"What are we rushing to get done?"

Chestnut Hill Ave Traffic Data Analysis

Data-driven decision-making

Jesse and Brenda Hefter

653 Chestnut Hill Av residents since 1989

April/May 2025

Data-driven Decision Making

Goal

Use data collected by Brookline Police Department over the last five (5) years to understand the nature of traffic issues along Chestnut Hill Ave

Process

Receive data for Moving Violations

Receive data for Crash Incidents

Analysis

Determine what has actually been recorded as issues along Chestnut Hill Ave between 2020 and 2024

Use these results to inform decision-making about next steps for improvement of the Avenue

Town of Brookline Traffic Crashes
(Source: Brookline Police Annual Crime Report, p, 32, 2023)

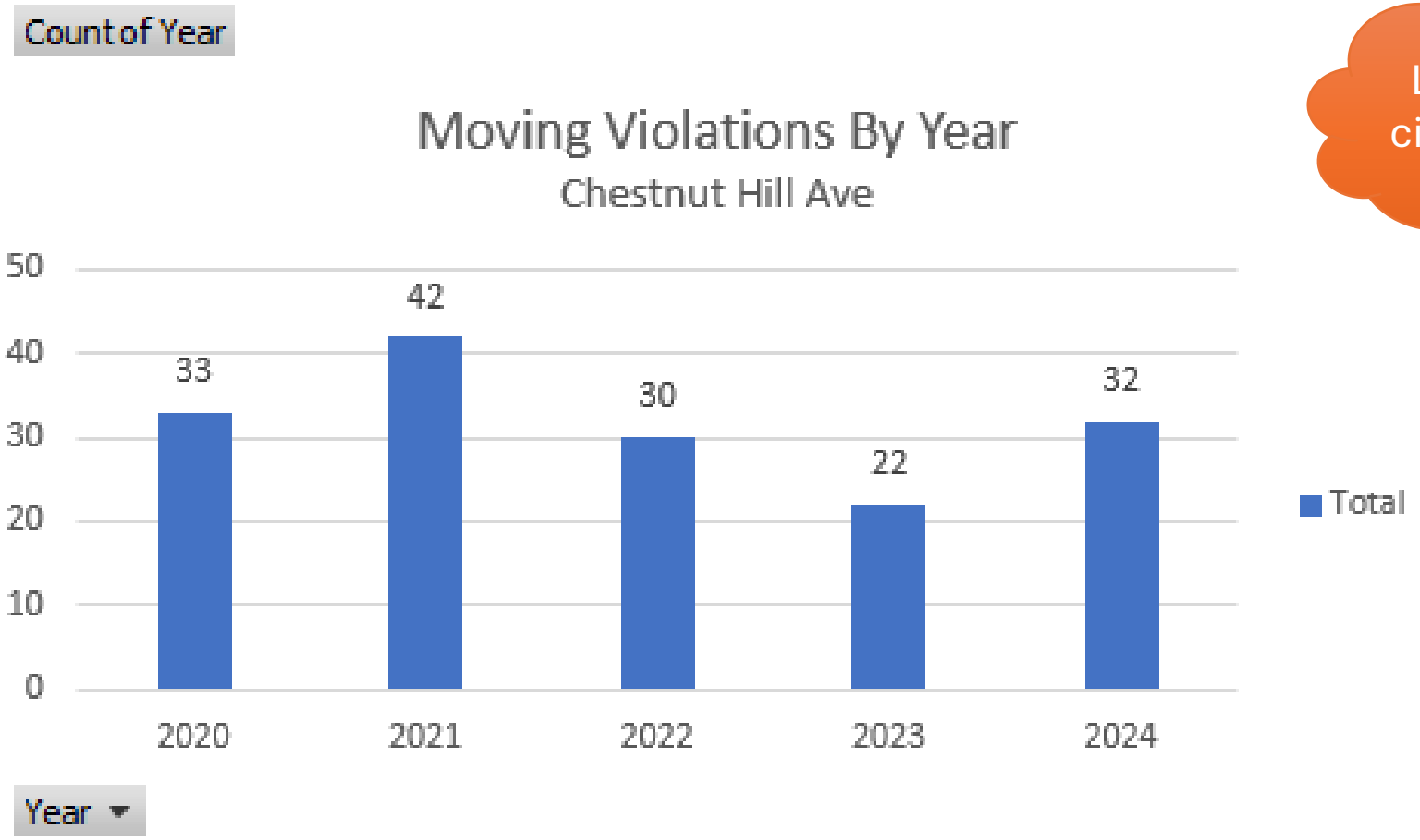
- Reported traffic crashes: 1,293
  - Majority of crashes are property damage only, no personal injury
- Breakdown – **Entire Town of Brookline**

Type	Count
Bike/Motor Vehicle	32
Bike/Pedestrian	5
Bike/Bike	1
Pedestrian/Motor Vehicle	38
Pedestrian/Moped	2
Pedestrian/Motorcycle	1
Other/Motor Vehicle	16

Moving Violations/Citations – Data Summary **Chestnut Hill Ave**

- Source: BPD – Jan 2020 – Dec 2024
- Records: 159
- Locations along the avenue: 13
- Citations/year range from **22 to 42**
- Highest locations include (top five represent 92%):
  - Boylston @ CHA – (95) 60% (vehicles turning onto CHA from Route 9)
  - Dean @ CHA – (19) 12%
  - CHA – (17) 11%
  - Beacon @ CHA – (8) 5% (not in Brookline but Boston)
  - Ackers @ CHA – (6) 4%

Moving Citations - Graphical Representation



Less than 1 citation/week

Moving Citations - Tabular Data

Row Labels	2020	2021	2022	2023	2024	Grand Total	Percent
ACKERS/CHESTNUT HILL AV	1	4	1			6	4%
BEACON/CHESTNUT HILL AV	2	2	2	2		8	5%
BOYLSTON/CHESTNUT HILL AV	24	20	20	10	21	95	60%
BUCKMINSTER/CHESTNUT HILL AV				1		1	1%
CHANNING/CHESTNUT HILL AV		1	1	1		3	2%
CHESTNUT HILL AV	4	3	4	3	3	17	11%
CHESTNUT HILL AV/DEAN	1					1	1%
CLINTON/CHESTNUT HILL AV	1	2				3	2%
DEAN/CHESTNUT HILL AV		8	2	3	6	19	12%
ELIOT/CHESTNUT HILL AV				1		1	1%
HYSLOP/CHESTNUT HILL AV		2		1		3	2%
RESERVOIR/CHESTNUT HILL AV					1	1	1%
WILLARD/CHESTNUT HILL AV					1	1	1%
Grand Total	**33**	**42**	**30**	**22**	**32**	**159**	100%

Moving Violation Data Observations

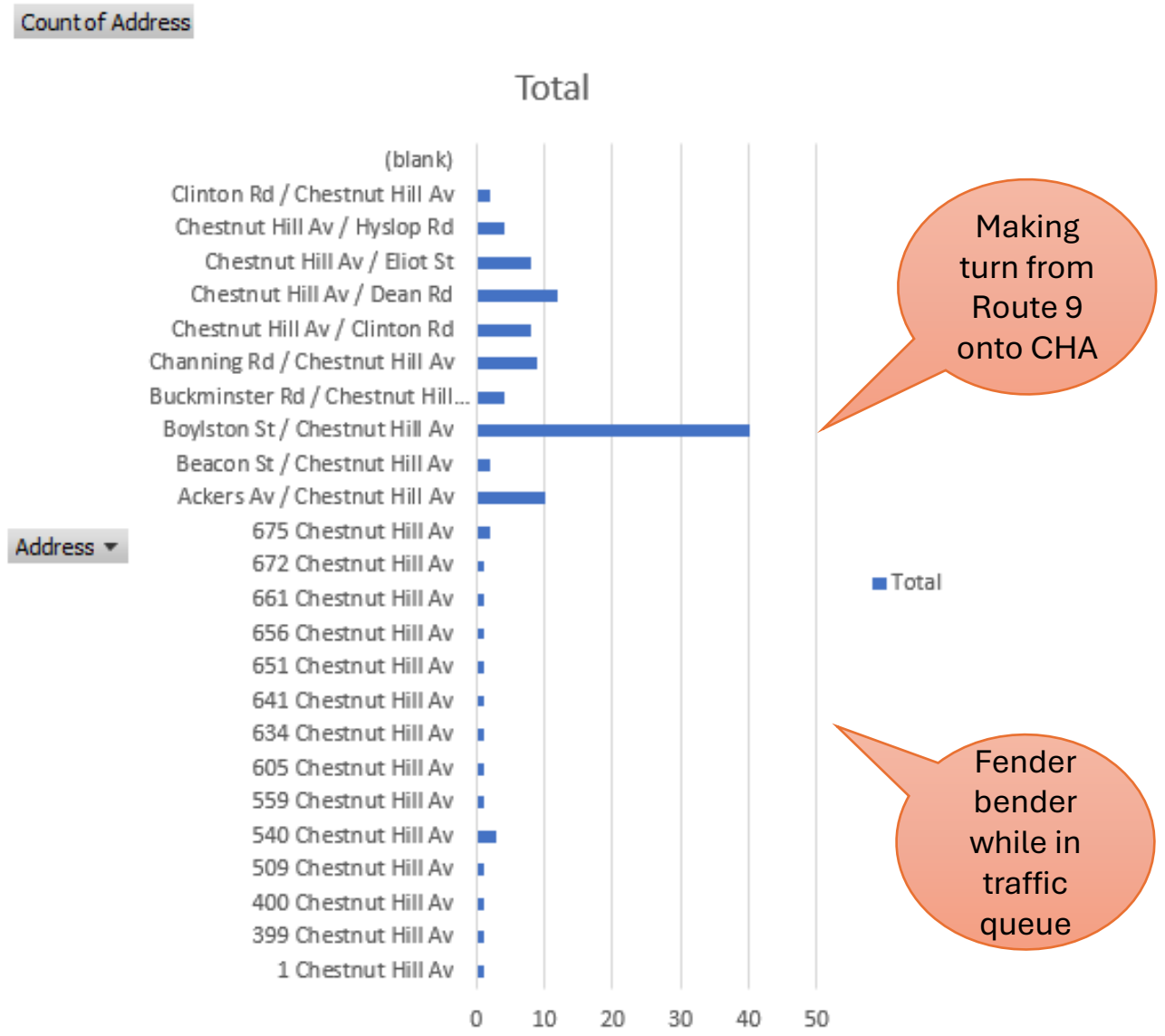
- An average of 30 moving violations/year from 2020-2024 for a heavily-trafficked (morning and evening rush hour) street in Brookline
- The majority of violations are located at the corner of Boylston (Route 9) and Chestnut Hill Ave
  - **Right on red violation** for vehicles traveling west on Route 9 making right onto Chestnut Hill Ave
  - **Left on red violation** for vehicles traveling east on Route 9 making left onto Chestnut Hill Ave
- Five "Fail to slow" citations in FIVE years
- Three "Speeding in violations-special regulation"
- Comment:
  - Low citation numbers should prompt a "pause to reflect" on the push to make dramatic changes along a safe roadway
  - Distribute our constrained financial resources more wisely by making the most urgent changes that then enable more improvements to be made across Brookline

Chestnut Hill Avenue Crash History– Data Summary

- Source: BPD – Jan 2020 - Feb 2025 (>five years)
- Records: 116
- Locations along the avenue: 24
- Crashes/year range from **~25-30**
- Highest locations include (top three include 92%):
  - Boylston @ CHA – (95) 60%
  - Dean @ CHA – (19) 12%
  - CHA – (17) 11%
  - Beacon @ CHA – (8) 5%
  - Ackers @ CHA – (6) 4%

Crash Incidents by Address Along Chestnut Hill Avenue

2020-Feb 2025



%-Distribution of Crashes **over 5 years** along locations on Chestnut Hill Ave

Row Labels	Count of Address	Percent
1 Chestnut Hill Av	1	1%
399 Chestnut Hill Av	1	1%
400 Chestnut Hill Av	1	1%
509 Chestnut Hill Av	1	1%
540 Chestnut Hill Av	3	3%
559 Chestnut Hill Av	1	1%
605 Chestnut Hill Av	1	1%
634 Chestnut Hill Av	1	1%
641 Chestnut Hill Av	1	1%
651 Chestnut Hill Av	1	1%
656 Chestnut Hill Av	1	1%
661 Chestnut Hill Av	1	1%
672 Chestnut Hill Av	1	1%
675 Chestnut Hill Av	2	2%
Ackers Av / Chestnut Hill Av	10	9%
Beacon St / Chestnut Hill Av	2	2%
Boylston St / Chestnut Hill Av	40	34%
Buckminster Rd / Chestnut Hill Av	4	3%
Channing Rd / Chestnut Hill Av	9	8%
Chestnut Hill Av / Clinton Rd	8	7%
Chestnut Hill Av / Dean Rd	12	10%
Chestnut Hill Av / Eliot St	8	7%
Chestnut Hill Av / Hyslop Rd	4	3%
Clinton Rd / Chestnut Hill Av	2	2%
(blank)		
Grand Total	**116**	100%

Single Bike Accident (Biker-At Fault) at Eliot/CHA Intersection (2023) Citation Issued

Count of Type	Column Labels			
Row Labels	N	Y	(blank)	Grand Total
1 Chestnut Hill Av	1			1
399 Chestnut Hill Av	1			1
400 Chestnut Hill Av	1			1
509 Chestnut Hill Av		1		1
540 Chestnut Hill Av	2	1		3
559 Chestnut Hill Av	1			1
605 Chestnut Hill Av	1			1
634 Chestnut Hill Av	1			1
641 Chestnut Hill Av	1			1
651 Chestnut Hill Av	1			1
656 Chestnut Hill Av	1			1
661 Chestnut Hill Av		1		1
672 Chestnut Hill Av	1			1
675 Chestnut Hill Av	1	1		2
Ackers Av / Chestnut Hill Av	7	3		10
Beacon St / Chestnut Hill Av	2			2
Boylston St / Chestnut Hill Av	33	7		40
Buckminster Rd / Chestnut Hill Av	3	1		4
Channing Rd / Chestnut Hill Av	9			9
Chestnut Hill Av / Clinton Rd	4	4		8
Chestnut Hill Av / Dean Rd	11	1		12
Chestnut Hill Av / Eliot St	7	1		8
Bike failed to yield right of way	1			1
Failure to Yield to Oncoming Traffic	1			1
Following too closely, Unsafe Lane Change		1		1
MV1 attempted to pass MV2	1			1
(blank)	4			4

Highest Crash Rate Location

(Note: zero crashes noted as due to high-speed)

Count of Type	Column Labels			
Row Labels	N	Y	(blank)	Grand Total
1 Chestnut Hill Av	1			1
399 Chestnut Hill Av	1			1
400 Chestnut Hill Av	1			1
509 Chestnut Hill Av		1		1
540 Chestnut Hill Av	2	1		3
559 Chestnut Hill Av	1			1
605 Chestnut Hill Av	1			1
634 Chestnut Hill Av	1			1
641 Chestnut Hill Av	1			1
651 Chestnut Hill Av	1			1
656 Chestnut Hill Av	1			1
661 Chestnut Hill Av		1		1
672 Chestnut Hill Av	1			1
675 Chestnut Hill Av	1	1		2
Ackers Av / Chestnut Hill Av	7	3		10
Beacon St / Chestnut Hill Av	2			2
Boylston St / Chestnut Hill Av	33	7		40
Failure to Stop at Red Light		2		2
Following Too Closely	2	1		3
MV hit median	1			1
MV1 made contact with MV2 when turning	1			1
MV1 pulled around and clipped MV2	1			1
Pressed gas instead of break, Following too Closely		1		1
Red Light Violation		1		1
Unsafe lane change	2	1		3
(blank)	26	1		27

Ackers Av @ CHA Crash Reasons (**zero incidents assigned to high-speed**)

Count of Type	Column Labels			
Row Labels	N	Y	(blank)	Grand Total
1 Chestnut Hill Av	1			1
399 Chestnut Hill Av	1			1
400 Chestnut Hill Av	1			1
509 Chestnut Hill Av		1		1
540 Chestnut Hill Av	2	1		3
559 Chestnut Hill Av	1			1
605 Chestnut Hill Av	1			1
634 Chestnut Hill Av	1			1
641 Chestnut Hill Av	1			1
651 Chestnut Hill Av	1			1
656 Chestnut Hill Av	1			1
661 Chestnut Hill Av		1		1
672 Chestnut Hill Av	1			1
675 Chestnut Hill Av	1	1		2
Ackers Av / Chestnut Hill Av	7	3		10
Distracted Driving	1			1
Driver may have fallen asleep	1			1
Failure to Use Care	1			1
Following Too Closely		1		1
Possible medical event		1		1
Struck a low tree limb	1			1
Sun glare caused to hit utility pole; Marked Lanes Violation		1		1
(blank)	3			3

CHA Crash Reasons (**zero incidents assigned to high-speed**)

Reason	Count	Percent
Following Too Closely	9	18%
Failure to Yield Right of Way	5	10%
Unsafe lane change	4	8%
Failure to Stop at Red Light	3	6%
Distracted Driving	2	4%
Marked Lanes Violation	2	4%
Bike failed to yield right of way	1	2%
CAD Only	1	2%
Can of air spray lodged under brake pedal	1	2%
Driver may have fallen asleep	1	2%
Failure to Use Care	1	2%
Failure to Yield at a Crosswalk	1	2%
Failure to Yield to Oncoming Traffic	1	2%
Following too closely, Unsafe Lane Change	1	2%
Garbage truck struck a low branch, pulling overhead cable wires that struck another car	1	2%
Improper passing on the right	1	2%
MV hit median	1	2%
MV pulled out of parking lot and hit MV 2	1	2%
MV1 attempted to pass MV2	1	2%
MV1 made contact with MV2 when turning	1	2%
MV1 pulled around and clipped MV2	1	2%
MV1 rolled into MV2	1	2%
MV2 failed to stop when MV1 stopped at Crosswalk, Following too Closely	1	2%
MV2 failed to stop when MV1 stopped at Red Light	1	2%
OUI, Reckless Operation, Marked Lanes Violation	1	2%
Plow hit old concrete traffic light base	1	2%
Possible medical event	1	2%
Pressed gas instead of break, Following too Closely	1	2%
Red Light Violation	1	2%
Struck a low tree limb	1	2%
Sun glare caused to hit utility pole; Marked Lanes Violation	1	2%
Unknown	1	2%
Total	51	100%

Crash data observations

One bike-related crash with a vehicle over the last 5 years cited as biker-at-fault

No crashes of the 116 reported noted “high-speed”

Majority of crashes involve:

- Following too closely
- Failure to yield right-of-way
- Unsafe lane changes (**Note**: CHA is single lane each way its entire length)

The highest frequency crash location is an intersection with a state highway

Crash data does not support the assertion that CHA is a speed thoroughfare or a dangerous road to travel

Crosswalk Changes - Questions

Clinton Road

- Big “Block the box” will back up traffic
- Pedestrian Refuge Island will narrow an already narrow roadway

Buckminster Road

- Pedestrian Refuge Island will block driveway access for abutter
- No MBTA data provided that there are any cross-walkers there at all! What problem are we solving?

Hyslop Road and Ackers Ave

- Road is not wide enough to require the refuge islands – road users don’t reliably stop anyway