Adopted April 18, 2011

City of Traverse City

Neighborhood Traffic Calming Program

Introduction

The City of Traverse City is committed to the safety and livability of its neighborhoods. This Neighborhood Traffic Calming Program is designed to be a joint effort between the residents and the City to: identify traffic issues, create and implement a plan to address those issues, and evaluate the effectiveness of the various solutions.

Goals and Objectives

Our intent is to establish a consistent and comprehensive process to address traffic concerns in our neighborhoods. Prudent implementation of traffic calming measures can promote a high quality of life and active character within the City's neighborhoods. Furthermore, this program strives to make our streets safer and quieter.

Program Objectives:

- Improve neighborhood livability by mitigating the negative impact of motor vehicle traffic.
- Promote safe and pleasant conditions for residents, motorists, bicyclists, pedestrians and transit riders.
- Promote and support the use of transportation alternatives
- Encourage citizen participation in all phases of traffic calming program activities.
- Make efficient use of City resources by prioritizing program activities.

Program Guidelines:

- Through traffic will be encouraged to use higher classification streets.
- Traffic calming devices shall be planned and designed in keeping with sound engineering and planning practices.
- Emergency vehicles will be accommodated.
- Reasonable vehicle access will be maintained; it is not acceptable to divert traffic to other streets.
- Pedestrian, bicycle and transit access will be encouraged or enhanced wherever possible.
- We will work with MDOT on designs for State Highways (US31, M-37, M-72)

Street Categories

Traffic calming measure will be applied to a street based on its category: "framework" streets and "non-framework" streets. **See Attachment 1: Framework Street Map and Attachment 2: Examples of Traffic Calming Measures.**

Framework streets include community collector streets and arterial streets that serve as regular emergency vehicle routes. Framework streets, because they are the first emergency routes for the City, may require additional analysis including the role of the street, which may limit the types of traffic calming measures that can be installed.

Non-Framework streets include local streets and neighborhood collector streets, which are rarely used by emergency vehicles. Non-framework streets would may not require the same level of analysis or have the same limitations on traffic calming measures as framework streets as they have a different role within the street network.

Neighborhood Traffic Calming Program Process

Project Initiation:
The first step is for the residents to identify the traffic concerns in the neighborhood and inform the City through a written citizen request stating the problems or issues being experienced. This can be done by using the attached form, also available on the City website, or a letter addressed to the City. **See Attachment 3: Form.**

Project Review:
Once we receive the request, staff will arrange for a site visit and meet with the neighborhood to discuss their concerns and review current traffic control measures. For project areas within a Neighborhood Association, staff will work with the Association President and/or Board to implement this Program. For project areas not within a Neighborhood Association, staff will encourage interested residents to volunteer as representatives to work with staff to develop a neighborhood traffic calming plan. Residents not serving as representatives are welcome to attend all meetings and time will be allotted for public comments and questions.

Problem Identification/Needs Assessment:
Staff will meet with the neighborhood representatives to make sure the problem definition represents the issues identified by the residents. There is a variety of techniques to help define the problem including:

- Citizen input including needs, values, suggestions, etc.
- Traffic observations including volumes, speed, parking, safety, access, etc.
- Environmental concerns including noise and air pollution, safety, access for pedestrians and cyclists, visual quality, etc.
- Observation of resident activities including street activities, cycling, pedestrians, disabled, parking etc.
- Collect pertinent data, as necessary, such as historical traffic data, crash statistics, volume and speed counts, land use data, etc.

Once all the information has been collected and analyzed, it must be determined if the street meets the minimum volume **(1000 vehicles/day)** and speed criteria **(15% of the vehicles traveling over 5mph over the speed limit)** and if traffic calming will address the concerns. From this information, staff and representatives will compose a Neighborhood Traffic Calming Plan. In general, the lowest level, effective traffic calming measure would be tried first.

Once the Plan has been formulated, neighborhood representatives would host discussions with the residents and property owners of the entire neighborhood. After which staff will work with neighborhood representatives to initiate the recommended solutions.

Petitioning of Neighborhood

For Plans with physical devices, a survey will be circulated by staff to the affected property owners to determine support for the plan. Signatures representing greater than 50% of the property owners within the project area would be required for further consideration of the project. The survey will acknowledge that funding for plans with physical devices on streets not currently being reconstructed will be paid 75% by the City and 25% by the affected property owners through a Special Improvement District process.

Funding

The neighborhood and staff must agree that a plan is ready before it is considered for funding. Costs count. If the neighborhood and the City can agree on a low(er) cost solution, it is easier to fund and more projects may be implemented. Since resources are limited, it is possible there will be more projects than available funds. A project ranking will be used to come up with a priority list for funding. **See Attachment 4: Project Rating Criteria.**

Solutions including Neighborhood Speed Watch, Portable Speed Trailer, Brush Trimming, Pavement Markings, Signage, Target Enforcement, etc. will be funded entirely by the City. Solutions including physical devices will be paid 75% by the City and 25% by the affected property owners. Neighborhoods would be given the option, if they do not wish to wait until their project comes to the top of the list, to pay 100% of the costs.

The City is committed to ensuring a basic, effective level of mitigation on neighborhood streets. If a neighborhood decides that it wants significant additional amenities over and above what is believed to correct the situation, it will need to pay the extra cost of these amenities. If the plan requires significant City funding, capital and/or maintenance costs, then a funding proposal would also be developed by the neighborhood with assistance of City staff.

Evaluation

Each project will be evaluated for effectiveness, based on the same factors that measured the problem and design in the first place and realistic expectations about how close to correcting the issue we can get. Since much of what we will be doing may be experimental, it will be important to measure the actual change in speed, crashes, volumes, etc. so that neighborhoods can benefit from each other's experiences.

We will need to specifically articulate how to define success before the treatment is installed. If it fails to meet the minimum expectations, or the negatives outweigh the positives, removal will be considered.

Staff will keep an inventory of measures, routinely inspect, and review the measures for maintenance and safety issues. We will be learning from each project's successes and failures as we start working with traffic calming measures. If a project does not get the anticipated results, the City will continue to work with the neighborhood to try to effectively mitigate the problem.

Summary

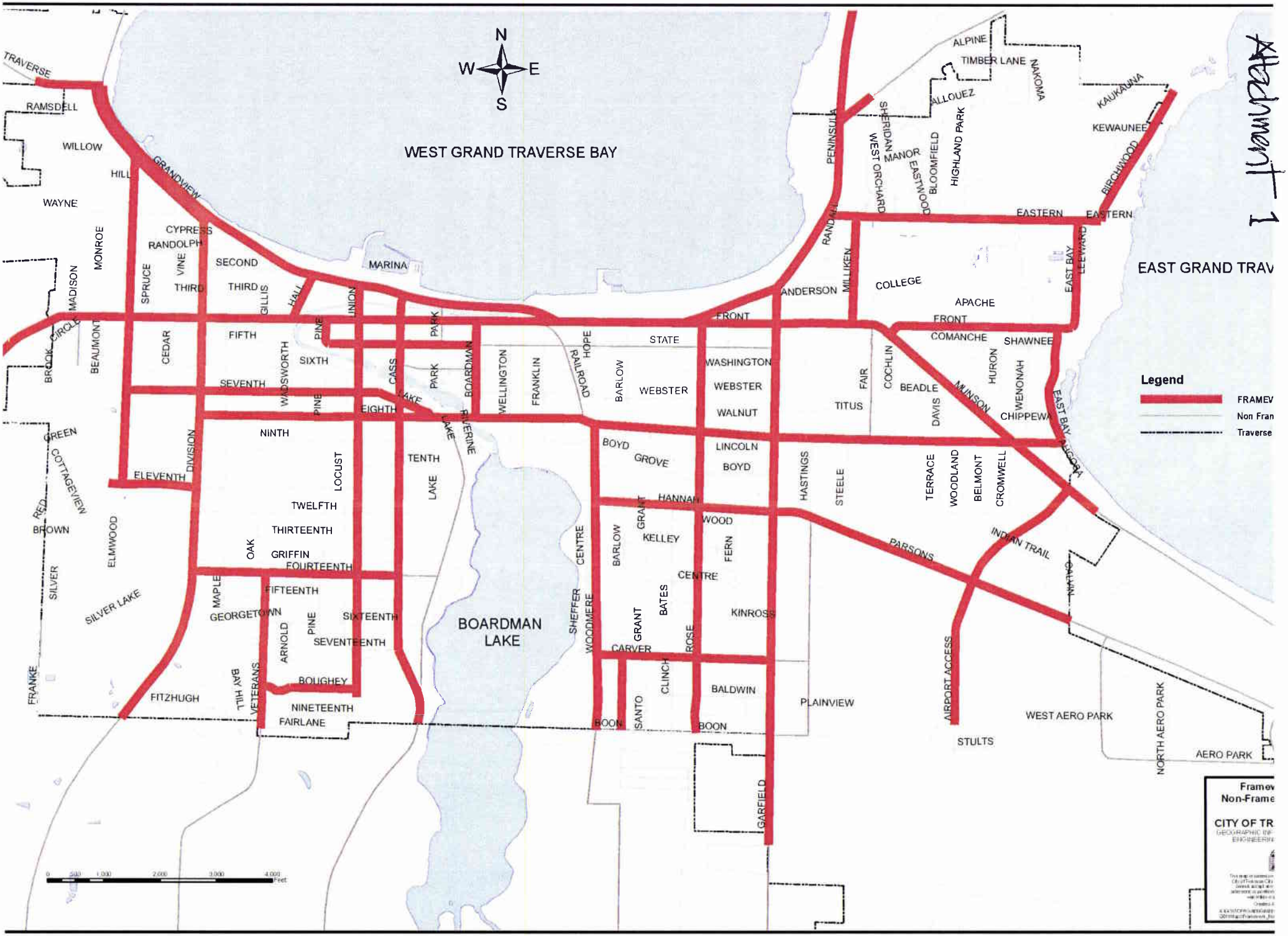
This Neighborhood Traffic Calming Program is intended to achieve the City's goal of ensuring a high quality of life and active character within neighborhoods. Through the implementation of appropriate traffic calming measures as proposed in this program, the City of Traverse City will work towards lessening the negative impact of motor vehicles on the residents' and property owner's right to enjoy quiet and safe streets and sidewalks within our community. This program is intended to be an evolving document as the City gains experience in the use of traffic calming measures.

Measures proposed through this process must be consistent with accepted transportation engineering practice and reflect the needs and characteristics of all potential users of the City's street system.

For more information on the Traverse City Traffic Calming Program, please contact the City Planning Department at 922-4778.

Text highlighted is the change made after the April 4, 2011 City Commission meeting.

April 12, 2011


Attachment 1
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WEST GRAND TRAVERSE BAY
BOARDMAN LAKE
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TRAVERSE
RAMSDELL
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MADISON
MONROE
BROOK CIRCLE
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WADSWORTH
GILLIS
HALL
UNION
PINE
CASS
PARK
LAKE
RIVERINE
BOARDMAN
WELLINGTON
FRANKLIN
RAILROAD
HOPE
STATE
FRONT
ANDERSON
MILLIKEN
RANDALL
PENINSULA
ALPINE
TIMBER LANE
NAKOMA
ALLOUEZ
SHERIDAN
WEST ORCHARD
MANOR
EASTWOOD
BLOOMFIELD
HIGHLAND PARK
KAUKAUNA
KEWAUNEE
BIRCHWOOD
EASTERN
EAST BAY
LEEWARD
COLLEGE
APACHE
COMANCHE
SHAWNEE
HURON
WENONAH
CHIPPEWA
MUNSON
BEADLE
DAVIS
COCHLIN
FAIR
TITUS
WASHINGTON
WEBSTER
WALNUT
LINCOLN
BOYD
GROVE
HANNAH
WOOD
KELLEY
FERN
CENTRE
KINROSS
BARLOW
GRANT
BATES
ROSE
CARVER
CLINCH
BALDWIN
BOON
SANTO
SHEFFER
WOODMERE
CENTRE
GREEN
COTTAGEVIEW
RED
BROWN
SILVER
ELMWOOD
DIVISION
LOCUST
TWELFTH
THIRTEENTH
FOURTEENTH
FIFTEENTH
SIXTEENTH
SEVENTEENTH
NINETEENTH
OAK
MAPLE
GEORGETOWN
ARNOLD
BAY HILL
VETERANS
BOUGHEY
FAIRLANE
FITZHUGH
FRANKE
GARFIELD
HASTINGS
STEELE
TERRACE
WOODLAND
BELMONT
CROMWELL
PARSONS
INDIAN TRAIL
CALVIN
AIRPORT ACCESS
PLAINVIEW
STULTS
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NORTH AERO PARK
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0 500 1,000 2,000 3,000 4,000 Feet

Attachment 2

Traffic Calming Tools

A choker or neckdown at State and Park Streets.

A mid-block choker or bumpout on Front Street.

Chokers/Neckdowns

Chokers and neckdowns are effective tools for slowing traffic at intersections and mid-block locations, typically in a downtown setting or where there is high pedestrian crossings. The curb line is extended into the street, thereby narrowing the street width and slowing drivers. Also called "bulbouts" and "bumpouts" these measures can eliminate illegal parking at intersections and shorten the crossing distance for pedestrians. They can provide a neighborhood gardening space or place to sit.

The measure is usually 6 feet or slightly less than a parking stall width of a parallel parking lane. Their use should be restricted to streets with on-street parking and not on streets with a striped bike lane.

Traffic Calming Tools

Speed Humps

These common traffic calming measures, if properly spaced, can reduce speeds on streets. This measure is not appropriate for primary emergency routes or framework streets. Drivers feel a discomfort if they travel over 25 mph. Speed humps are 12 feet wide and 3 inches in height and extend the full width of the street. Painted "chevrons" on the speed bump increase the visibility for oncoming drivers and cyclists.

Speed Humps are intended for non-framework streets.

Raised Crosswalks

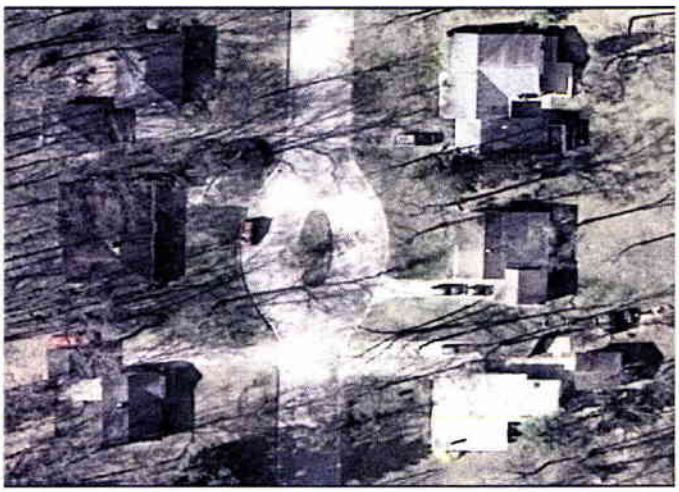
A raised crosswalk functions similar to a speed bump. A striped crosswalk is incorporated into a measure to facilitate pedestrian crossings. The crosswalk is raised 3 inches allowing pedestrians to be more visible to oncoming vehicles. Drainage requirements may limit the application of this measure.

Raised mid-block crosswalk on Front Street helps to make pedestrians and their pets more visible.

Traffic Calming Tools

Mid-block Deflector Island on Belmont Street.

Mid-block Deflector Islands or Short Medians
This measure works very well on streets with long blocks. They require drivers to deflect their travel paths on otherwise straight streets. Placed at the entrance to a neighborhood, often with textured paving on either side, they create attractive gateways. They may also serve as a pedestrian refuge area at crosswalks.



Mid-block Deflector Island on Terrace Street.

Deflector Islands at State Street and Boardman Avenue.

Traffic Calming Tools

Traffic Circles

These small traffic circles are raised circular islands located most commonly at four-legged intersections. The traffic circles slow drivers using the intersection or even mid-block on streets with long blocks. The circles also can provide an attractive gateway into a neighborhood. Unlike Chokers/Neckdowns, drainage is usually not an issue with this measure.

Traffic circle on Webster Street.

Chicanes

These measures effectively realign otherwise straight streets to form S-shaped curves. They are often designed as a series of lateral shifts rather than as continuous curves. Chicanes can be accomplished by taking stretches of curbs and angling them out on one side, then doing the same further down the street on the alternate side. If parking demand is high, parking lanes alternating back and forth along the block can be an inexpensive measure to help lower speeds.

Chicane in Brighton, Michigan.

Chicane created by alternating on-street parking from one side to the opposite side on Washington Street.

Traffic Calming Tools

Closely spaced street trees along Cass Street add beauty and if reinforced with other physical measures can help to slow drivers.

Psycho-perception Measures

Measures such as restriping to visually narrow lanes, without physical changes, won't fool many drivers. However, psycho-perception measures are most effective when used in conjunction with physical measures. Edge striping, adding bike lanes, optical speed bars (transverse markings at narrowing markings), street trees, instant-feedback signs are examples of these types of measures.

Edge striping for parking helps to narrow the appearance of Union Street even when there are no parked cars.

One study showed that streets with on-street parking slowed driving speeds by 7.5 miles per hour compared to similar streets without on-street parking.

The contrasting pavement color on the Brighton, Michigan street gives an appearance of a narrower pavement. (Photo by Dan Burden)

Traffic Calming Tools

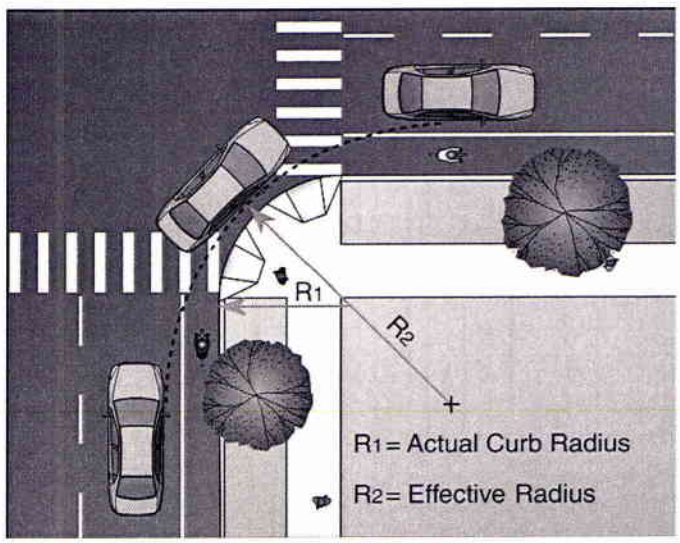
Skinny Streets

Narrower streets help to reduce driver speeds, especially if on-street parking is prevalent. This measure could be considered if the street is proposed to be totally reconstructed. Studies show that the number of crashes stay the same when a street is narrowed; however, the severity of crashes is lessened due to the slower driver speeds. Narrower streets also require less materials to construct and the amount of storm water runoff is reduced.

Wadsworth Street is 27 feet width, but widens south of Eighth Street.

Tighten Corners

By reducing the radius of the street corners, street intersections can be made tighter. This measure is effective in slowing the driver's speed when turning the corner. The tighter corners also help to shorten the crossing distance for pedestrians thus decreasing the exposure time when crossing the street. Like narrower streets, this technique requires less materials to construct and the amount of storm water runoff is reduced.



By tightening the street corners, turning movements are slowed and pedestrian safety crossing the street is enhanced.

Attachment 3

City of Traverse City
Neighborhood Traffic Calming Program
Resident Questionnaire

Date: _____
Contact Name: _____ Telephone: _____
Address: _____

1. Describe the location of the traffic problem. Please include the name of each street and/or intersection affected by the problem. _____
_____
_____

2. Of the items below, which best describes the traffic problem (circle all that apply)?
- Speeding
- Traffic Volumes
- Cut-through Traffic
- Traffic Noise
- Crashes
- Pedestrian Safety (including bicyclists)
- Parking
- Other (please explain)

3. Describe the time of day the problem appears to be the worst. Please be as specific as possible.
_____
_____

4. Describe what you feel is causing the problem. For example, particular drivers or most drivers on your street? _____
_____

5. Have you previously contacted the City of Traverse City for help in addressing your traffic problem? If yes, please indicate which departments have been contacted.
_____
_____

Please submit the following petition form along with your application to the City Planning Department, 400 Boardman Avenue, Traverse City, MI 49684.

Thank you.

Attachment 4

City of Traverse City
Neighborhood Traffic Calming Program
Priority Ranking

Criteria	Points	Basis for point assignment
Speed	0 – 35	4 points assigned for every mph greater than 5mph above the posted speed limit (using the full day 85th percentile speed)
Volume	0 – 30	3 points assigned for every 400 vehicles per day after the first 1000 vehicles
Auto Accident History	0 – 10	1 point assigned for each 0.3 recorded auto crashes per year per mile of roadway (based on the past three years)
Pedestrian generators	0 – 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 if any retail, commercial or other institutional uses (including churches) exist within 500 feet of the project area
Sidewalks	0 or 15	7 points if there is no continuous sidewalk on at least one side of the street.
Total Points Possible	**100**	

Neighborhood Traffic Calming Program
Applicant Petition

We the undersigned residents of _____, between _____ and _____ streets, request the City of Traverse City to provide traffic calming solutions for the traffic problem(s) described in the attached application.

Please place a check mark in front of your name if you would like to serve on a sub-committee to help determine your street's traffic calming solution.

Name (printed)	Address	Signature