CITY OF ANN ARBOR TRAFFIC CALMING PROGRAM OVERVIEW

- Step 1: Petition
 - Petitioner defines the project area limits and gathers petition signatures.
 - 50% of addresses within the project area must sign the petition.
 - One signature per household.
 - Staff evaluate petition and project area based on qualification criteria; if qualification criteria are met, proceed to step 2.
- Step 2: Initial Questionnaire
 - A questionnaire is distributed to all addresses within the project mailing area for initial feedback about the existing conditions. Educational materials about the Traffic Calming Program is distributed with the questionnaire.
 - The questionnaire asks residents whether they support the Traffic Calming process moving forward. If at least 50% of addresses within the mailing area support the process moving forward, then proceed to step 3.
- Step 3: Meeting #1 Orientation/Workshop
 - Meeting #1 includes a program orientation and workshop style discussion. Engineering staff share starter ideas to address the concerns shared via the initial questionnaire, and gather additional community feedback.
 - Licensed engineers develop a preliminary plan to distribute prior to Meeting #2, based on starter ideas shared at Meeting #1, community feedback as well as safety and industry best practices.
- Step 4: Meeting #2 Walking
 - Meeting #2 is held on-site. The preliminary plan is marked on-street by Engineering staff prior to Meeting #2. Meeting attendees walk the length of the project area to view device placement and visualize the draft plan on-site. Additional community feedback is gathered.
 - Licensed engineers will develop a final plan to distribute as part of the final polling based on starter ideas shared at Meeting #1, community feedback from Meeting #1 and 2, as well as safety and industry best practices.
- Step 5: Final Polling
 - A final polling card is distributed to all addresses within the project mailing area to determine community support for the final plan. An electronic response option to return final polling cards is provided.
 - If greater than 50% of the returned final polling cards support the final plan, the plan moves forward for construction.

Project Mailing Area Definition

- Addresses adjacent to the defined project area and addresses 100 ft. from where the project street intersects a local cross street.
- The property owner and current resident are included. Where one parcel includes multiple units, each unit will be included in the mailing list and invited to participate in final polling.
- Cul-de-sac properties within the project area notified for information only
- Other corridor users welcome at public meetings

Community Role

- Initiate request
- Build community support and interest
- Provide input about existing conditions and community preferences
- Establish an understanding of the Traffic Calming Program and options available
- Help inform plan development and the decision making process

Staff Role

- Evaluate petitions based on qualification criteria
- Conduct speed study
- Project area mailings and communications
- Gather community input
- Provide professional engineering expertise
- Develop plan taking community feedback into consideration
- Where demonstrated safety concerns are identified by professional engineering staff, decisions about improvements will be made outside of the Traffic Calming Program.

Internal Engagement/Staff Coordination

- Engineering
- Public Works
- Ann Arbor Fire Department (AAFD)
 - Traffic Calming projects shall not impact primary emergency routes.

- International Fire Code: 503.3.4.1 Traffic calming devices: Traffic calming devices shall be prohibited unless approved by the fire code official.
- Ann Arbor Police Department (AAPD)
- Ann Arbor Area Transportation Authority (AAATA) and Ann Arbor Public Schools (AAPS)
 - Input needed when bus routes are present along the project area

Miscellaneous Updates

- Two year requirement before resubmittal for non-qualifying project areas
- Local street defined by National Functional Classification



Program Objectives

- Improve the safety and convenience for pedestrians and cyclists by reducing the speed of vehicular traffic
- Use engineering best practices and stakeholder engagement to advance Vision Zero principles as adopted by City Council
- Empower residents to make their neighborhood streets safer through a resident-driven process

Qualification Criteria

•Awards points on an incremental basis

•A total of 10 points needed for project qualification

Criteria	Range	Points
Qualifying Petition Support	<50% does not qualify	
 Resident initiated Establish community buy-in early Minimum requirement: Signatures from 50% of all addresses within the identified project area 	51 - 75 %	3
	76 - 90 %	5
	> 90%	7
 85th Percentile Speed The speed at which 15% of traffic is traveling over Speed study conducted by City over seven consecutive days Holidays and major events avoided for data collection 	<25 mph does not qualify	
	25 mph	0
	26 - 27 mph	3
	28 - 30 mph	5
	> 30 mph	10
Percent Violators	0 - 30%	0
 Percentage of vehicles exceeding the 	31 - 50%	5
legal speed limit		
	> 50%	10
Average Daily Traffic (ADT)	<=250 vehicles	0
	251 - 500	1
• Average number of vehicles counted over a 24 hour period	501 - 750	2
	751 - 1000	3
	1001 - 1500	4
	1501+	5
Speed Related Crash History		
(5 years)		
 Reported crashes that cite excess speed in 	No	0
previous five calendar yearsMust be a police report on file		
	Yes	5
School Travel (max 5 pts) *defined by school • Walk Radius • Quarter mile around a public school	Outside of walk radius*	0
	Inside of walk radius*	2 each
	School property adjacent to project	
	Published priority school walk route	
	Petition aligned with Safe Routes to	3
	School Committee Workplan	
Major Pedestrian Generators	Adjacent to corridor	3
(e.g., park, library, shopping		
plaza, senior housing,	Within 1/8 mi. of project area	1 each
community center.) (max 3		1/2 each
pts)		
 Locations people are likely to walk to. 		
	Mithin 1/1 mi of project area	
	vvium 1/4 m. or project area	

Traffic Calming Device Toolkit: Vertical Deflection Devices

- Vehicles driving over vertical device greater than 25 mph will feel discomfort
- Devices are marked with painted chevrons to increase visibility for oncoming motorists
- Emergency response may be delayed 2 to 10 seconds per device
- Possible increase in traffic noise

Description/Considerations

Cost

Speed Hump



Speed humps are 12 feet wide, 3 inches high, have a parabolic shape, and extend the full width of the street.

- 20-25% speed reduction on average
- 18% average traffic volume reduction
- 13% average crash reduction



Speed Table



Speed tables are typically 22 feet wide – including a 10 foot wide center platform and slopes tapering down on each side, 3 inches high and extend the full width of the street. The center platform width is variable and can be customized to the location.

- 12% average traffic volume reduction
- 45% average collision reduction
- Less speed reduction than speed humps

Raised Crosswalks





Raised crosswalks are 18 feet wide – including a 6 foot wide center platform marked with crosswalk striping and slopes tapering down on each side, 3 inches high and extend the full width of the street.



Raised Intersections



- 18% average traffic volume reduction
- 13% average crash reduction
- Increases the visibility of pedestrians
- Installation must be ADA-compliant

A raised intersection involves ramping each side of an intersection approach and raising the entire intersection 3 inches. Where there are pedestrian crossings, crosswalks can also be marked and raised to the elevation of the raised intersection.

- Improves pedestrian visibility
- May require utility work
- Installation must be ADA-compliant

Neighborhood Gateway



Treatment



A physical landmark that indicates a change from a higher speed arterial road to a lower speed residential or commercial district.

- Increases awareness for residential speeds
- May require additional right-of-way
- Neighborhood would bear landscaping installation and maintenance cost

Picture and Diagram Sources: Dan Burden, City of Northhampton, Beta Inc., National Association of City Transportation Officials, Michigan Department of Transportation, Federal Highway Administration

Traffic Calming Device Toolkit: Horizontal Deflection Devices

- Provide opportunities for neighborhood landscaping
- Neighborhood would bear landscaping installation and maintenance costs
- Lanscaping must be designed to maintain pedestrian visibility
- Emergency response may be delayed 2 to 10 seconds per device
- Reduce speed by creating the perception of friction (less room for error)

Description/Considerations Cost

Pedestrian Island/Median Landscaping



Raised islands placed in the center of the street at intersection or midblock locations.

- \$\$ • Reduces pedestrian crossing width by providing a refuge within the street
- Reduces pedestrian-motorist crashes May require additional right-of-way

Residential Traffic Circles





Raised circular islands of pavement, most commonly at fourlegged intersections. This does not change existing traffic control, e.g., stop signs.

- 10% reduction in midblock speed
- 70% reduction in intersection crashes
- 28% reduction in overall crashes
- Can provide an attractive gateway to a neighborhood
- Minimal effect on cut through traffic
- Left turns may be difficult for larger vehicles

Compact Urban/Mini Roundabout





A type of roundabout characterized by a small center island. This changes traffic control to yield upon entry.

- Decreases conflict points
- May require additional right-of-way
- May require changes to intersection configuration





Pedestrian Gateway Treatment



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	10' & VARIES
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	BIKE LANE

Signs within crosswalk indicating vehicles have to stop for pedestrians. Must be consistent with crosswalk design guidelines.

- Defines the area of preferred crossing for pedestrians
- Communicates high pedestrian activity areas to motorists
- Pedestrian awareness and visibility improved
- Painting and maintenance expense
- Results have shown high yielding rates

Curb Extensions Curb Bump Outs





Chicane



An extension of the curb line to the physically and visually tighten the corridor by narrowing street width. Two parallel curb bump-outs can be used to create a

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single lane width passageway, or chokepoint. Alternating curb bump-outs can be used to create a chicane effect.

- When applied at intersection and midblock locations:
 - Shortens pedestrian crossing distance
 - Improves pedestrian visibiity
 - Eliminates illegal parking
- 4% speed reduction for 2-lane chokers and 14% reduction for 1-lane chokers
- Minor reduction in traffic volume for 2-lane chokers and 20% reduction for 1-lane chokers
- May require loss of on-street parking • 1-lane chokers rely on regulatory signs and driver courtesy