

**AGENDA: TSC 6/6/16**

ITEM NO. 4: Consider request for TRAFFIC CALMING on Oak Hill Avenue between 13<sup>th</sup> Street and Elmwood Street.

Staff Report:

1. Oak Hill Avenue is classified as a "local" street, paved approximately 23 feet wide, with a speed limit of 20 mph, as established by City Code.
2. The City's *Traffic Calming Policy* permits traffic calming devices on "local" streets if the 85<sup>th</sup> percentile speed of traffic is 5 mph or greater over the speed limit, if the 24-hour two-way traffic volume is greater than 1000, or, if cut-through traffic comprises more than 50% of the traffic during the peak hour of the day
3. Traffic data collected on Oak Hill Avenue found the 85<sup>th</sup> percentile speed of traffic to be approximately 32.3 mph, and, the 24-hour two-way traffic volume to be approximately 505.
4. Therefore, Oak Hill Avenue does meet the minimum criteria for consideration of traffic calming.

**MINUTES: TSC 6/6/16**ITEM NO. 4:

Consider request for TRAFFIC CALMING on Oak Hill Avenue between 13<sup>th</sup> Street and Elmwood Street.

Woosley reviewed the information provided in the staff report.

Public Comments:

Byron Wiley, 1200 Almira Avenue, Vice President of Brook Creek Neighborhood Association: I think this particular segment of road is even more used as a cut-through and the 20 mph speed limit was intended to help, but, people are still zipping through there.

Michael Almon, 1311 Prairie Avenue, Secretary of Brook Creek Neighborhood Association: The basic cause of why people are cutting-through here, is 15<sup>th</sup> & Haskell; part of our request is a roundabout at 15<sup>th</sup> & Haskell; that would resolve the major part of the problem, it would eliminate a lot of the back-up and congestion; if we did have the turn restrictions at these streets and no roundabout at Haskell, if people get frustrated, they may choose another route in the morning and evening; I should point-out that Oak Hill is the cemetery road and should not have speed humps, we would prefer chicanes; also, we would like to see either turn restrictions or partial closures at the six (6) intersections with 15<sup>th</sup> Street.

Commission Discussion:

Commissioner Koprince: We approved the last one and I think this one is even more deserving.

**MOTION BY COMMISSIONER KOPRINCE, SECOND BY COMMISSIONER DEVLIN, TO RECOMMEND APPROVAL OF TRAFFIC CALMING ON OAK HILL AVENUE BETWEEN 13<sup>TH</sup> STREET AND ELMWOOD STREET; THE MOTION CARRIED, 7-0.**

## **Brook Creek Neighborhood Association**

Melissa Fahrenbruch, President

1322 Maple Ln, Lawrence KS 66044

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February 1, 2016

David Woosley, Traffic Engineer  
Traffic Safety Commission  
City of Lawrence  
Lawrence City Hall  
6 East 6th St.  
Lawrence KS 66044

Dear Mr. Woosley:

The Brook Creek Neighborhood Association has been contacted by several residents with traffic safety concerns. Several of our small residential roads are being used as shortcuts, which leads to an increase in traffic and the speed of the vehicles.

The areas of concern are:

1. East Glenn Rd
2. Maple Ln (between 13th and 15th) - mostly around school pick time (2:30pm - 5:00pm)
3. Oak Hill Ave

We are requesting this issue be addressed by the Traffic Safety Commission for possible traffic calming measures or selective time-of-day access restrictions that could be implemented in these areas.

Sincerely,

Melissa Farenbruch  
President  
Brook Creek Neighborhood Association

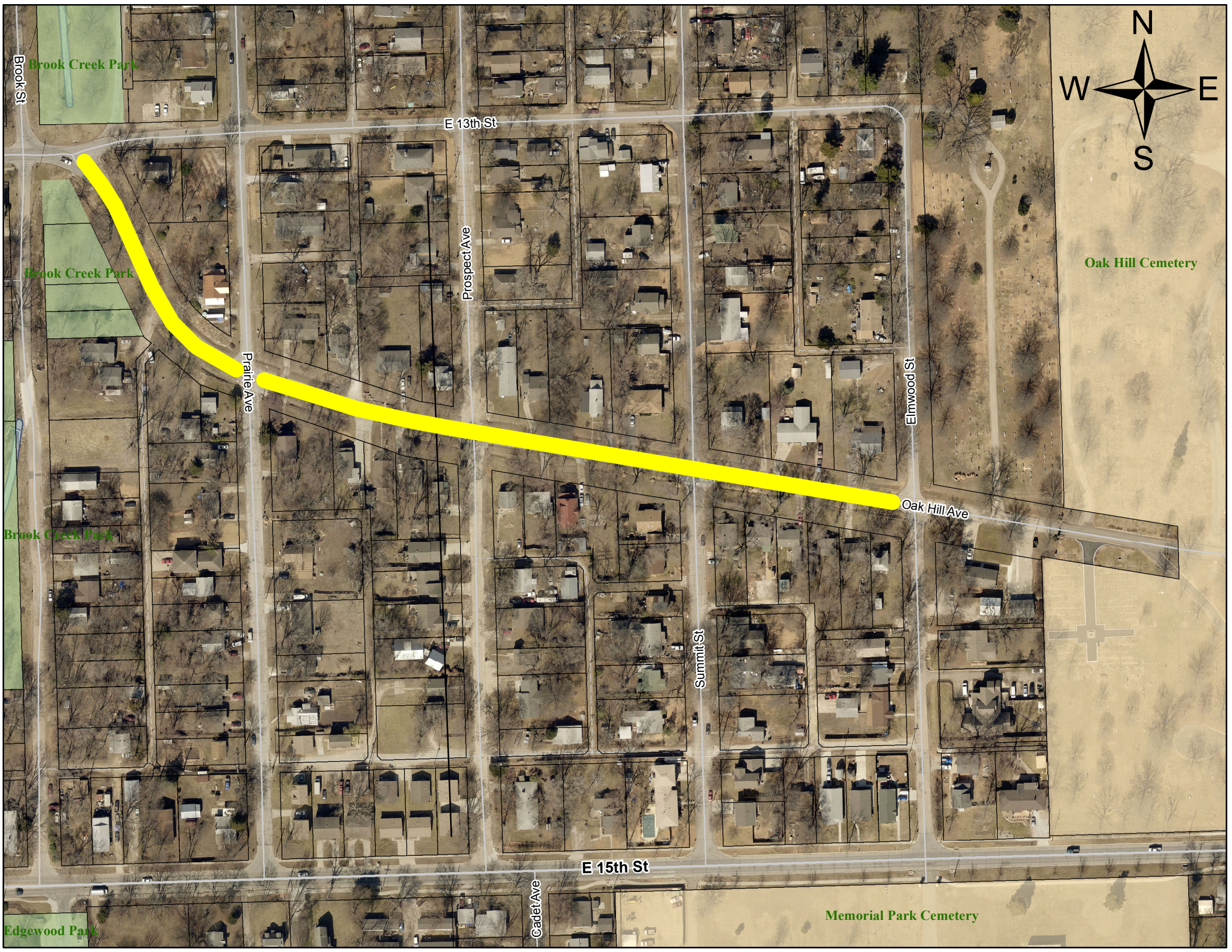


# TRAFFIC CALMING POLICY

Resolution No. 6602, August 23, 2005

1. TRAFFIC-CALMING DEVICES may include but are not limited to Traffic-Calming Circles, Speed Humps and Speed Cushions, Speed Tables, Partial Diverters, Full Diverters, Center Island Narrowing, Chokers, and Road Closures; however, roundabouts are traffic management devices and are not subject to this policy.
2. TRAFFIC-CALMING DEVICES may be permitted on "local" streets as designated by the City's Major Thoroughfares Map, and under any one of the following conditions:
  - A. The 85<sup>th</sup> percentile speed of traffic is 5 mph or greater over the speed limit, or
  - B. The 24-hour two-way traffic volume is greater than 1000, or
  - C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
  - D. Where no single condition is satisfied, but where any two of A, B or C above are satisfied to the extent of 80 percent or more of the stated values.
3. TRAFFIC-CALMING DEVICES (except SPEED HUMPS) may be permitted on "collector" streets as designated by the City's Major Thoroughfares Map, under any one of the following conditions:
  - A. The 85<sup>th</sup> percentile speed of traffic is 5 mph or greater over the speed limit, or
  - B. The 24-hour two-way traffic volume is greater than 3000, or
  - C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
  - D. More than 50% of the frontage of the roadway consists of residential lots with the houses facing the roadway in question, or
  - E. Where no single condition is satisfied, but where any two of A, B, C or D above are satisfied to the extent of 80 percent or more of the stated values.
4. Traffic data will be collected with city personnel using city equipment only. In the event that a requested location does not meet the minimum requirements as stated in 2 or 3 above, subsequent requests will not be considered for a minimum of one year.
5. The Lawrence-Douglas County Fire & Medical Department, the Police Department, the Public Works Department and the Traffic Safety Commission must review all requests for TRAFFIC-CALMING DEVICES before being presented to the City Commission.
6. If a project is approved by the City Commission, the City Commission will determine financing of the construction. The City Commission may require 0-100% of the costs to be paid by the group or neighborhood making the request.
7. After a project is approved and funded by the City Commission, TRAFFIC-CALMING DEVICES will only be constructed at a location if 70% or more of the property owners within 300 feet measured along the centerline of the street in each direction approve of the installation or if directed by the City Commission. The individual, group or neighborhood making the request shall be responsible for obtaining the property owners' and residents' approval in writing and submitting it to the city.
8. Once installed, TRAFFIC-CALMING DEVICES may only be removed at a location if more than 70% of the property owners and residents within 300 feet measured along the centerline of the street in each direction approve of the removal or if directed by the City Commission. The individual, group or neighborhood making the request shall be responsible for obtaining the property owners' and residents' approval in writing and submitting it to the city.
9. TRAFFIC CALMING DEVICES may initially be landscaped (if appropriate) by the city, provided that the group or neighborhood making the request agrees in writing to maintain the landscaping or pursuant to the payment of a landscape maintenance fee. No privately installed landscaping is permitted unless approved by the city in writing.





Brook Creek Park

Brook Creek Park

Brook Creek Park

Edgewood Park

Oak Hill Cemetery

Memorial Park Cemetery

Brook St

Prairie Ave

E 13th St

Prospect Ave

Cadet Ave

E 15th St

Summit St

Elmwood St

Oak Hill Ave



## David Woosley

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**From:** Michael Almon <paradigm@ixks.com>  
**Sent:** Monday, June 06, 2016 5:58 AM  
**To:** Ziegelmeyer, John  
**Cc:** Crawford, David; rhd851@gmail.com; tbharrod@gmail.com; Jason.hoskinson@bgcons.com; tjones@douglas-county.com; skoprince@petefishlaw.com; chrisstorm@sunflower.com; David Woosley; Fahrenbruch, Melissa; Wiley, Byron  
**Subject:** Brook Creek Neighborhood cut through traffic at TSC  
**Attachments:** BCNA Ongoing Traffic Safety Efforts\_1995-present.pdf; Traffic Calming Devices Primer\_Wallwork\_1999.pdf

Good morning, Mr. Ziegelmeyer:

I am sending you some information regarding this evening's Traffic Safety Commission agenda items #2, #3, and #4. These are to support a request by the Brook Creek Neighborhood Association for either traffic calming devices and/or street-entry turn restrictions.

The first document will provide you with a history of our neighborhood's efforts to reduce the chronic commuter cut-through traffic, much of which travels at high speed. Our efforts began in 1995, and our first request to the TSC being in 1997. The measures that have been provided by the City over the years have fallen short of our desires, and mostly failed to achieve the desired objectives.

Please review the attached history that will provide you background information, and a context for the requests before you tonight.

We ask that Mr. Woosley add the attached materials to the official agenda packet for tonight's meeting.

thank you,  
Michael Almon, Secretary  
Brook Creek Neighborhood Association  
cc: BCNA President and Vice President

Brook Creek Neighborhood  
Ongoing Traffic Safety Efforts – begun 1995

- circa 1995      Neighborhood experiencing increase in speeding and cut-through traffic.
- 9 October 1996      Neighborhood survey of traffic calming device preference, with ratings:  
1) stop signs – 46 votes  
2) speed limit reduction – 30 votes  
3) speed humps – 19 votes  
4) turn restrictions off of major streets – 17 votes  
5) Elmwood St. gated from 15th St. – 2 votes  
6) diagonal diverter across Oak Hill & Prairie intersection – 1 vote
- 13 May 1997      BCNA President, Mark Taylor, sent a request to David Woosley, Lawrence Traffic Engineer, for:  
1) stop signs on Oak Hill at Summit, Prairie, and 13th Streets  
2) turn restrictions from 5:30-9:00am and 3:00-6:00pm at 15th and Elmwood and 12th and Haskell  
3) speed limit reduction to 15mph on Elmwood, Oak Hill, 13th, 12th, and Brook Streets.  
4) investigate the use of speed humps (never before used in Lawrence)
- 28 February 1998      BCNA reply to Mr. Woosley's traffic counts, questioning why he:  
1) took counts during the Labor Day Holiday week  
2) at a time when Elmwood St. was closed for construction, and  
3) used 24 hour averages rather than cut-through rush hour periods  
We again requested traffic counts during rush hours and while K.U. is in session. We reiterated that simply installing “no turn” signs and/or stop signs would be the easiest and least costly solution.
- 17-27 April 1998      David Woosley took traffic counts again. BCNA reviewed the data at our September meeting, confirming that rush hour traffic volumes and speeds were excessive, and would be solved by traffic calming devices.
- 11 September 1998      BCNA wrote to Mr. Woosley stating that his speed and volume numbers and our own observed speed and volume numbers confirm that we need traffic calming devices. We asked to be placed on the 5 October 1998 Traffic Safety Commission (TSC) agenda. We requested:  
1) two-way stop signs on Oak Hill at Summit, four-way at 13th St., and two-way on Prairie at Oak Hill  
2) 5-9am and 3-6pm turn restriction from 15th St. onto Elmwood, Summit, Prospect, Prairie, and Brook Streets.  
3) 5-9am and 3-6pm turn restriction from Haskell onto 12th St.  
4) 20mph speed limit on Oak Hill, Elmwood, Prairie, Brook and 13th

- 23 September 1998 Mr. Woosley wrote to deny placing the BCNA item on the October TSC agenda. He said we had made new request for which he had no data. He could have the data collected in time for the 7 December 1998 meeting, and possibly the 2 November meeting.
- 28 September 1998 BCNA wrote Mr. Woosley to say that our request was of the same type as before with turn restrictions, stop signs, and speed reductions. We had only added turn signs at four corners so that all cut-through options would be addressed as a full package. The question wasn't cut-through numbers on any given street, but rather turning must be prohibited on all streets to close out all turning options.
- 1 November 1998 BCNA Newsletter had article listing all the items we had requested in our 11 September 1998 letter to Mr. Woosley. BCNA discussion took place at our October and November meetings.
- 7 December 1998 Traffic Safety Commission heard our request. Mr. Woosley advised that the situation does not warrant any traffic calming, saying that:
- 1) there had been only one Police reported collision in the last 3 years
  - 2) conditions do not warrant stop signs, which should not be used for speed control
  - 3) State law sets the default urban speed limit at 30mph, and it takes an engineering study to change it.
- Eight members of BCNA spoke in favor of traffic calming saying:
- 1) they had witnessed many wrecks on Oak Hill, on Brook, and at the intersection of 13th and Brook, and high rates of speed as well.
  - 2) speeding cars had hit mail boxes, swerved into the ditch or into the creek.
  - 3) speeding cars had blown through the intersection of 13th/Brook/Oak Hill, where there is only a single "yield" sign.
  - 4) single vehicle wrecks, or non-injury wrecks are typically not reported by the Police.
  - 5) this wasn't an issue of large volumes of traffic, but heavy cut-through traffic during rush hour, most often speeding.
  - 6) this traffic should be kept on the collector of 15th St., and not funnel through our residential streets.
  - 7) these streets are narrow without sidewalks, designated bicycle routes, and having much pedestrian use.
- The Traffic Safety Commission voted to recommend:
- 1) a four-way stop at 13th and Brook St., and
  - 2) reduced speed limit to 20mph on Oak Hill, and on 13th St. from Haskell to Oak Hill.



- 5 January 1999      Lawrence City Commission heard the recommendations from the TSC. David Woosley gave his recommendation that traffic calming was not warranted in the area. But he said the TSC had recommended a four-way stop at 13th and Brook St., and reducing the speed limit to 20mph on Oak Hill, and on 13th St. from Haskell to Oak Hill. He said that the intersection of 13th and Brook was confusing, and he thought a four-way stop there could work.
- The City Commission voted to establish a four-way stop at 13th and Brook St., and reducing the speed limit to 20mph on Oak Hill, and on 13th St. from Haskell to Oak Hill.
- The Commission also voted to refer back to the TSC the question of two-way stops at Oak Hill and Summit, and Oak Hill and Prairie.
- 1 February 1999      The TSC heard the stop sign issue sent back from the City Commission. Mr. Woosley explained the City Commission's action on stop signs and/or yield signs. He said that stop signs are warranted only where right of way is unclear or a serious collision record exists. He further said that yield signs could be warranted in this area to assign right of way, or if special problems exist. He recommended yield signs.
- Two BCNA members spoke, President Kirsten Roussel, and Michael Almon. They said that BCNA never requested nor supported yield signs that will not limit speeding cut-through traffic on Oak Hill, but rather will enhance it. They asked that stop signs be installed on the Oak Hill side streets of Elmwood, Summit, Prospect, and Prairie. They also asked that a 20mph speed limit be established on Elmwood, Prairie, and Brook.
- The TSC voted to recommend:
- 1) establishing a 20mph speed limit on all residential streets in the neighborhood north of 15th St., and
- 2) placing yield signs on all the Oak Hill side streets of Elmwood, Summit, Prospect, and Prairie.
- 2 March 1999      The City Commission voted to:
- 1) establish a 20mph speed limit on all residential streets in the neighborhood north of 15th St., and
- 2) place yield signs on all the Oak Hill side streets of Elmwood, Summit, Prospect, and Prairie.
- 25 March 1999      Traffic Calming Workshop led by Michael Wallwork of Alternate Street Design, and sponsored by the Mid-America Regional Council (MARC). Attended by Michael Almon and David Woosley.

- 23 April 2001 BCNA President, Kirsten Roussel, wrote to David Woosley requesting to be on the 7 May 2001 TSC agenda. We pointed out that when the City Commission established yield signs contrary to our wishes, we said we intended to revisit the issue if problems weren't resolved. In two year's time, the problems had worsened:
- 1) cut-through traffic from 15th St. has increased onto Oak Hill Ave. to about 1200 trips per day, a 72% increase.
  - 2) the paving of Noria Rd. (E. 1750 Rd.) up to 15 th St. has exacerbated the problem, enabling K-10 commuters with a back route.
  - 2) speeding on Oak Hill, 13th, and Brook Streets continues.
  - 4) many cars still blow through the intersection of 13th and Brook, which now has stop signs. Even a Parks & Rec truck flagrantly runs that stop sign regularly.
- BCNA requested the TSC consider two items:
- 1) a partial street closure device, like the successful new one at 6th and Schwartz Rd. We requested these at the 15th St. entrance to the side streets of Elmwood, Summit, Prospect, Prairie and Brook. We requested another at the Haskell Ave. entrance to 12 th St.
  - 2) a 130 foot diameter roundabout at 15th and Haskell Ave. The cut-through commuter traffic is mainly a result of long lines and delays during rush hour at this intersection.
- 7 May 2001 The TSC “received the request” from the BCNA for partial street closures and a roundabout.
- 1) the TSC took no action on the requests
  - 2) the TSC directed Mr. Woosley “to meet with the neighborhood, and bring back to a future meeting a plan for controlling traffic within the neighborhood”.
- Nothing ever became of that directive.
- 1 February 2016 BCNA President, Melissa Fahrenbruch, requested to be on the TSC agenda to develop solutions to commuter cut-through traffic on three streets – East Glenn, Maple Lane, and Oak Hill Ave. We asked to consider:
- 1) traffic calming measures, or
  - 2) selective time-of-day access restrictions
- 6 June 2016 TSC agenda items #:
- 2) East Glenn traffic calming
  - 3) Maple Lane traffic calming
  - 4) Oak Hill Ave. traffic calming
- The agenda makes no mention of selective time-of-day access restrictions.

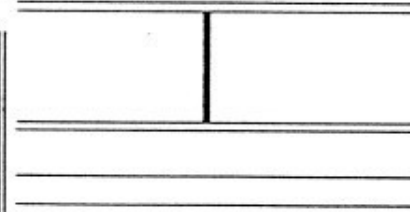
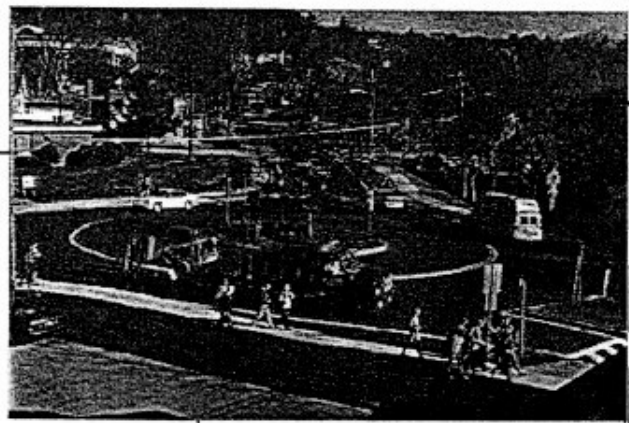
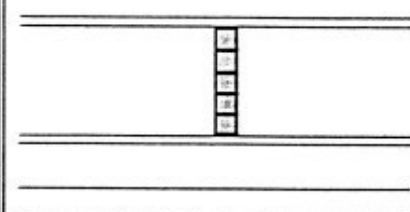
# A Primer on Traffic Calming Devices

Michael Wallwork, P.E.  
Alternate Street Design, Inc.  
1999

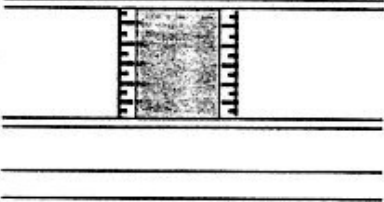
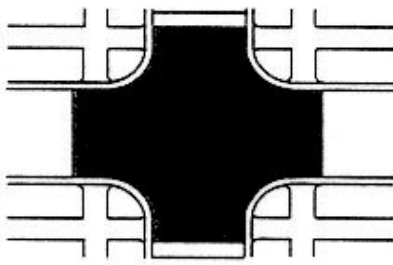
In the modern context traffic calming is a reaction to poor planning/zoning and/or street design. In the historic street system traffic calming is used to moderate driver behavior on streets originally designed for lower vehicle volumes and vehicle speeds. A more appropriate approach is to be proactive and redesign our neighborhoods and streets to be people friendly. Then traffic calming on local streets or along arterial roads will become less necessary.

*A roundabout near an elementary school in Montpelier, Vermont on a State Highway to calm traffic. It has been very successful.*

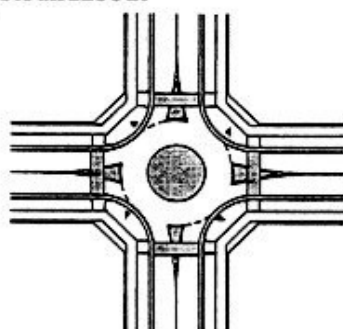
## Vertical Deflection Devices

	Advantages	
1. Speed Bump 	Short and sharp, speed bump is a very aggressive speed control device.  Works well in series.	 Can damage vehicles more easily than other devices.
2. Speed Hump 	Longer than the speed bump and less aggressive.  Has variable impact on different types of vehicles.  Works well in series.	Less likely to damage vehicles than a speed bump, but still requires low speed.  Causes emergency vehicles to almost stop at each bump.  Noisy

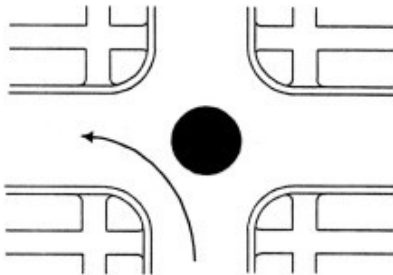
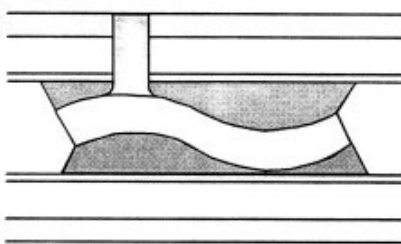
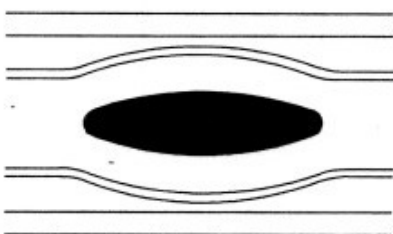


	Advantages	Disadvantages
<b>3. Speed Table</b> 	<p>Provides a good crossing point for pedestrians.</p> <p>Makes drivers come up to pedestrian level.</p>	<p>Careful design of ends is required to prevent drivers from putting one wheel in the gutter and doing 40 mph over a speed table.</p> <p>Causes emergency vehicles to almost stop at each bump.</p> <p>Noisy.</p>
<b>4. Intersection Hump</b> 	<p>Slows vehicles in the most critical area and so helps to make conflict avoidance easier.</p> <p>Highlights intersection.</p> <p>Useful where large vehicles must turn.</p>	<p>Increases difficulty of making a turn.</p> <p>Need to ensure vehicles do not intrude into pedestrian space.</p> <p>Causes emergency vehicles to almost stop at each bump.</p>

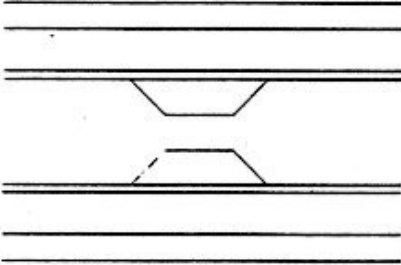
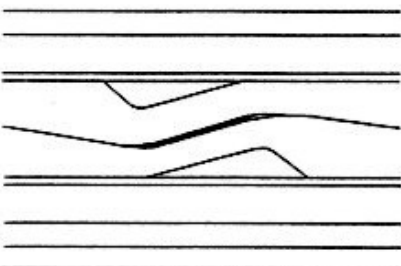
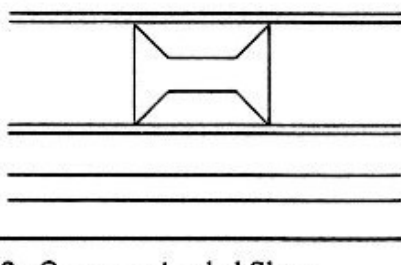
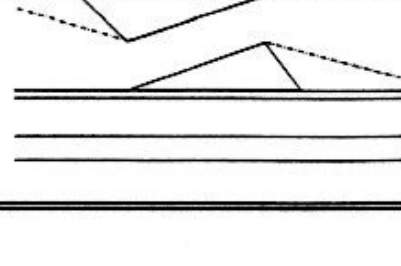
## Horizontal Deflection Devices

	Advantages	Disadvantages
<b>5. Roundabout</b> 	<p>Reduces crashes by 50 to 90 percent when compared to 2-way, 4-way stop signs and traffic signals.</p> <p>Reduces vehicle speed.</p> <p>Provides space for landscaping.</p> <p>Cheaper to maintain than traffic signals.</p>	<p>May restrict larger vehicles if designed to too low a speed.</p> <p>Providing a mountable apron, this limitation can be minimized.</p> <p>May require additional lighting</p> <p>If left turns by large vehicles are to be accommodated then right-of-way may have to be purchased.</p>

## Horizontal Deflection Devices

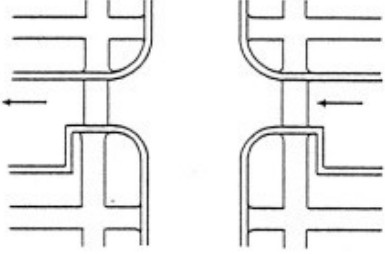
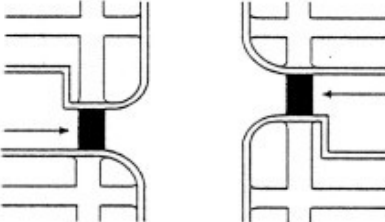
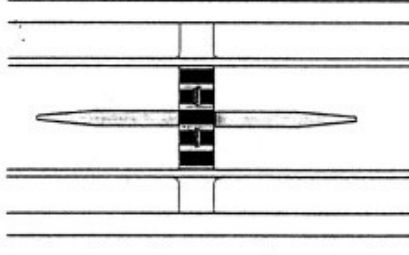
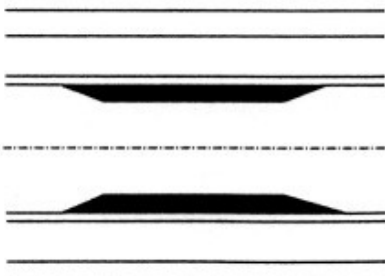
	Advantages	Disadvantages
<p>6. Mini-Roundabout</p> 	<p>Reduce crashes by 90 percent compared to two-way and four-way stop control.</p> <p>Physically slow all vehicles except bicycles.</p> <p>Attractive as they can be landscaped.</p>	<p>Wrong-way-left turn could be problematic on busy residential or collector roads.</p> <p>Restricts larger vehicles.</p>
<p>7. Driveway Link</p> 	<p>Provides a greater visual obstruction.</p> <p>Provides a large area for landscaping.</p> <p>Length of the device is limited by cost.</p> <p>A very effective method of</p>	<p>Increases the area of landscaping to be maintained by residents.</p> <p>Cost is greater than some other devices.</p>
<p>8. Oval Median</p> 	<p>Provides a refuge for pedestrians and cyclists.</p> <p>Can improve the streetscape if landscaped.</p> <p>Can be designed to different speeds.</p>	<p>Requires careful design to achieve real speed reduction.</p>

## Horizontal/Combined Devices

	Advantages	Disadvantages
<p>9. One Way Slow Point</p> 	<p>Reduces vehicle speed, especially if two vehicles approach from opposite directions.</p> <p>Imposes minimal inconvenience to local traffic.</p> <p>Pedestrians have a reduced crossing distance.</p>	<p>Landscaping needs to be controlled to ensure visibility is not reduced.</p>
<p>10. Two-way Slow Point with Median</p> 	<p>As for (9), except that pedestrian safety is less than (9).</p> <p>Provides space for landscaping.</p>	<p>Landscaping needs to be controlled to ensure visibility is not reduced.</p>
<p>11. One-way Slow-point with Speed Table</p> 	<p>Provides space for landscaping.</p> <p>Provides both horizontal and vertical deflection and hence has a much greater calming effect than (10).</p>	<p>Landscaping needs to be controlled to ensure visibility is not reduced.</p>
<p>12. One-way Angled Slow Point</p> 	<p>Provides space for landscaping.</p> <p>Reduces pedestrian crossing distance.</p>	<p>It is less effective in controlling speeds than (10) because drivers can create a straight path through the slow point by driving over the centerline.</p>



## Intersection and Mid-block Devices

	Advantages	Disadvantages
<p>17. One-way Entry &amp; Exit</p> 	<p>Reduces through traffic in one direction and partially in the other.</p> <p>Allows two-way traffic in the remainder of the street.</p>	<p>Reduces access for residents.</p> <p>Emergency vehicles only partially affected as they have to drive around partial closure.</p>
<p>18. One-way Entry/Exit</p> 	<p>Eliminates through traffic.</p> <p>Allows two-way traffic in the remainder of the street.</p>	<p>Reduces access for residents.</p> <p>Emergency vehicles only partially affected as they have to drive around partial closure.</p>
<p>19. Pedestrian Refuge</p> 	<p>Provides a refuge for pedestrians as they cross the road.</p> <p>Provides a visual clue of a different environment.</p>	<p>No horizontal or vertical deflection means that speed reduction is small and limited to only a few drivers.</p>
<p>20. Two-lane Slow Point</p> 	<p>Causes minor inconvenience to drivers.</p> <p>Regulates parking and serves to protect parked vehicles as the bulb-outs can be installed in no-parking areas to stop illegal parking.</p> <p>Reduces pedestrian crossing area.</p>	<p>Not very effective in slowing vehicles or diverting through traffic.</p> <p>Only partially effective as a visual obstruction.</p>