.	cles. nd the posted speed lir	Awai Poi Total	
15 Points 2. Traffic Speed Traffic Speed is measure Points are awarded base MPH 3 to 6 15 Points * Phase II Point Total mu PHASE III 1. Other Consideratio If a School Zone or Pede	20 Points ed by the Average Mile per led on the difference betwee MPH 7 to 10 20 Points ust be 40 points or greater to the section of the difference betwee many sections.	Hour (MPH) for all vehich the average speed an MPH 11 plus 25 Points or proceed to PHASEIII.	cles. nd the posted speed lir	Awar Poir Total Awar Poir	

Physical Alterations

Neighborhood Traffic Management Program Point System Criteria

The following point system criteria are used to determine the street's point score:

Traffic Volume – Points are assigned according to the street's Peak Hour Volume (PHV). Peak hourly volumes are normally registered between the hours of 4:00 to 6:00 PM, on average weekdays. Points are given on a graduated scale from 100 to greater than 350. Streets with a PHV of less that 100 will be approved for passive measures only. Streets with a PHV above 350 will not be considered for speed humps

Speed – Points are assigned according to how many miles per hour the average speed is measured above the posted speed limit. Points will be assigned on a graduated scale from 3mph above the limit to greater than 11mph. Streets with an average speed below 3mph above the posted limit will only be eligible for passive measures.

School Zone / Pedestrian Generators – 5 points will be assigned if a school is located on the street or in the immediate area or if other pedestrian generators such as a community park, shopping center, etc. are in the same area.

Sidewalks – 5 points will be assigned if the street does not have continuous sidewalks on at least one side of the street.

Neighborhood Traffic Management Program Solutions

Passive Traffic Control Measures

Passive measures include educational methods and police enforcement. No minimum criteria must be reached to be eligible for this level. Some examples of measures that can be taken under this level are as follows:

- 1. Speed notification sign board this device displays a motorist's speed as they approach the signboard in an effort to educate the driver that their speed might be inappropriate and to raise driver consciousness of their travel speed. Community mailings a letter sent from the community association to all of the residents of the street asking for their assistance to help control the speed that they travel in the community. This procedure is effective if cutthrough problems are not present.
- 2. Police enforcement periodic radar enforcement.



Physical Alteration Control Measures

Physical alterations include Traffic Circles, Chokers, Pedestrian Refuge Islands, Medians and Speed Humps.

Minimum Requirements: Local residential roadway, 1000' or longer with a total point value of 40 or higher and a final petition signed by a minimum 75% of the affected households and by all of residences with a device being installed in front of their homes must sign.

• Only the table top style speed humps shall be installed which consist of a 6' parabolic approach to a 10' long plateau in the center resulting in a total length of 22'.



• Chokers/Pedestrian Refuge Islands – Chokers are the narrowing of streets, either at an intersection or mid-block, to reduce the width of the travel way. Chokers can be designed to widen the sidewalk (bulb design), or an island may be constructed, which would force the traffic toward the curb (island choker). Either way, chokers appear to have the greatest effect in the area of pedestrian safety. By reducing the amount roadway width, the choker dramatically reduces the exposure time that a pedestrian is in the street. Additionally, both chokers break up the appearance of the roadway and may be landscaped to increase the attractiveness of residential neighborhoods.



Traffic Circles – Traffic circles are different from traditional roundabouts in that they
are circles placed in an intersection without modifying the outside curbs. As with
roundabouts motorists must yield to traffic in the circle. The primary consideration for
installing these types of devices will be the effect on emergency vehicles and school
buses. They must be designed in a way that these types of vehicles can either turn left by
going around the circle or in some cases turn left in front of the circle by driving over
mountable splitter islands.



Appendix

blank initial request form

blank petition form

Neighborhood Traffic Management Program Request Form

Community Organization (if any):								
Community Represen	tative:							
Address								
City	S	State	Zip Code					
Work Phone	Home Phone		E-mail Address					
Requested Street								
Address on the street	where speeds are the high	nest (critica	al information)					
Description of the Pro	blem							

Mail the completed request form back to Baltimore County Department of Public Works Traffic Engineering and Transportation Planning 111 West Chesapeake Avenue, Room 326 Towson, Maryland 21204

Traffic Calming Petition

Dear Neighbor			
in favor of Baltimore C support before the proje home must sign on the	County installing these ect can be constructed	e installation of traffic slowing devices a devices (see traffic calming plan) pleas l. Anyone who has a traffic calming deve can be installed.	e sign below. We need 75%
Address		Signature	
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-

Mail the completed form back to Baltimore County Department of Public Works Traffic Engineering and Transportation Planning 111 West Chesapeake Avenue, Room 326 Towson, Maryland 21204