

VILLAGE OF GARDEN CITY

# SATELLITE STUDY AND TRAFFIC CALMING MASTER PLAN

Final Presentation June 15, 2023



#### PROJECT OVERVIEW

- Village-wide plan using typical study areas; focused on Village-owned streets
- Understand existing conditions
- Get community input (Survey 123 and CAC)
- Identify treatments; determine suitability
- Develop concept sketches for select locations
- Summarize findings and recommendations
- Report and present to Village
- Submit Traffic Calming Master Plan

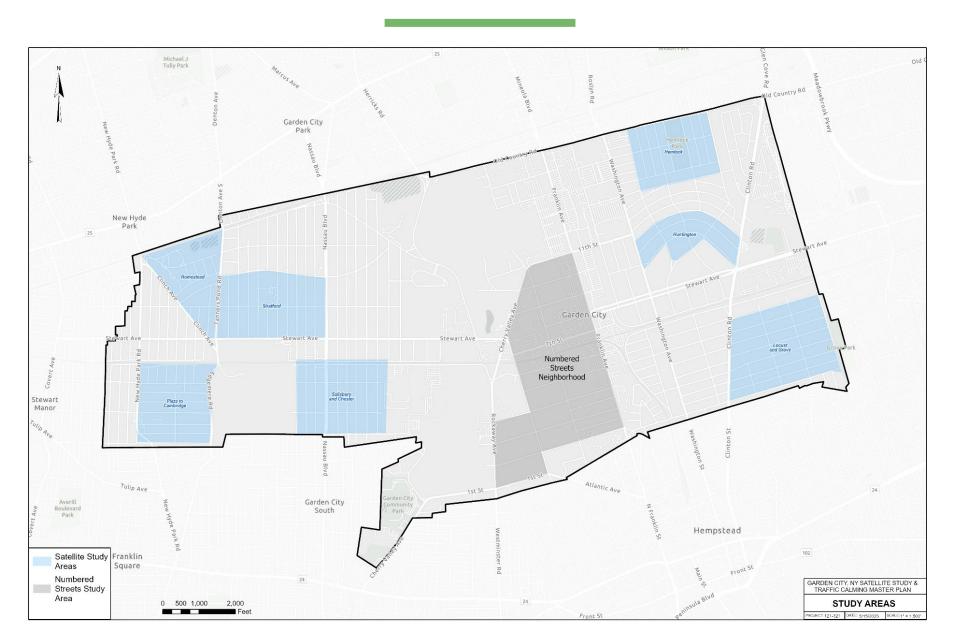


#### PROJECT SCHEDULE

- September Kick Off Meeting
- October Existing Conditions & Survey 123
- November CAC Meeting #1
- December Research on Treatments
- January Additional Data Collection
- February Suitability Analysis & Concepts
- March CAC Meeting #2
- Refine Concepts & Cost Estimates
- April Special CAC Review Meeting
- June Report and Presentation



## STUDY AREAS BY SECTION



#### **PROJECT GOALS**

Reduce the speed of vehicles

Deter cut-through traffic on residential streets

Make streets safer for all users

Improve quality of life



#### WHAT IS TRAFFIC CALMING?

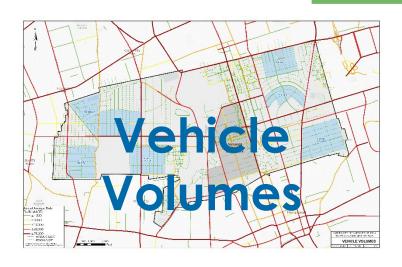
The primary purpose of traffic calming is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort. These objectives are typically achieved by reducing vehicle speeds or volumes on a single street or a street network. Traffic calming measures consist of horizontal, vertical, lane narrowing, roadside, and other features that use self-enforcing physical or psycho-perception means to produce desired effects.

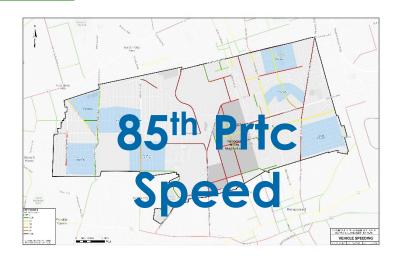
- Federal Highway Administration (FHWA)

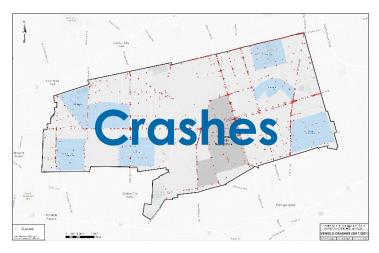
- Aims to reduce automobile speeds and traffic volumes on neighborhood streets
- Used on streets to facilitate the safe and efficient movement of all users, especially pedestrians and cyclists.
- Although mostly known as a neighborhood-specific initiative, traffic calming can be implemented on different street types and in rural and commercial areas.
- Strategies are sometimes grouped into the three E's:
  Education, Enforcement, Engineering and Planning

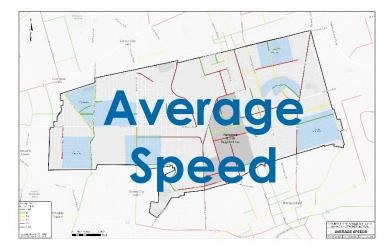


## **EXISTING CONDITIONS REVIEWED**



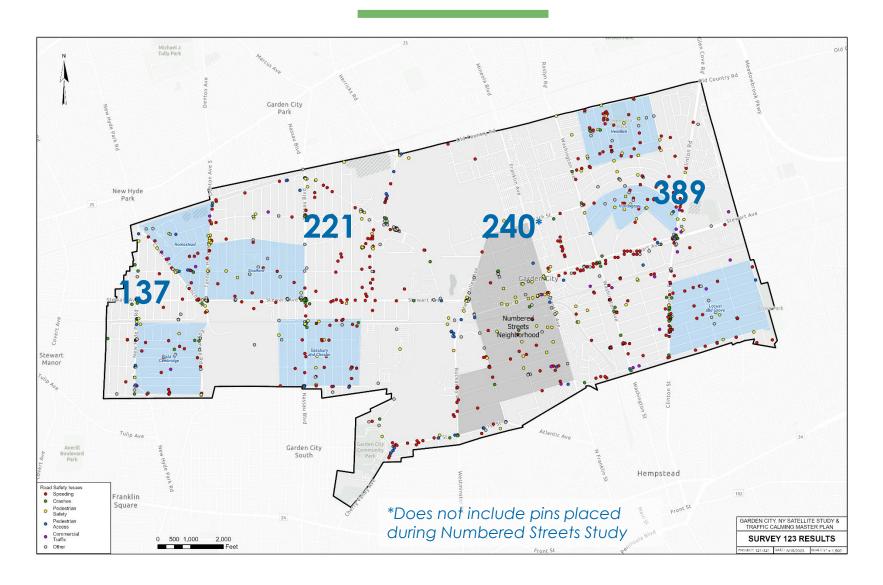






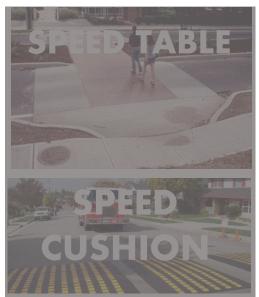


## STUDY AREAS BY SECTION





# POSSIBLE / PREFERRED TREATMENTS





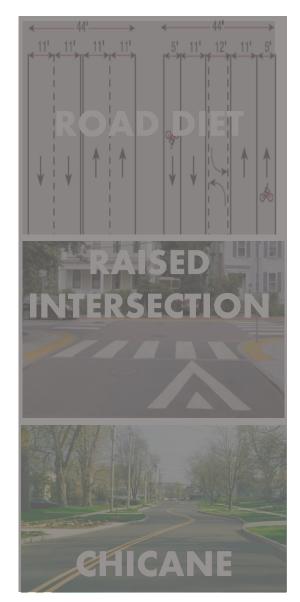










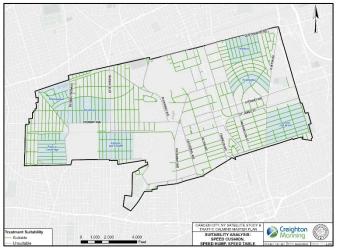




#### **EXAMPLE - SPEED HUMPS**







**Speed Humps** Used where AADT is <3500\* / posted speed <30mph

**Benefits:** Can reduce speeds and alert drivers in areas with high pedestrian traffic, discourages cut-throughs

**Revised Concepts:** Developed networks for traffic calming which provide a more effective deterrent for speeding on multiple streets

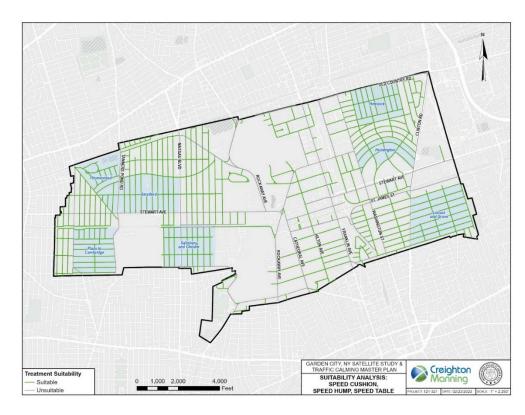
**Suitability Analysis:** Speed humps are widely suitable based on factors like maximum vehicle volumes



<sup>\*</sup> Volume and speed ranges are guide, not requirements

## **REVIEW OF SUITABILITY ANALYSIS**

- Criteria used FHWA guidance and best practice to evaluate suitability for treatments across the Village
- Criteria includes traffic volumes, posted speeds, lane widths, etc.
- Suitability criteria are guides, not absolute rules
- Maps show initial suitability, not actual feasibility or planned projects



Suitability analysis map for speed humps

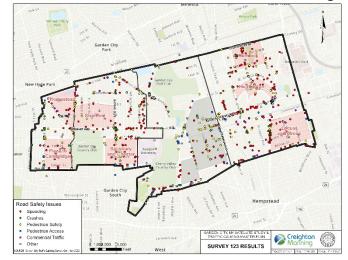


#### SKETCH LOCATION SELECTION CONSIDERATIONS

- Public feedback (Survey 123)
- Crash and speed data
- Proximity to schools and/or school bus stops
- Engineering criteria
- Feedback from the Village
  - Traffic Commission members
  - Police Commissioner / Engineer
- Opportunities for creation of traffic calming network



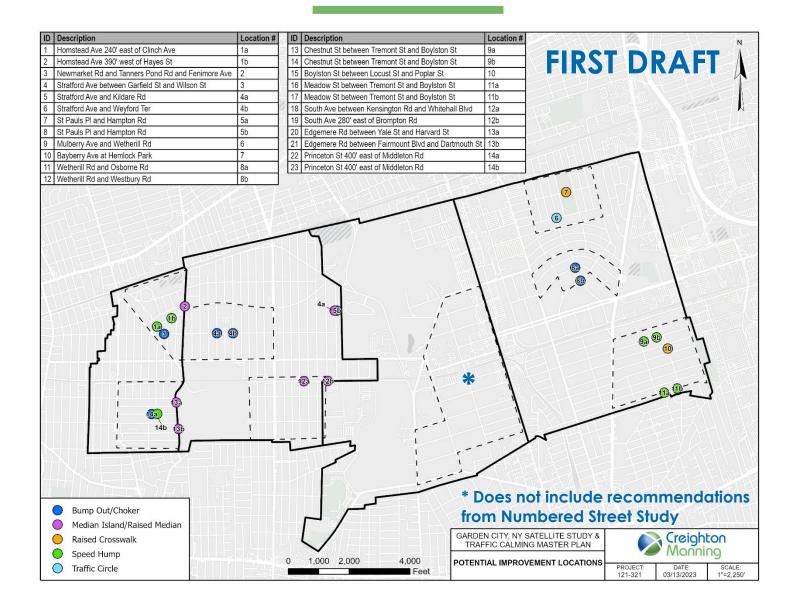
Public feedback from Kick Off meeting



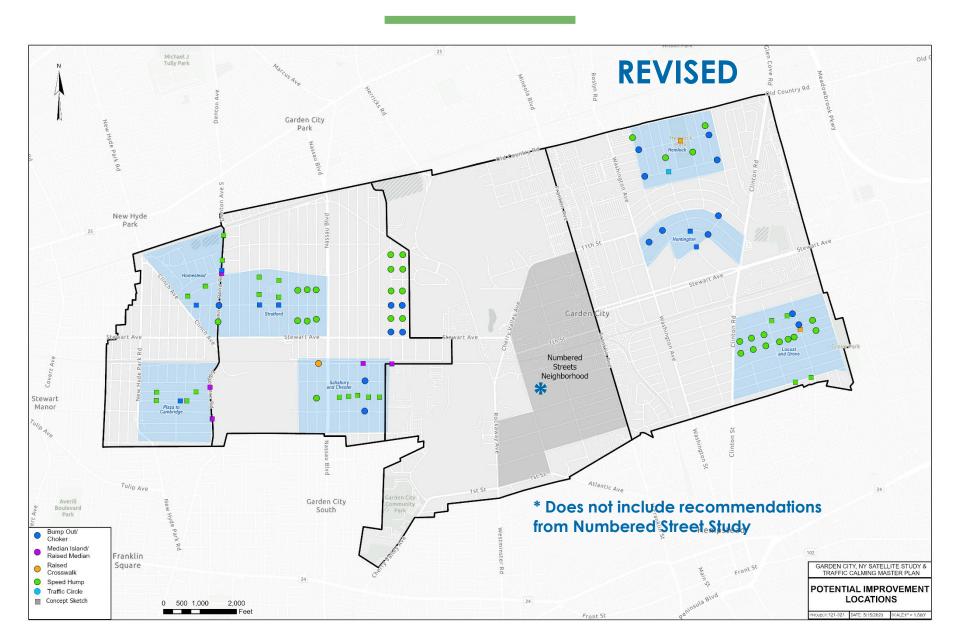
Map of pins from Survey 123 feedback



#### POTENTIAL IMPROVEMENT LOCATIONS



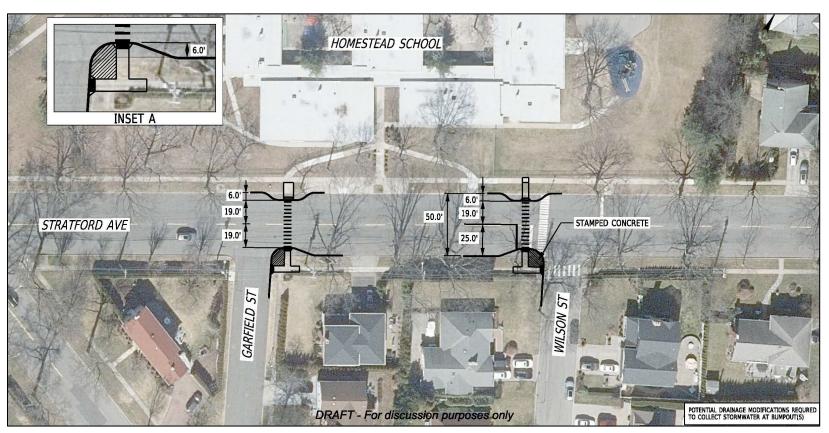
#### POTENTIAL IMPROVEMENT LOCATIONS



#### POTENTIAL IMPROVEMENT CONCEPT SKETCHES

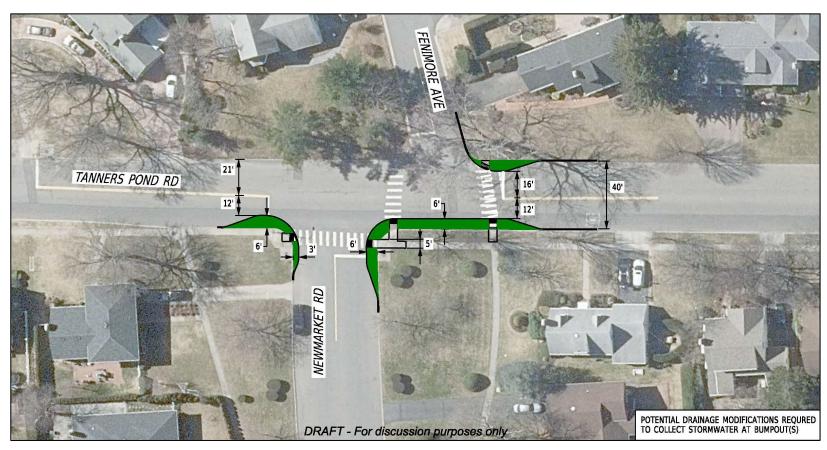
- 25-30 concept sketches developed
- Presenting a few from each Study Area
- Treatments sketched based on:
  - suitability analysis
  - professional judgement
  - community feedback
- Concepts are not final designs
- Could be "tested" with temporary materials





Sketch plan showing bump-outs on Stratford Ave at Garfield St and Wilson St to reinforce pedestrian crossings leading to the Homestead School and calm traffic on Stratford Ave





Sketch plan showing bump-outs on Tanners Pond Rd and Newmarket Rd to narrow travel lanes, shorten crossing distance and generally calm traffic. Concept with median islands also developed. Goal is to narrow roadway.





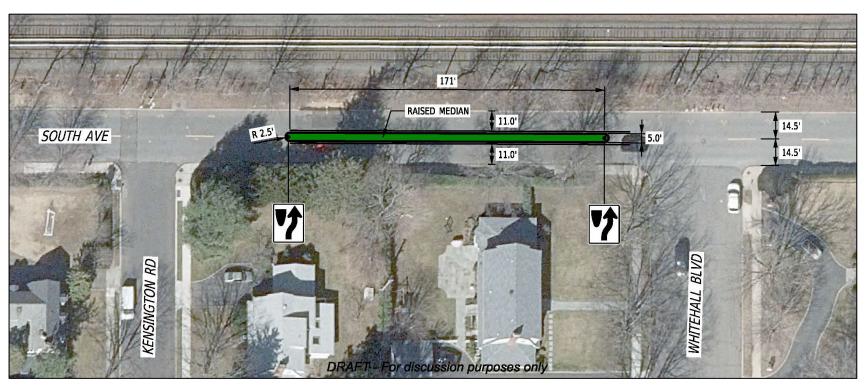
Sketch plan showing multiple speed humps along Princeton St and Harvard St between New Hyde Park Rd and Edgemere Rd. Existing stop signs are shown as red dots.





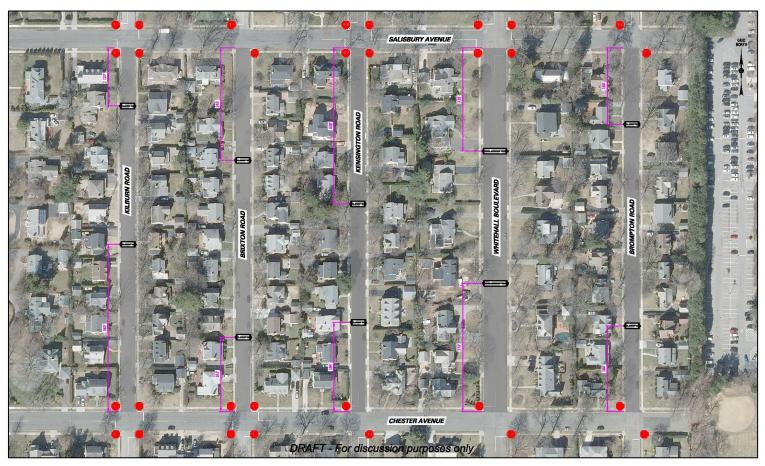
Sketch plan showing multiple speed humps along Tanners Pond Rd.





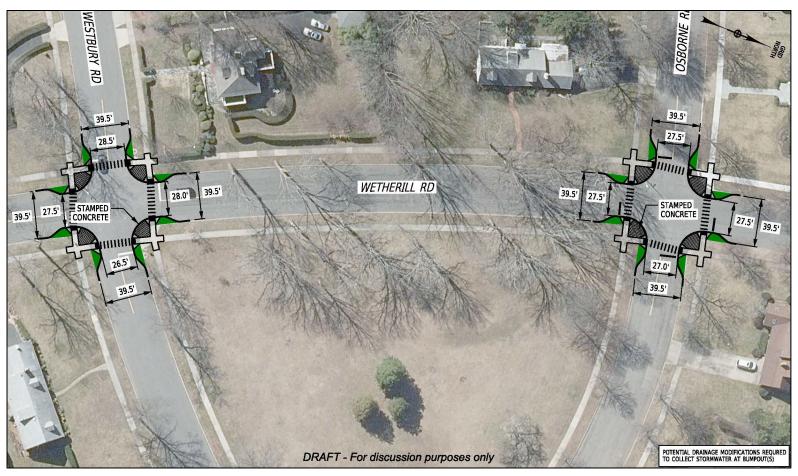
Sketch plan showing center median island along South Ave; recommend similar in the same area. Median design could vary – continuous or broken, landscaped or hardscaped, etc.





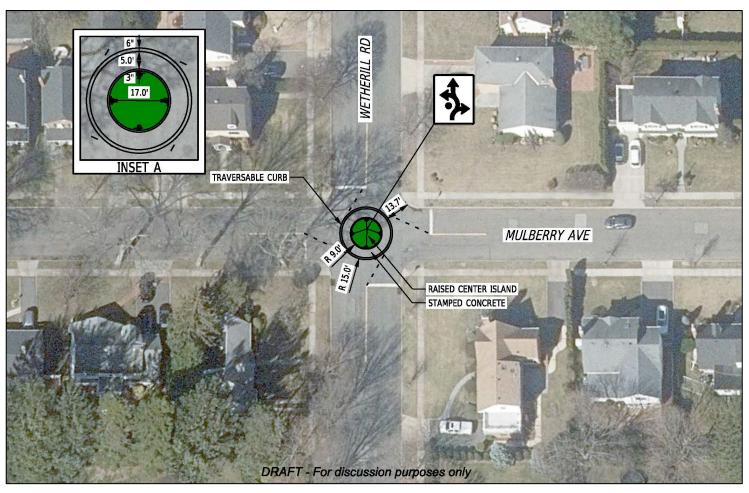
Sketch plan showing speed humps on Kilburn Rd, Brixton Rd, Kensington Rd, Whitehall Blvd, and Brompton Rd between Salisbury Ave and Chester Ave





Sketch plan showing intersection bump-puts on Wetherill Rd at Westbury Rd and Osborne Rd near Triangle Park





Sketch plan showing a neighborhood traffic circle; circle forces motorists to reduce speed through the intersection





Sketch plan showing a speed humps on Chestnut between Tremont St and Boylston St.; recommend series in this section between Clinton Rd and Grove St.





Sketch plan showing a raised crosswalk on Boylston St, midblock between Poplar St and Locust St, in front of Locust School



#### ADDITIONAL IDEAS FOR CONSIDERATION

- Traffic Calming Request Protocol
  - Temporary or Permanent
  - Criteria include traffic data and resident support
  - Treatment removal request protocol
- Prioritization Process
  - Traffic Commission to prioritize suitable locations
- Develop Capital Plan for Priority Locations
- Traffic Policies
  - Speed limit reduction
  - Automatic enforcement (red light or speed cameras)
- Temporary Treatments Speed Humps and More
  - Bump-outs, chokers, traffic circles
  - Design, implement, study



# **TEMPORARY SPEED HUMPS (4th STREET)**

- CAC recommended speed humps during Numbered Streets Study
- Traffic Commission approved purchase of temporary humps, installation, and "during study"
- Installed in early May 2023, data collection in late May / early June





## **TEMPORARY SPEED HUMPS (4th STREET)**

- Study found 85<sup>th</sup> perct. speeds dropped by 10mph and 9mph
- Vehicles traveling above speed limit (30mph) dropped dramatically
- Positive feedback from residents, school, church

Direction	Before	After	Delta	Before	After	Delta	Before	After	Delta
	Average Speed (mph)			85 <sup>th</sup> Percentile Speed (mph)			% Above Speed Limit		
EB	30	24	-6	39	29	-10	49%	8%	-41%
WB	29	23	-6	37	28	-9	48%	5%	-43%



#### **NEXT STEPS**

- Traffic Commission to consider recommendations
- Act on those with existing support
- Develop capital program / budget
- Define protocols (request, removal, prioritization, etc.)
- Implement / study temporary treatments





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# THANK YOU

#### **Contact Info**

Creighton Manning Engineering, LLP

Michael Amabile, AICP – Project Manager



mamabile@cmellp.com



www.cmellp.com



(914) 800-9207 (office)

