



VILLAGE OF GARDEN CITY

TRAFFIC CALMING SATELLITE STUDY

Estates Section – CAC
Listening Session
November 21, 2022

MEETING AGENDA

- Welcome and Introductions (5 min)
- Study Overview (5 min)
- Discussion #1 (10 min)
- Existing Conditions (5 min)
- Survey 123 (5 min)
- Discussion #2 (15 min)
- Possible Treatments (5 min)
- Discussion #3 (15 min)
- Next Steps and Questions (5 min)

STUDY 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 **concepts** for select locations
- **Summarize findings** and **recommendations**
- **Report** and **present** to Village
- Submit **Traffic Calming Master Plan**

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.

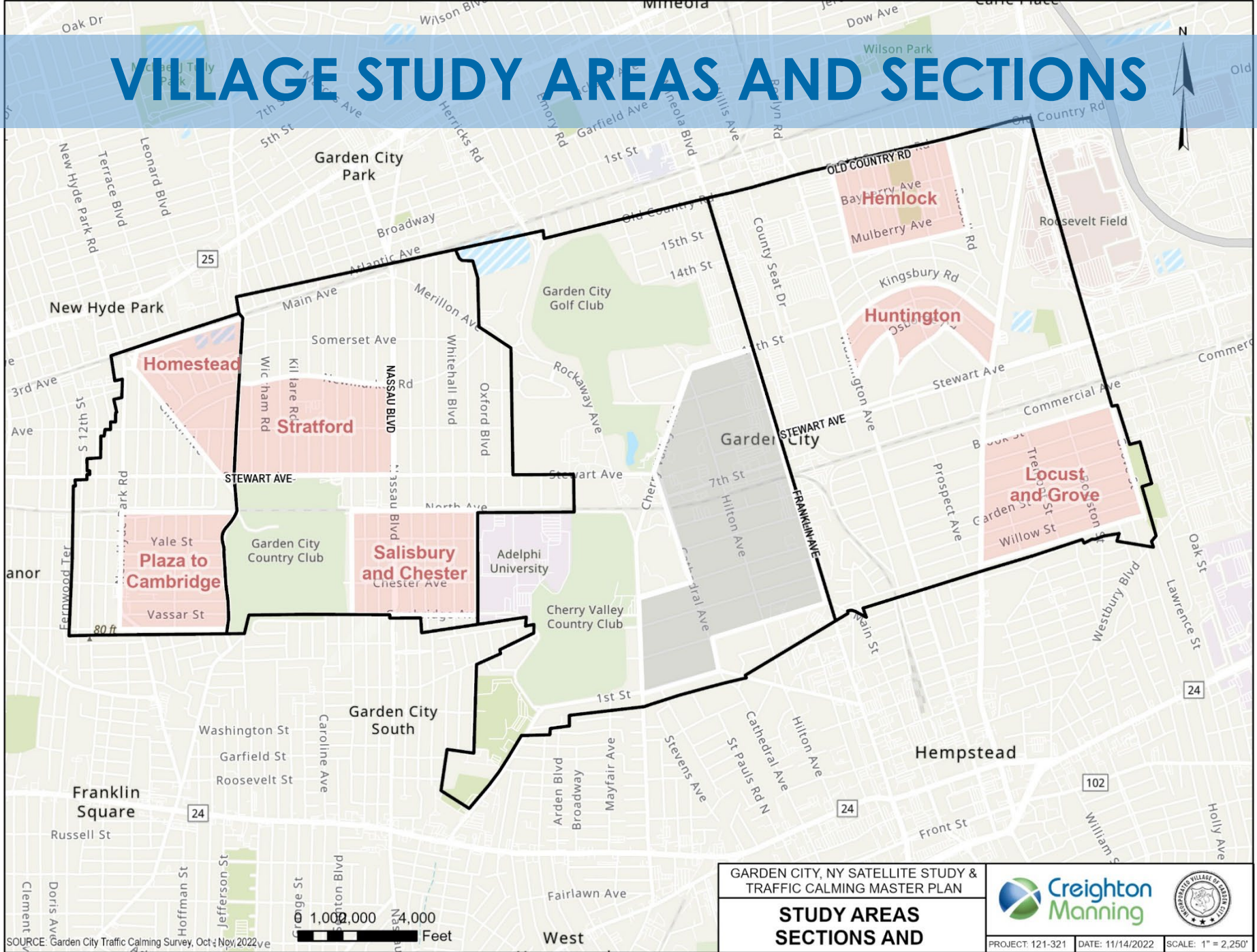
- Federal Highway Administration (FHWA)

- 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 different areas, including commercial settings and rural areas.
- Strategies are sometimes grouped into the three E's: **Education, Enforcement, Engineering and Planning**

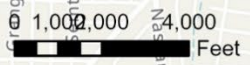
DISCUSSION #1

- We want to hear from the CAC...
 - Why is calming traffic in Garden City important to you?
 - What would you say is the goal of this study?
 - How would you evaluate this effort's success?

VILLAGE STUDY AREAS AND SECTIONS



SOURCE: Garden City Traffic Calming Survey, Oct; Nov, 2022 v e



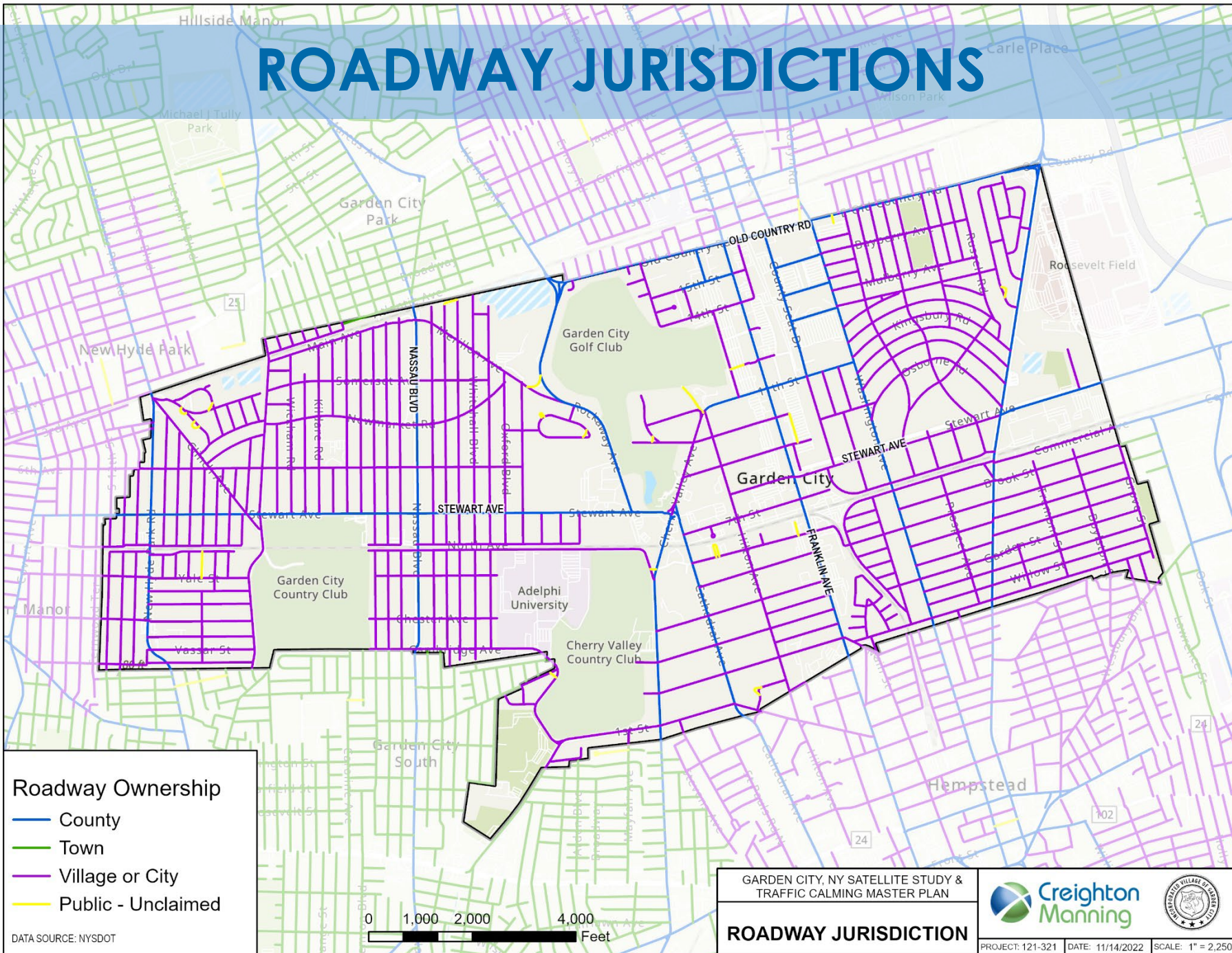
GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

**STUDY AREAS
SECTIONS AND**



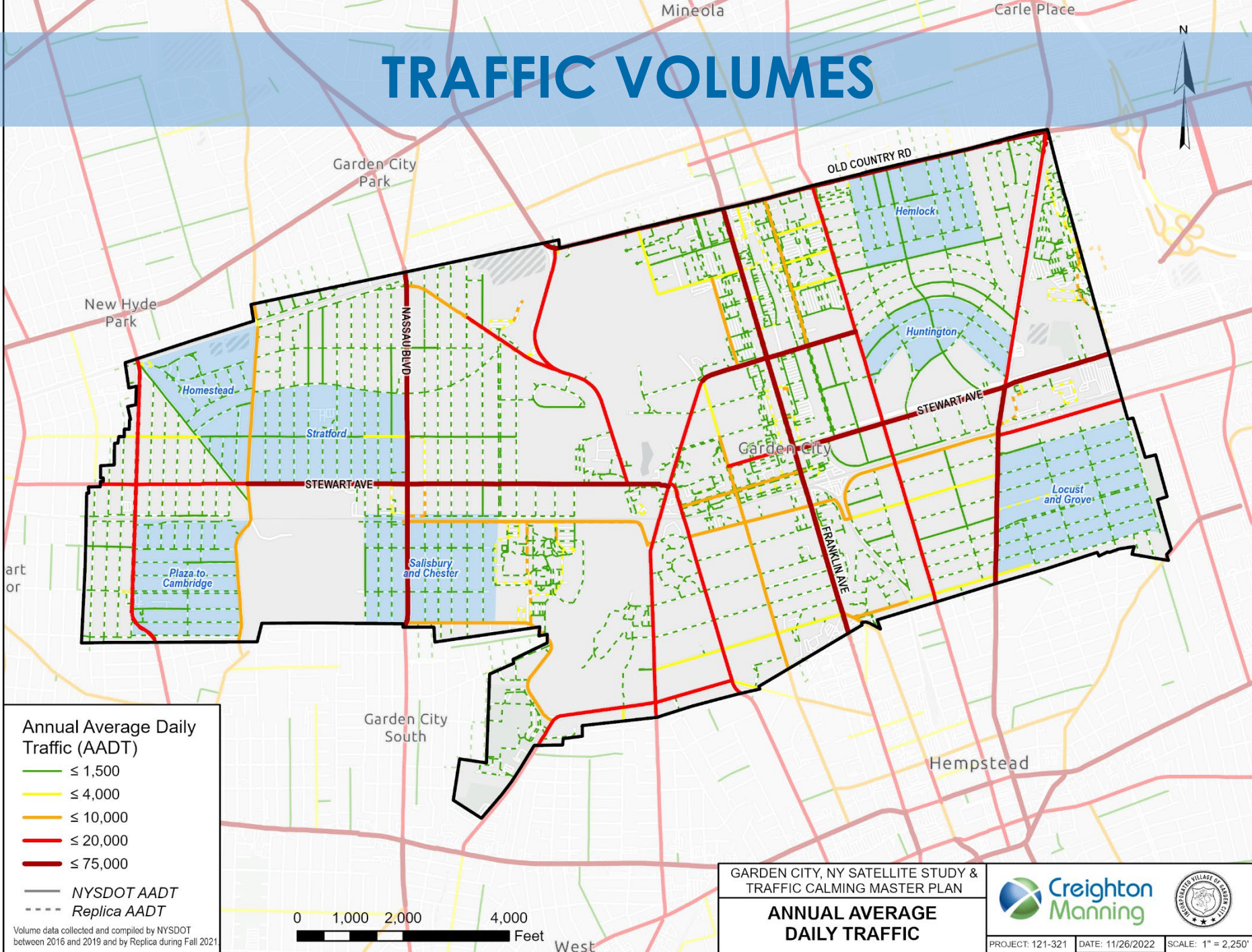
PROJECT: 121-321 | DATE: 11/14/2022 | SCALE: 1" = 2,250'

ROADWAY JURISDICTIONS



DATA SOURCE: NYSDOT

TRAFFIC VOLUMES



Annual Average Daily Traffic (AADT)

- ≤ 1,500
- ≤ 4,000
- ≤ 10,000
- ≤ 20,000
- ≤ 75,000

- *NYS DOT AADT*
- - - *Replica AADT*

Volume data collected and compiled by NYSDOT between 2016 and 2019 and by Replica during Fall 2021

0 1,000 2,000 4,000 Feet

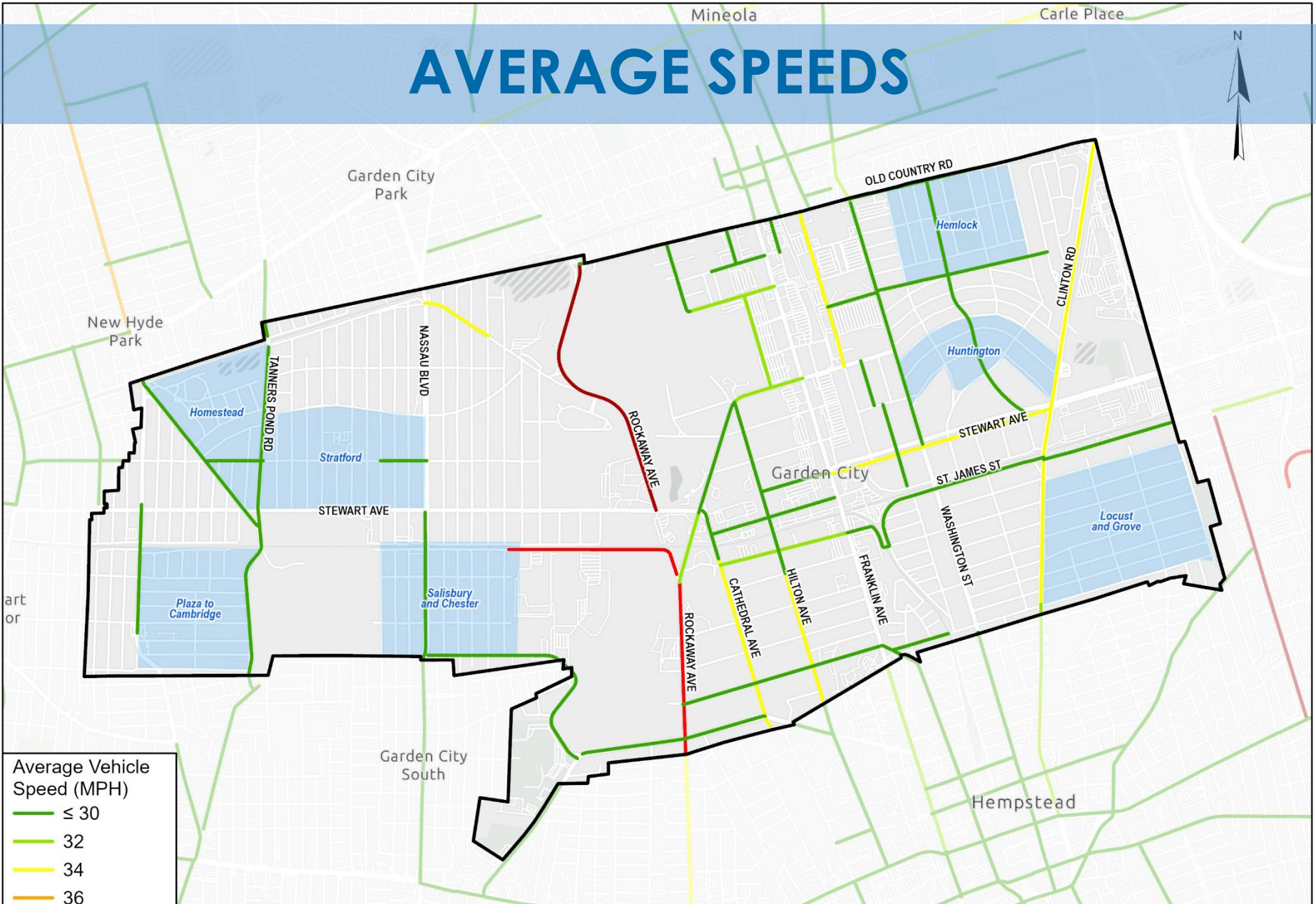
GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

ANNUAL AVERAGE DAILY TRAFFIC



PROJECT: 121-321 | DATE: 11/26/2022 | SCALE: 1" = 2,250'

AVERAGE SPEEDS



Average Vehicle Speed (MPH)

- ≤ 30
- 32
- 34
- 36
- 38
- ≥ 40

Speed data collected and compiled by NYSDOT between 2016 and 2019.



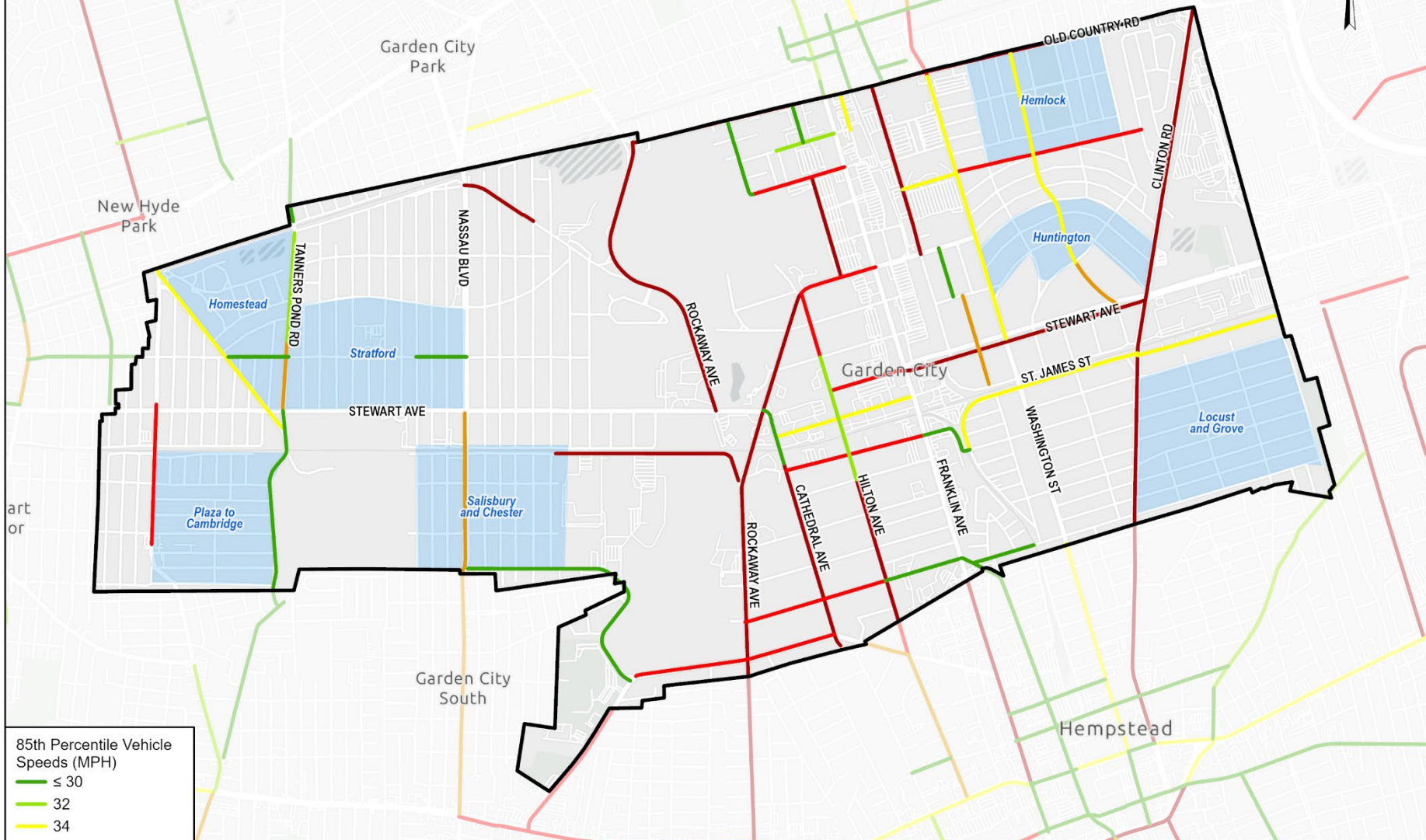
GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

AVERAGE VEHICLE SPEED



PROJECT: 121-321 DATE: 11/25/2022 SCALE: 1" = 2,250'

85th PERCENTILE SPEEDS



85th Percentile Vehicle Speeds (MPH)

- ≤ 30
- 32
- 34
- 36
- 38
- ≥ 40

Speed data collected and compiled by NYSDOT between 2016 and 2019.



GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

VEHICLE SPEEDING
85th Percentile Speeds

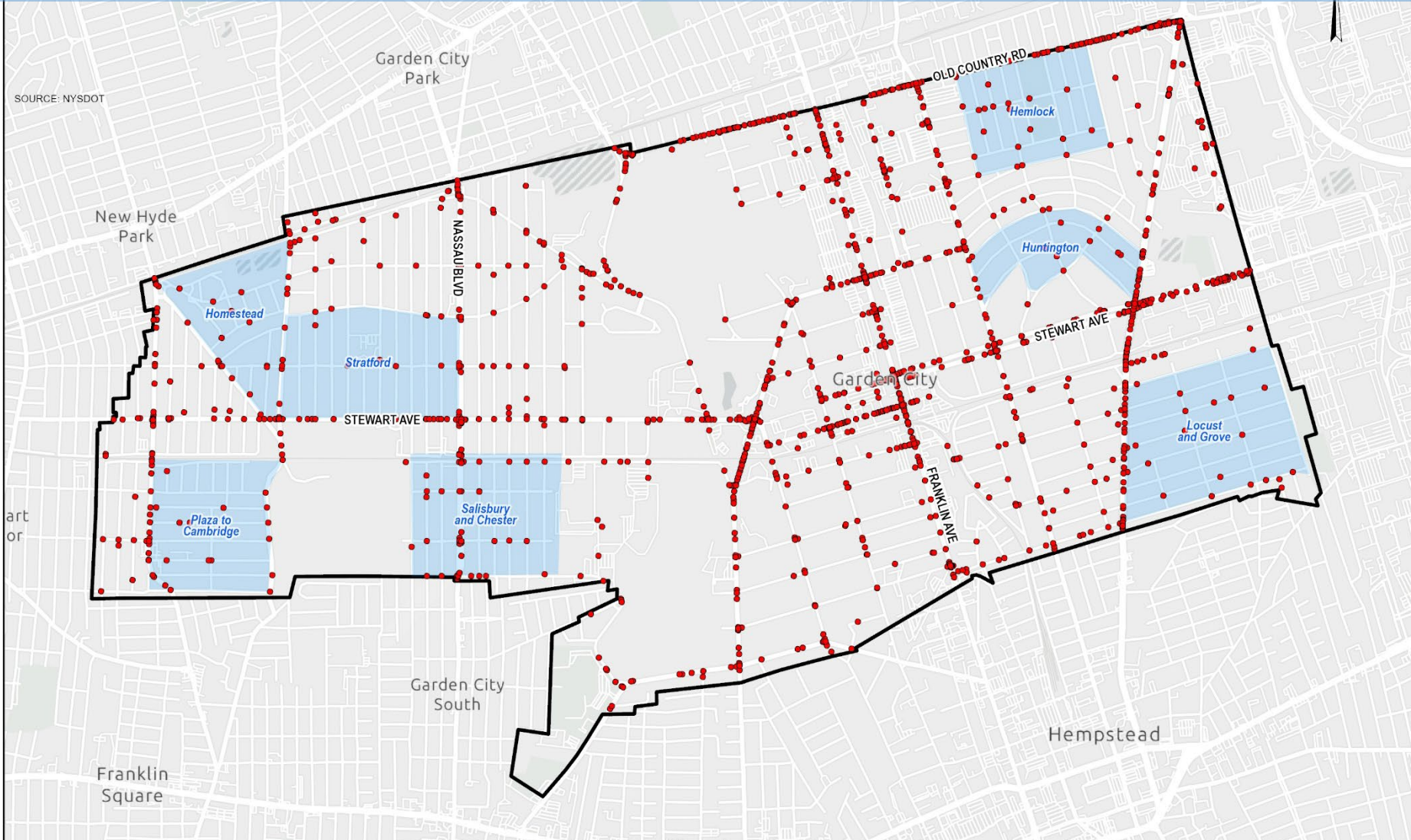


PROJECT: 121-321 DATE: 11/25/2022 SCALE: 1" = 2,250'

ALL CRASHES 2017-2021



SOURCE: NYS DOT



art
or

• Crashes
DATA SOURCE: NYS DOT



West

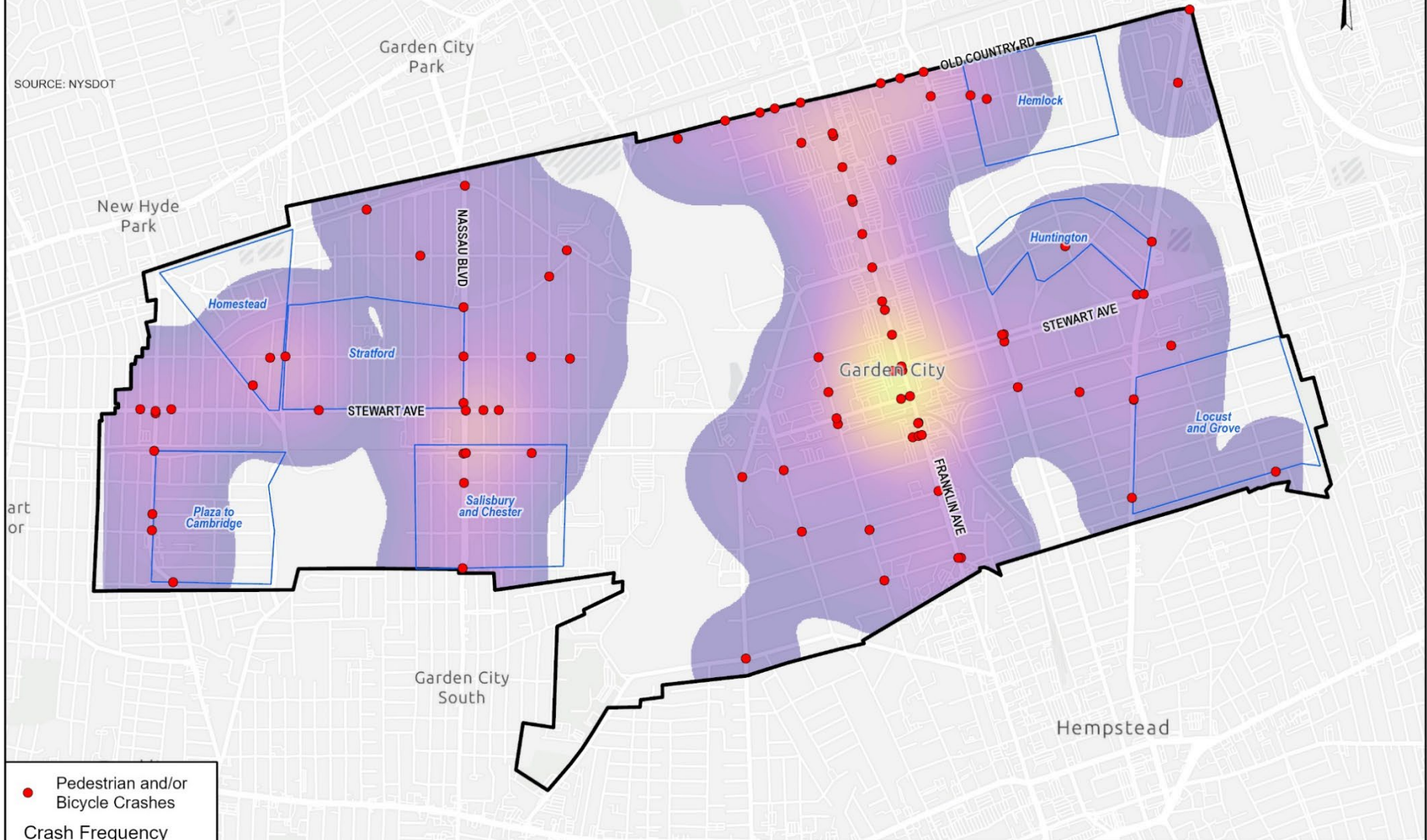
GARDEN CITY, NY SATELLITE STUDY &
TRAFFIC CALMING MASTER PLAN
MOTOR VEHICLE CRASHES
2017 - 2021



PEDESTRIAN/BICYCLE CRASHES 2017-2021



SOURCE: NYS DOT



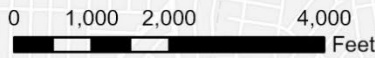
art
or

● Pedestrian and/or Bicycle Crashes

Crash Frequency

← Lower Higher →

DATA SOURCE: NYS DOT



GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

MOTOR VEHICLE CRASHES INVOLVING PEDESTRIANS AND/OR BICYCLES

2017 - 2021



PROJECT: 121-321 | DATE: 10/26/202 | SCALE: 1" = 2,250'

West

CRASHES IN GARDEN CITY (SERIOUS/FATAL)

Year	2017	2018	2019	2020	2021
Crashes	822	995	933	569	909
Crashes with Serious Injury	21	14	14	9	19
Crashes with Fatality	0	0	1	1	1

Source: NYSDOT. Data collected for the study area from 01/01/2017 – 12/31/2021.

CRASHES IN GARDEN CITY (PEDS / BIKE)

Year	2017	2018	2019	2020	2021
Crashes	822	995	933	569	909
Crashes involving Pedestrians	17	25	15	9	13
Crashes involving Bicyclists	9	9	7	8	9

Source: NYSDOT. Data collected for the study area from 01/01/2017 – 12/31/2021.

CRASHES IN COMPARISON

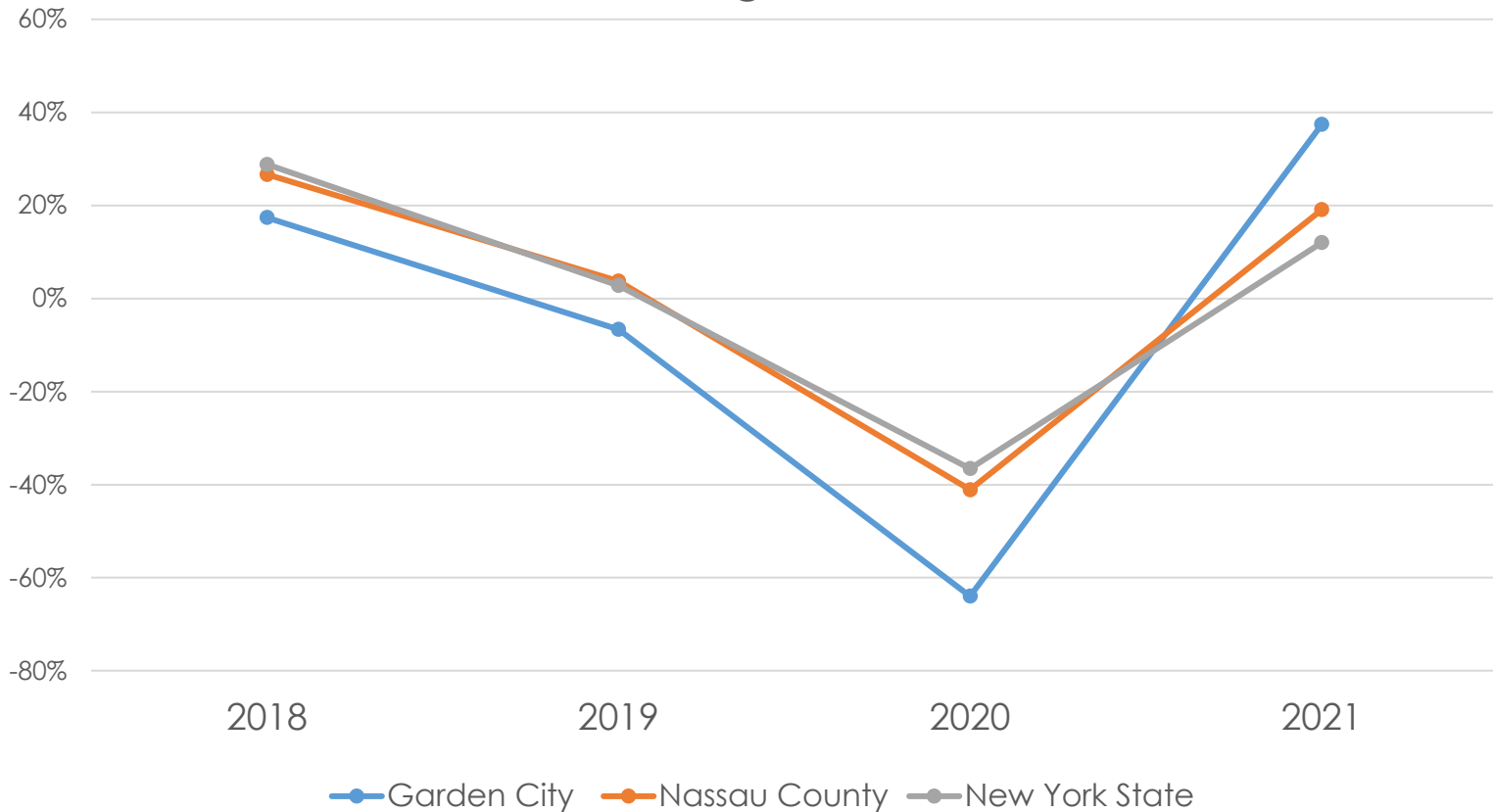
Year	2017	2018	2019	2020	2021
Garden City	822	995	933	569	909
Nassau County	29,557	40,306	41,862	29,672	36,665
New York State	309,371	434,596	447,021	327,390	372,159

Source: NYSDOT and NYS DMV

CRASHES IN COMPARISON



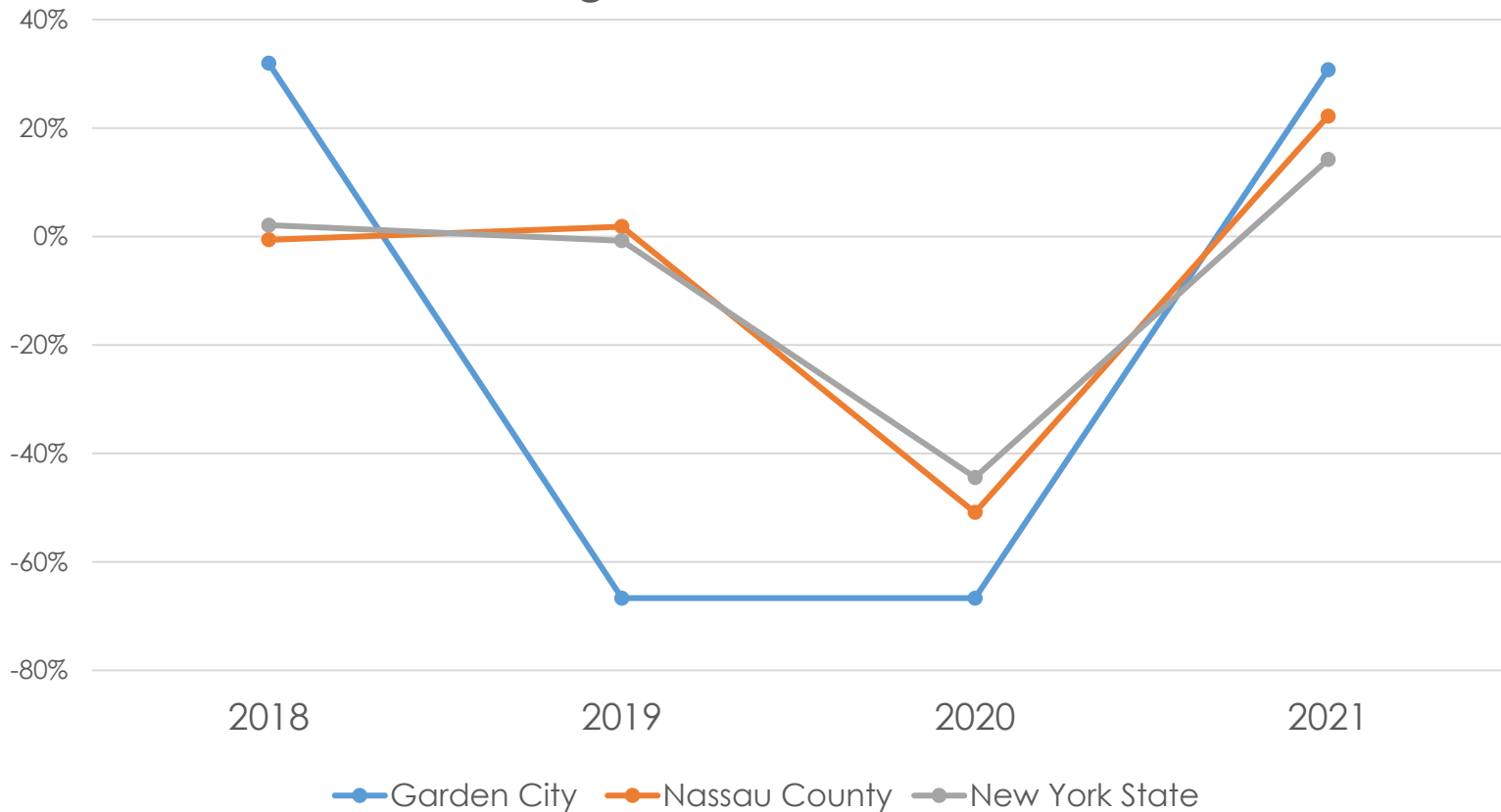
Percent Change in All Crashes



Source: NYSDOT and NYS DMV

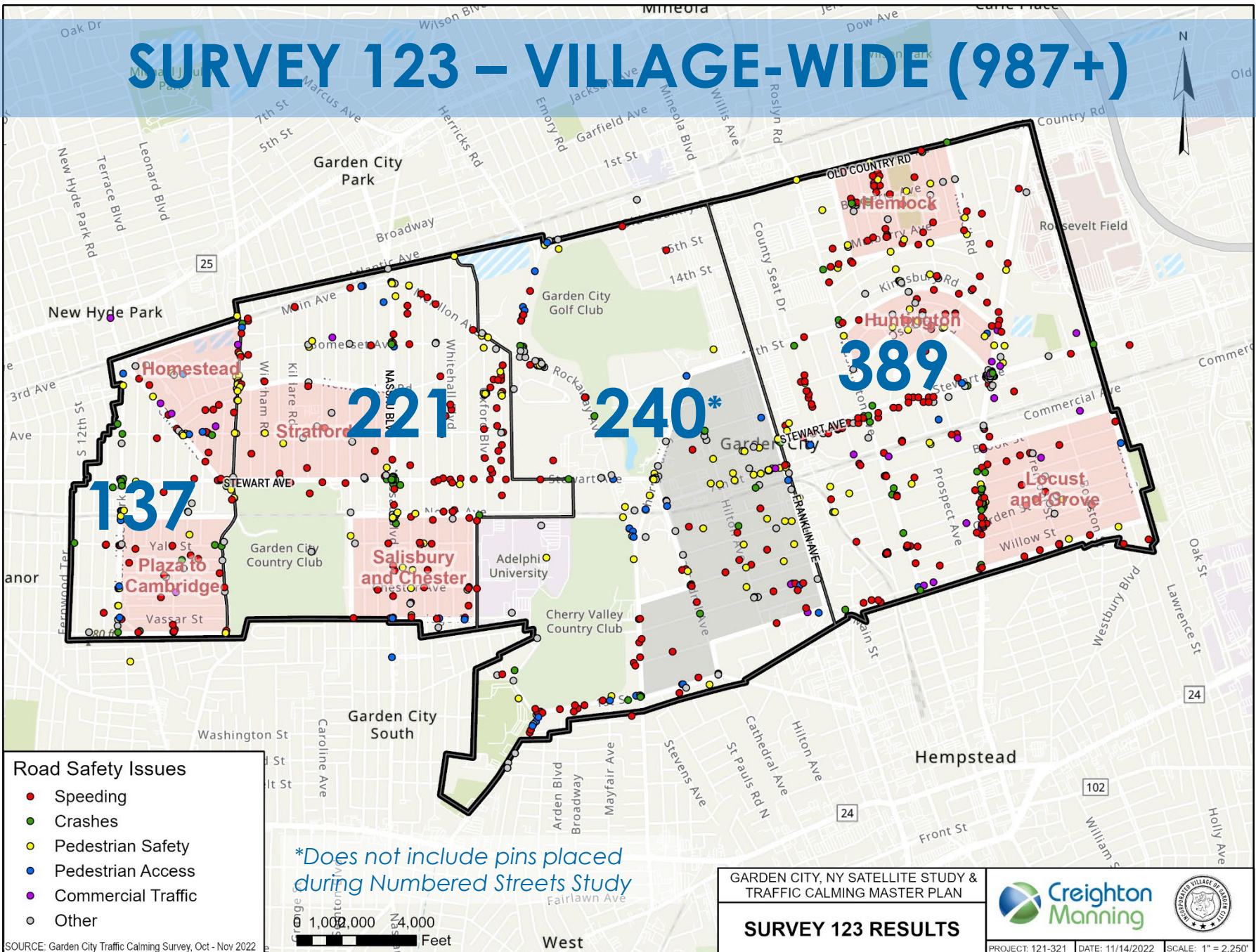
CRASHES IN COMPARISON

Percent Change in Crashes invol Pedestrians



Source: NYSDOT and NYS DMV

SURVEY 123 – VILLAGE-WIDE (987+)



**Does not include pins placed during Numbered Streets Study*

0 1,000 2,000 4,000 Feet

GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

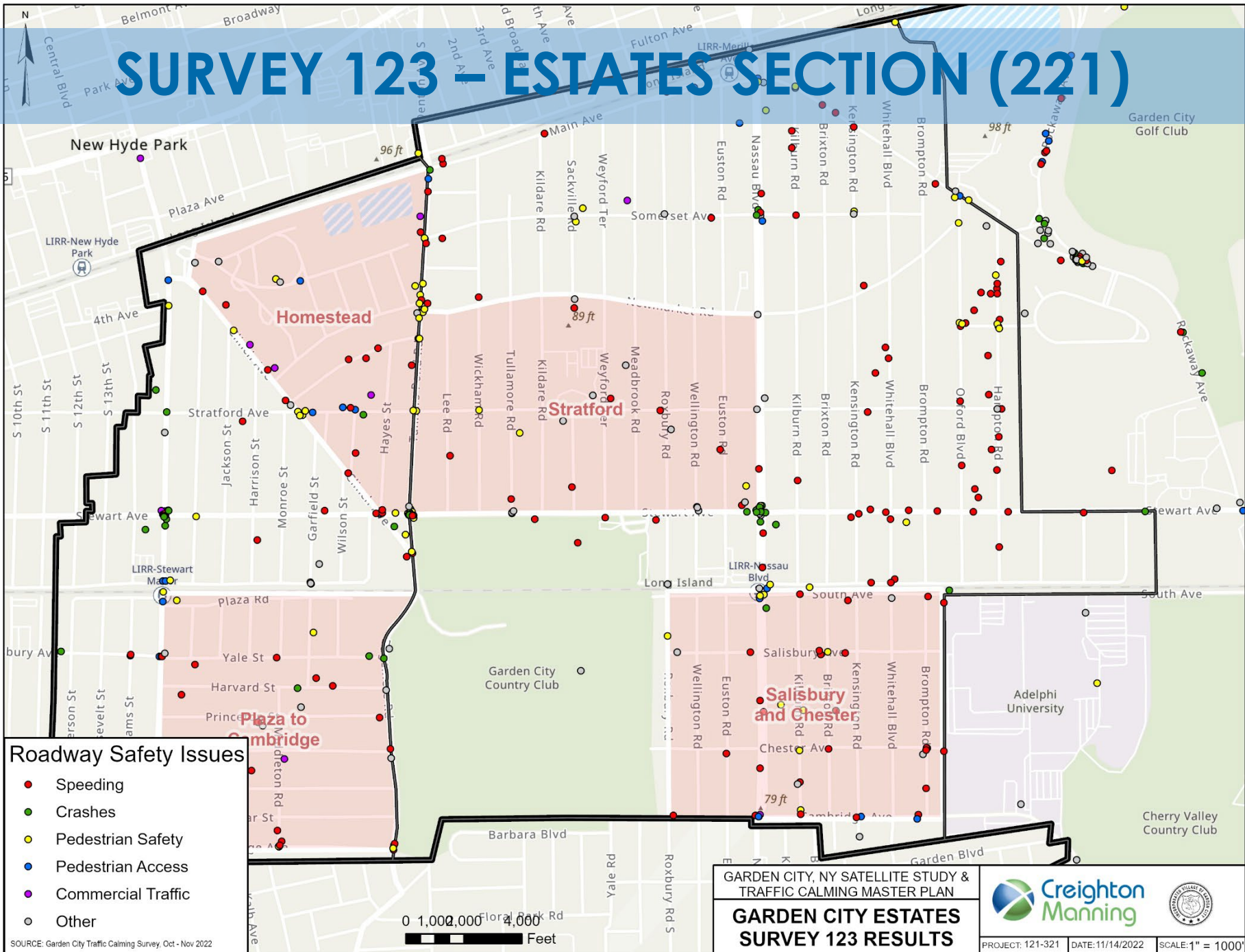
SURVEY 123 RESULTS



PROJECT: 121-321 DATE: 11/14/2022 SCALE: 1" = 2,250'

SOURCE: Garden City Traffic Calming Survey, Oct - Nov 2022

SURVEY 123 – ESTATES SECTION (221)



Roadway Safety Issues

- Speeding
- Crashes
- Pedestrian Safety
- Pedestrian Access
- Commercial Traffic
- Other

SOURCE: Garden City Traffic Calming Survey, Oct - Nov 2022

0 1,000 2,000 4,000 Feet

GARDEN CITY, NY SATELLITE STUDY & TRAFFIC CALMING MASTER PLAN

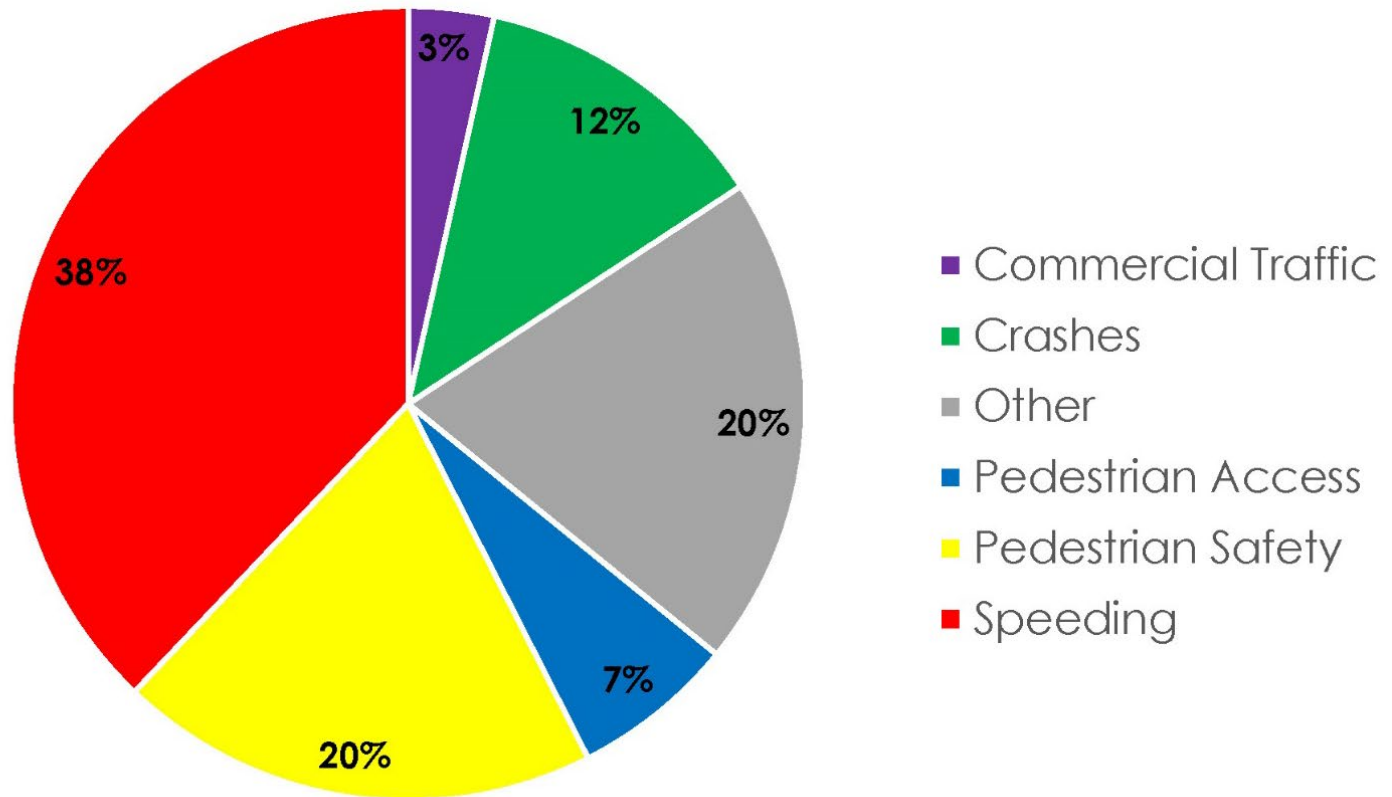
GARDEN CITY ESTATES SURVEY 123 RESULTS



PROJECT: 121-321 | DATE: 11/14/2022 | SCALE: 1" = 1000'

SURVEY 123 – RESULTS SUMMARY

Total Survey Responses



SURVEY 123 – ESTATES COMMENTS

Cars are speeding down South avenue (seems to be Adelphi traffic). There are few stops signs to slow them down. This is a residential neighborhood with a high number of young children, and the speeding on south avenue is dangerous.

People don't stop at stop signs and speed down Stratford

1 - Nassau Blvd and Stewart southbound. No turn signal. And the turning lane should be longer. 2 - rockaway, HS and Merillon merge is a disaster.

Needs a longer “walk” time for pedestrians to cross at Nassau Blvd

Speeding, crashes and pedestrian safety

Students walking to/ from school and cars racing up and down Oxford. Also, when I walk my dog on Oxford, you need to walk on the sidewalk as cars are racing up and down Oxford.

DISCUSSION #2

- Again, we want to hear from the CAC...
- After having reviewed the material...
 - What locations are of greatest concern to you in your section / study area?

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 different areas, including commercial settings and rural areas.
- Strategies are sometimes grouped into the three E's: **Education, Enforcement, Engineering and Planning**

POSSIBLE TREATMENTS...



Enhanced Crosswalks

- High-visibility markings, pedestrian enhancements including neckdowns, pedestrian-activated crossing warning lights
- Signs that alert drivers to yield to pedestrians

Benefits: Delineates preferred pedestrian paths, shortens distances between crossings, makes crossings more visible



Speed Humps & Speed Cushions

- Used where AADT is <math><3500^*</math> / posted speed <math><30\text{mph}</math>

Benefits: Can reduce speeds; cushions are traversable by emergency vehicles without slowing



* Volume and speed ranges are guide, not requirements

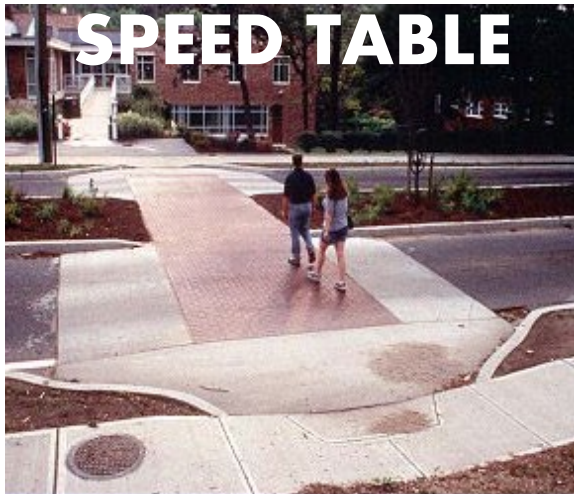
POSSIBLE TREATMENTS...



Raised Crosswalk

- Used with low traffic volumes at approaches / speeds <35mph
- 3 to 6 inches above street level

Benefits: slows motorists at crosswalks; similar to a speed table,



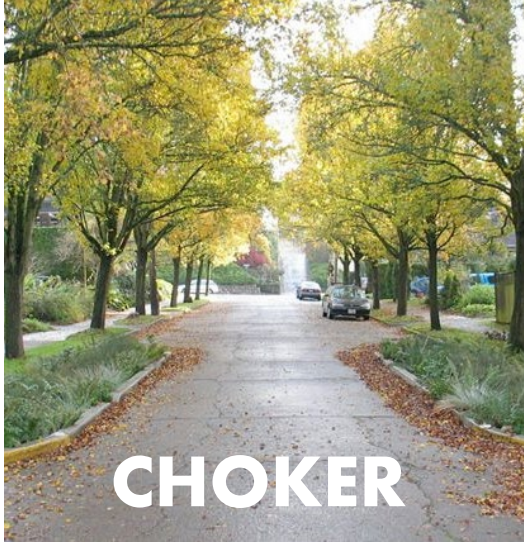
Speed Table

- Used where AADT is <3000* / posted speed <30mph

Benefits: Can reduce speeds; provides location for mid-block pedestrian crossing; similar to raised crosswalk

* Volume and speed ranges are guide, not requirements

POSSIBLE TREATMENTS...



Choker

- Used where AADT 1000-6000* / posted speed <40mph
- Called “Neckdowns” or “bulb-outs” at intersections

Benefits: Reduce speeds by restricting travel way; allows for roadside beautification



Chicane

- Used where AADT<3500* / posted speed <35mph
- Design consideration should be made for drainage and utility features

Benefits: Allows for roadside beautification; reduces speeds by introducing horizontal elements

* Volume and speed ranges are guide, not requirements

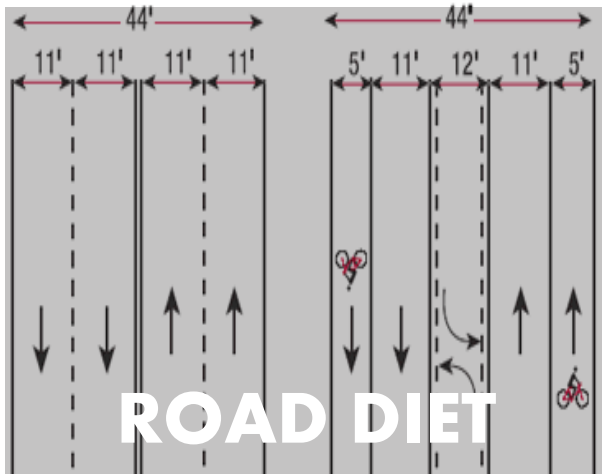
POSSIBLE TREATMENTS...



Median Island

- Used with any traffic volume / posted speed <45mph
- Also called a pedestrian island

Benefits: Can be used mid-block, reduces speeds by narrowing roadway and alerts drivers of pedestrian crossing



Road Diet

- Used where AADT <20000* / posted speed <40mph
- Most commonly used on a four lane road; converted to two lanes with a turning lane

Benefits: Can provide additional space for other modes of transportation, slows speeds by narrowing lane widths

* Volume and speed ranges are guide, not requirements

POSSIBLE TREATMENTS...



Raised Intersection

- Used with low traffic volumes at approaches / speeds <35mph
- Works well at intersections with significant pedestrian traffic

Benefits: Functions like a speed hump or speed table, slows motorists, a vertical element that alerts drivers



Traffic Circle

- Slow speeds, low traffic volumes
- Installed at a junction of two local roads

Benefits: Reduces speed by directing drivers around the circle; reduces the number of angle and turning collisions; reduces conflict points. Can have Stop or Yield signs at approaches

* *Volume and speed ranges are guide, not requirements*

POSSIBLE TREATMENTS...



Turn Restriction Signs

- Prohibits movements at specific times /days
- May shift traffic to nearby streets
- Can be effective, especially with enforcement
- Less effective than physical changes

Benefits: Reduces cut through traffic, low-cost, best if limited to certain time periods



Stop Signs

- Is a Traffic Control device; not effective for speed reduction
- Used with low/moderate traffic volumes at approaches

Benefits: low-cost, can reduce accidents

* Volume and speed ranges are guide, not requirements

OTHER POSSIBLE ACTIONS...



RED LIGHT CAMERAS

Requires state approval



SPEED CAMERAS

Requires state approval, reduced speeding by 72% in NYC



ACTIVE EDUCATION

Done in collaboration with NYSDOT



LOWER SPEED LIMITS

New law allows 25mph speed limit

DISCUSSION #3

- Again, we want to hear from the CAC...
- After having reviewed the material...
 - What treatments are you interested in seeing developed?
 - What concerns do you have?

NEXT STEPS

- Summarize the notes
- Collect more data (speeds, volumes, etc.) at specific locations
- Additional research on treatments
- Begin sketching treatments

THANK YOU

Contact Info

Creighton Manning Engineering, LLP

Michael Amabile, AICP – Project Manager



mamabile@cmellp.com



www.cmellp.com



(914) 800-9207 (office)

