

## CITY OF ANN ARBOR TRAFFIC CALMING PROGRAM

### PROCESS 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 are 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 street conditions such as geometry or utility locations, 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 street conditions such as geometry or utility locations, 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 feet 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
- Monitor project areas for demonstrated safety concerns. The following safety concerns could warrant consideration outside of the Traffic Calming Program<sup>1</sup>: a documented crash pattern,

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<sup>1</sup> Separation from the Traffic Calming Program is necessary to clearly set the community expectation that decisions about addressing documented safety concerns will be made by professional engineering staff, City administration and/or City Council depending on the scale of the project. Public engagement and communications will be essential components; however, safety improvements must not be left entirely to community polling. Eligible funding sources for capital improvement projects and/or maintenance work associated with a safety concern could differ from the Traffic Calming Program funding.

critical sight distance problem, non-motorized travel need, and/or sensitive travel population (e.g., a primary route for elderly persons or children). The following process will be used when professional engineering staff determine presence of a documented safety concern within a Traffic Calming project area:

- Determine the appropriate public engagement strategy based on the scale of the project and using the City of Ann Arbor Community Engagement Toolkit.
- Notify the traffic calming project area: provide documentation of the safety concern and share next steps in the engagement strategy for the safety concern.
- Proceed with the remainder of the traffic calming project area, setting aside discussion of the safety concern location.

### **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

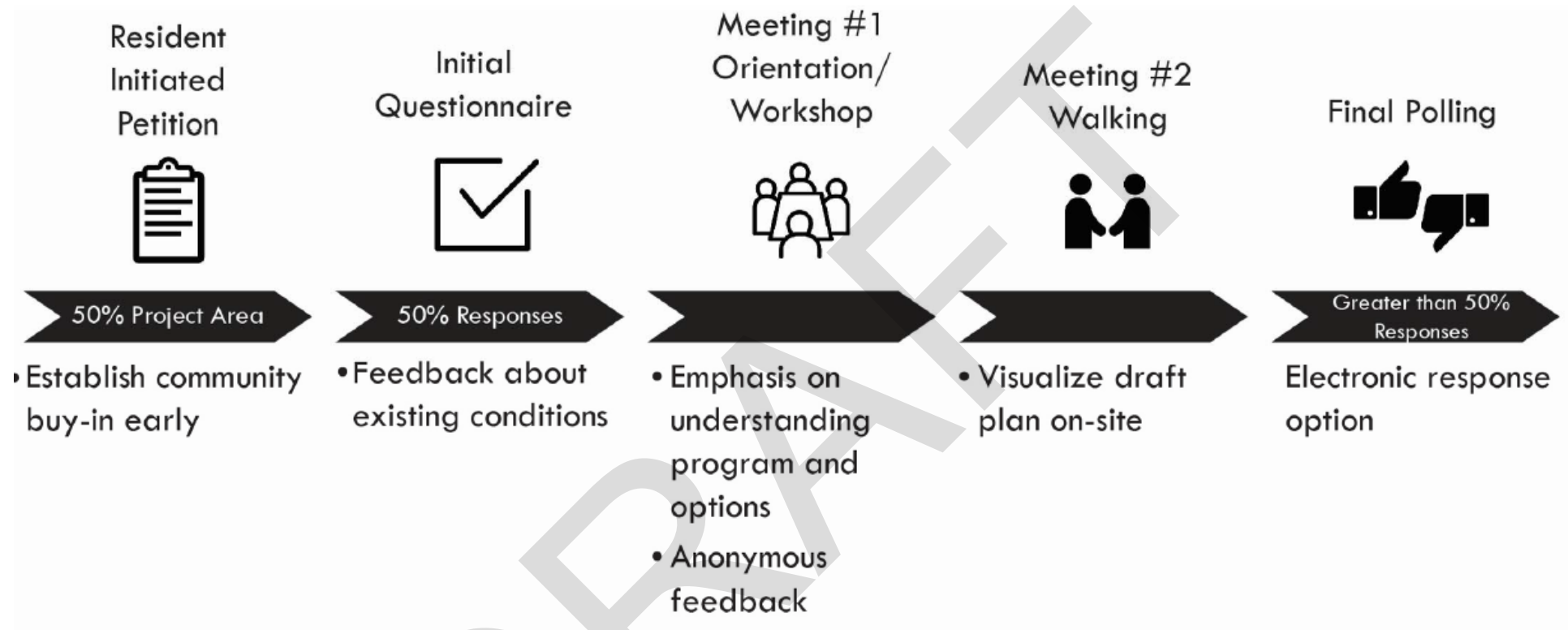
### **Program Objectives**

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

### **Miscellaneous Updates**

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

## Public Engagement Process



## Program Objectives


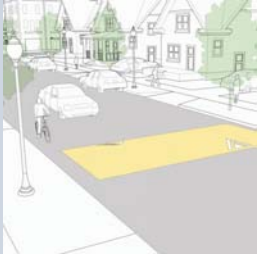



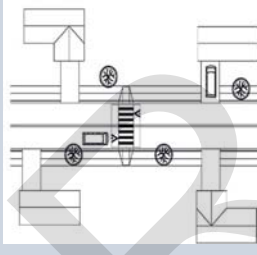

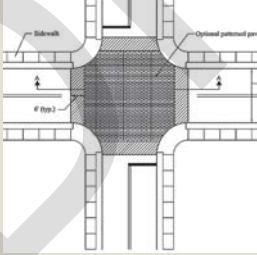


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## Qualification Criteria

- Awards points on an incremental basis
- A total of 10 points needed for project qualification


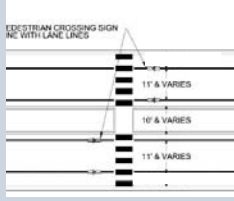

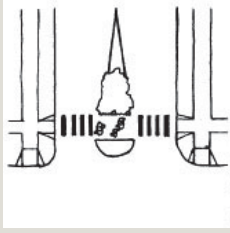

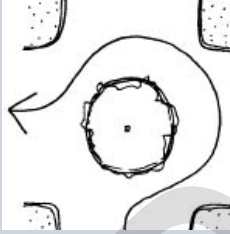

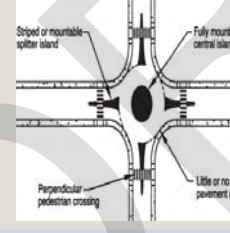

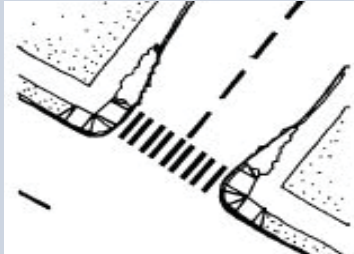

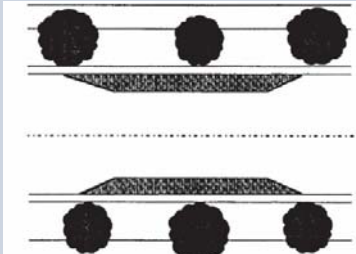

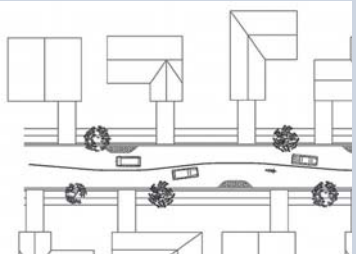
Criteria	Range	Points
<b>Qualifying Petition Support</b> <ul style="list-style-type: none"> <li>• Resident initiated</li> <li>• Establish community buy-in early</li> <li>• Minimum requirement: Signatures from 50% of all addresses within the identified project area</li> </ul>	<50% does not qualify	
	51 - 75 %	3
	76 - 90 %	5
	> 90%	7
<b>85th Percentile Speed</b> <ul style="list-style-type: none"> <li>• The speed at which 15% of traffic is traveling over</li> <li>• Speed study conducted by City over seven consecutive days</li> <li>• Holidays and major events avoided for data collection</li> </ul>	<25 mph	-1
	25 mph	0
	26 - 27 mph	3
	28 - 30 mph	5
	> 30 mph	10
<b>Percent Violators</b> <ul style="list-style-type: none"> <li>• Percentage of vehicles exceeding the legal speed limit</li> </ul>	0 - 30%	0
	31 - 50%	5
	> 50%	10
<b>Average Daily Traffic (ADT)</b> <ul style="list-style-type: none"> <li>• Average number of vehicles counted over a 24 hour period</li> </ul>	<=250 vehicles	0
	251 - 500	1
	501 - 750	2
	751 - 1000	3
	1001 - 1500	4
	1501+	5
<b>Speed Related Crash History (5 years)</b> <ul style="list-style-type: none"> <li>• Reported crashes that cite excess speed in previous five calendar years</li> <li>• Must be a police report on file</li> </ul>	No	0
	Yes	5
<b>School Travel (max 5 pts)</b> <b>*defined by school</b> <ul style="list-style-type: none"> <li>• Walk Radius               <ul style="list-style-type: none"> <li>• Quarter mile around a public school</li> </ul> </li> </ul>	Outside of walk radius*	0
	Inside of walk radius*	2 each
	School property adjacent to project	5
	Published priority school walk route Petition aligned with Safe Routes to School Committee Workplan	
<b>Major Pedestrian Generators (e.g., park, library, shopping plaza, senior housing, community center.) (max 3 pts)</b> <ul style="list-style-type: none"> <li>• Locations people are likely to walk to.</li> </ul>	Adjacent to corridor	3
	Within 1/8 mi. of project area	1 each
		1/2 each
	Within 1/4 mi. of project area	

- 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
<b>Speed Hump</b>  		<p>Speed humps are 12 feet wide, 3 inches high, have a parabolic shape, and extend the full width of the street.</p> <ul style="list-style-type: none"> <li>• 20-25% speed reduction on average</li> <li>• 18% average traffic volume reduction</li> <li>• 13% average crash reduction</li> </ul>	\$
<b>Speed Table</b>  		<p>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.</p> <ul style="list-style-type: none"> <li>• 12% average traffic volume reduction</li> <li>• 45% average collision reduction</li> <li>• Less speed reduction than speed humps</li> </ul>	\$\$
<b>Raised Crosswalks</b>  		<p>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.</p> <ul style="list-style-type: none"> <li>• 20-25% average speed reduction</li> <li>• 18% average traffic volume reduction</li> <li>• 13% average crash reduction</li> <li>• Increases the visibility of pedestrians</li> <li>• Installation must be ADA-compliant</li> </ul>	\$\$
<b>Raised Intersections</b>  		<p>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.</p> <ul style="list-style-type: none"> <li>• Improves pedestrian visibility</li> <li>• May require utility work</li> <li>• Installation must be ADA-compliant</li> </ul>	\$\$\$
<b>Other</b>			
<b>Neighborhood Gateway Treatment</b>  		<p>A physical landmark that indicates a change from a higher speed arterial road to a lower speed residential or commercial district.</p> <ul style="list-style-type: none"> <li>• Increases awareness for residential speeds</li> <li>• May require additional right-of-way</li> <li>• Neighborhood would bear landscaping installation and maintenance cost</li> </ul>	\$

# Traffic Calming Device Toolkit: Horizontal Deflection Devices

- Provide opportunities for neighborhood landscaping
- Neighborhood would bear landscaping installation and maintenance costs
- Landscaping must be designed to maintain pedestrian visibility
- Emergency response may be delayed 2 to 10 seconds per device
- Narrowed roadway section can reduce speed (perception of less room for error)

		Description/Considerations	Cost
<b>Pedestrian Gateway Treatment</b>  		<p>Signs within crosswalk indicating vehicles have to stop for pedestrians. Must be consistent with crosswalk design guidelines.</p> <ul style="list-style-type: none"> <li>• Defines the area of preferred crossing for pedestrians</li> <li>• Communicates high pedestrian activity areas to motorists</li> <li>• Pedestrian awareness and visibility improved</li> <li>• Will have painting and maintenance expense</li> <li>• Results have shown high yielding rates</li> </ul>	\$
<b>Pedestrian Island/Median Landscaping</b>  		<p>Raised islands placed in the center of the street at intersection or midblock locations.</p> <ul style="list-style-type: none"> <li>• Reduces pedestrian crossing width by providing a refuge within the street</li> <li>• Reduces pedestrian-motorist crashes</li> <li>• May require additional right-of-way</li> <li>• May interrupt driveway access and result in U-turns at the end of medians</li> </ul>	\$\$
<b>Residential Traffic Circles</b>  		<p>Raised circular islands of pavement, most commonly at four-legged intersections. Does not change existing traffic control, e.g., stop signs.</p> <ul style="list-style-type: none"> <li>• 10% reduction in midblock speed</li> <li>• 70% reduction in intersection crashes</li> <li>• 28% reduction in overall crashes</li> <li>• Can provide an attractive gateway to a neighborhood</li> <li>• Minimal effect on cut through traffic</li> <li>• Left turns may be difficult for larger vehicles</li> <li>• May shift vehicles closer to crosswalks</li> <li>• Bicyclists navigate with traffic around circle</li> <li>• Possible driver confusion entering traffic circle after yielding to traffic already in circle</li> </ul>	\$\$
<b>Compact Urban/Mini Roundabout</b>  		<p>A type of roundabout characterized by a small center island. This changes traffic control to yield upon entry.</p> <ul style="list-style-type: none"> <li>• Decreases conflict points</li> <li>• May require additional right-of-way</li> <li>• May require changes to intersection configuration</li> <li>• May shift vehicles closer to crosswalks</li> <li>• Bicyclists navigate with traffic around circle</li> </ul>	\$\$\$\$
<b>Curb Extensions</b> <p>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 single lane width passageway, or choke-point. Alternating curb bump-outs can be used to create a chicane effect.</p>			\$-\$\$\$\$
<b>Curb Bump Outs</b>  	<b>Choker/Neckdown</b>  	<b>Chicane</b>  	<ul style="list-style-type: none"> <li>• 2-lane chokers <ul style="list-style-type: none"> <li>• 4% speed reduction</li> <li>• Minor reduction in traffic volume</li> </ul> </li> <li>• 1-lane chokers <ul style="list-style-type: none"> <li>• 14% speed reduction</li> <li>• 20% reduction in traffic volume</li> <li>• Rely on regulatory signs and driver courtesy</li> </ul> </li> <li>• Devices applied at intersection and midblock locations: <ul style="list-style-type: none"> <li>• Shorten pedestrian crossing distance</li> <li>• Improve pedestrian visibility</li> <li>• Eliminate illegal parking</li> </ul> </li> <li>• May require drainage considerations</li> <li>• May require loss of on-street parking</li> <li>• May cause debris to collect around the device</li> </ul>

Transportation Commission  
Traffic Calming Task Force Recommendations

Task Force Members: Councilmember Ackerman, Jared Hoffert, Bradley Parsons, Patti Smith

Task Force recommendations regarding the proposed Traffic Calming Program Update are provided below. Additional background and detail is provided in Appendix A.

1. Recommend allowing streets with an 85<sup>th</sup> percentile speed less than 25 mph the opportunity to qualify and replace <25mph "does not qualify" with "-1" on the qualification criteria rubric.
2. Recommend Traffic Calming Program annual budget of \$100,000-\$150,000 and exploration of funding options outside of ACT51.
3. Recommend ongoing exploration of a "Tier 2" addition to the existing Traffic Calming Program to address speed, safety and cut-through traffic.
4. Recommend that unanticipated outcomes of treatments be identified in the toolbox.
5. Recommend flexibility to expand the toolbox of treatments, including temporary treatments, and treatments not specifically identified in the Program.
6. Recommend staff utilize a variety of tools and techniques for public input and reaction including presentation of design alternatives for a project area, when appropriate.
7. Recommend that staff improve public awareness about programs that are complementary to Traffic Calming, including an updated, user-friendly online interface.
8. Recommend staff consider ways to better integrate Ann Arbor Public Schools (AAPS) into discussions and solutions when Traffic Calming requests are near schools, and encourage AAPS to involve staff and the community in traffic calming related work they may pursue or recommend.
9. Recommend that Council maintains authority for Traffic Calming Program approval.

**MOTION:** The Transportation Commission accepts the Traffic Calming Task Force recommendations and recommends that City Council approve the revised Traffic Calming Program inclusive of the changes described above.

August 15, 2018: A motion was made by Gordon, seconded by Naheedy, that the Traffic Calming Task Force recommendations be Accepted as amended by the Commission and forwarded to the City Council and should be returned by 10/1/2018. The Transportation Commission recommends that City Council approve the revised Traffic Calming Program inclusive of Task Force recommendations. On a unanimous voice vote, the Chair declared the motion carried.



## Appendix A

### Background

The Traffic Calming Task Force met with staff four times in July and August to review the draft Traffic Calming Program update. The following are highlights from the discussion which resulted in the Task Force recommendations. Staff comments are provided in italics.

### Supporting Detail

#### 1. 85<sup>th</sup> Percentile Speed Qualification Criterion

As currently drafted, the Traffic Calming Program requires the 85<sup>th</sup> percentile speed to be at or above 25 mph in order to qualify for the Traffic Calming Program. The Task Force recommends that this criterion be changed so that neighborhoods could qualify if they experience an 85<sup>th</sup> percentile speed below 25 mph and that a value of negative one (-1) be given for an 85<sup>th</sup> percentile speed below 25 mph.

- *Staff agrees with this recommendation.*

#### 2. Traffic Calming Program Budget

Currently, City Council budgets under \$40,000 annually for the Traffic Calming Program to cover all staff costs and construction costs associated with traffic calming petitions as well as maintenance of existing treatments. The Task Force believes this funding amount to be inadequate to fund the desired two to three traffic calming petitions per year and recommends a budget between \$100,000 and \$150,000 annually. The Task Force has concerns about the exclusive use of Act 51 funds for the Traffic Calming Program because of possible limitations on that funding source.

- *Staff believes that a budget between \$100,000 and \$150,000 would adequately fund between two and three traffic calming projects from petition through construction. Staff will request augmentation of the Traffic Calming budget as part of the next biennial budget process.*

#### 3. Tier 2 Traffic Calming Program

As currently drafted, the Traffic Calming Program applies to neighborhood streets only (i.e., functional classification is 'local') and emphasizes speed reduction. The Task Force recommends that the City explore a Tier 2 Traffic Calming Program so that community stakeholders can address concerns related to safety, speeds, and cut-through traffic. The San Jose Tier 2 Traffic Calming Program should be referenced as an example.

- *Staff agrees and will pursue development of a Tier 2 Traffic Calming Program upon completion of the neighborhood street Traffic Calming Program update and contingent upon available budget and resources. Staff will engage the Transportation Commission in the development of the Tier 2 Traffic Calming Program.*

#### 4. Treatment Considerations – Unanticipated Outcomes

The Task Force has observed that certain types of treatments may have unanticipated outcomes. For example, vehicles may swerve into the crosswalk as the driver navigates

through a residential traffic circle. Therefore, the Task Force recommends that these considerations be added to each treatment in the toolbox.

- *Staff agrees with this recommendation.*

5. Flexibility to Expand the Toolbox

The Task Force recommends that flexibility for temporary traffic calming installations be accommodated as part of the Program, including use of tools not specifically identified in the toolbox.

- *Staff agrees with this recommendation.*

6. Public Engagement Tools

The Task Force suggests that a menu of options for public engagement be provided, including development of design alternatives for a traffic calming project area.

- *Staff agrees with this recommendation.*

7. Increase Public Awareness about Complementary Programs

The Task Force has observed community confusion about what is (and what is not) included in the Traffic Calming Program. Information about requests for stop signs, street lights, increased speed enforcement, and other programs require different processes and lines of communication. The Task Force recommends that information about programs that complement the Traffic Calming Program be added to the Traffic Calming website.

- *Staff agrees with this recommendation.*

8. AAPS Coordination

The Task Force recommends improved communications with AAPS, including AAPS involvement in Traffic Calming project area discussions and neighborhood engagement on AAPS initiated projects. Leverage opportunities to coordinate complementary Safe Routes to School projects and traffic calming projects.

- *Staff agrees with this recommendation.*

9. Program authority

Recommend that Council maintains authority for Traffic Calming Program updates and approval. This is consistent with Council's role to establish policy. The Task Force agrees that the administrator should manage and maintain the Traffic Calming Program and that individual Traffic Calming project plans should not require City Council approval. The City Administrator, or designee, should have the authority to implement the approved Program.

- *Staff agrees with this recommendation*