

**NATICK PUBLIC SCHOOLS**  
**School Committee Meeting**  
**December 2, 2024**  
**6:00 PM**  
**School Committee Room - 3rd flr, Town Hall**

**Posted Date: Tuesday, November 26, 2024 @ 3:15 PM**

**Open Meeting 6:00PM, Executive Session 6:05PM, Return to Open Session approximately at 6:35 PM. Virtual Meeting Accessed Via: [https://us06web.zoom.us/j/2038566119?](https://us06web.zoom.us/j/2038566119?pwd=TmtdXGxenQ0YXRlN1FicHVpd3hEZZ09)**  
**pwd=TmtdXGxenQ0YXRlN1FicHVpd3hEZZ09 Meeting ID: 203 856 6119 Passcode: 987179 One tap mobile +13126266799,,2038566119# US (Chicago) +16465588656,,2038566119# US (New York) Dial by your location +1 312 626 6799 US (Chicago) +1 646 558 8656 US (New York) Meeting ID: 203 856 6119 Find your local number: <https://us06web.zoom.us/j/2038566119?pwd=TmtdXGxenQ0YXRlN1FicHVpd3hEZZ09> . If any member of the public, attending the meeting virtually, wishes to take advantage of public speak, they should email the School Committee Chair, Shai Fuxman at ([sfuxman@natickps.org](mailto:sfuxman@natickps.org)), one hour prior to the start of the meeting. Your email should include your name, town and your request to be called upon during the public speak portion of the agenda. The School Committee Chair will then announce your name and you will be unmuted and prompted to turn on your video for your opportunity to share your remarks. Per our public speak policy, each speaker will have up to 3 minutes.**

**Posted In Accordance with Provisions of M.G.L. Chapter 30A, Sections 18-25**

**OPEN SESSION**

- Roll Call
- Pledge of Allegiance
- Moment of Silence
- Announcements

**EXECUTIVE SESSION - this portion of the meeting is not open to the public**

1. To conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel.
2. To conduct strategy sessions in preparation for negotiations with Non-Represented Personnel (PSAT/SAT Tech Coordinator)

**PUBLIC SPEAK**

Public Speak is scheduled for a period of fifteen minutes. Each speaker will be permitted a maximum of three minutes during which time they can speak about topics within the scope of responsibility of the School Committee. All remarks will be addressed through the School Committee Chair. Public Speak is not a time for debate or response to comments by the School Committee.

**TEACHER, STUDENT AND METCO REPRESENTATIVE UPDATES/CONCERNS**

**CONSENT AGENDA**

1. Donation Memo
2. Approval of Field Trip to Providence RI
3. Approval of Open Session Minutes from 10.21.24
4. Approval of Executive Session Minutes from 10.21.24

#### **SUPERINTENDENT'S REPORT**

1. Metro West Adolescent Health Survey Work Group Presentation
2. VOCAL & SAEBRS
3. SY26 Budget: Preliminary Estimate and Override Recommendation
4. Enrollment - December 1, 2024

#### **SUBCOMMITTEE/LIAISON UPDATES**

1. Policy Subcommittee Update

#### **CHAIRMAN'S REPORT**

1. Rotary Book Donation Report
2. Zero Emissions Vehicle Fleet & Roadmap

#### **ACTION ITEMS**

1. Non-Rep Schedule - New line for PSAT/SAT Tech Coordinator
2. Zero Emissions Vehicle Fleet & Roadmap

*Agenda items will be addressed in an order determined by the chair. Times are approximate.*

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**ITEM TITLE:**

To conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel.

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND  
INFORMATION:**

**RECOMMENDATION:**

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**ITEM TITLE:** To conduct strategy sessions in preparation for negotiations with Non-Represented Personnel (PSAT/SAT Tech Coordinator)

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND**

**INFORMATION:**

**RECOMMENDATION:**

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**ITEM TITLE:** Donation Memo  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:** Donation Memo - LINK  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
donation memo	12.2.24_FY25_Donation_Memo_.docx_(1).pdf	Cover Memo



Natick Public Schools

**BUSINESS OFFICE**

13 East Central Street, Natick, MA 01760

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**Matthew J. Gillis, Assistant Superintendent for Finance & Operations**

Melissa Spash, Superintendent of Schools

Susan Balboni, Assistant Superintendent for Teaching, Learning, and Innovation

Date: December 2, 2024

TO: School Committee Members  
Melissa Spash, Superintendent

FROM: Matthew J. Gillis

RE: Donations

I recommend the School Committee vote to accept the following donations:

Source/Donation	Amount/Value	Purpose
Rotary Book Donation		

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**ITEM TITLE:** Approval of Field Trip to Providence RI  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:** Approval of Field Trip to Providence RI - LINK  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
approval of field trip to providence ri	12.2_mtg_ _field_trip_to_providence_RI_.pdf	Cover Memo

# Natick Public Schools

## Field Trip Request Form

### Out-of-State (not overnight) Travel ONLY

*Attach itinerary, student lists (if known), hotel information, chaperone sign-off forms, waiver requests, etc. to the completed request form and send it to the Principal's office. If you will just be submitting the one request form, you may return it by email.*

*Submit to the principal's office no later than the Wednesday before the Natick High School Committee is to meet. Overseas trip requests must be submitted and also approved in advance of any marketing to the students.*

*The lead teacher or an adult representative from your trip must appear at the Natick School Committee meeting to present the request. You will be notified of the date of this meeting.*

Date: \_\_\_November 8, 2024\_\_\_\_\_

To: \_\_\_Providence Performing Arts Center\_\_\_\_\_

From: \_\_\_**Steve Miller**\_\_\_\_\_

Re: \_\_\_Theatre, Humanities, and METCO students see matinee of A Christmas Carol at Providence Performing Arts Center in Providence RI performed by Trinity Rep Theatre Company.\_\_\_\_\_

I would like to request Approval for the following Out-of-State but NOT Overnight Trip:

Date of trip: \_\_\_December 3, 2024\_\_\_\_\_

Lead teacher's name: \_\_\_Steve Miller\_\_\_\_\_

Group/Class(es): \_\_\_Theatre For All Class, Humanities Class, METCO students and some Theatre club students\_\_\_\_\_

Destination and Itinerary: \_\_\_Providence Performing Arts Center, \_\_\_\_\_

Mode of transportation requested: \_\_\_School Bus\_\_\_\_\_

Transportation Company: \_\_\_Connolly Bus\_\_\_\_\_

Method of payment (fundraising, etc.): \_\_\_part of curriculum budget\_\_\_\_\_

Names of chaperones: \_\_\_Steve Miller, Tim Ballard, Chris Cardoso or one\_other\_\_\_\_\_

Estimated cost per student: \_\_\_0\_\_\_\_\_

Purpose of trip and its relevance to learning taking place in your classroom:

\_\_\_Give students a relevant experience with live theater and an example of how a work of literature can be adapted for the stage and modified. Trinity Rep presents a different take on Christmas Caroll every year\_and to build connection between students and programs\_\_\_\_\_

I have attached all relevant forms necessary to submit this request.



Department Head or Designee Approval

*Steve Miller*

Principal Approval

*Janice 11/12/24*

Superintendent Approval

*Melissa Spahr 11/25/24*

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**ITEM TITLE:** Approval of Open Session Minutes from 10.21.24  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:**  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
approval of open session minutes from 10.21.24	10.21.24_OPEN_SESSION_School_Committee_Minutes.pdf	Cover Memo

*Natick Public Schools*  
**SCHOOL COMMITTEE MEETING OPEN SESSION MINUTES**  
*October 21, 2024*

The School Committee held a meeting on Monday October 21, 2024, at 6:04 pm via an in-person and virtual meeting. Chair Fuxman called the meeting to order and took roll call at 6:04 pm.

Members Present:

Chair Fuxman - present  
Ms. Gorseth - present  
Ms. Brunell - present at 6:07 pm  
Ms. McDonough – present at 6:30 pm  
Ms Collins - present virtually at 6:07 pm  
Mr. Brand – present  
Ms. Flathers - present  
Ms. Scott - present virtually @ 7:07 pm

Others Present:

Dr. Melissa Spash	Superintendent
Susan Balboni	Assistant Superintendent for Teaching, Learning, Innovation and Equity
Matthew Gillis	Assistant Superintendent of Finance
Linda McGrath	Recording Secretary

Chair Fuxman made a motion to move into Executive Session at 6:06 PM for the following purposes: Ms. Gorseth second the motion.

1. To discuss strategy with respect to collective bargaining if an open meeting may have a detrimental effect on the bargaining position of the public body and the Chair so declares (EAN Units A and B, Administrative Assistants, Food Service, Paraprofessionals, and Custodial and Maintenance).

Chair Fuxman took role call to vote:

Chair Fuxman - yes  
Ms. Gorseth - yes  
Mr. Brand – yes  
Ms. Flathers - yes

## OPEN SESSION

Chair Fuxman resumed the open session meeting at approximately 7:07 pm and stated that the meeting was being recorded by Pegasus.

### Pledge of Allegiance

Moment of Silence - To honor those who have sacrificed for our country.

Announcements - Chair Fuxman announced that Spark Kindness is holding an event Thursday, October 24th @ 6:30 pm at the High School auditorium and is in collaboration with Natick United.

Also, Natick SEPAC is having an event on October 23rd @ 6:30 - 8:00 pm at Kennedy Middle School.

## PUBLIC SPEAK

Public Speak is scheduled for a period of fifteen minutes. Each speaker will be permitted a maximum of three minutes during which time they can speak about topics within the scope of responsibility of the School Committee. All remarks will be addressed through the School Committee Chair. Public Speak is not a time for debate or response to comments by the School Committee.

No one present for public speak ~

### TEACHER REPRESENTATIVE - Jefferson Wood

Mr. Wood stated he did not have any announcements for tonight.

### STUDENT REPRESENTATIVE - Anthony Lu

Anthony announced that last Friday, October 18th there was a mock presidential debate hosted by the politics club with a turnout of about 400 students. Also, there will be PSAT testing on Saturday, October 26th and playoff season for the fall will be starting.

### METCO REPRESENTATIVE - Tamika Scott

Ms. Scott stated that she did not have anything to report for tonight.

## CONSENT AGENDA

1. Approval of the Open Session minutes from [9.9.24](#)
2. Approval of the Executive Session minutes from 9.9.24
3. [Donation Memo](#)
  - a. Donations totaling \$75.00 to NHS Athletic Department In Memory of Richard Peristere.

- b. [Donations totaling \\$900 to Memorial, Lilja & Kennedy from Natick Education Foundation.](#)

Chair Fuxman asked for a motion to approve. Mr. Brand made a motion to approve the consent agenda. Ms. Gorseth seconded the motion. *All were in favor. 6-0-0. Motion passed.*

## SUPERINTENDENT’S REPORT - Dr. Spash

1. Dr. Tracy Gladstone - [Mood Check - School-Based Mental Health Screening & Intervention](#)

Dr. Fergusson announced Dr. Tracy Gladstone along with a brief introduction of her work. Dr. Gladstone then went over her presentation on Mood Check to the committee.

Mr. Brand asked if the “checks” were at the same time of year and is there any data around correlations around life events? Dr. Gladstone stated that generally the schools prefer the same time of year.

Ms. Gorseth wondered about the families that do not want to share information with the Natick schools and how it differs from other districts? Also, are there any factors that would play into that decision of keeping the information private? Dr. Gladstone commented that it is pretty much the same across the districts.

Ms. Flathers asked if there is any education provided to parents with regards to sharing information? Dr. Gladstone stated that they encourage parents to share information with the schools.

Ms. Brunell asked if Natick could do a better job of educating parents? Dr. Gladstone replied that they have shared information with parents about the program but are open to feedback. She also commented that the rates of parents letting them share information is low.

Ms. Brunell asked how they are funded at this time? Dr. Gladstone stated that they started with funding from the Metrowest Health Foundation in Natick and then received a second grant to bring to the middle schools.

Chair Fuxman asked if there is data as to how many of the students who are flagged receive the support that is needed? Dr. Gladstone stated that they don’t have the data for that as it is a community based program.

Chair Fuxman asked what the process is when parents opt in to sharing and who at the school would receive? Dr. Gladstone stated that they ask the parents who they would think would be helpful for them to contact. If they are not sure, then they will suggest.

Student Representative Anthony Lu asked if the “Mood Check” is available in other languages? Dr. Gladstone commented that the letters and materials are available in other languages, plus they have access to a translation line and Google Translate.

Teacher Representative Mr. Wood wondered if the students who are screened, would they perhaps start thinking about having potential health concerns when they normally would have not thought of otherwise? Dr. Gladstone commented that it is a concern but the evidence shows an overall small risk.

Dr. Fergusson added that there are multiple measures that are used in assessing and screening students.

2. [MCAS Presentation](#) - Sue Balboni

Dr. Spash introduced Ms. Balboni to the MCAS presentation.

Ms. Gorseth asked what the magnitude of bars on slide 17 are? Ms. Balboni explained that the 9th and 10th grade Science bars are hard to compare because some students will take the test in 9th grade with their physics and others will take the test in 10th grade with biology. Ms. Gorseth then asked what is required to pass and graduate? Dr. Spash stated that it is partially meeting or higher.

Ms. McDonough asked in regards to the decrease over time, if there are any specifics that can be identified and what are the next steps as to how to address it as a district? Ms. Balboni stated that nothing has changed in terms of their instruction over the past year.

Ms. McDonough then asked if this data tracks with the other data that is collected in the district? Ms. Balboni said 100% yes. She said they are seeing a little discrepancy especially at the middle with comparison between MCAS and Renaissance.

Dr. Spash commented that Renaissance does not include writing and that could be a massive gap.

Ms. Brunell commented that she would like to see training for the School Committee on MCAS or Open Architect and could use training on how to interpret the numbers.

Ms. Brunell also commented that she would like to see a mid-year report or some sort of revisiting. Ms. Balboni stated that it would make sense at mid year along with the literacy audit.

### 3. [School Improvement Plans: SY25 Orientation](#)

Dr. Spash went over a presentation on the School Improvement Plans.

Ms. Gorseth asked about the core participants' names and roles and are they reflective of the population that this decision impacts. What roles would be listed here? Dr. Spash stated that depending on who the students are, you would want to have teachers, possibly paras, Special Ed leads, and could be members of the student support team.

## SUBCOMMITTEE/LIAISON UPDATES

### 1. [School Committee Handbook](#)

Ms. Brunell talked about updating the School Committee Handbook and appreciated everyone's input to bring it to a final draft for voting.

Dr. Spash commented that if it reflects our norms then she would be content with the draft.

Ms. McDonough stated that it is a great resource document and has everything in one place.

Ms. Flathers suggested calling the School Committee Handbook for this year and revisit each year.

Ms. Brunell wondered where to house it? Chair Fuxman mentioned having it on the school website and making it public. Ms. McDonough stated that it needs to live on Google Drive so Dr. Spash suggested that it remain with the School Committee secretary.

Ms. Brunell commented that the handbook has resources for the student representatives of the School Committee.

Ms. Flathers made a motion to approve the 2024/2025 School Committee Handbook. Ms. Gorseth seconded the motion. *All were in favor. 6-0-0. Motion passed.*

## 2. Update on Calendar Working Group

Ms. Gorseth commented that they had a meeting last week with the larger calendar working group and shared the draft surveys that will be sent out to students, families and educators. Also, they would be using Thought Exchange to send out the surveys. Ms. McDonough thought within the next month that the survey will be sent out.

Ms. Brunell mentioned Wellesley's calendar as a resource.

## 3. Policy Subcommittee Update

Mr. Brand mentioned that they are looking for feedback from tonight's discussion and then will work on a revised policy to bring back to the committee. The first policy that is being worked on is Public Participation and making it two separate parts. The first would be public speak as it is now and looking to change it so the public can speak about anything they want, including items on the agenda. The second would be public speak during agenda items which the Chair would put on the agenda in advance for particular items only where there could be public speak.

Ms. Balboni mentioned that it was given to Attorney Andy Waugh for review for all the language on public speak before any changes.

Ms. McDonough asked if there would be flexibility of agenda items? Mr. Brand thought yes, but best practice would be no.

Ms. Flathers suggested pushing more on the public forum side of things.

## 4. Appoint School Committee Member, Matt Brand to Serve on TEC Board of Directors

Dr. Spash asked for a vote for Matt Brand to be the Representative to the TEC Board.

Ms. McDonough made a motion to appoint Matt Brand to the TEC Board of Directors. Ms. Flathers second the motion. *All were in favor. 6-0-0. Motion passed.*

## FINANCE

### 1. 1st Quarter Financial Report

Mr. Gillis went over the 1st quarter financial report commenting that the budget just started. He then went over the grants that closed on September 30th and talked more about the revolving funds.

### 2. FY26 Budget Calendar

Mr. Gillis went over the budget calendar and looked for feedback.

Ms. Brunell mentioned that Ms. Flathers, Ms. Collins and herself are meeting regarding the budget goal and wondered if it would develop into a budget subcommittee and could it be placed on the budget calendar? Mr. Gillis stated that he would be happy to provide.

Ms. McDonough asked if Mr. Gillis was thinking about the FinCom meetings when creating the timeline?

Mr. Gillis stated that their meetings are usually not at the same as the School Committee meetings.

## CHAIRMAN'S REPORT

### 1. Future Meetings

Chair Fuxman discussed future meeting agenda items which are the following:

1. School Improvement Plans - November 4th
2. School Committee Goals - November 4th

Dr. Spash mentioned possibly having data EL and Special Ed on December 2nd.

Ms. Flathers asked when Jillian Martin Wilson will be presenting and Chair Fuxman said it would be November 18th and would they be voting that day? Chair Fuxman stated that if it is not policy, then it can be voted on that night as an endorsement.

Ms. Brunell mentioned having a discussion about the MASC conference on the November 4th agenda. Chair Fuxman commented that the MASC conference would be on the November 18th agenda along with School Improvement Plans and Zero Emission Policy.

Mr. Brand made a motion to adjourn the meeting at 9:06 pm. Ms. Gorseth seconded the motion. *All were in favor.*  
**6-0-0 - Motion passed.**

Respectfully submitted by:

Linda McGrath  
Recording Secretary





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**ITEM TITLE:**

Approval of Executive Session Minutes from 10.21.24

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND INFORMATION:**

**RECOMMENDATION:**

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**ITEM TITLE:** Metro West Adolescent Health Survey Work Group Presentation  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:** Metro West Adolescent Health Survey - LINK  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
metrowest adolescent health survey	12.2_MWAHS_Fall_2023_Data.pptx.pdf	Cover Memo



Kennedy Middle School



Wilson Middle School



Natick High School

# METROWEST ADOLESCENT HEALTH SURVEY

FALL 2023 DATA



# TABLE OF CONTENTS

## 1. Survey Design & History.

- MetroWest Health Foundation
- The Administration of NPS
- The middle and high school students who participated by taking the survey
- Education Development Center (EDC)

## 2. Framing Today's Presentation

## 3. Key Indicators & Findings

# SURVEY DESIGN & HISTORY

## Validity & Reliability

- Research shows that young people respond truthfully to surveys when:
  - Participation is **voluntary**
  - They perceive the survey is **important**
  - They feel measures have been taken to preserve **privacy** and ensure **anonymity**.

*These assurances were built into the common survey protocol.*

# FRAMING TODAY'S WORK

## Showing Progress Over Time in:

- Creating a safety & supportive community
- Fostering health and wellness
- Increasing a sense of belonging

## Themes/Trends You May Note

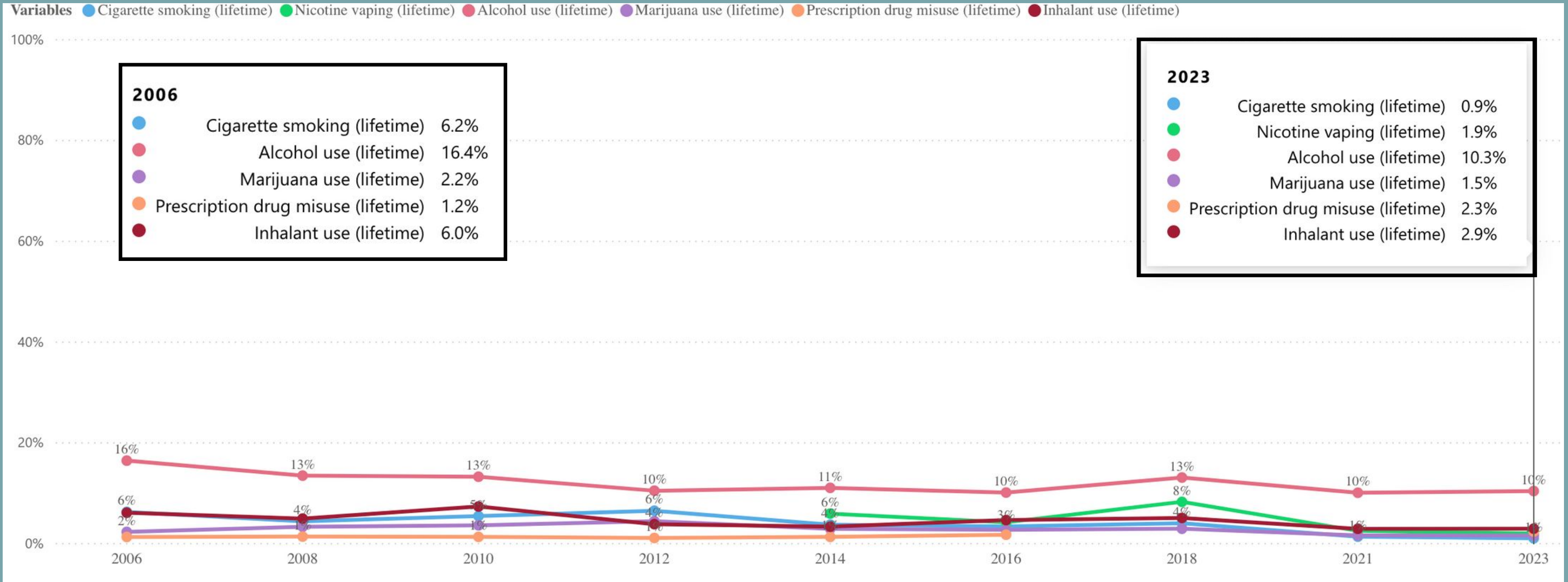
- Parents as Partners
- COVID bounce-back
- Overall decrease in maladaptive behaviors

# MIDDLE SCHOOL DATA

- **Substance Use**
- **Mental Health**
- **Bullying & Conflict**
- **Cyberbullying**
- **Culture Of Support**
  - **School Connectedness**
  - **Peer Support**
  - **Adult & Support & Mental Health**
- **Time Students Spend on Activities & Home Rules**

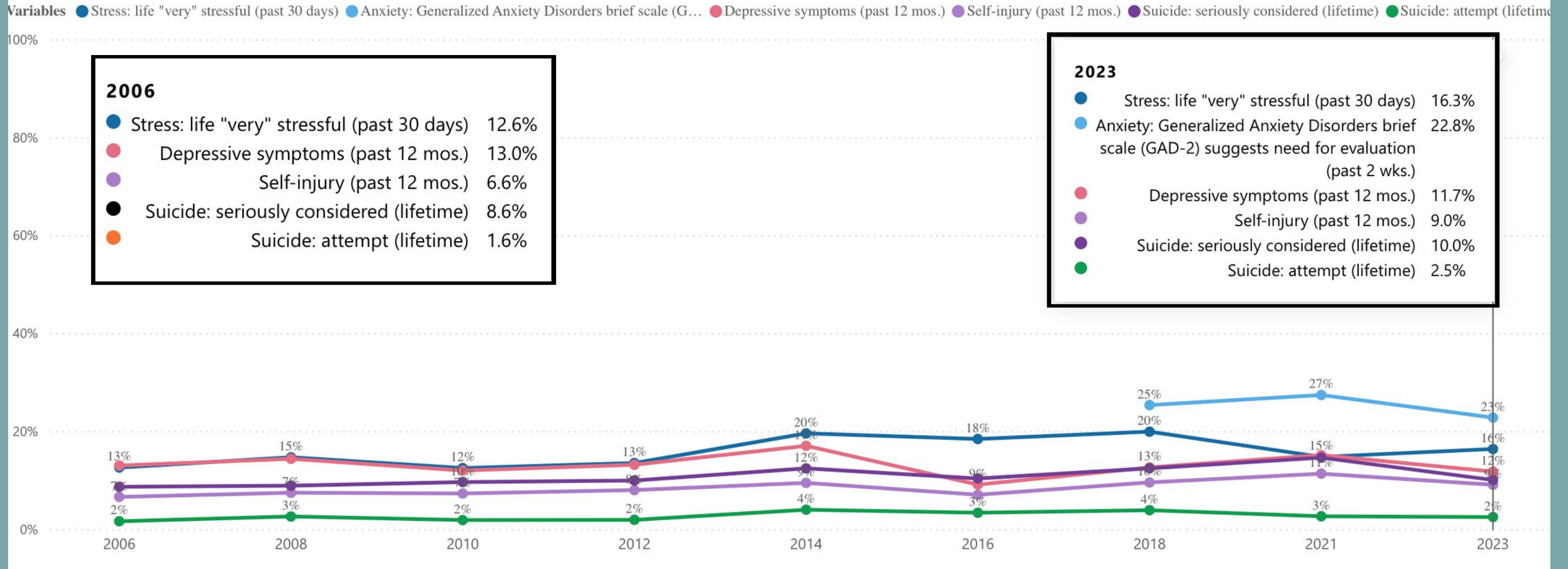


# Substance Use (Lifetime)



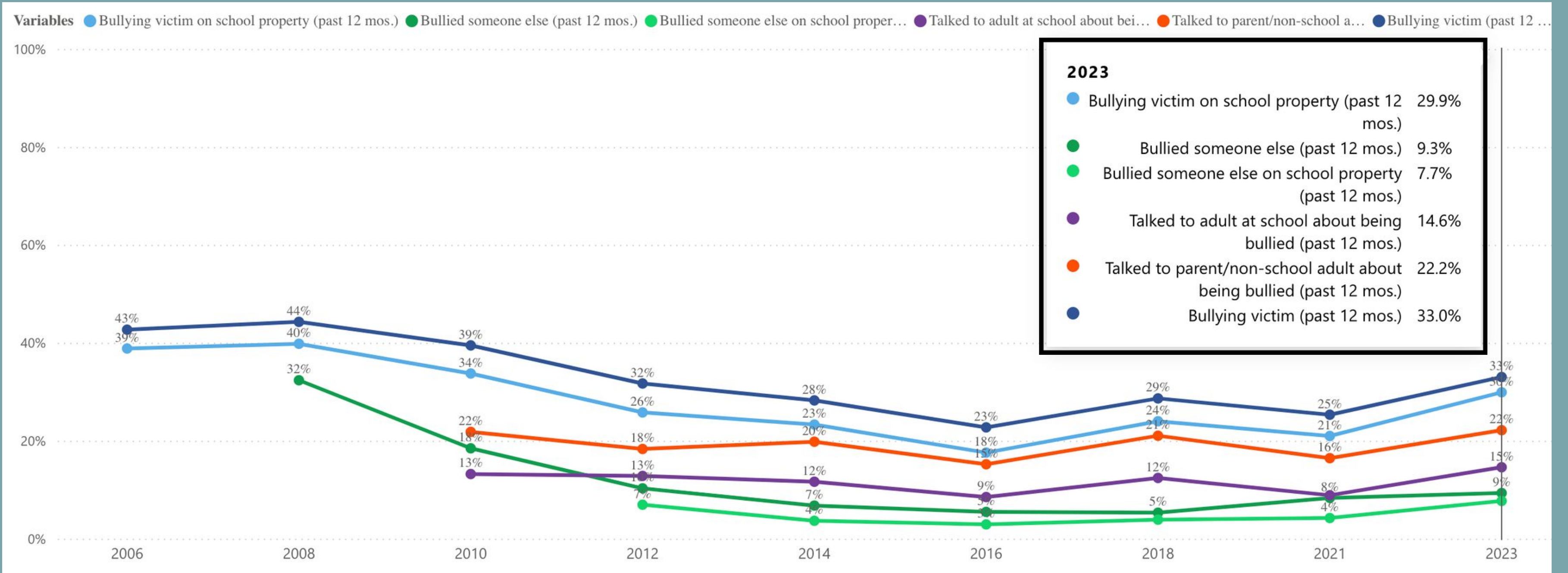
- Vaping dropped 6.1% in 5 years
- Alcohol dropped 6.1% since 2006

# Mental Health



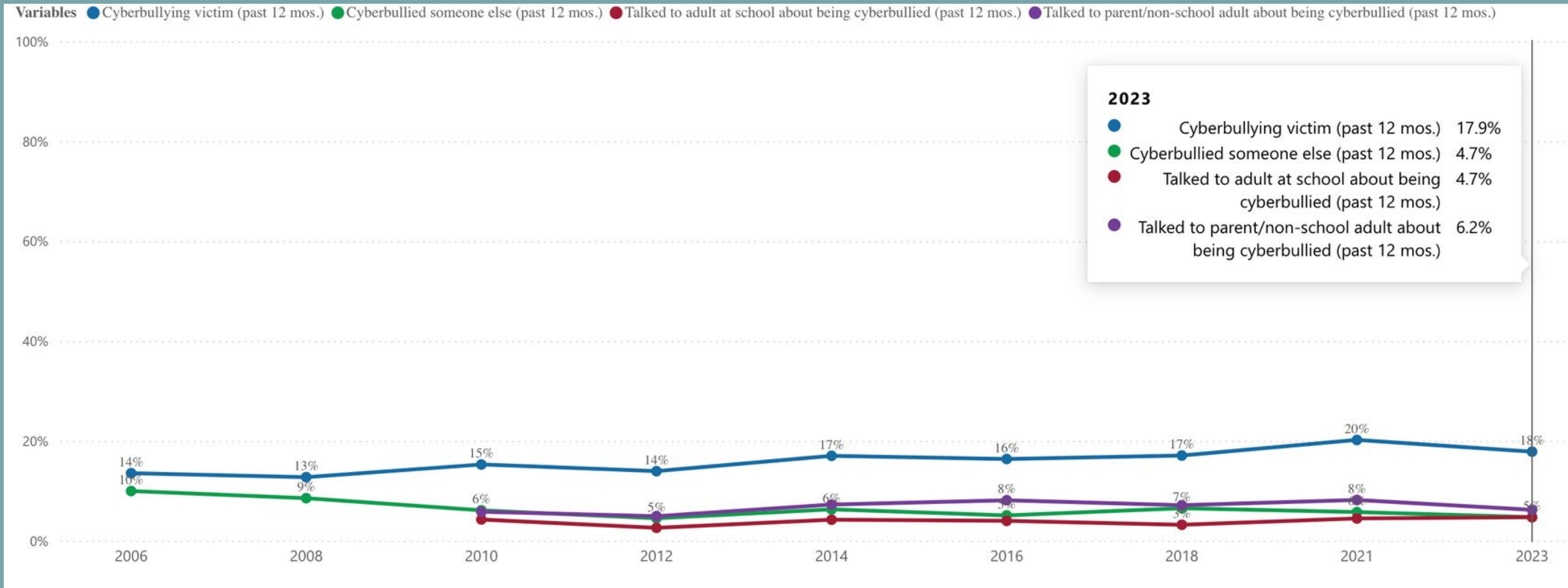
Art please add Talking points for this one

# Bullying & Conflict

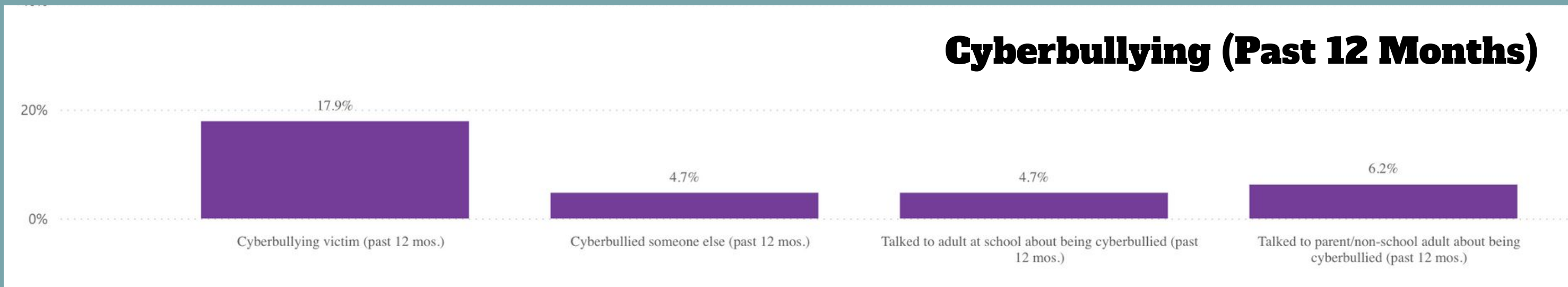


- Since 2006, bullying is down, but since 2016 there is an overall upward trend
- Overall reports for bullying in the past 12 months increased from 25% in 2016 to 31% in 2023
- Bullying on school property increased from 21% in 2016 to 28% in 2023

# Cyberbullying (past 12 months)

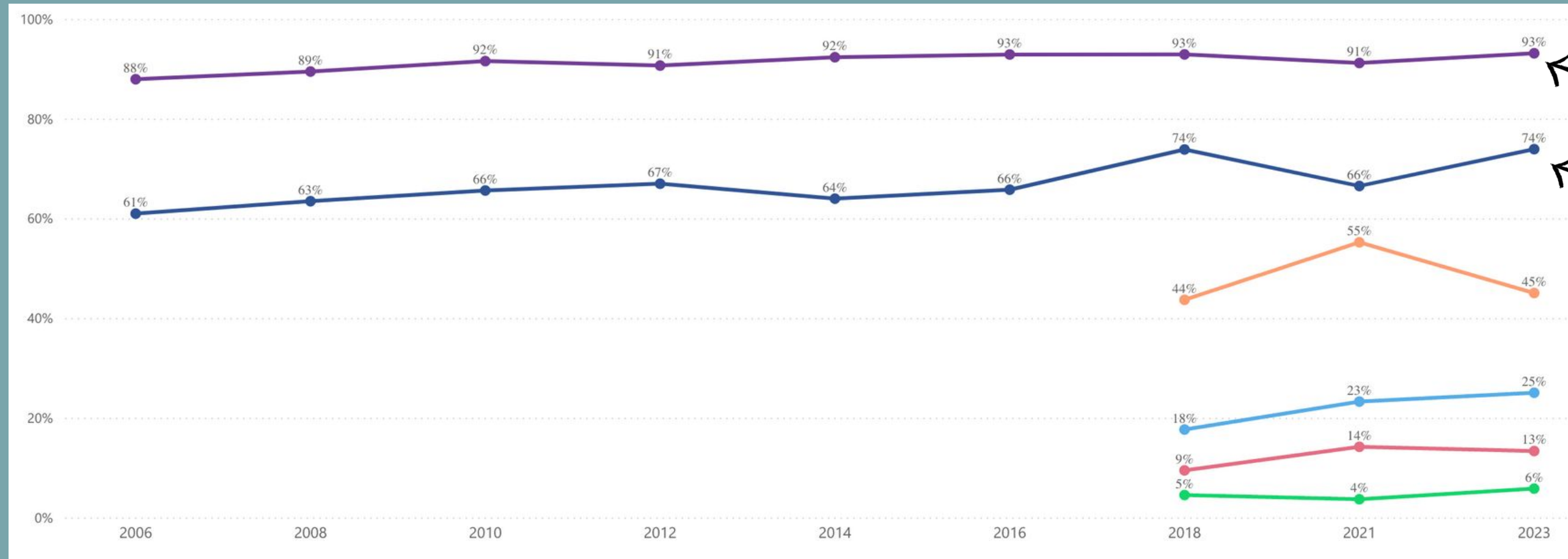


**Trending down since COVID but still a concern**



# Culture of Support

## Natick Middle Schools



- 93% Have an adult they feel like they can talk to
- Increase of from 66% to 74% of Adult Support at school
- We are back to pre-COVID #'s.

### 2018

- Talked with a school counselor, therapist, or psychologist (past 12 mos.) 17.7%
- Talked with a school nurse (past 12 mos.) 4.5%
- Talked with a teacher or other school staff (past 12 mos.) 9.5%
- Adult support: Have parent/non-school adult to talk to about important things 92.9%
- Talked with a parent, relative, or other adult outside of school (past 12 mos.) 43.7%
- Adult support: have adult at school to talk to about a personal problem 73.8%

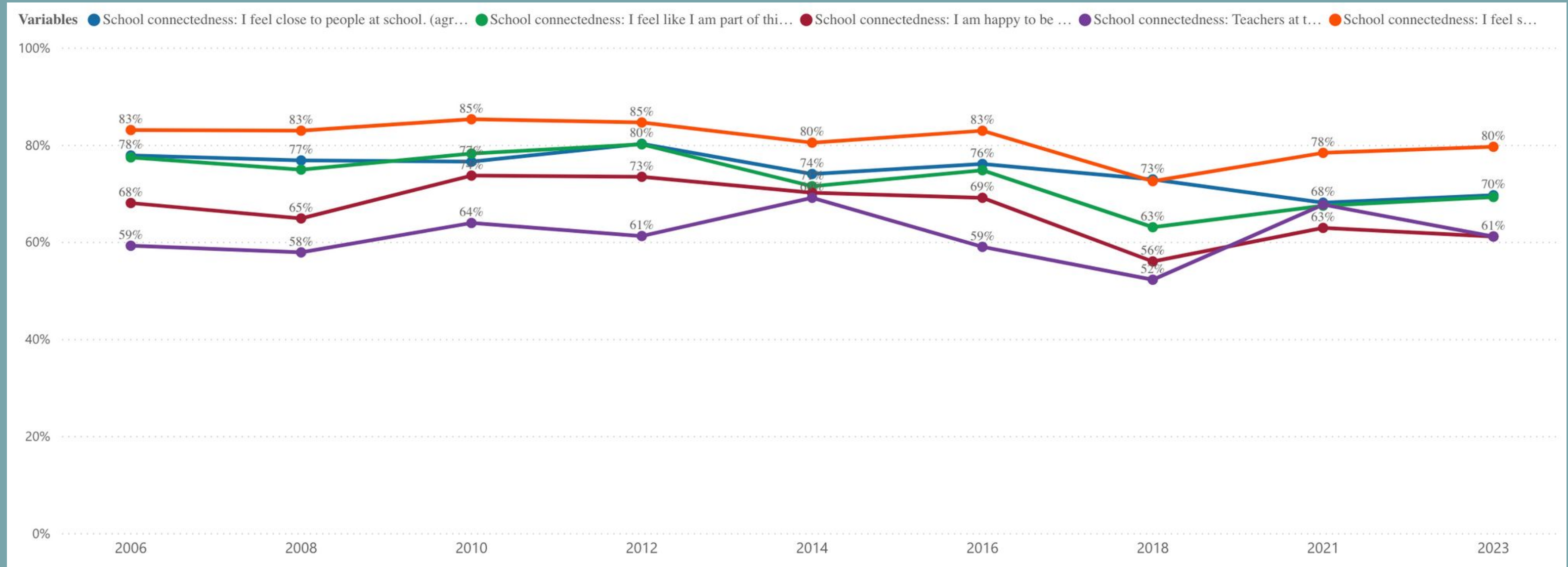
### 2021

- Talked with a school counselor, therapist, or psychologist (past 12 mos.) 23.3%
- Talked with a school nurse (past 12 mos.) 3.7%
- Talked with a teacher or other school staff (past 12 mos.) 14.2%
- Adult support: Have parent/non-school adult to talk to about important things 91.2%
- Talked with a parent, relative, or other adult outside of school (past 12 mos.) 55.2%
- Adult support: have adult at school to talk to about a personal problem 66.5%

### 2023

- Talked with a school counselor, therapist, or psychologist (past 12 mos.) 25.0%
- Talked with a school nurse (past 12 mos.) 5.8%
- Talked with a teacher or other school staff (past 12 mos.) 13.3%
- Adult support: Have parent/non-school adult to talk to about important things 93.1%
- Talked with a parent, relative, or other adult outside of school (past 12 mos.) 45.0%
- Adult support: have adult at school to talk to about a personal problem 73.9%

# School Connectedness



**2006**

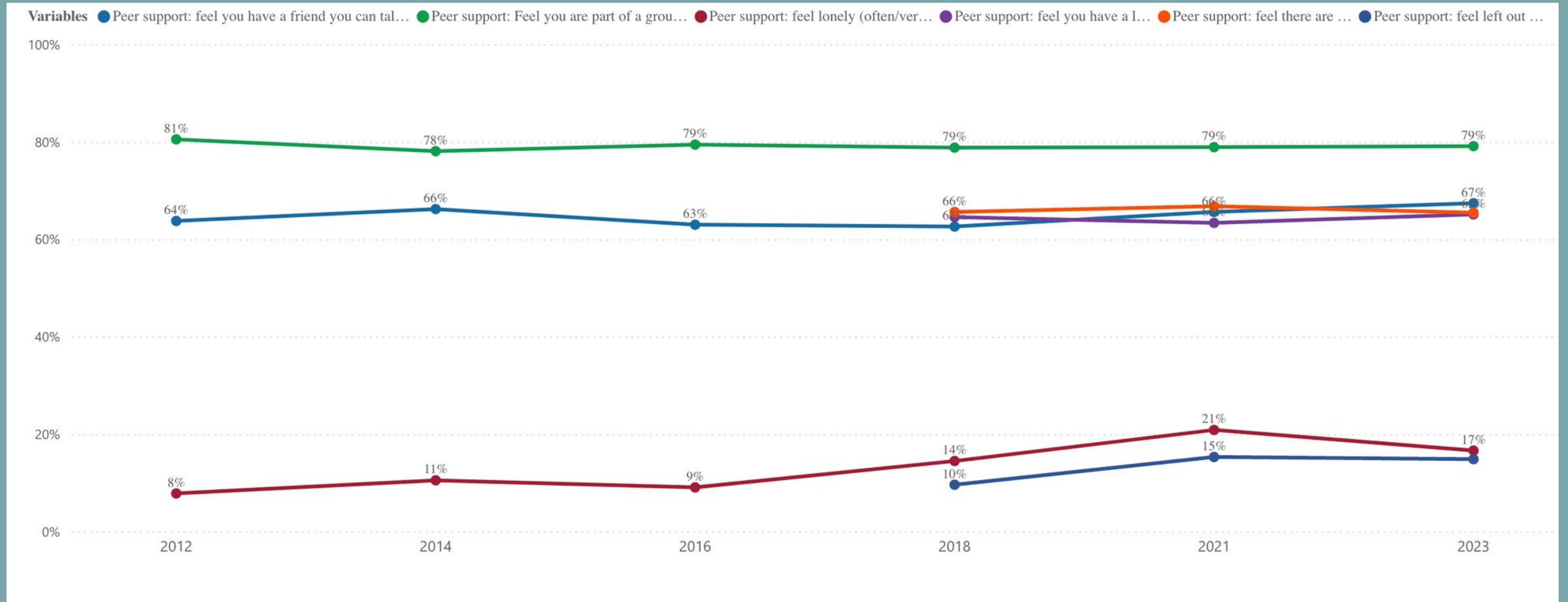
● School connectedness: I feel close to people at school. (agree/strongly agree)	77.8%
● School connectedness: I feel like I am part of this school. (agree/strongly agree)	77.4%
● School connectedness: I am happy to be at this school. (agree/strongly agree)	68.0%
● School connectedness: Teachers at this school treat students fairly. (agree/strongly agree)	59.2%
● School connectedness: I feel safe at my school. (agree/strongly agree)	83.0%

**2023**

● School connectedness: I feel close to people at school. (agree/strongly agree)	69.6%
● School connectedness: I feel like I am part of this school. (agree/strongly agree)	69.2%
● School connectedness: I am happy to be at this school. (agree/strongly agree)	61.1%
● School connectedness: Teachers at this school treat students fairly. (agree/strongly agree)	61.1%
● School connectedness: I feel safe at my school. (agree/strongly agree)	79.6%

- Students reported that they feel less connected in school since 2006 although it has improved since 2018.
- 93% of Students feel like they have an adult to go to, an Increase from 66% to 74%. We are back to #'s prior to COVID

# Peer Support



**2012**

Peer support: feel you have a friend you can talk to about a personal problem (often/very often)	63.8%
Peer support: Feel you are part of a group of friends (often/very often)	80.5%
Peer support: feel lonely (often/very often)	7.8%

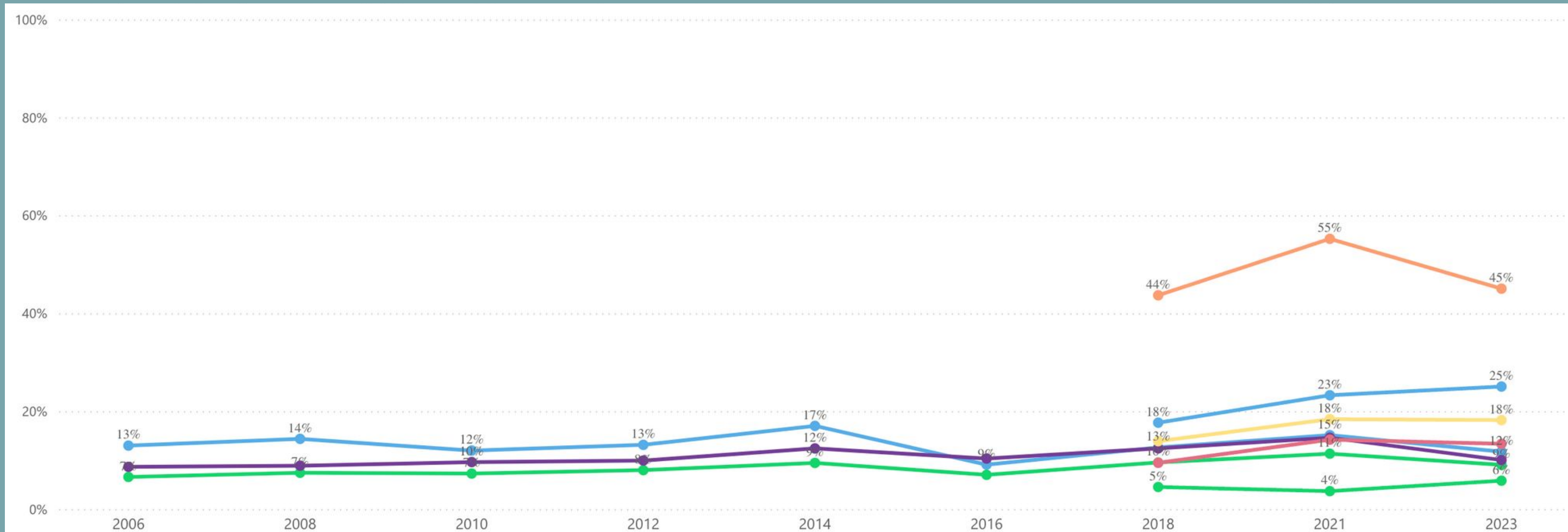
**2023**

Peer support: feel you have a friend you can talk to about a personal problem (often/very often)	67.4%
Peer support: Feel you are part of a group of friends (often/very often)	79.1%
Peer support: feel lonely (often/very often)	16.6%
Peer support: feel you have a lot in common with the people around you (often/very often)	65.1%
Peer support: feel there are people who really know and understand you (often/very often)	65.5%
Peer support: feel left out and excluded by others (often/very often)	14.9%

• Students feel more alone since 2012 although peer support (feel like you have a friend) has increased

# Adult Support & Mental Health

## Natick Middle Schools

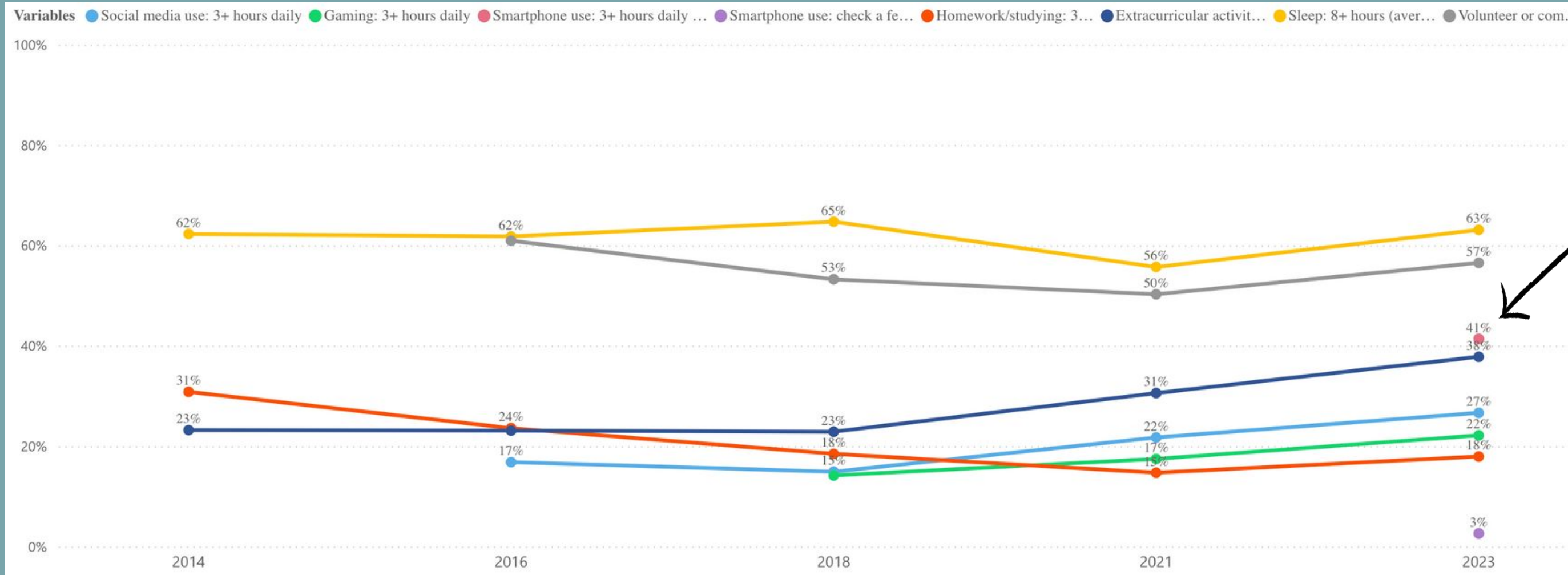


2023		
●	Depressive symptoms (past 12 mos.)	11.7%
●	Self-injury (past 12 mos.)	9.0%
●	Suicide: seriously considered (lifetime)	10.0%
●	Talked with a school counselor, therapist, or psychologist (past 12 mos.)	25.0%
●	Talked with a school nurse (past 12 mos.)	5.8%
●	Talked with a teacher or other school staff (past 12 mos.)	13.3%
●	Therapist, psychologist, or other mental health professional outside of school (past 12 mos.)	18.2%
●	Talked with a parent, relative, or other adult outside of school (past 12 mos.)	45.0%

• **Students talking to school staff has increased while students talking to parents has decreased (Post COVID)**



# Time Students Spend On Different Activities & Rules at Home With Social Media



41.4% of our students reported being on their Smartphone 3+ hours daily (not school or h.w.)

45.8% of our students reported that either they have no rules or rules that aren't enforced by parents/guardians

**2018**

- Social media use: 3+ hours daily 14.9%
- Gaming: 3+ hours daily 14.2%
- Homework/studying: 3+ hours daily outside of school 18.5%
- Extracurricular activities: 3+ hours daily outside of school 22.9%
- Sleep: 8+ hours (average school night) 64.7%
- Volunteer or community service participation (3+ days, past 12 mos.) 53.3%

	Total (%)	Sex (%)		Grade (%)		
		Female	Male	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
	(1,109)	(546)	(561)	(368)	(377)	(364)
<b>Are there rules in your household about how you can use social media (such as rules about which sites you can use, how much time you can spend on social media, and where/when you can use social media)?</b>						
I don't use social media because I choose not to.	15.0	10.3	19.7	18.0	12.6	14.6
I don't use social media because my parent(s)/ guardian(s) don't allow it.	12.5	15.5	9.5	16.2	10.6	10.8
No, there are no rules.	16.5	14.3	18.7	14.7	15.6	19.3
Yes, there are rules but they are not enforced.	29.3	31.6	27.0	25.4	32.1	30.1
Yes, there are rules, and they are enforced.	26.7	28.3	25.1	25.7	29.1	25.1

**2023**

- Social media use: 3+ hours daily 26.6%
- Gaming: 3+ hours daily 22.2%
- Smartphone use: 3+ hours daily (not for school or homework) 41.4%
- Smartphone use: check a few times/hour or more during school 2.6%
- Homework/studying: 3+ hours daily outside of school 18.0%
- Extracurricular activities: 3+ hours daily outside of school 37.8%
- Sleep: 8+ hours (average school night) 63.1%
- Volunteer or community service participation (3+ days, past 12 mos.) 56.5%

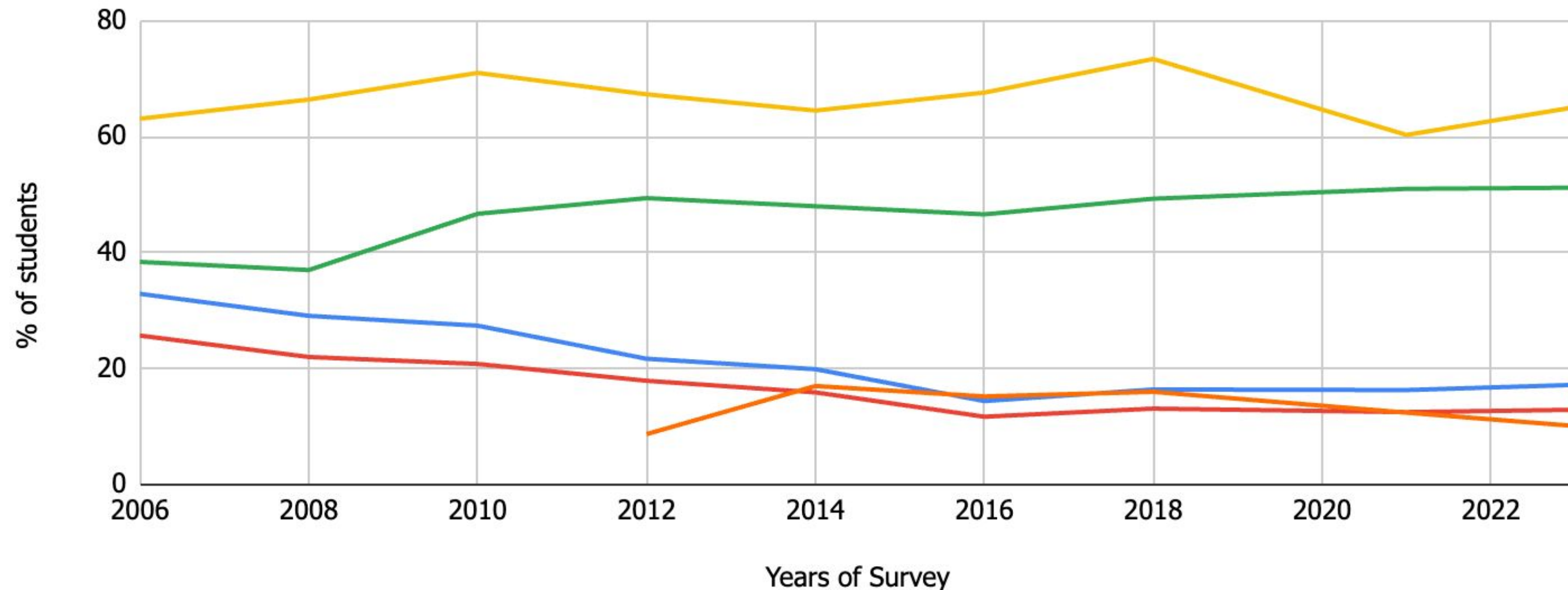
# HIGH SCHOOL DATA

- Health & Wellness
- Mental Health
- Bullying
- Substance Use
- Violence
- Dating Violence
- Culture Of Support: School Connectedness, Peer Support, Adult & Support & Mental Health

# NHS: Health & Wellness

## Health & Wellness

— Lifetime sexual intercourse — Currently sexually active (past 3 months) — Condom use at last intercourse§  
— Exercised for ≥60 minutes on 5 or more days/week — Sent, forwarded, or posted a "sext" of yourself



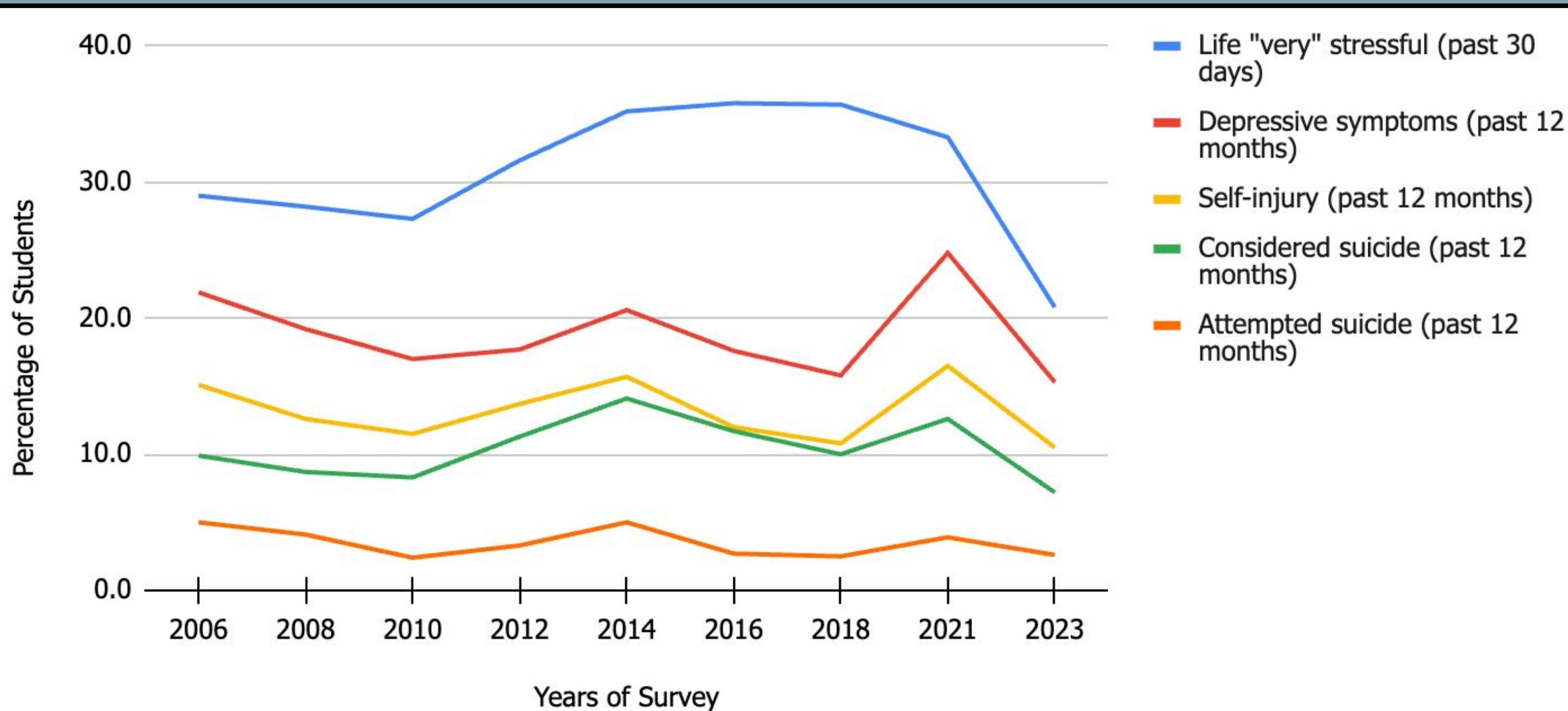
### Physical Activity:

- Consistent increase in regular exercise amongst students

### Sexual Activity:

- Decrease in sexual activity overall
- Bump in sexting in 2014, and steady decline since then.

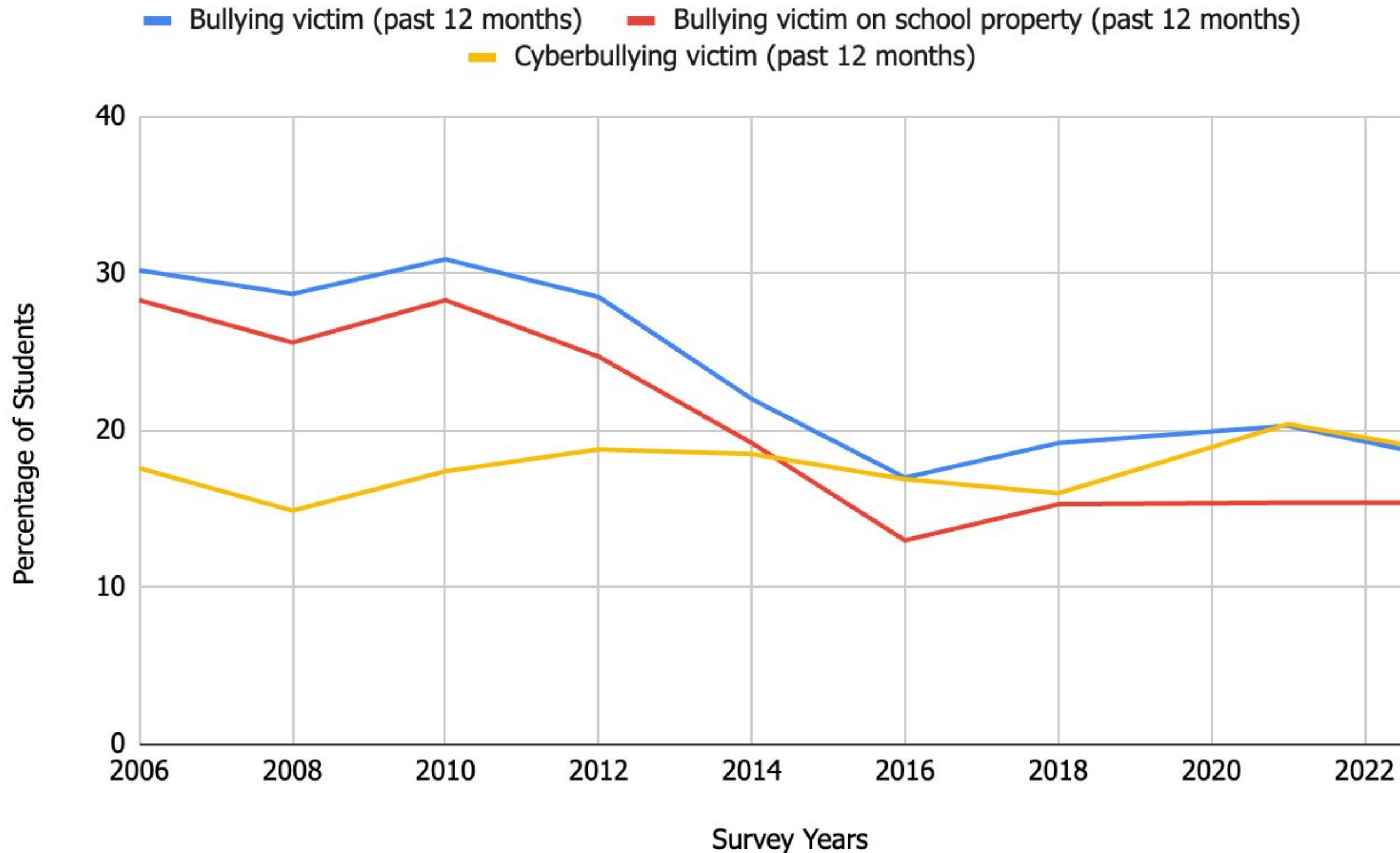
# NHS: Mental Health



## Mental Health:

- Decrease in all areas of concern.
- Return to many pre-COVID norms
- Marked decrease in stress level & depressive symptoms

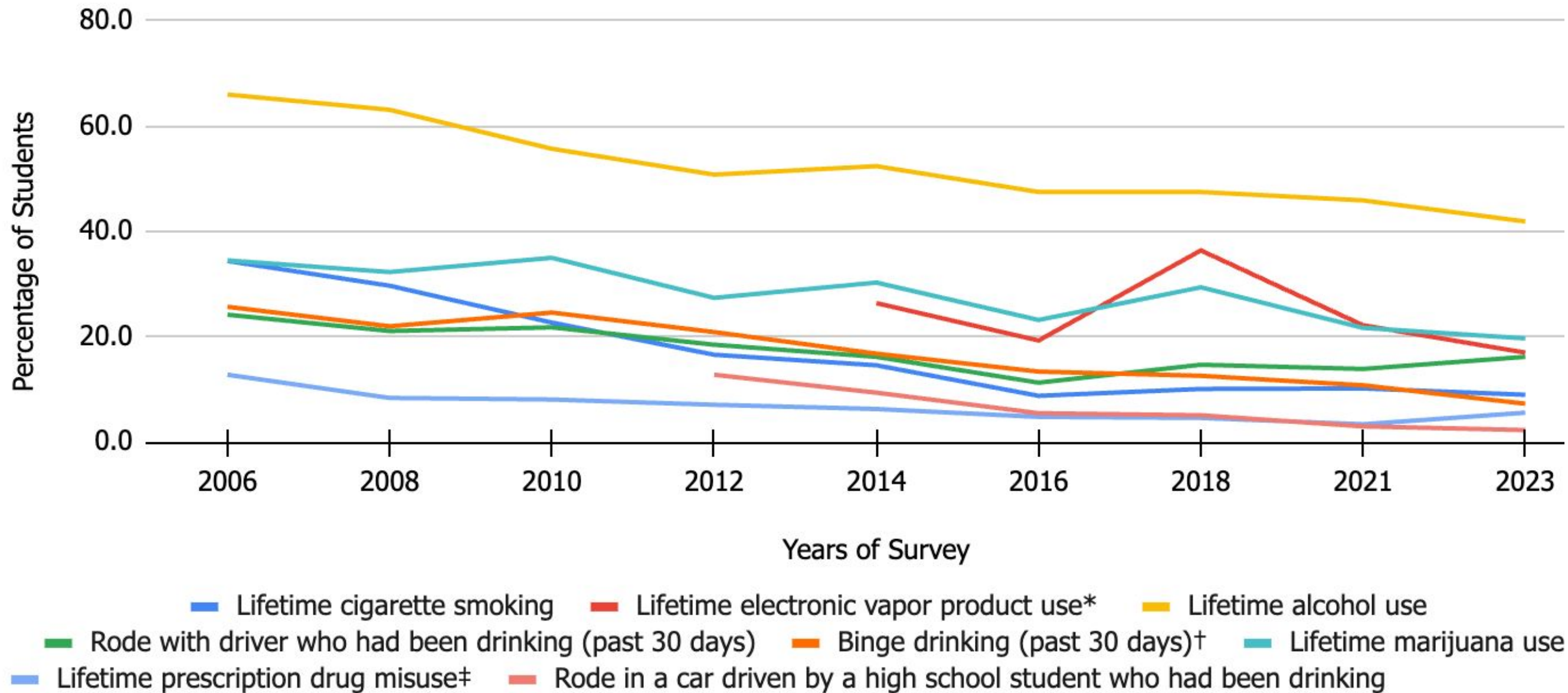
# NHS: Bullying



## Bullying

- Decreased from an overall high of 30.9% in 2014
- Cyberbullying decreasing after peaking during COVID in 2021
- Bullying on school property remains constant since 2018

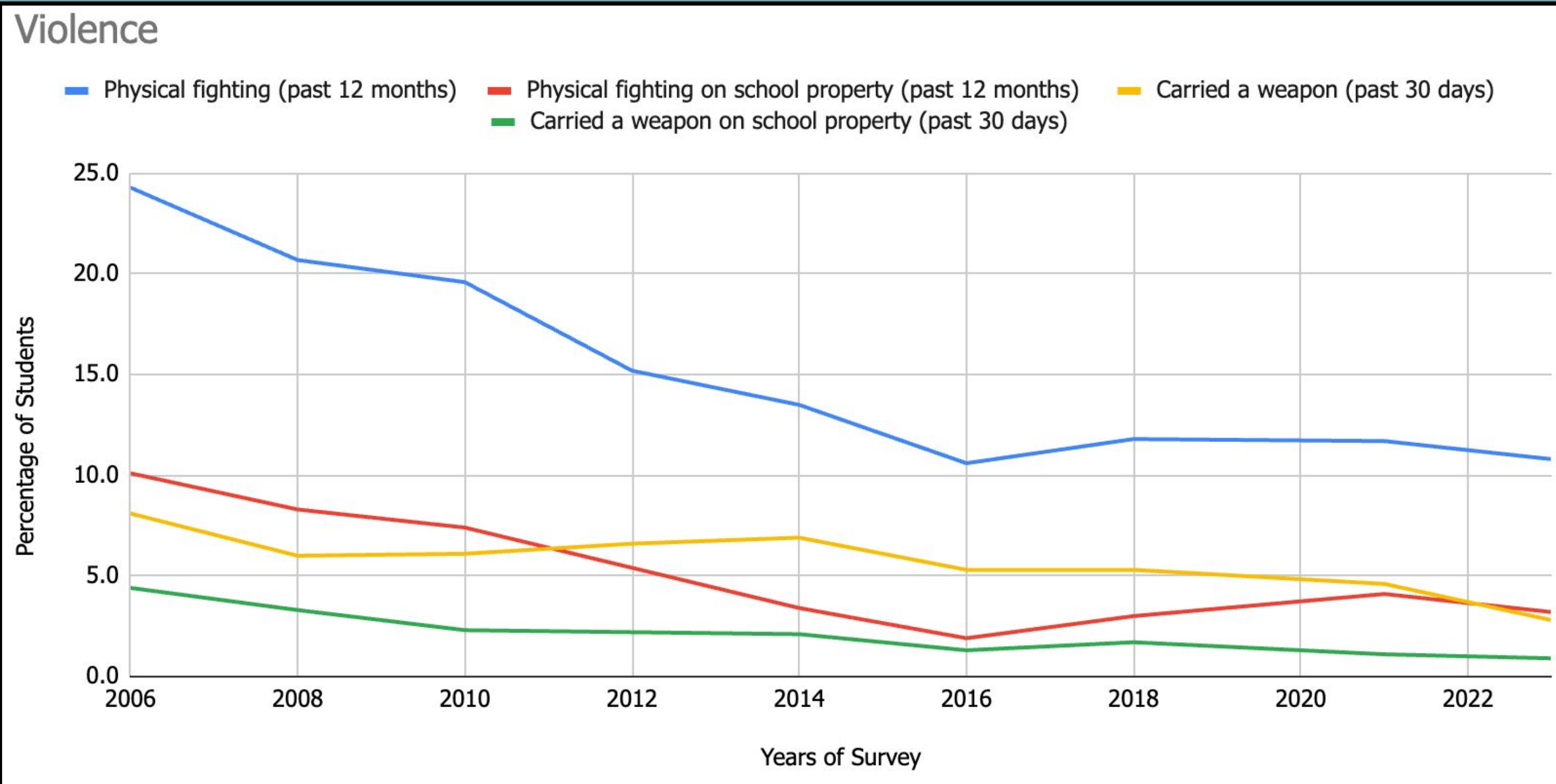
# NHS: Substance Use



## Substance Use:

- Steady decreases in cigarette use, alcohol use, binge drinking, marijuana use since 2006
- Vaping has trended down since 2018
- Following regional trends, there is a slight uptick in prescription drug misuse.
- Slight increase in riding with drivers who've used alcohol. However, while the regional percentage trended down to 9.9% from 12.2%; our data went up from 13.9% to 16.2%. It's notable that these drivers may not be peers.

# NHS: Violence

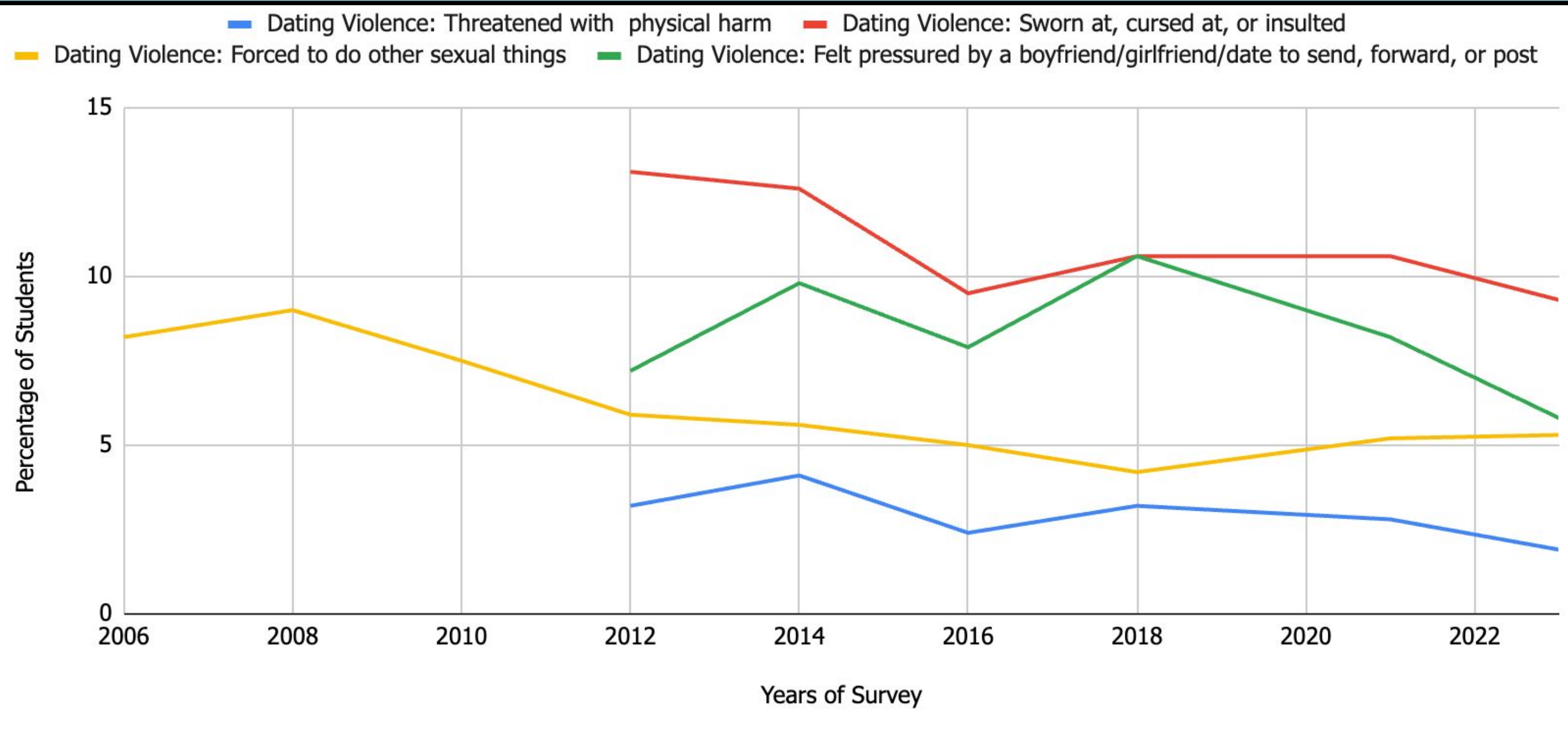


## Violence:

- Large steady decrease in physical fighting, which has remained largely consistent since 2018
- Decrease in fighting at school since 2021
- Decreases in carrying a weapon in and out

of school

# NHS: Dating Violence

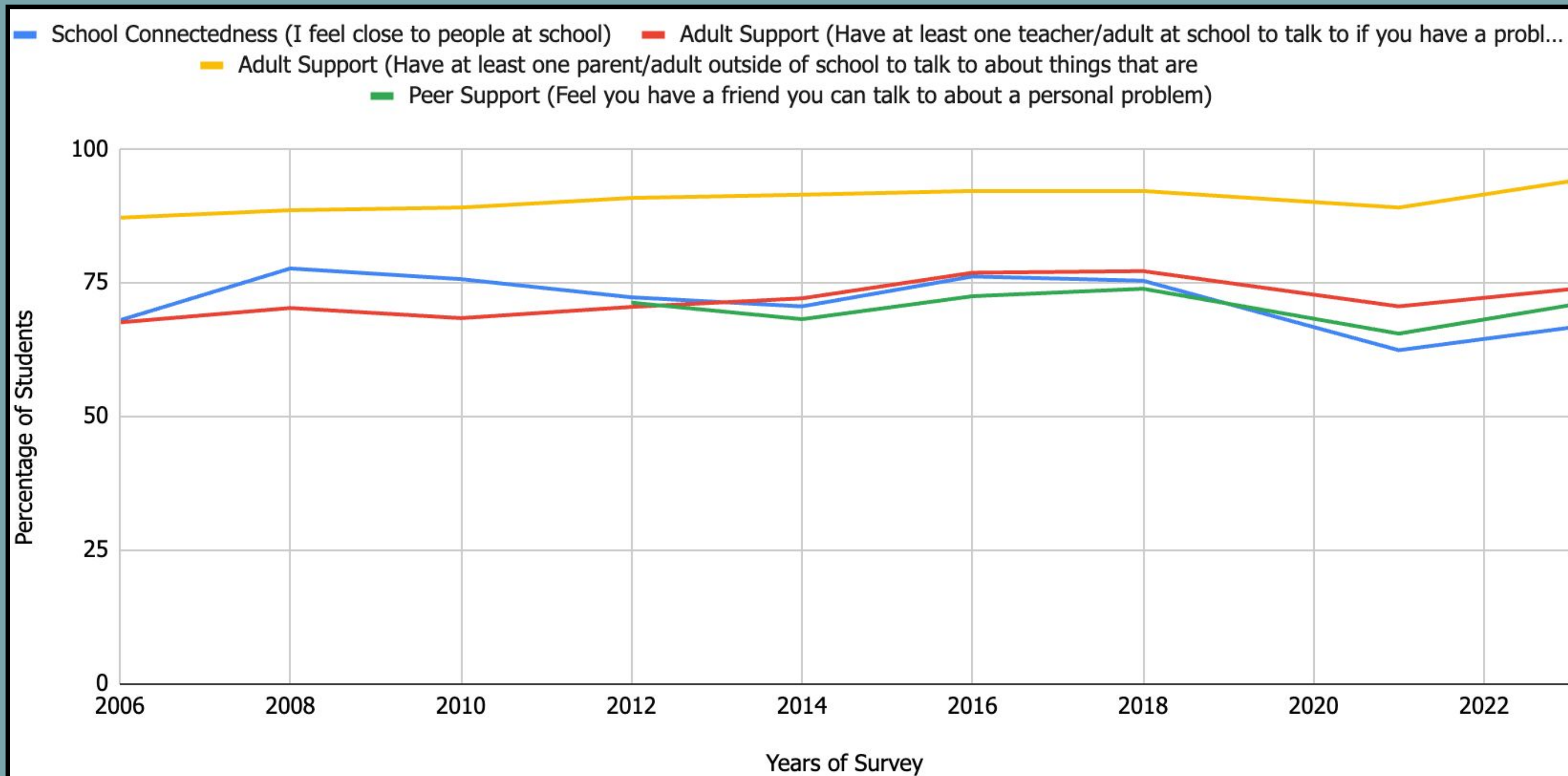


**Dating Violence:**

- Numbers remain relatively low
- Decreasing on most indicators
- Slight uptick in % of students forced into sexual behavior



# NHS: Culture of Support



## Culture of Support:

- Close to 75% of students have a trusted adult in school and 94% have a trusted adult outside of school
- Increase in overall connectedness and peer support, coming back from COVID numbers

# 04. Data Takeaways

## MIDDLE SCHOOLS

- Data points around substance use in middle school is trending downward.
- 3 out of 5 middle school students report they have a trusted adult at school.
- Overall reports for bullying in the past 12 months is up
- Overall, most students feel like they have an adult to go to.
- Middle school students report a lot of time on social media with less supervision.

## HIGH SCHOOL

- Some data points during COVID (2021) represented outliers and we are returning to some of the numbers from 2018, just before COVID.
- Students are reporting feeling less stressed overall.
- Protective factors like adult and peer support and level of consistent exercise are increasing.
- Almost all negative indicators are trending downward, including mental health indicators.
- There are still areas to be worked on, but there is a lot to be proud of as a community.

# 05. Next Steps

## MIDDLE SCHOOLS

- Share with School Council and Case Management team
- Use this data with Health classes and use the data to make needed changes to Health curriculum
- Professional development for staff on aspects of Tier 1, 2 and 3 social emotional wellness with an addition of Tiered support for students
- Student Mentoring programs for identified students (staff with students and HS students matched with students)
- Continuing to promote an SEL-focused culture through the implementation of advisory and extra-curricular activities
- Restorative practices utilized for student conflict and education
  - mediations, accountability projects, use of Wayfinder
- Continue efforts regarding cell phone restrictions at school
- Parent education around healthy social media and cell phone use for students

## HIGH SCHOOL

- ~~Share info with School Council and Principal's Roundtable~~
- Continue to invest in Gamechangers Program
- Offer increased sections of Healthy Relationships I and Healthy Relationships II courses
- 11th grade assembly on drinking and driving called Thinkfast
- Professional development for staff on aspects of Tier 1 & 2 social emotional instruction and intervention
- Continue to promote a health-focused culture through promotion of athletics and staffing the weight room before school
- Create a scope and sequence for integrating Wayfinder into the 9-12 academic curriculum in SY25-26
- Consider expanding the new 10th grade Tier 3 academic/behavioral program to other grades
- Continue efforts regarding cell phone limitations at school
- Continue building partnerships with Natick 180, the health department and Natick Police Department.

# Natick 180 Overview: 12 Community Sectors



# Student Initiatives

## Middle Schools

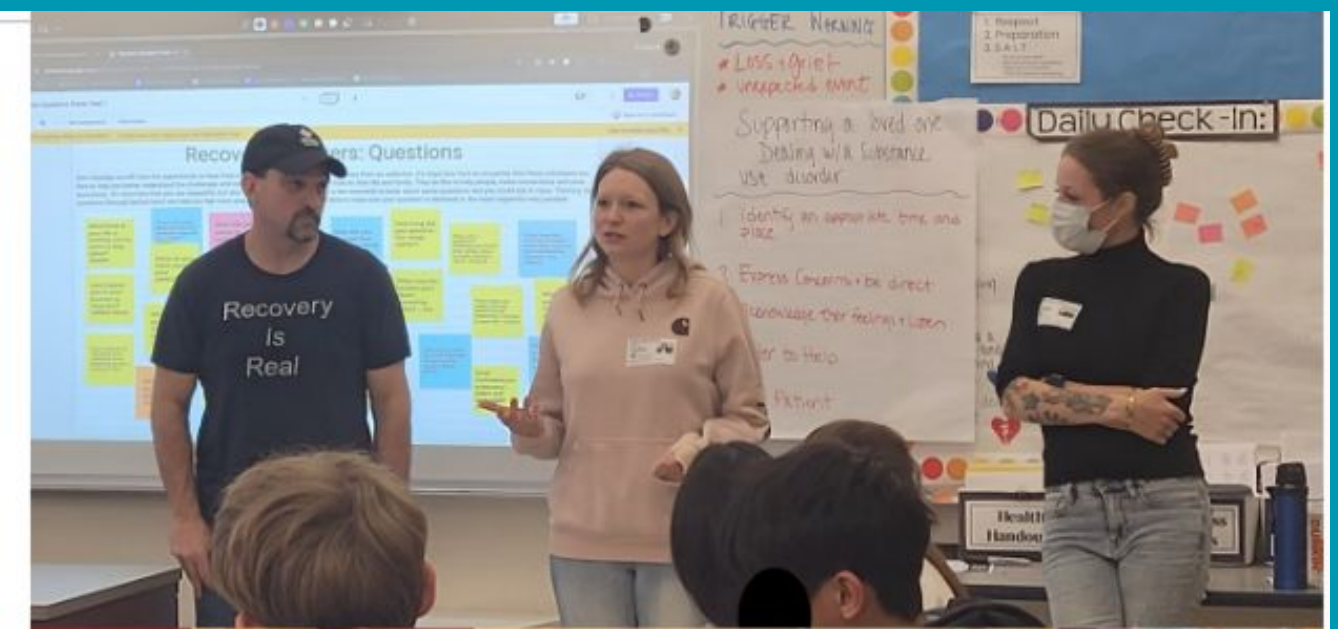
- Health Class Presentations led by Natick 180 & NATI
- Red Ribbon Week
- Share substance use & mental health resources

## High School

- Health Class Recovery Speaker Presentations
- NATI club (Natick 180 Youth Sector)
  - Vape Disposal Project
- Annual Events: Red Ribbon Week, Sticker Shock, & Equity Day
- Support for the After Prom Party and other activities
- Share substance use & mental health resources
- METCO & North Star Connections

**Red Ribbon Week Banner: 1200+ students signed**

**Health Class Visits: presented to 350+ students**



# Parent/Caregiver Initiatives

- **Community education, trainings & events**
  - Youth Mental Health First Aid, QPR Suicide Prevention, Naloxone (Narcan), & Coaches Mental Health trainings
  - Collaborate with SPARK Kindness, Families for Depression Awareness, NPS, etc.
- **Connections to services and resources**
  - Maintain INTERFACE and MetroWest CARE Connection Hub referral services
  - Provide as-needed consultation
  - Develop and share print/electronic community resources (i.e. HAWK Card, mental health apps, etc.)
- **Community Presence**
  - Awareness campaigns (banners, billboard), monthly newsletters, & regular social media posts
  - Attend community events (Natick Days, Open Houses, etc.)

**Community ed events: 650+ participants (2024)**

**E-newsletter mailing list: 1,600+ members**

**HAWK Cards: 1000+ distributed**

**Health & Wellness Knowledge**  
**'HAWK' Card**

**24/7 Help**

**911** for medical emergencies & dangerous situations (call)

**988** National Suicide and Crisis Lifeline (call/text) [988lifeline.org](https://988lifeline.org)

**MA Behavioral Health Help Line** **833-773-2445**  
for immediate crisis support (call/text) [masshelpline.com](https://masshelpline.com)

**Mobile Crisis Intervention (MCI)\*** **800-640-5432**  
for help during a mental health crisis (call) [advocates.org](https://advocates.org)  
\*previously known as Psychiatric Emergency Services

**Ongoing Help**

**Behavioral Health Partners Metrowest**  
**844-528-6800** [bhpmw.info/metrowesthub](https://bhpmw.info/metrowesthub)  
for free mental health & social service referrals M-F 9am-5pm

**INTERFACE Referral Service**  
**888-244-6843** [interface.williamjames.edu](https://interface.williamjames.edu)  
for free mental health referral services M,W,F 9am-5pm; T,Th 8am-6pm

**Natick Information & Referral Line**  
**508-647-6519**  
for free referral assistance to local services & programs M-W 8am-5pm; Th 8am-7pm; F 8am-2:30pm

 **Many more resources!**  
Scan the QR code or visit [natick180.org/hawk-card](https://natick180.org/hawk-card)

Natick 180  
Updated 6/2024



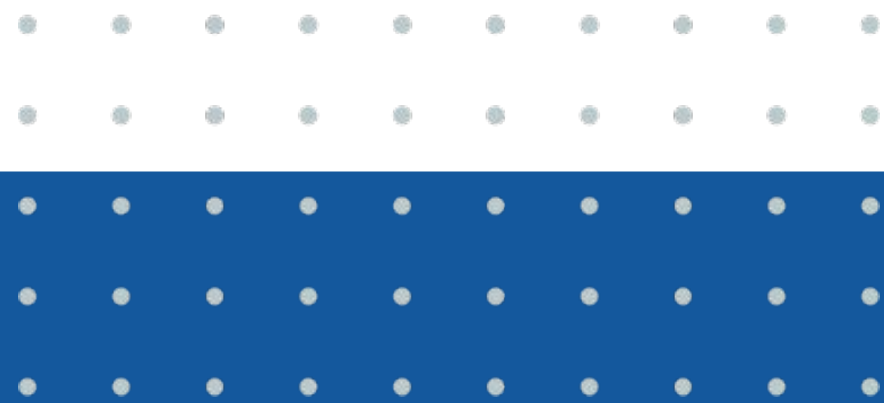
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**ITEM TITLE:** VOCAL & SAEBRS  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:** VOCAL & SAEBRS - LINK  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
vocal & saebars	12.2_SAEBRS__VOCAL_Data.pptx.pdf	Cover Memo



# SAEBRS

&

# VOCAL DATA



Natick Public School

FALL 2024





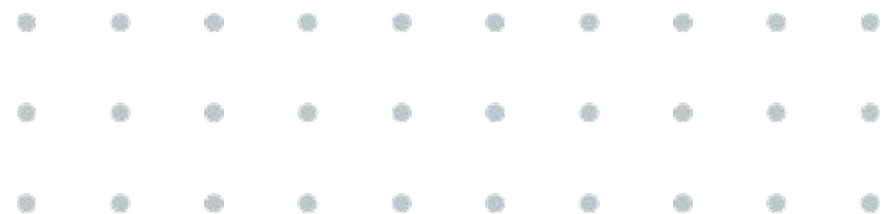
# 1. SAEBRS Overview

# 2. SAEBRS Data

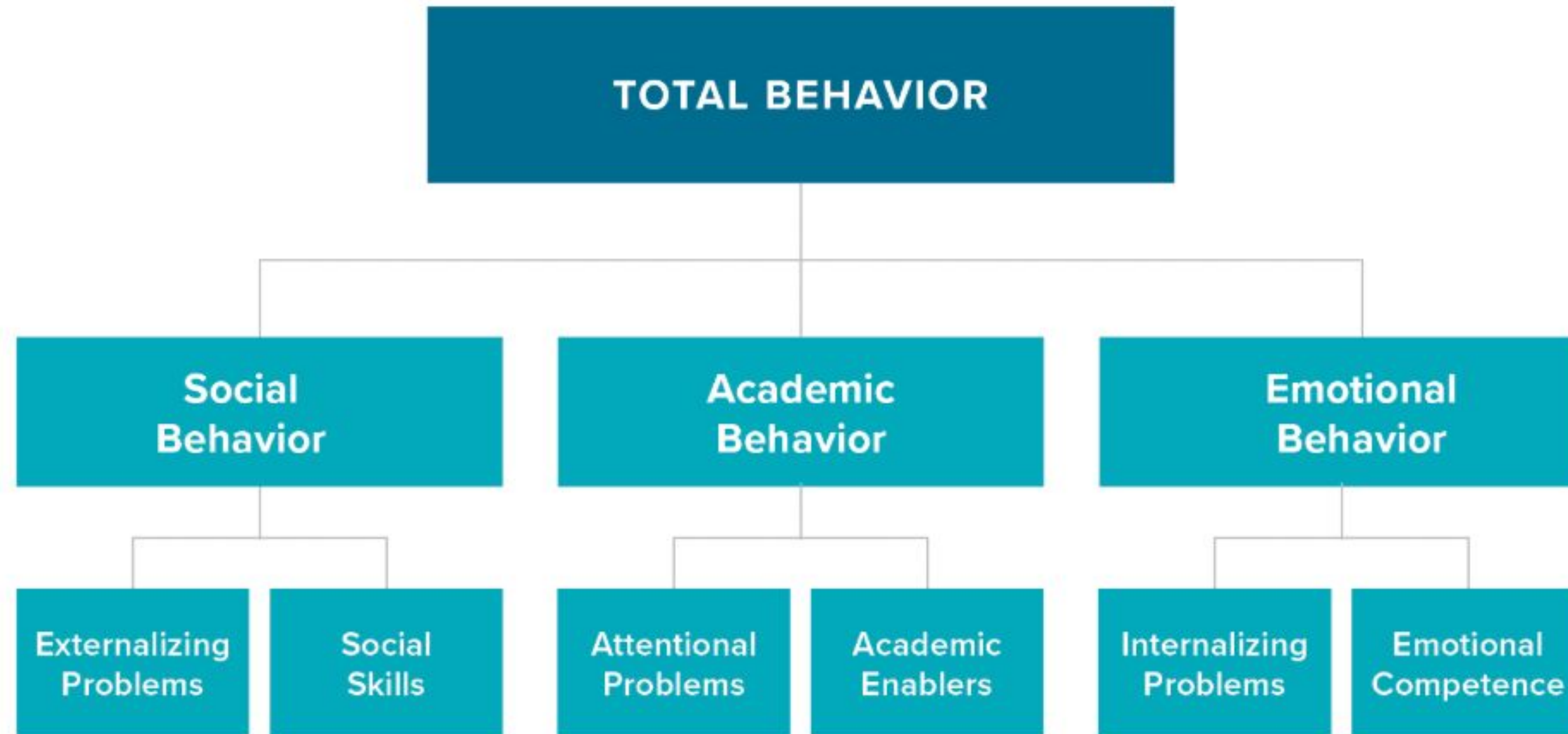
# 3. VOCAL Overview

# 4. VOCAL Data

# 5. Next Steps




# SAEBRS OVERVIEW



## 20-ITEM SCALE FOR OVERALL BEHAVIOR


- Social Behavior (7 items)
- Academic Behavior (6 items)
- Emotional Behavior (7 items)


# SAEBRS OVERVIEW

mySAEBRS 1 of 20 

I argue with others.


Never  Sometimes  Often  Almost Always



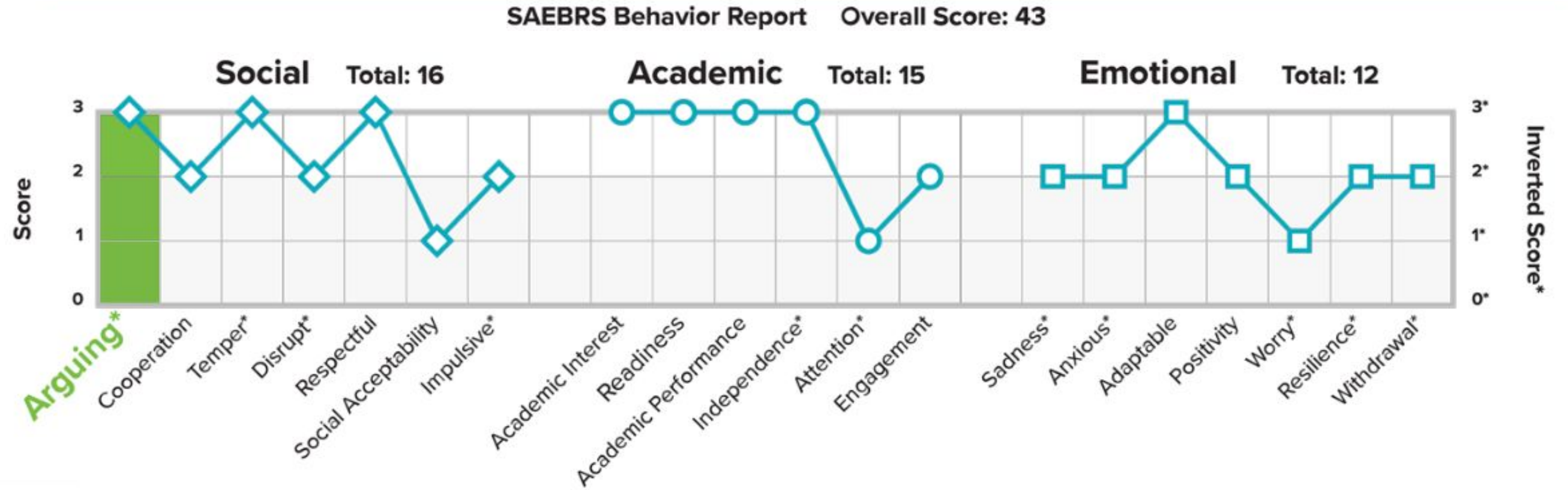
mySAEBRS 7 of 20 

I have trouble waiting my turn.

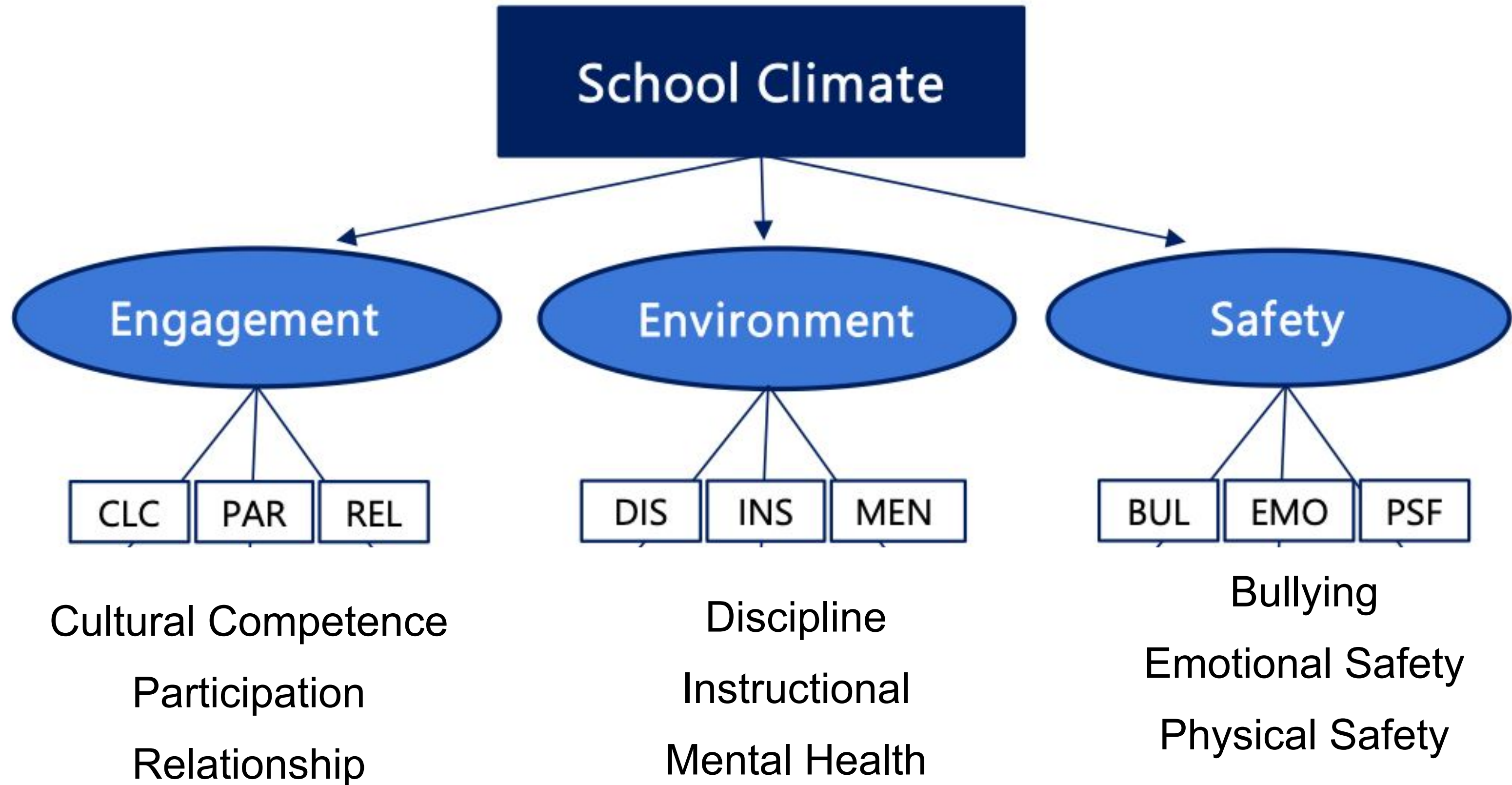
Never  Sometimes  Often  Almost Always



# CASEL ALIGNMENT



# VOCAL OVERVIEW

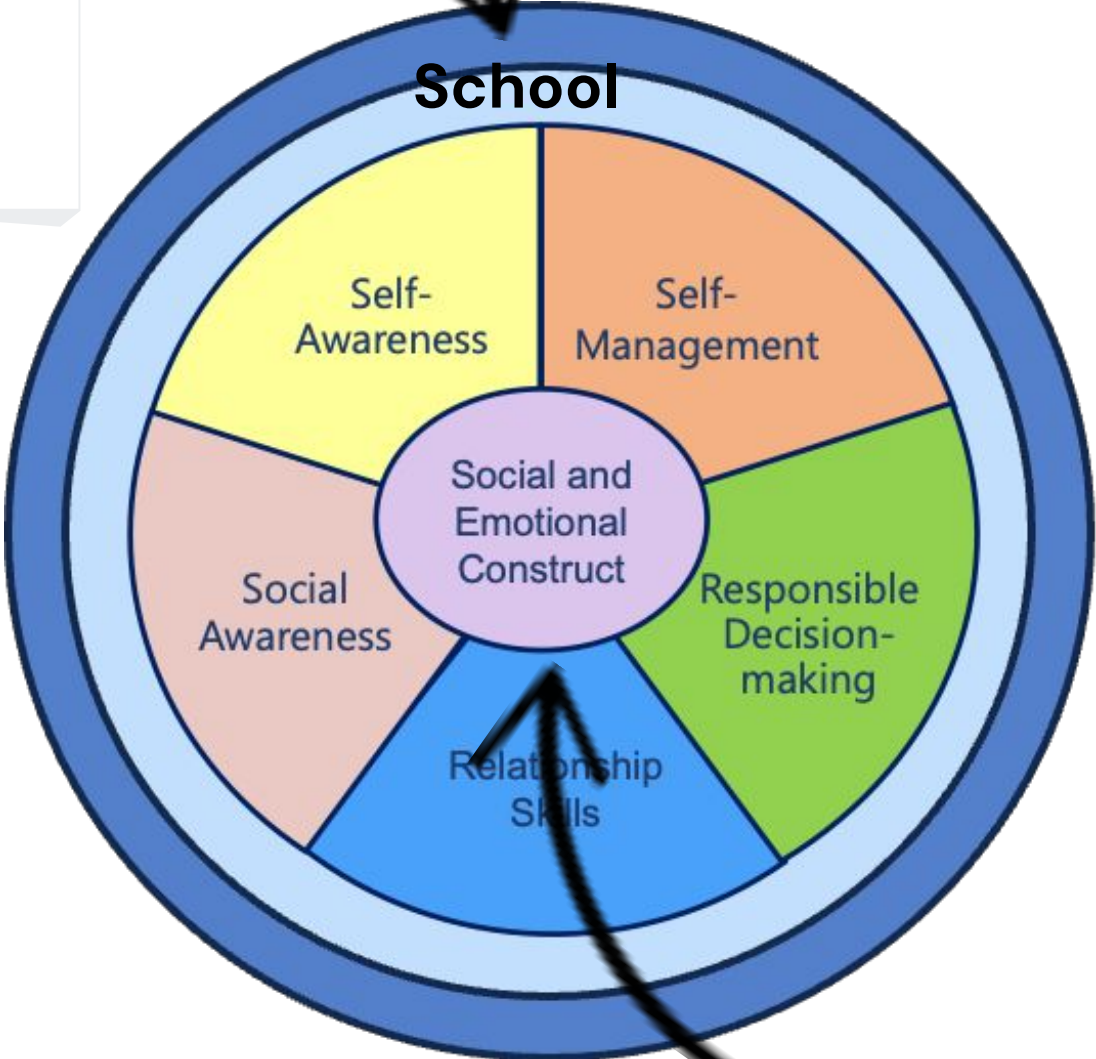


# VOCAL OVERVIEW

Dimension	Indicator (Code)	Grade 4	Grade 5	Grade 8	Grade 10
Engagement	Cultural competence (ENGCLC)	4	4	5	4
Engagement	Relationships (ENGREL)	4	4	4	4
Engagement	Participation (ENGPART)	9	9	11	9
<b>Engagement</b>	<b>Sub-total</b>	<b>17</b>	<b>17</b>	<b>20</b>	<b>17</b>
Safety	Emotional (SAFEMO)	5	5	4	6
Safety	Physical (SAFPSF)	2	2	2	2
Safety	Bullying/cyber-bullying (SAFBUL)	8	7	8	8
<b>Safety</b>	<b>Sub-total</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>16</b>
Environment	Instructional (ENVINS)	8	9	8	9
Environment	Mental health (ENVMEN)	2	2	2	2
Environment	Discipline (ENVDIS)	4	4	4	4
<b>Environment</b>	<b>Sub-total</b>	<b>14</b>	<b>15</b>	<b>14</b>	<b>15</b>
	Total number of items	46	46	48	48

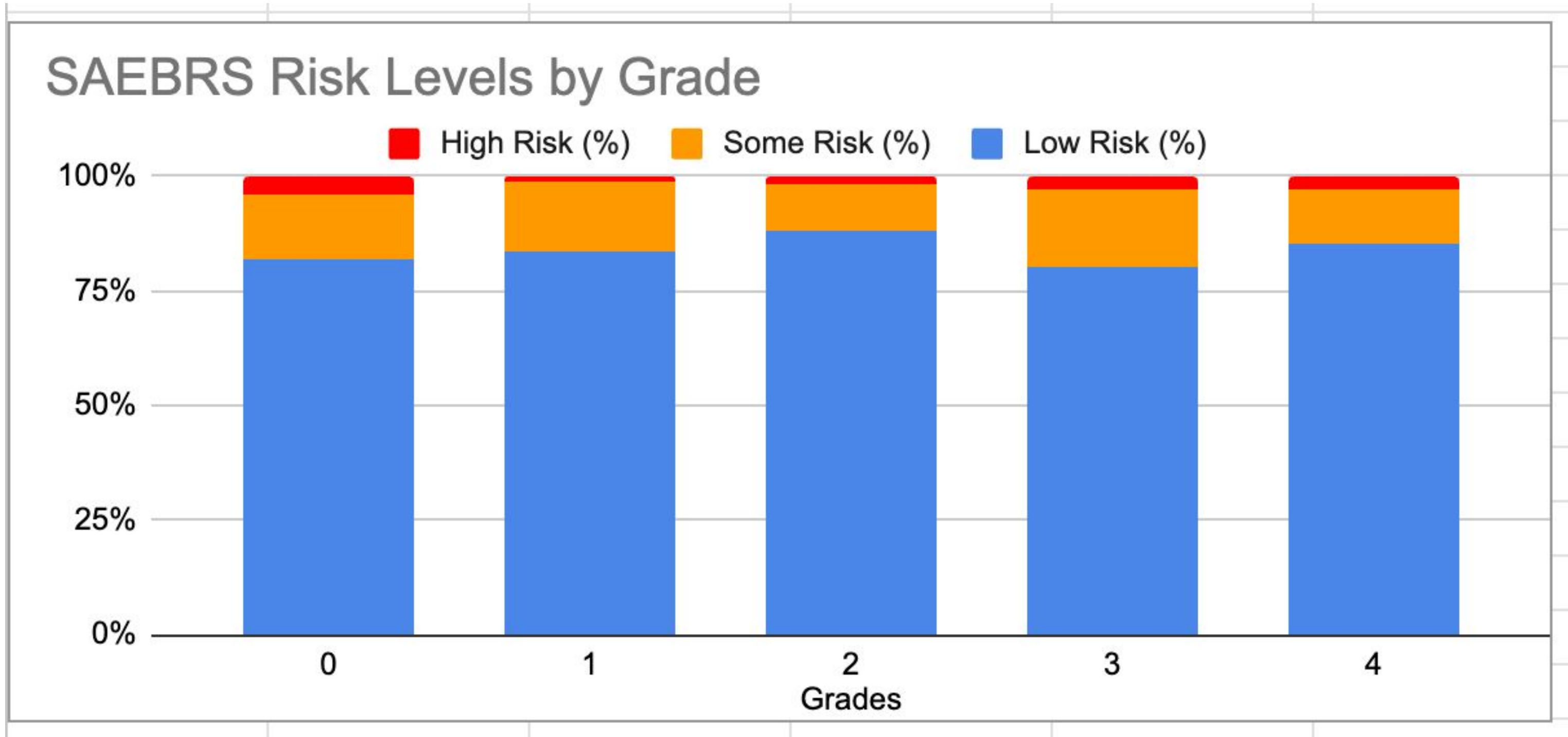
# CASEL ALIGNMENT

Views of Climate and Learning  
(VOCAL)



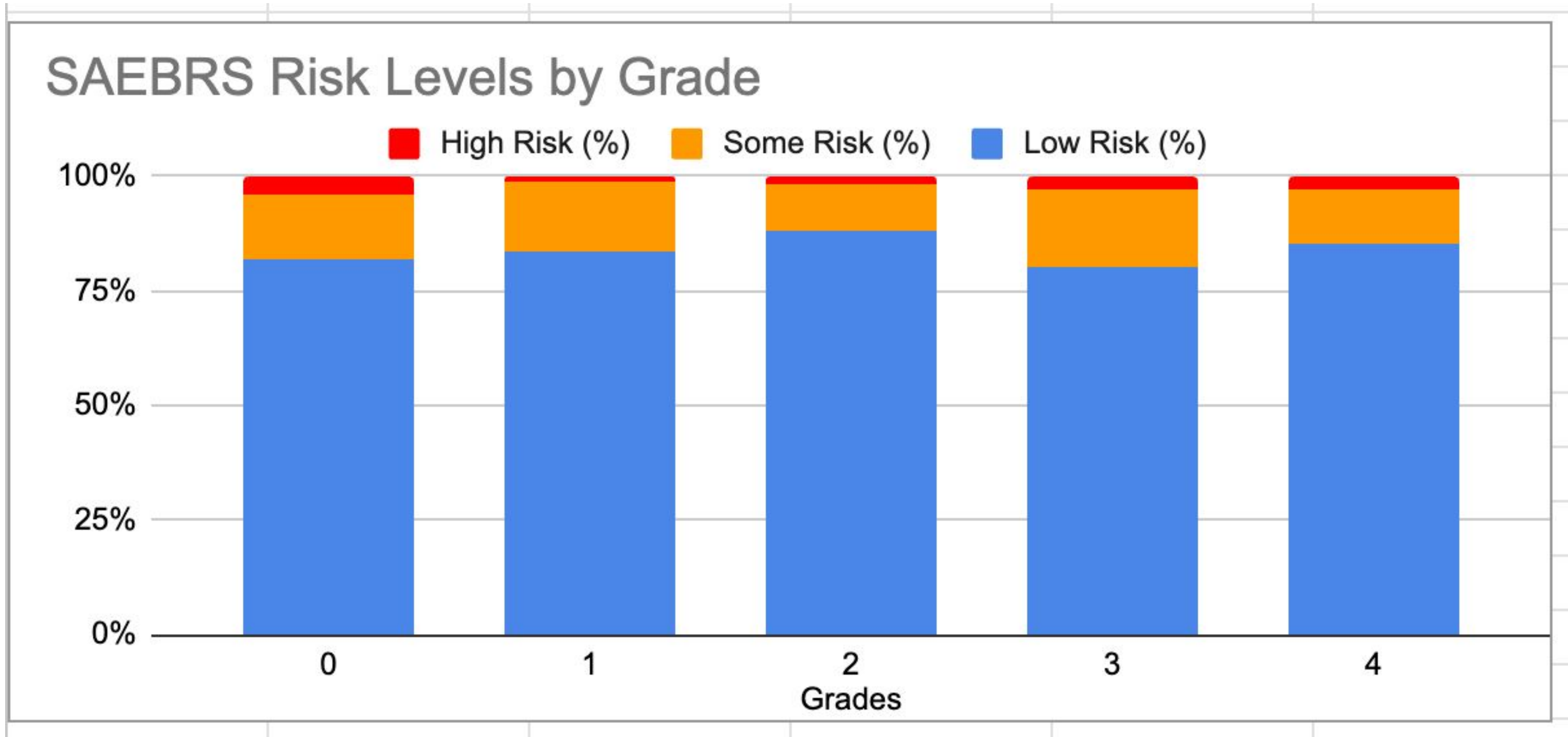
(Social Academic Emotional  
Behavior Risk Survey  
(SAEBRS)

# SAEBRS DATA



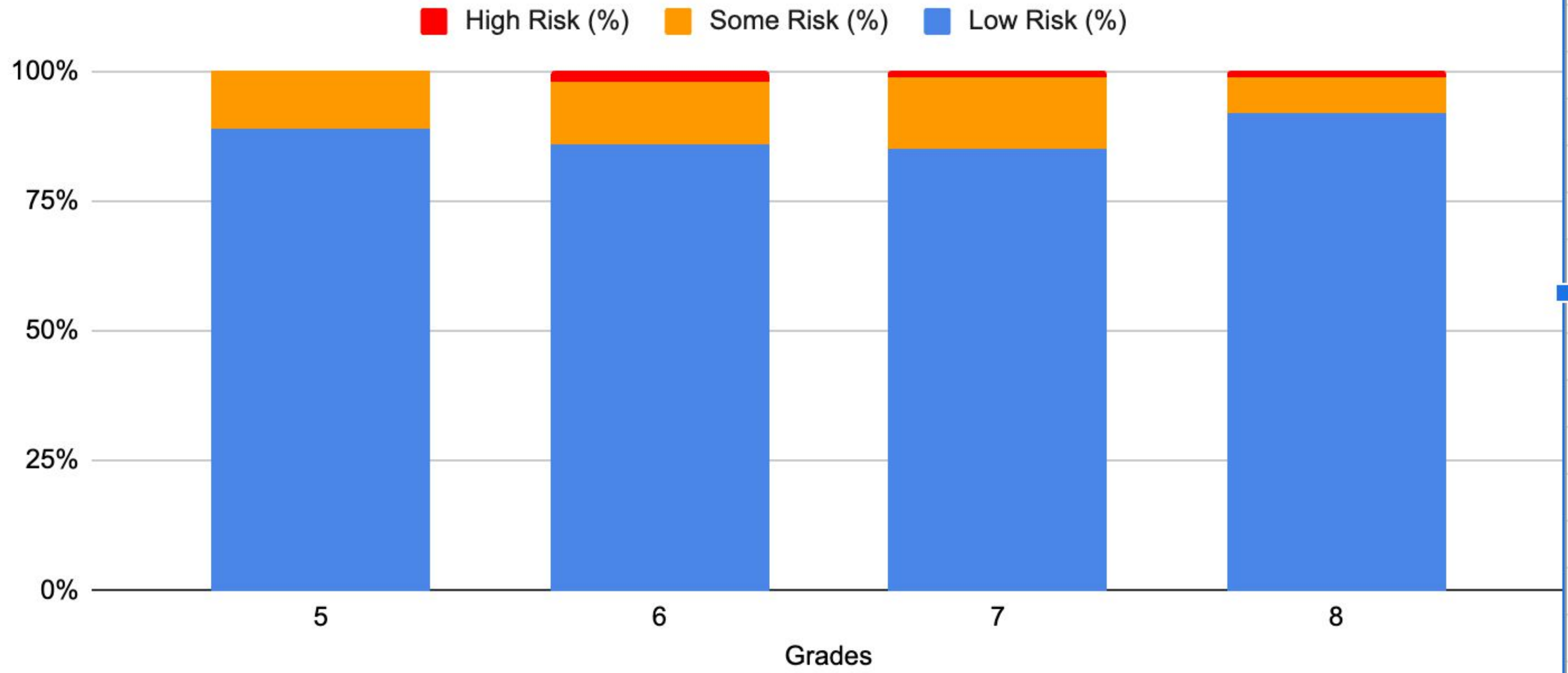


# SAEBRS DATA



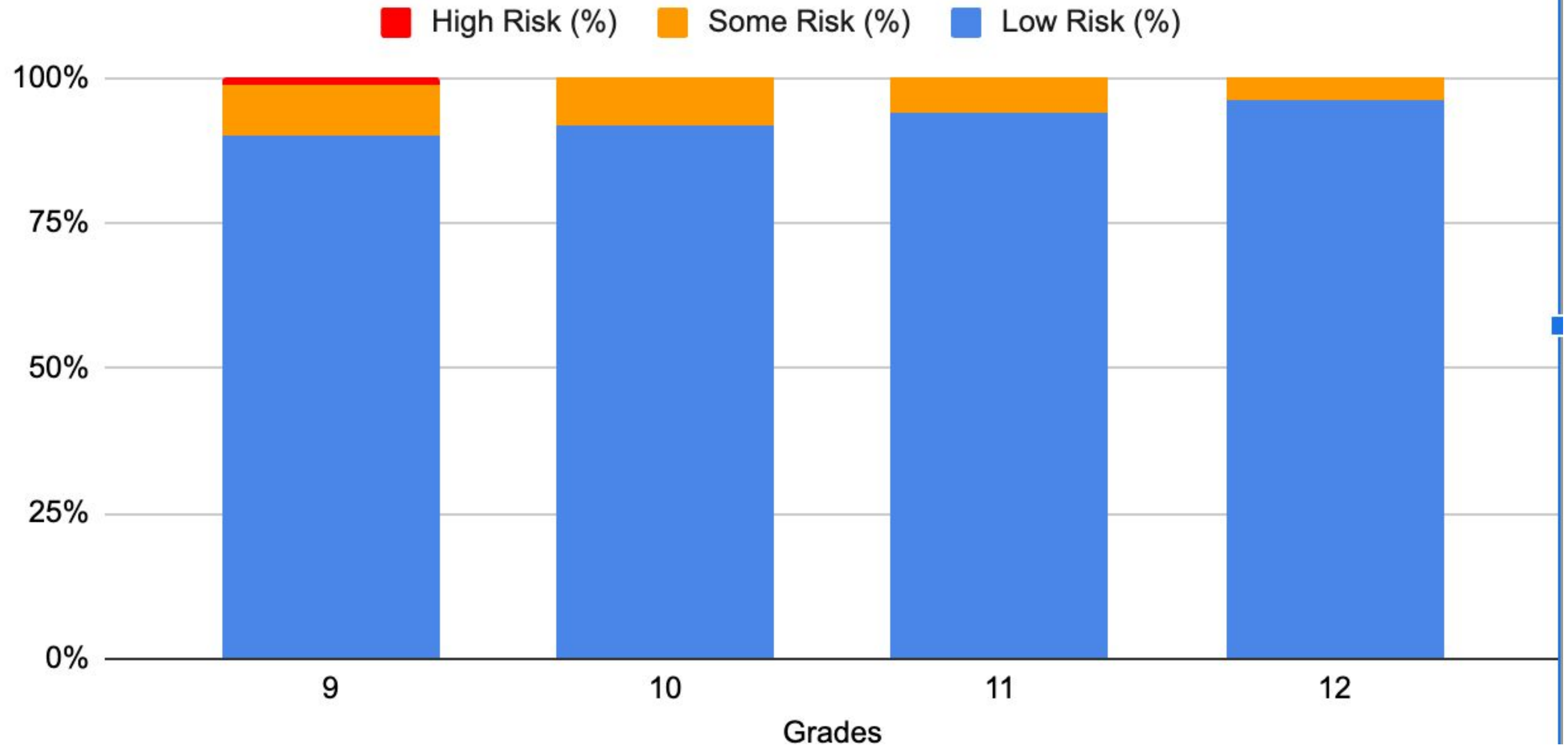
# MYSAEBRS DATA

## SAEBRS Risk Levels by Grade



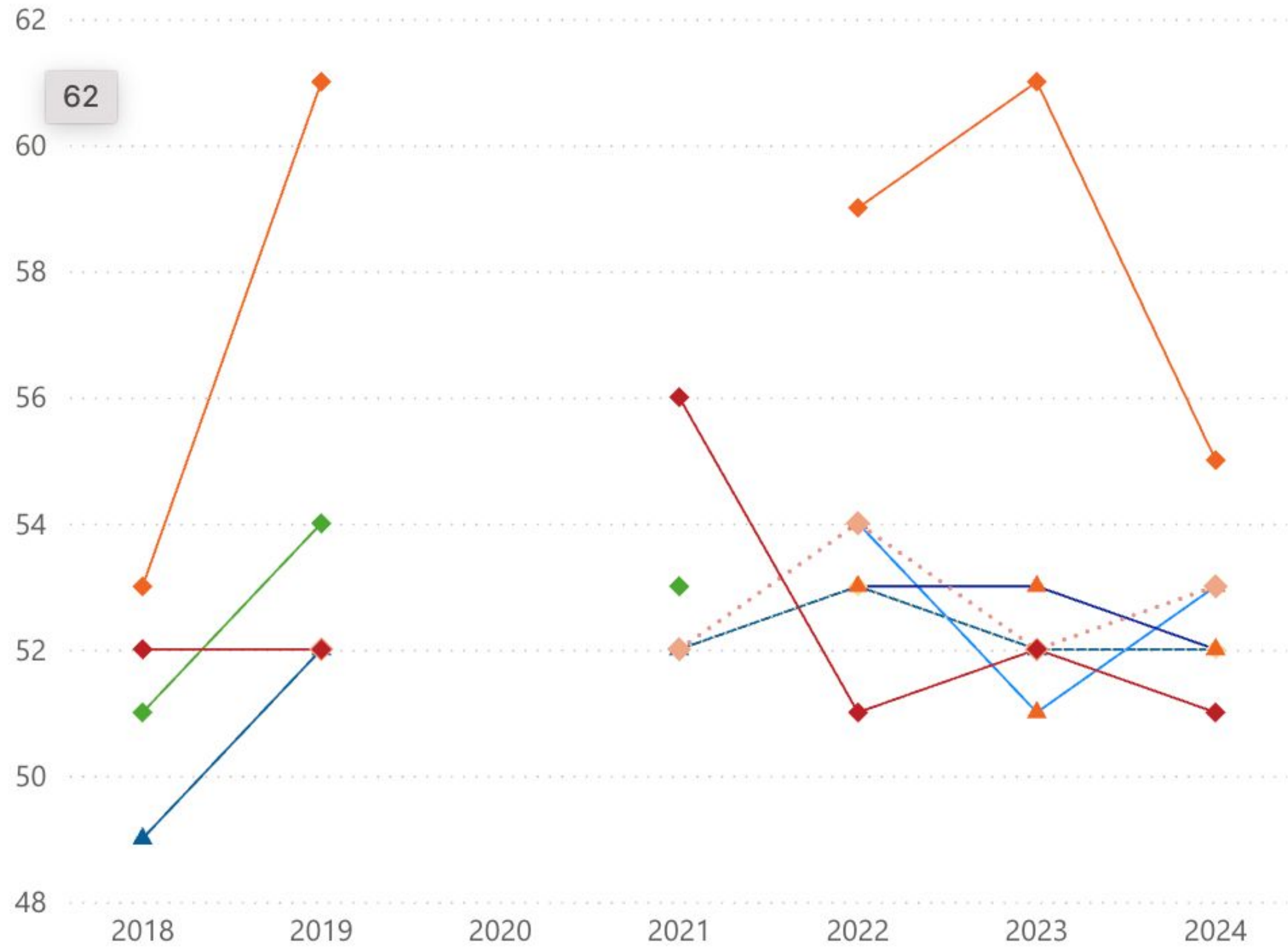
# MYSAEBRS DATA

## SAEBRS Risk Levels by Grade



# VOCAL DATA

Average Index Score



**2022**

▲	All	53
◆	EL	59
▲	Low Inc.	54
◆	Not EL	53
▲	Not Low Inc.	53
◆	not Stud w/Dis	54
◆	Stud w/Dis	51

Student group: All (blue triangle), Eco. Dis. (green diamond), EL (orange diamond), Low Inc. (blue triangle), Not Eco. Dis. (green diamond)

#### 4th Grade

# A Few Takeaways

- Strong Instruction & relationships; consistency in discipline across students
- Low income students and SWD express concerns about fairness in discipline
- EL & SWD expressed concerns about bullying & Emotional Safety

#### 5th Grade

- Strong academic engagement
- Students of color report some negative peer relationships
- Students of color report some challenges with bullying, emotional/physical safety

#### 8th Grade

- Student report an overall positive discipline environment
- EL and Low Income students report concerns about bullying
- Strong participation/engagement across grade
- SWD report some challenges with schoolwork & instruction

#### 10th Grade

- Student report a positive culture of discipline
- EL students report some challenges with engagement
- Students of color report overall positive school environment with some challenges w/ discipline
- Some students report challenges with relationships & sense of belonging

# Next Steps

- Celebrate areas of success
- Analyze Key Findings
- Share results with stake holders
- Prioritize areas for improvement
- Develop Action plans
- Provide support & resources
- Create chanel for communication and feedback
- Monitor progress and impact

---

**ITEM TITLE:** SY26 Budget: Preliminary Estimate and Override Recommendation

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:** SY26 Budget: Preliminary Estimate and Override Recommendation -  
LINK

**BACKGROUND**

**INFORMATION:**

**RECOMMENDATION:**

---

**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
SY26 Budget: Preliminary Estimate and Override Recommendation	Override_Update_SC_Meeting_12.2.24.pdf	Cover Memo



# **SY26 Budget: Preliminary Estimate and Override Recommendation**

School Committee Meeting 12.2.24



# Scope of Presentation

## ***What this is***

- Preliminary SY26 Numbers
- Recommendation to School Committee to take a position on a potential override

## ***What it is not***

- An SY26 budget presentation (this is due on 2.1.25)

# Guiding Points

## Spring 2024

- **Discussions about a potential override have been ongoing**, including in School Committee meetings last year and in previous years.
- Recommendation aligns with prior conversations in school committee meetings & **should not be unexpected**.

## SY25 Budget embeds cuts & one time funds

- \$650K in Reductions - primarily achieved through central office adjustments & attrition, impacting 10 FTEs.
- \$2MM Allocation - drawn from Circuit Breaker Reserves to close the gap between the town's appropriation and the district's needs, which fell below level servicing due to prior cuts.

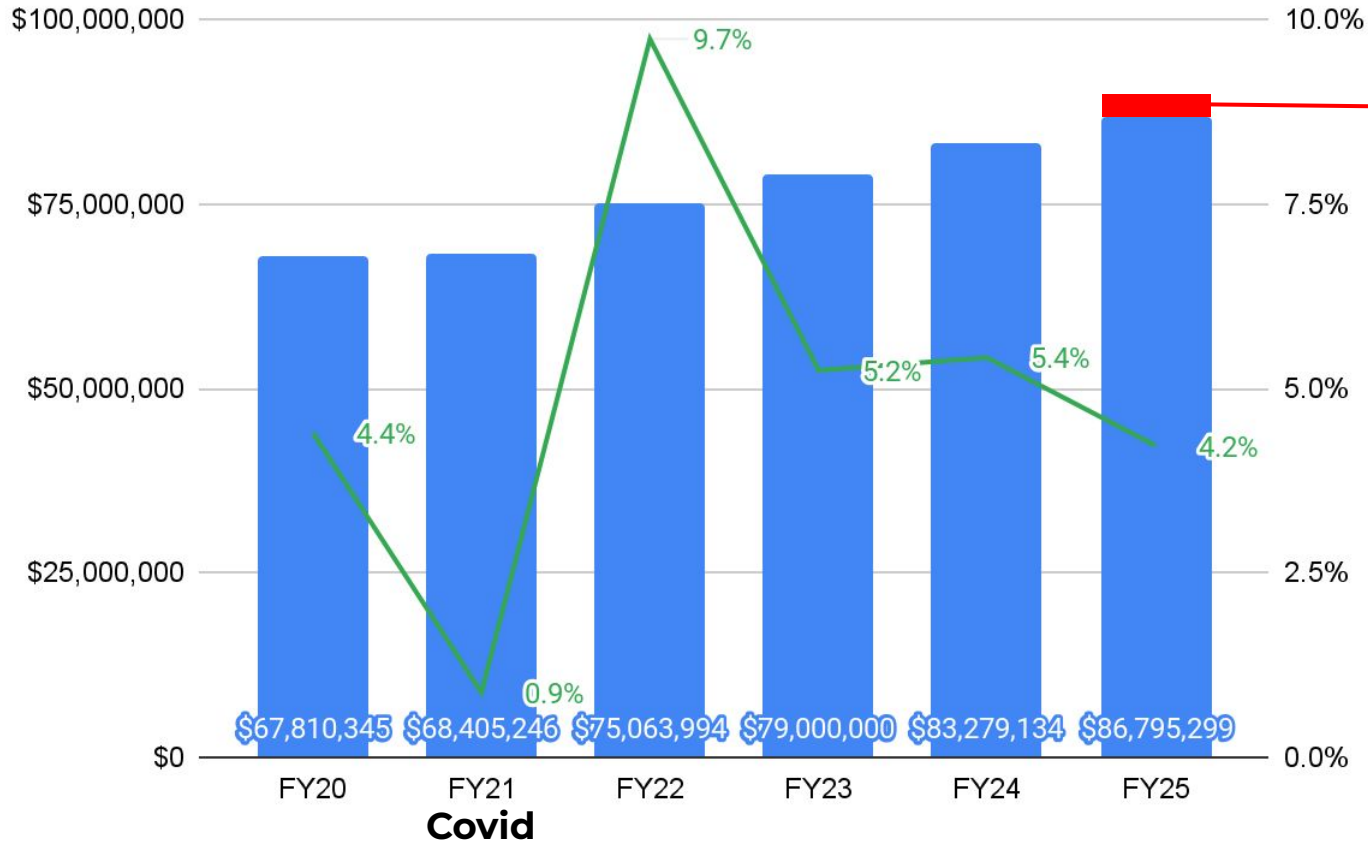
## Fiscal Responsibility

- Commitment to Sustained Savings - the district has **prioritized cost reductions with minimal impact on the quality of education**, ensuring these savings are sustainable (not one-time).
- Savings Achieved:
  - \$650K for SY25 identified in February 2024 (budget submission).
  - \$400K for SY25 identified in October 2024
  - \$1M planned for SY26

## Note on ESSER One time funds (\$1.3MM 2021-2023)

- Facilities Improvements - \$279K focused on enhancing school readiness in response to COVID
- ESSER Funded Staffing - \$1MM (23.1 FTEs) **integrated into school operating budgets** to meet ongoing student needs. Recent **cost reductions** in other areas have not only **offset these costs** but exceeded the retained ESSER funding.

# Historical Appropriation & Percent Increase



## **SY25**

School used an additional **\$2MM** beyond the Appropriation from Circuit Breaker Reserve

If this had been appropriated it would have been a **6.6%** increase over SY24

# ESSER Details

## **FY20/21 Grant, ESSER I, closed 9/30/22**

- \$279,511 on Technology/facilities equipment

## **FY21/22 Grant, ESSER II, closed on 8/2/23**

- Added \$155,596 in Admin Salaries (1 FTE)
- Added \$127,316 in Professional Salaries (2.0 FTE)

## **FY22 ESSER III Grant, closed on 8/2/23**

- Added \$196,693 in Professional Staff ( 2.0 FTE)
- Added \$511,663 in Support Salaries (18.1 FTE)

# Circuit Breaker Reserve

- Circuit Breaker **early** estimate in FY26 is \$4,000,000 for FY25
- Limited CB Carryover for FY26 **\$224,204**
- FY25 budget offset was \$2 Million
- Audit completed by DESE 10/24

Early Nov post CB Audit on 11/13/24	
Description - Revenue	
CB FY24 Carryover, 1x Funds	\$2,118,821
FY25 GF Private Schools	\$1,250,305
FY25 GF Collaboratives	\$918,593
<i>Est FY25 CB Claim</i>	<i>\$3,700,000</i>
	\$7,987,719
Description - Expenses	
GF Private School	\$1,251,753
GF Collab	\$1,082,870
CB Tuitions	\$5,128,892
CB Salaries	\$150,000
CB Transportation	\$150,000
	\$7,763,515
<b>CB to Carry over for FY26</b>	<b>\$224,204</b>

# SY26 Preliminary Estimates – School & Town

	SY25
Appropriation	\$86,795,299
Transportation Subsidy	429,000
Circuit Breaker Reserve	2,000,000
Subtotal	89,224,299
Cuts implemented & planned	(400,000)
Adjusted after cut	88,824,299

SY26 <i>5/24 school estimate</i>	SY26 10/24 Town Recommended Allocation
\$96,462,904	\$92,714,346
429,000	0
0	0
\$96,891,904	\$92,714,346
(1,400,000)	
\$95,491,904	
<i>Short</i>	(\$2,777,548)

# Fiscal Responsibility

Planned SY25 Cuts  
(Feb 2024)

**\$650,000**

- ✓ Central Office Positions (n=4)
- ✓ Staff attrition related to final year of closing Johnson
- ✓ 4.0 Elem Library Paras
- ✓ 1.0 Math coach
- ✓ 1.0 Grade 5 teacher

Additional SY25 Cuts  
(Oct 2024)

**\$400,000**

- ✓ \$125K School Bldg Materials & Supplies
- ✓ Tech Salary Allocation Town
- ✓ Professional Development
- ✓ Facilities Services/Utilities
- ✓ Transportation

SY26 Cuts for O/R &  
non O/R Budgets  
(Feb 2025)

**\$1,000,000**

- Digital resources
- Fee increases in line with neighbor districts
- Professional development - increase internal capacity
- FTEs (n=10) with focus on lowest student impact

**Guidance for School  
Committee Role &  
School Staff during an  
Override**



# Role of School Committee

## **Applicable Massachusetts General Laws**

- Conflict of Interest Law (Ch. 268A)
- Campaign Finance Law (Ch. 55)

## **School Committee Members...**

- Have more leeway than other public employees when participating in political activity
- Have goal of informing and guiding public debate on public issues
- Can take official actions concerning ballot questions during regular business hours
- Can use public resources to inform the public, as opposed to for purposes of advocacy
- Can campaign for ballot questions during regular business hours
- Can campaign under their official title as school committee members
- State their view point and position on the ballot question

# Role of School Committee

## Examples of Ways the School Committee May Participate in an Override Campaign

- Discuss the ballot question on the override at its own meetings and at informational meetings sponsored by a public or private group
- Invite or permit ballot question committees to address its meetings, use public buildings for meetings following policy allowing equal access for all viewpoints.
- Vote to take a position on the ballot question, and issue an official statement regarding that position
- Distribute information about their position through any standard channels used for reporting official actions (e.g., website, public meetings), ensuring that the information shared is factual and does not constitute advocacy.

[Link to legal memo from school counsel](#)

# Role of Town/School Staff

## Applicable Massachusetts General Laws

- Conflict of Interest Law (Ch. 268A)
- Campaign Finance Law (Ch. 55)

## School/Town Employee Role

- Communicate strictly **factual, unbiased information** and **avoid campaigning** or favoring a “yes” or “no” opinion vote when speaking with the public in your town/school capacity.
- If approached by a resident/parent, public official, PAC member (political action committee), **respond with factual information** provided in this deck or **refer the person** to Corrie Kerr, Director of Communications for Natick Public Schools with a cc: to your principal for visibility.
- Avoid engaging on social media or other platforms regarding the override when using a school page or commenting as a school employee v. personal comments

# Background Facts - *shared with School Staff via email 12.2.24*

- The Town of Natick is (likely) to pursue a ballot question this March 2025 (local election) seeking up to \$8M operational override for FY26; Read [Town Administrator memo to Town Meeting](#) (dated 10.22.24)
- Overseeing Boards/Committees:
  - Select Board (SB) - Is the chief policy making entity for the Town, including regarding financial management principles. The SB must vote by Feb 18th to place the question on the ballot
  - School Committee - Is charged with overseeing School Department policy and budget
  - Finance Committee - Provides general oversight and guidance to Town Meeting, including on matters related to the Town's financials
- Ballot Question Timeline:
  - Submission: Ballot question must be approved by a majority vote of the Select Board (Winter '24 - by Feb. 18 per political calendar)
  - note: the Town is working to establish an override webpage (on [www.natickma.gov](http://www.natickma.gov)) that will serve as a resource tool to provide to residents and generally answer related questions.
- Logistics: Override ballot questions must be presented in dollar terms and must specify the purpose of the override.
- Decision: Overrides require a majority vote of approval by the electorate (Mar '25)
- Override Campaigning - it's possible that local-based groups may form to campaign the "yes" v. "no" sides of the override decision (these groups are PACs or political action committees). PACs are typically active in campaigning on either side of the override vote. As Town staff, we will be asked to provide factual, unbiased information, but should avoid providing support or advocacy on the issue in our capacity as Town employees. If unsure of what/how to respond, please engage with Town Administration (cc'ing your Dept Head).

[Link to Town Administrator Memo; shared with all school staff 12.2.24](#)

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**ITEM TITLE:** Enrollment - December 1, 2024  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:** Enrollment - LINK  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
enrollment - 12.1.24	12.2_NPS_Student_Enrollment_-_2024_12_01_Dec_SY25_-_Totals.pdf	Cover Memo

Natick Public Schools - Student Enrollment December 01, 2024

	November 01, 2024																December 01, 2024															
	NPK	K	1	2	3	4	5	6	7	8	9	10	11	12	Total		NPK	K	1	2	3	4	5	6	7	8	9	10	11	12	Total	
<b>NHS</b>											396	438	420	385	1,639	<b>NHS</b>											398	439	423	381	1,641	
<b>KENNEDY</b>								221	241	218	235				915	<b>KENNEDY</b>											222	241	218	236		917
<b>WILSON</b>								180	182	191	175				728	<b>WILSON</b>											180	184	191	176		731
<b>BEN-HEM</b>		21	21	19	20	20										<b>BEN-HEM</b>		21	21	19	20	20										
		21	21	19	19	20												21	21	19	19	20										
		22	21	19	21	20												22	21	19	21	20										
		21	21	17	20	20												21	21	17	20	21										
		22	20		21	19												22	20		21	20										
					20																20											
Total:	<b>107</b>	<b>104</b>	<b>74</b>	<b>121</b>	<b>99</b>										505	Total:	<b>107</b>	<b>104</b>	<b>74</b>	<b>121</b>	<b>101</b>											507
<b>BROWN</b>		17	18	20	21	24										<b>BROWN</b>		18	17	18	21	24										
		17	18	19	21	24												17	18	20	20	24										
		18	19	21	20	24												18	18	21	19	24										
		18	18	20	20	24												18	17	20	21	24										
		18	18	20	21													17	18	20	21											
					20																20											
Total:	<b>88</b>	<b>91</b>	<b>100</b>	<b>123</b>	<b>96</b>										498	Total:	<b>88</b>	<b>88</b>	<b>99</b>	<b>122</b>	<b>96</b>											493
<b>JOHNSON</b>	SCHOOL CLOSED															<b>JOHNSON</b>	SCHOOL CLOSED															
Total:	End of School Year 2024															Total:	End of School Year 2024															
<b>LILJA</b>		19	16	17	24	24										<b>LILJA</b>		20	16	17	24	24										
		22	16	20	23	24												22	16	20	23	24										
		20	17	20	22	22												20	17	20	21	22										
		21	15	21	22													21	15	21	22											
		19																20														
Access Program:		2	3		1											Access Program:		2	3		1											
Combo Classes:			9	9												Combo Classes:			9	9												
Combo Classes:			9	8												Combo Classes:			9	8												
Total:	<b>103</b>	<b>85</b>	<b>95</b>	<b>92</b>	<b>70</b>										445	Total:	<b>105</b>	<b>85</b>	<b>95</b>	<b>91</b>	<b>70</b>										446	
<b>MEMORIAL</b>		18	21	23	18	22										<b>MEMORIAL</b>		18	20	23	19	21										
		18	20	21	20	22												18	21	21	20	22										
		17	21	23	20	22												18	22	23	20	22										
		18	21	23	20	22												18	21	23	20	22										
					20	23															20	23										
Total:	<b>71</b>	<b>83</b>	<b>90</b>	<b>98</b>	<b>111</b>										453	Total:	<b>72</b>	<b>84</b>	<b>90</b>	<b>99</b>	<b>110</b>										455	
<b>PRE-K EAST</b>	66														66	<b>PRE-K EAST</b>	66														66	
<b>PRE-K NHS</b>	53														53	<b>PRE-K NHS</b>	54														54	
<b>PRE-K BEN</b>	9														9	<b>PRE-K BEN</b>	10														10	
<b>TOTAL:</b>	<b>128</b>	<b>369</b>	<b>363</b>	<b>359</b>	<b>434</b>	<b>376</b>	<b>401</b>	<b>423</b>	<b>409</b>	<b>410</b>	<b>396</b>	<b>438</b>	<b>420</b>	<b>385</b>	5,311	<b>Total:</b>	<b>130</b>	<b>372</b>	<b>361</b>	<b>358</b>	<b>433</b>	<b>377</b>	<b>402</b>	<b>425</b>	<b>409</b>	<b>412</b>	<b>398</b>	<b>439</b>	<b>423</b>	<b>381</b>	5,320	

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**ITEM TITLE:** Policy Subcommittee Update

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND INFORMATION:**

**RECOMMENDATION:**

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**ITEM TITLE:** Rotary Book Donation Report

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND INFORMATION:**

**RECOMMENDATION:**

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**ITEM TITLE:** Zero Emissions Vehicle Fleet & Roadmap  
**DATE:**  
**ITEM TYPE:**  
**ITEM SUMMARY:** Municipal Decarbonization Roadmap - LINK  
**BACKGROUND INFORMATION:**  
**RECOMMENDATION:**

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**ATTACHMENTS:**

<b>Description</b>	<b>File Name</b>	<b>Type</b>
municipal decarbonization roadmap	12.2_Municipal_Decarbonization_Roadmap.pdf	Cover Memo



# Municipal Decarbonization Roadmap

December 2024

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# Acknowledgements

Thank you to the staff and community members who helped collect data, provide input and advocate for improvements throughout the development of Natick's Municipal Decarbonization Roadmap.

We look forward to working with you to implement this Roadmap as part of our net zero journey.

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# Introduction

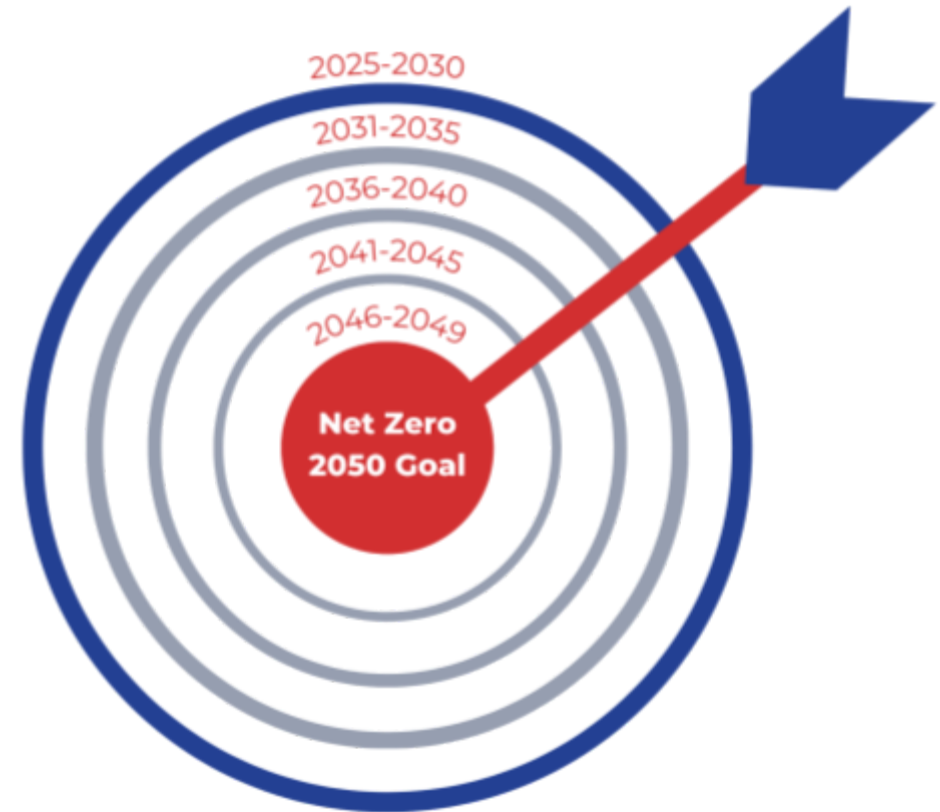
The Town of Natick and Natick Public Schools are striving to reach net zero greenhouse gas (GHG) emissions by 2050.

Pursuing this goal is in line with our community's values, Natick's history as a sustainability leader, and the direction set by Natick's elected officials, including Town Meeting, the Select Board, School Committee and Planning Board.

This work builds on Natick's 2021 Net Zero Action Plan, which outlined strategies to achieve net zero and identified priority actions for municipal operations. It recommended Natick change where our energy comes from, electrify our buildings, and switch to more efficient and cleaner vehicles.

In the years between now and 2050, our municipality will have hundreds of opportunities to advance these recommendations. We will replace every water heater, in every public building, at least once. We will replace more than 20 heating and cooling systems. We will re-roof at least 13 buildings. We will more than twice replace each of our fleet's 151 vehicles, and we will likely construct or significantly renovate four buildings. Each of these life cycle events and the decisions we make when we encounter them will influence Natick's net zero goal.

This document, known as Natick's Municipal Decarbonization Roadmap, sets a long-term strategy for identifying, planning for and leveraging these opportunities to advance our community's net zero ambitions over time.



## Alignment with State Goals & Funding Opportunities

The Municipal Decarbonization Roadmap is in response to the 2018 non-binding resolution Town Meeting passed to adopt a community-wide 2050 net zero GHG reduction goal. It directly advances priority actions identified in Natick's 2021 Net Zero Action Plan, which was unanimously endorsed by the Natick Select Board, School Committee and Planning Board, and aligns with current municipal energy conservation and electrification initiatives.

This work also aligns with and advances GHG targets set by the Commonwealth of Massachusetts and positions Natick to receive funding to advance municipal decarbonization. In 2021, the state’s signature climate law, An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy, was amended to require the Secretary of the Executive Office of Energy and the Environment (Secretary) to set statewide GHG emissions limits and sector-specific emissions sublimits that are to be met every five years. These limits require GHG emissions to be at least thirty-three percent below 1990 levels in 2025, and fifty percent below 1990 levels in 2030.

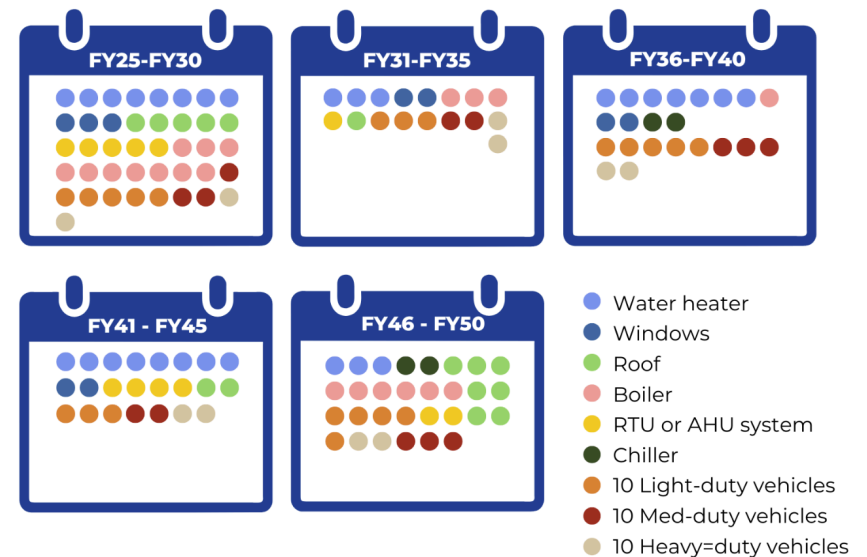
The Massachusetts Department of Energy Resources (DOER) has supported municipalities with grants and technical assistance to reduce energy use in accordance with An Act Relative to Green Communities, and Natick has received more than \$2 million from the Green Communities program since 2010. In 2024, DOER established the Climate Leader Community certification as a framework for municipalities to provide additional funding to municipalities in achieving the Secretary’s set limits. Developing this Municipal Decarbonization Roadmap completes one of the six criteria necessary to make Natick eligible for this funding.

## Purpose & Strategy

The purpose of the Municipal Decarbonization Roadmap is to provide municipal decision makers with a long-term planning strategy for decarbonizing municipal operations by 2050. This strategy closely aligns with RMI’s “Zero Over Time” approach<sup>1</sup>, which involves spreading out energy efficiency, electrification, renewable energy, and energy storage projects over the life of a capital asset.

In simple terms, the Municipal Decarbonization Roadmap is essentially a 25 year calendar of net zero upgrades (see Figure 1 for number of capital projects planned for each five year period between FY 2026 and FY2050). It identifies “trigger events” that will happen over the next 25 years, and lays out a high-level plan to leverage these moments to reduce or eliminate fossil fuels. The Roadmap does not assess the financial implications – positive or negative – of pursuing net zero energy upgrades, nor does it provide a detailed, technical or feasibility assessment of individual decarbonization opportunities. Financial implications are also not considered due to the long-term nature of this Roadmap and the many factors that can influence market conditions over time.

**Figure 1. Estimated Capital Replacement Calendar**



<sup>1</sup> <https://rmi.org/insight/zero-over-time-for-building-portfolios/>

## Developing this Roadmap

Natick's Municipal Decarbonization Roadmap was developed by PowerOptions, the largest energy-buying consortium in New England and a trusted energy consultant for nonprofits and public entities, through a technical assistance grant funded by the Massachusetts Department of Energy Resources. PowerOptions used a combination of in-house economic models, a virtual energy audit, and Helioscope solar software to produce Natick's Municipal Decarbonization Roadmap.

PowerOptions's modeling was reliant on building and vehicle data collected by Natick staff and evaluates strategies to decarbonize Natick's 23 primary public buildings and 151 vehicles between 2025-2050.

Fiscal Year 2022 was used as the baseline for this analysis for all vehicles and buildings, with the exception of Kennedy Middle School which uses Fiscal Year 2023 (FY 2022, the building was not fully constructed). Data collected for each of Natick's 22 buildings is provided in the Appendix. It includes:

- Monthly energy use in native units (kWh of electricity, therms of natural gas, gallons of oil)
- Monthly energy costs
- Square footage
- Age of roof, heating system(s), air conditioning system(s), water heater(s), and range(s), as applicable
- Type and quantity of heating system(s), air conditioning system(s), water heater(s) and range(s)
- Fuel type for heating system(s), water heater(s) and range(s)
- Presence of ventilation system
- Window type and quantity of single pane windows
- Age and presence of solar array

- Presence of dryers

Building strategies assessed include: energy efficiency, electrification (fuel-switching away from fossil fuels to electric alternatives), on-site solar photovoltaics, and Renewable Energy Certificates. For projects occurring between 2025 and 2030, the timeline for implementing these strategies was matched with Natick's five-year capital plan. For projects occurring in 2031 and beyond, an estimated timeline was determined based on the last year of the following useful life standards:

- Roof: 25-30 years
- Cast Iron Boiler: 30-50 years
- Condensing Boiler: 20-25 years
- Air Handling Unit (AHU)/Rooftop Unit (RTU): 25-30 years
- Building Management System: 10-15 years
- Chiller: 20-25 years
- Water heater: 10-15 years
- Range: 10-15 years

Vehicles registered to Natick in the Massachusetts Vehicle Registry were included in the analysis. Motorcycles, non-road equipment (NRE) or trailers, and contracted vehicles, such as school buses, were excluded from the analysis. Vehicles in Natick's fleet were assessed to match each existing vehicle with the best candidates for battery electric vehicles (BEV). For conservative purposes, a 10 year lifespan was assigned to every vehicle in the fleet.

# Natick's Progress to Net Zero

The Town of Natick has been a leader in energy efficiency and decarbonization for more than 20 years.



**In 2004, Natick joined ICLEI Local Governments for Sustainability**, which required the town to establish a baseline greenhouse gas emissions inventory and set reduction goals.

**In 2010, Natick was one of the first Green Communities designated by DOER.** Since joining, the Town has received more than \$2 million in grants through the program.

**In 2012, Natick became one of the first municipalities to install solar** on school and municipal buildings. These efforts have saved the Town more than \$1 million in energy costs to-date.

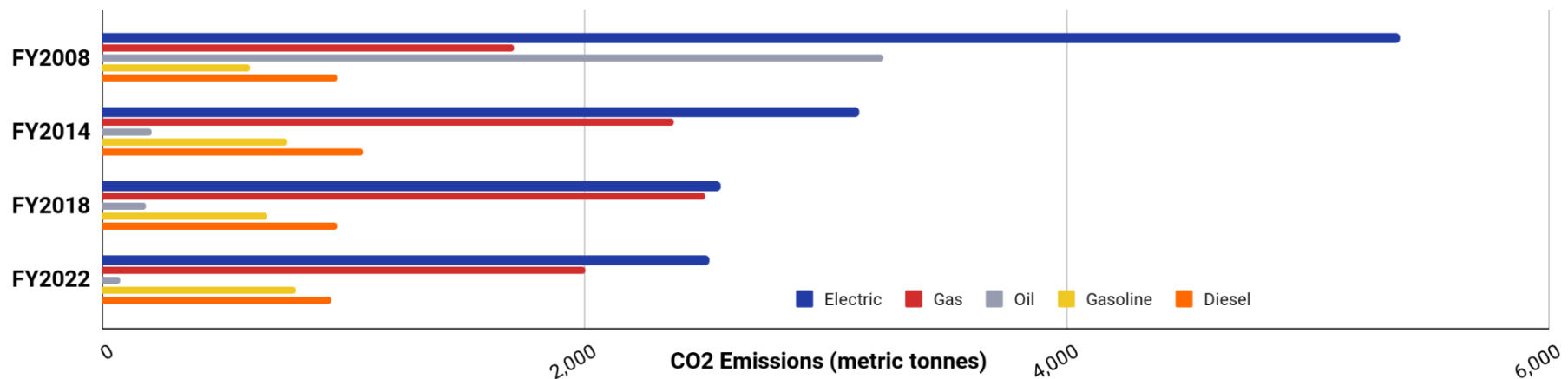
**In 2014, Natick was one of the first Green Communities to achieve its 20% energy reduction goal.** This was primarily achieved through the replacement of HVAC systems, which resulted in the conversion of buildings from oil to natural gas heating.

**In 2016, Natick became one of the first municipalities to purchase an electric vehicle and install public charging stations.**

**In 2020, Natick became one of the first municipalities to install a solar plus storage project** in conjunction with the new Kennedy Middle School.

**In 2023, Natick was one of just 24 communities nationwide to receive a Renew America's Schools grant** from the United States Department of Energy to install heat pumps and reduce onsite fossil fuel use at Bennett-Hemenway Elementary School.

**Figure 2. Municipal Emissions by Source Over Time**





# A New Baseline: Fiscal 2022 Emissions

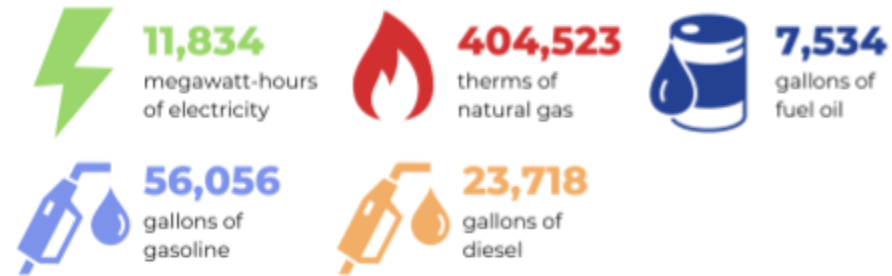
The Town of Natick and Natick Public Schools (the municipality) are responsible for serving the 37,000 residents who call our community home.

In service of these residents, the municipality performs a variety of functions. On an annual basis, we:

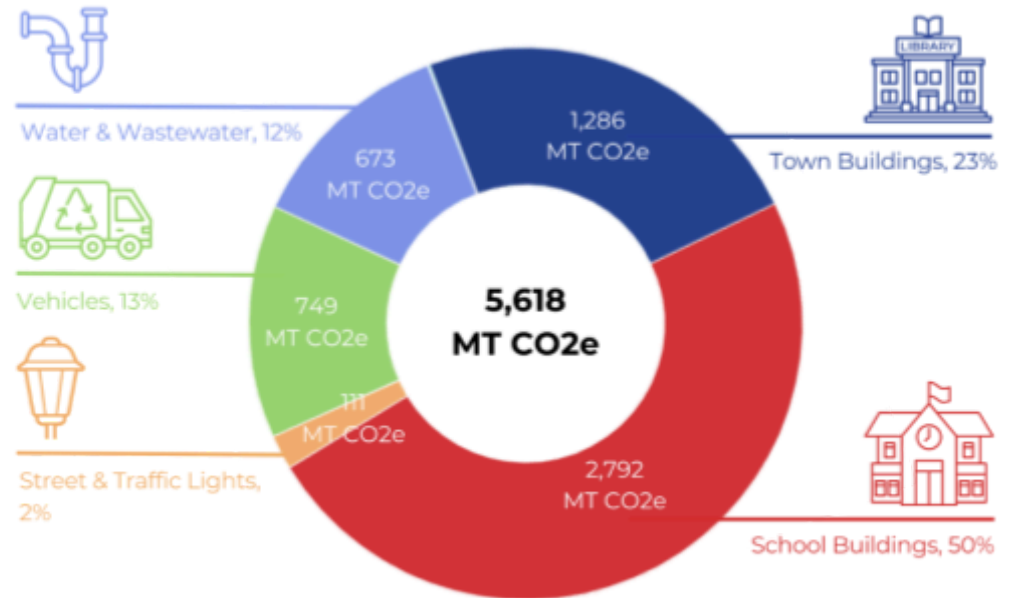
- Educate approximately 5,300 students from Pre-K through age 22,
- Pump approximately one billion gallons of clean drinking water to Natick homes and businesses,
- Maintain more than 212 acres of playing fields and open space,
- Conduct nearly 5,000 health inspections,
- Circulate more than 440,000 materials through our public libraries,
- Collect trash and recycling from approximately 10,500 households,
- Plow nearly 700 streets, totalling 170 miles, when it snows,
- And more.

These activities require the use of energy and generate GHG emissions. In Fiscal Year 2022, Natick's municipal and school operations emitted 5,618 metric tonnes of carbon dioxide equivalent (MT CO<sub>2</sub>e). See Appendix, Table 1 for details.

**Figure 3. FY 2022 School & Municipal Energy Use**



**Figure 4. FY 2022 School & Municipal GHG Emissions**



**Table 2. FY 2022 Building Energy Use & Greenhouse Gas Emissions (MT CO2e)**

Building	Electricity	Fossil Fuels	Total	% of Total
<b>Natick High School</b>	<b>460</b>	<b>260</b>	<b>720</b>	<b>17.7%</b>
<b>Ben-Hem Elementary School</b>	<b>146</b>	<b>242</b>	<b>388</b>	<b>9.5%</b>
<b>Wilson Middle School</b>	<b>147</b>	<b>220</b>	<b>367</b>	<b>9.0%</b>
<b>J F Kennedy Middle School</b>	<b>169</b>	<b>164</b>	<b>333</b>	<b>8.2%</b>
<b>Brown Elementary School</b>	<b>146</b>	<b>136</b>	<b>282</b>	<b>6.9%</b>
<b>Police &amp; Fire Headquarters</b>	<b>137</b>	<b>134</b>	<b>271</b>	<b>6.6%</b>
<b>Morse Library</b>	<b>138</b>	<b>91</b>	<b>229</b>	<b>5.6%</b>
<b>Memorial Elementary School</b>	<b>56</b>	<b>172</b>	<b>228</b>	<b>5.6%</b>
<b>Lilja Elementary School</b>	<b>56</b>	<b>162</b>	<b>218</b>	<b>5.3%</b>
<b>Ice Rink</b>	<b>101</b>	<b>98</b>	<b>199</b>	<b>4.9%</b>
DPW Headquarters	46	123	169	4.1%
Johnson Elementary School	16	153	169	4.1%
Community Senior Center	73	47	120	2.9%
East School	8	79	87	2.1%
Town Hall	78	-	78	1.9%
Cole Recreation Center	16	53	69	1.7%
Fire Dept West - Station 4	56	1	57	1.4%
Golf Course	27	-	27	0.7%
LFNR Garage	5	16	21	0.5%
Fire Dept East - Station 3	9	11	20	0.5%
Fire Dept South - Station 2	9	11	20	0.5%
Oak Street Storage	3	-	3	0.1%
Recycling Center	3	-	3	0.1%
<b>Total</b>	<b>1,905</b>	<b>2,173</b>	<b>4,078</b>	<b>100%</b>

## School and Municipal Buildings

The majority (73%) of Natick's municipal emissions came from the use of our schools and public buildings. In Fiscal Year 2022, Natick's 23 school and municipal facilities emitted 4,078 MT CO2e of the Town's 5,618 MT CO2e (Table 2).

Of Natick's building-related emissions, Natick High School (18%), Bennett-Hemenway Elementary School (10%), Wilson Middle School (9%), Kennedy Middle School (8%), Brown Elementary School (7%), Police and Fire Headquarters (7%), Morse Library (6%), Memorial Elementary School (6%), Lilja Elementary School (5%) and the Ice Rink (5%) contributed to nearly 80 percent of the Town's building emissions, and 60 percent of the Town's total Fiscal Year 2022 emissions. Natick aims to electrify all buildings and vehicles in the Town over time, but focusing on these ten high impact facilities will significantly reduce overall emissions (Table 2).

## Municipal Vehicles

The municipal fleet was responsible for 13% of the Town's emissions in FY 2022. The analyzed fleet consists of 151 vehicles that are a mix of 66 light-duty vehicles (LDV), 49 medium-duty vehicles (MDV), and 36 heavy-duty vehicles (HDV), including two electric vehicles (EVs) already owned by the Town.

**Table 3. FY 2022 Vehicle GHG Emissions (MT CO2e)**

Light-duty	Medium-duty	Heavy-duty
<b>281</b>	<b>157</b>	<b>310</b>

## Water & Wastewater

Water and sewer operations generate 12% of the municipality's emissions and are primarily driven by the electricity required to pump water and wastewater to and from Natick homes and businesses. These processes require limited on-site fossil fuel combustion, and emissions for this sector are anticipated to fall as the electric grid transitions to renewable sources over time.

## Street, Traffic & Park Lights

Outdoor lighting, including streetlights, traffic lights and lights in parks are responsible for just 2% of municipal emissions. Similar to emissions from water and wastewater operations, lighting-related emissions are expected to diminish with the greening of the grid between now and 2050.

## Future Emissions

The Town of Natick is committed to achieving net zero and providing local support for the GHG emissions limits set by the Secretary of the Executive Office of Energy and the Environment.

To become a Climate Leader Community, Natick is required to adopt the Massachusetts Department of Energy Resources's (DOER) minimum GHG emissions reduction timeline for municipalities (Table 3). These targets focus on:

- Reducing emissions from the use of onsite fossil fuels,
- Transitioning to Zero Emission Vehicles (ZEVs) in the municipal fleet, with a focus on light-duty vehicles in the near term, and
- Improving the Energy Use Intensity score of Natick's public buildings, through energy efficiency and electrification.

Table 4 identifies DOER's targets for each of these measures in 2027, 2030, 2040 and 2050.

**Table 4. Minimum Emissions Reduction Timeline, established by DOER**

DOER Targets	2027	2030	2040	2050
Reduce emissions from onsite fossil fuels	-20%	-35%	-60%	-100%
Zero emission vehicles (ZEVs) in light-duty fleet adoption	5%	20%	75%	100%
Zero emission vehicles (ZEVs) in heavy-duty fleet adoption	0%	20%	50%	100%
Energy Use Intensity reduction	-20%	-25%	-25%	-30%
Total Emissions Reduction Goals (% of 2022 emissions)	>15%	>35%	>65%	>95%

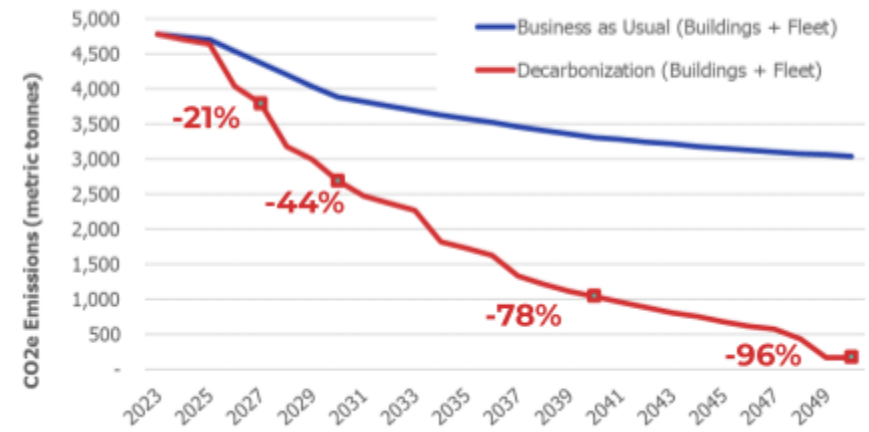
## Natick's Projected Emissions

By pursuing the decarbonization actions outlined in this Roadmap, the Town of Natick is projected to meet or exceed DOER's minimum emissions reduction goals. By 2050, this roadmap estimates that Natick can reduce our GHG emissions by 75 thousand cumulative MT CO<sub>2</sub>e, transition our fleet to ZEVs, lower our building's Energy Use Intensity (EUI) scores by nearly 40 percent, and meet the emissions reductions goals set by the Secretary.

**Table 5. Natick's Emission Reduction Timeline as a Result of Decarbonizing**

Natick Projections	2027	2030	2040	2050
Reduce emissions from onsite fossil fuels	-28%	-53%	-88%	-100%
Zero emission vehicles (ZEVs) in light-duty fleet adoption	6%	38%	100%	100%
Zero emission vehicles (ZEVs) in heavy-duty fleet adoption	0%	2%	59%	100%
Energy Use Intensity reduction	-11%	-21%	-35%	-40%
Total Emissions Reduction Goals (% of 2022 emissions)	21%	44%	78%	96%

**Figure 5. Natick's Projected Emissions**



### Powered by a Changing Electrical Grid

In 2021, roughly half of Massachusetts's electric load was met by the generation of in- and out-of-state clean energy sources, such as solar, hydropower, and wind. The state has multiple standards that require escalating percentages of electricity delivered to Massachusetts customers to come from clean energy.

Natick and the Commonwealth's net zero goals rely heavily on further greening the grid. Without significant increases in clean energy, electrification will not result in meaningful GHG reductions.

For this analysis, electricity emissions factors are sourced from the Massachusetts Clean Energy and Climate Plan for 2050, and represent estimates based on the New England grid. Using these projections, Natick's emissions will fall by about 35% by 2050 due to grid improvements alone. This is illustrated by the "Business as Usual" line in Figure 4. The Decarbonization line shows how Natick's emissions will fall if fossil fuel usage is reduced over time.

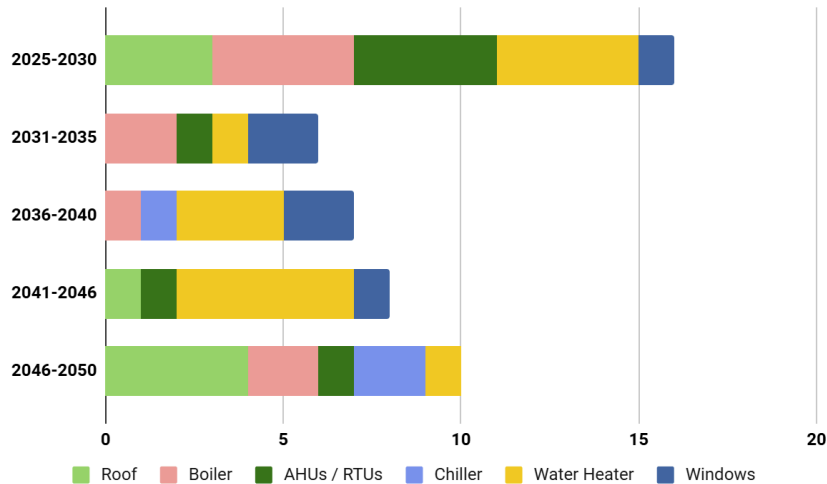


# Building Decarbonization Roadmap

Natick’s roadmap for building decarbonization focuses on our ten highest impact buildings and aligns net zero upgrades with major building life-cycle events, like equipment replacements.

Over the next 25 years, these buildings will require significant capital investment - especially in the near term. Six of the ten buildings were constructed or substantially renovated between 1995 and 2003, and major HVAC components of these buildings are near end of life.

**Figure 6. Estimated Number of Capital Projects at Top Buildings Over Time**



The following pages profile each of these eight buildings and are ranked in priority order, based on the amount of emissions they generate. Each profile provides a high-level overview of the building; opportunities to decarbonize through energy efficiency and electrification (in tandem with planned capital improvements); and a bar chart that shows how, by implementing these measures, Natick could reduce emissions from fossil fuels for each building over time.

Proposed strategies for each building and their associated timing are identified in Table 6; however, these are ideas only and should not be considered final. Technical and financial analysis will be necessary on a project-by-project basis, as part of the capital planning process.

## Opportunities, Not Obligations

Natick acknowledges that decarbonization will occur over time and that the electrification of existing buildings can be a complex and monumental task. This Roadmap identifies capital needs and opportunities to consider. It does not presume the proposed strategies will ultimately prove financially or technically practicable, nor does it obligate Natick to pursue them.

**Table 7. Capital Needs & Opportunities to Consider**

Capital Need	Opportunities to Consider
HVAC Equipment Replacement	Fuel switching from gas to electric. Replacing equipment with higher-efficiency equipment or new technology. Right-sizing equipment to the actual loads, and downsizing if load-reducing ECMs were performed.
Water Heater Replacement	Fuel switching from gas to electric. Converting to a heat pump water heater.
Roof Replacement	Adding insulation, based on the energy analysis. Ensuring the new roof meets load requirements for future solar installation. Adding toplighting, though design carefully to avoid introducing too much heat. Adding solar. Using reflective/white roofing material.

## Guiding Principles for Building Decarbonization

In practice, this Roadmap seeks to incorporate net zero strategies into the capital planning process, and encourages facilities and sustainability staff to work together to plan for system replacements before they become emergencies and result in like-for-like replacements. This will require greater alignment across departments, and municipal staff are committed to working with the Select Board and School Committee to define and formalize internal policies and processes.

In doing so, the Town of Natick will strive to follow these guiding principles:

**For Existing Buildings,** when capital improvements are planned for electrical, heating, ventilation, or air conditioning systems, the Town shall:

- a. Design 1) a like-for-like replacement option, 2) a more energy efficient option, and 3) where applicable, an option that provides an alternative to the on-site combustion of fossil fuels.
- b. Engage with its local utility, state and federal financial grant and incentive programs as early as possible (ideally during the feasibility phase, but no later than the beginning of schematic design) to benefit from design support and to maximize funding.
- c. Evaluate design options based on feasibility, life cycle costs, and net zero impacts.
- d. When net zero strategies are not practicable, ensure that steps are taken to develop and incorporate plans to facilitate the building's future transition to low- or zero-carbon fuels.

- e. Evaluate building envelope upgrades and implement said upgrades where technically and fiscally feasible.
- f. Establish and adhere to a low target energy use intensity for overall building or site performance.
- g. Where appropriate, design and install renewable energy and energy storage.
- h. Maximize resilient design to protect critical infrastructure and continued operation when modeled for long-term climate impacts.

**For New Construction and Substantial Renovations,** where possible and when cost-effective, the Town shall:

- a. Strive to achieve zero net energy, where sufficient renewable energy is generated onsite to offset the building's annualized energy consumption. Electricity generated by onsite renewables offsets the use of electricity from the grid. As such, onsite renewables provide zero-emission electricity and can reduce a building's GHG emissions compared to electricity provided by the grid, until the grid is fully decarbonized. Onsite fuel combustion (propane, gas, oil) cannot be offset from the use of onsite renewable electricity generation.
- b. Implement energy storage wherever possible, especially when paired with onsite renewables.
- c. Prioritize sites that provide access to public transportation and alternative modes of transportation.
- d. Evaluate and implement strategies to reduce embodied carbon contained in building materials.

# #1: Natick High School (720 MT CO2e)

Natick High School is the largest public building in our community and it emits the highest amount of GHG emissions. The school consumes a large amount of electricity and uses natural gas rooftop units (RTU) in combination with energy recovery units (ERUs) to heat and cool the 254,829 square foot building.

Despite having high emissions, the building's EUI of 45 is low compared to most Natick schools. This could be, in part, due to the existing 301 kW behind-the-meter rooftop solar array. Note, the solar canopy is ahead-of- the-meter and does not feed into the building.

## Decarbonization Roadmap

The implementation of efficiency and electrification measures could help reduce Natick High School's emissions by 95% through 2050.

### Energy Efficiency

While there are no immediate energy efficiency measures planned, options will be explored prior to electrification. Measures such as ensuring efficient building management system (BMS) run times could reduce fossil fuel emissions by up to 6 percent.

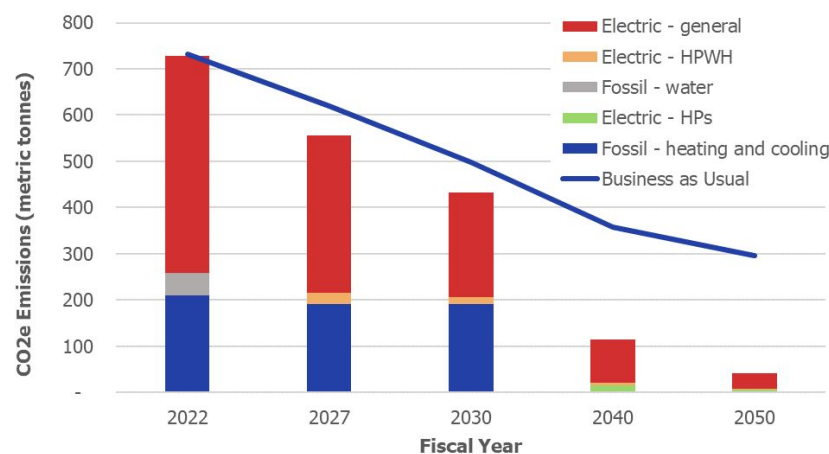
### Electrification

The Town will explore electrifying the school's existing natural gas equipment at or near its projected end-of-useful life. The first opportunity will be with the near term replacement of the building's domestic hot water heating system, which is responsible for approximately 20% of the building's fossil fuel consumption.

Before replacing the school's boilers and RTUs, Natick will explore adding heat pumps to the building. Given the size of the school, ground-source heat pumps (GSHP) may be an appropriate solution, and could also be used for domestic hot water heating in future years. Lastly, induction range stovetops will help the school achieve net zero emissions by 2050.



Figure 7. Natick High School's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized





## #2: Bennett-Hemenway Elementary (388 MT CO2e)

Bennett-Hemenway (Ben-Hem) Elementary emitted the third highest amount of GHG emissions in Fiscal Year 2022. Though the emissions were lower than Natick High and Kennedy Middle School, Ben-Hem's EUI was nearly double, at 84. This is likely related to the inefficiencies associated with the dated natural gas and oil boilers.

Ben-Hem was designed to include a chiller that was never installed. In its absence, the lack of centralized air conditioning has been problematic for building occupants.

### **Decarbonization Roadmap**

Natick recently received a \$2+ million grant from the U.S. Department of Energy (DOE) to support energy efficiency and electrification. The implementation of this grant will reduce the use of on-site fossil fuels by 60% by 2026. Longer term, the building has an opportunity to reduce emissions by 95% through 2050.

### **Energy Efficiency**

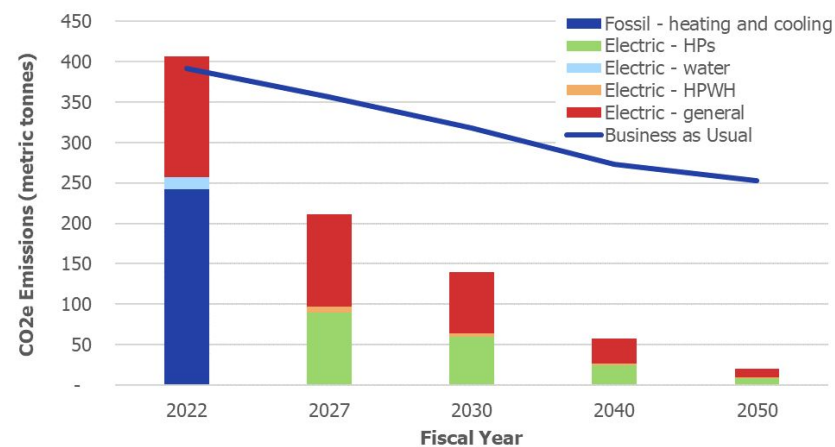
Natick will replace the building's controls system as part of the DOE project and will pursue other energy conservation measures, such as an LED lighting retrofit for all classrooms at this property in the near-term.

### **Electrification**

Natick will add an ASHP heat pump in place of a chiller, replace existing natural gas RTUs with heat pump RTUs, and install condensing boilers in conjunction with the DOE grant by the end of 2026. The existing electric resistance water heater could also be upgraded to a heat pump water heater in the near future. At the end of the condensing boilers and heat pump's useful life, the Town will revisit technologies available on the market and will seek to fully eliminate the use of fossil fuels for heating.



**Figure 8. Bennett-Hemenway Elementary School's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**



## #3: Wilson Middle School (367 MT CO<sub>2</sub>e)

Wilson Middle School emitted 367 MTCO<sub>2</sub>e in Fiscal Year 2022, and accounted for 7% of all municipal emissions. Due to the presence of a large rooftop solar array, the majority of Wilson's emissions come from heating. The building relies on natural gas boilers, RTUs and window AC units to condition the building.

### Decarbonization Roadmap

This building's HVAC equipment is nearing the end of its useful life and the building is currently being assessed by a third-party consultant as part of Eversource's Deep Energy Retrofit program. As part of this effort, a technical analysis will be complete that outlines electrification and energy efficiency opportunities and their associated energy, emissions and cost savings.

### Energy Efficiency

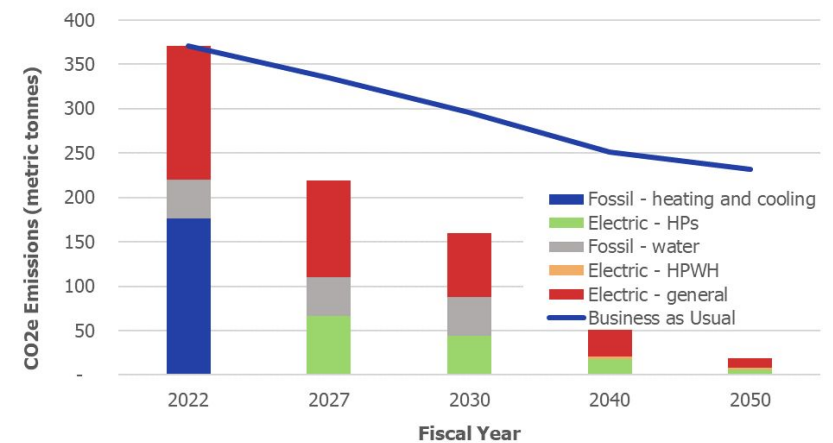
Detailed recommendations for energy efficiency will be available upon completion of the consultant's report. This is expected to include opportunities such as: ensuring efficient run times through building controls, replacing or repairing existing sensors and equipment such as VFDs, and optimizing equipment start/stop.

### Electrification

Electrification upgrades to existing equipment will begin in or around 2027, following the Eversource analysis. RTU heat pumps and VRFs may be considered at this building, as they would be an efficient solution to meeting the school's energy demands. Heat pump water heaters may also replace the existing natural gas heaters around the same time.



**Figure 9. Wilson Middle School's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**



## #4: Kennedy Middle School (333 MT CO2e)

Kennedy Middle School is Natick's newest and most efficient school, with an EUI of 39. The building it replaced had an EUI of 63.

The building is primarily conditioned by RTUs and a chiller, and relies on natural gas for heating needs. It has on-site solar PV panels, which include rooftop and parking canopy arrays and the town's first commercial battery storage system. The battery deploys solar power to reduce the building's monthly electricity demand charges; a separate diesel generator provides backup power.

Data used for this building is from FY 2023, which is the first year the school was fully operational, with no construction occurring.

### **Decarbonization Roadmap**

Given the building is brand new, significant capital improvements are not expected to occur at Kennedy Middle School until 2050.

### **Energy Efficiency**

Kennedy is currently using more energy than modeled during the building's design process, and staff are working to optimize the building's controls to avoid excess energy usage.

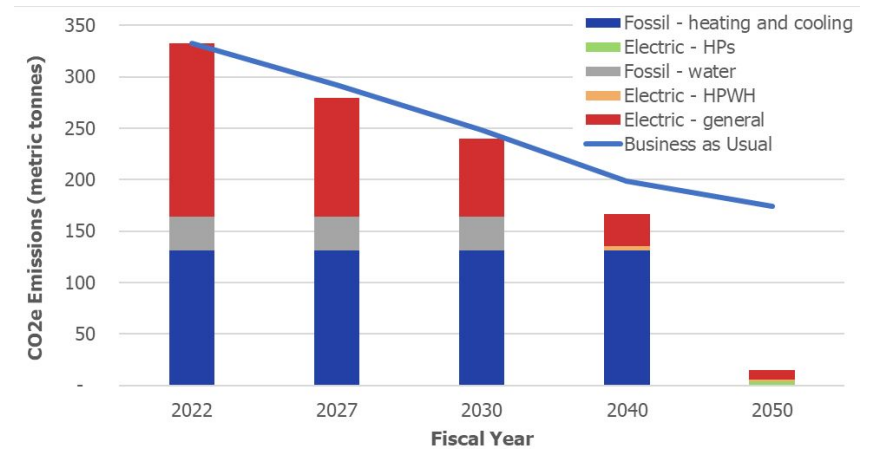
Kennedy also has excess heating capacity (beyond necessary redundancies) - just one of the building's extra boilers could meet the heating demand for the entirety of Brown. As Natick explores campus-wide solutions for this site, connecting the building's heating system should be considered.

### **Electrification**

A campus-wide ground-source heat pump system is an interesting opportunity to explore for Kennedy and Brown when Kennedy's boilers are due for replacement.



**Figure 10. Kennedy Middle School's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**



## #5: Brown Elementary (282 MT CO2e)

Brown Elementary School emitted the next highest GHG emissions in Fiscal Year 2022, and had an EUI of 78.

The 1950s building is approximately 60,000 square feet in size and has about 25 classrooms that are served by standard unit ventilators. It has a forced hot water system that relies on two natural-gas fired boilers, and five AHUs provide conditioning for larger spaces. The new modular building is the only classroom space with air conditioning (beyond window units) and is heated using electricity.

### Decarbonization Roadmap

Brown is currently participating in a scoping study to determine if it is a good fit for Eversource's Deep Energy Retrofit program.

### Energy Efficiency

Energy efficiency measures may include ensuring BMS and ventilation efficiencies and upgrading lighting controls and fixtures. These could reduce the school's energy consumption by nearly 20 percent in the near-term.

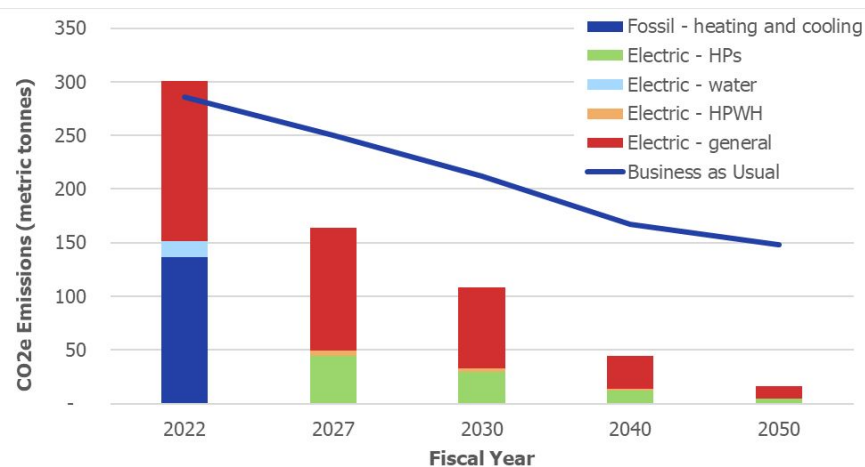
### Electrification

Upgrades to the building's air handling units (AHUs) and building management system are necessary in the coming five years, and Natick will leverage consultant recommendations to pursue opportunities for electrification. The school's boiler is expected to reach its end-of-useful life around 2028, and VRF heat pumps may be an appropriate solution to meet the school's energy needs at that time.

In the interim, Natick has applied for grant funding to replace the main water heater (installed in 2012) with a heat pump water heater, and will seek to replace the building's two smaller water heaters with similar technology at the end of their useful life.



Figure 11. Brown Elementary School's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized



## #6: Police & Fire Headquarters (271 MT CO<sub>2</sub>e)

The Police & Fire Headquarters contributed to 271 MTCO<sub>2</sub>e in Fiscal Year 2022. This building does not emit as many GHG emissions as some of Natick's school buildings, but is still a top (7 percent) contributor to the Town's overall emissions.

The Police & Fire Headquarters building encompasses approximately 54,000 gross square feet of space and is essentially split into two halves. The east side houses the Fire Department and the west side houses the Police Department. The Fire Department side of the building operates 24/7/365, and has approximately 13 bunk rooms and a minimum of 20 firefighters on duty per shift.

### Decarbonization Roadmap

#### Energy Efficiency

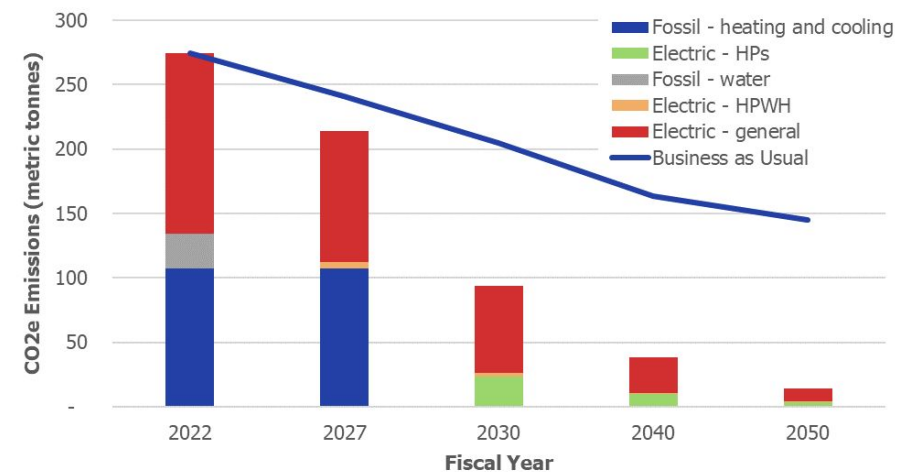
The demands placed on the operations of this emergency response facility dictate much of its non-discretionary energy consumption. However, energy efficiency opportunities do exist and a 2019 analysis suggests that adjusting building management controls, evaluating equipment sizing, and exploring potential economies in the sharing of systems may result in savings.

#### Electrification

While the domestic hot water boilers and associated pumps were replaced in 2011, the heating equipment at this building was installed in 1996, and is well past its projected end-of-useful life. Natick will need to prioritize maintaining emergency response operations above all else at this building, and will consider electrification upgrades to the existing equipment in conjunction with HVAC replacements. VRF heat pumps may be an option to meet the headquarters' energy demands. Heat pump water heaters will also be considered for electrifying the existing equipment. Induction range stove tops will be the final measure required to achieve net zero emissions by 2050.



**Figure 12. Police/Fire Headquarters' Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**



## #7: Morse Institute Library (229 MT CO2e)

The Morse Institute Library emitted the seventh highest GHG emissions in Fiscal Year 2022, at 229 MTCO2e.

The library was built in 1873 and sustained a series of additions in 1927 and 1964. A large renovation of the building was completed in 1997 that preserved and paired the 1873 building with a large modern addition. Today the building is 60,860 square feet, houses more than 299,105 books and materials, and welcomes nearly 1,000 patrons each day.

In 2023, the Town completed several large HVAC-related projects at the library. It replaced the chiller with a heat pump, replaced building controls, and repaired or replaced a significant amount of HVAC-related equipment, including VAV boxes, etc. While the heat pump provides AC and heating, the building does currently rely on its original gas boilers (1996) for the majority of heating needs.

### Decarbonization Roadmap

#### Energy Efficiency

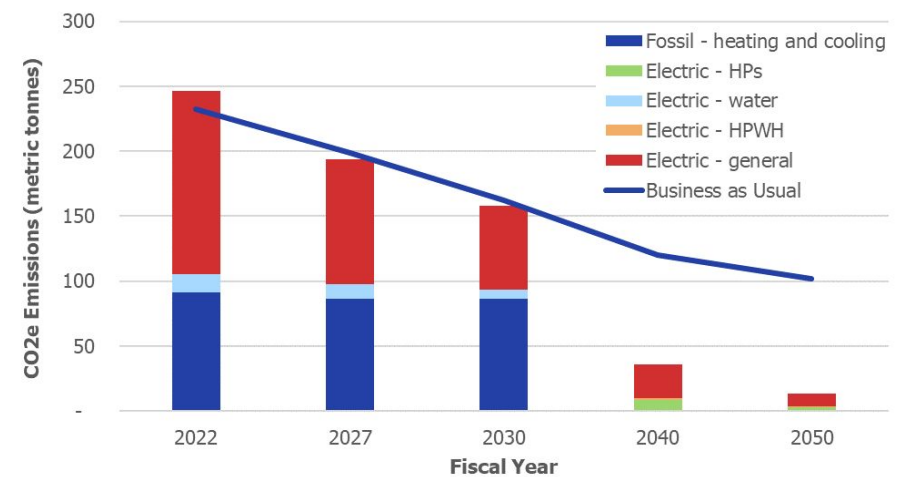
This building has undergone a variety of energy efficiency projects in the past 10 years, including a full LED retrofit, the installation of VFDs, addition of occupancy sensors, and replacement of the archive room's Liebert system. As the Town optimizes the new controls, additional energy efficiency improvements will follow.

#### Electrification

The boilers, which are due for replacement, represent an opportunity for further electrification in the coming years. However, the building's heating and cooling system is already complex and the Town will need to carefully evaluate options to determine the best approach to electrification. Heat pump water heaters will not be needed in the near-term but may be installed at the current electric resistance tanks' projected end-of-useful life, near 2032.



Figure 13. Morse Institute Library's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized



## #8: Memorial Elementary (228 MT CO2e)

The Memorial Elementary School emitted 228 MTCO<sub>2e</sub>, the next highest in Fiscal Year 2022, accounting for 5.8 percent of total municipal emissions.

Memorial was built in 1970 and was last renovated in 2009. Solar was added to the building in 2012 and many of the HVAC mechanical systems were updated in 2014. However, the electrical systems remain in poor condition, and the Town has submitted an application to the MSBA to have the building considered for replacement or major renovations.

### Decarbonization Roadmap

A significant number of opportunities for energy efficiency and electrification exist if the building is replaced or renovated. MSBA offers additional funds to support electrification and air quality improvements, and Natick should explore these as it evaluates design alternatives.

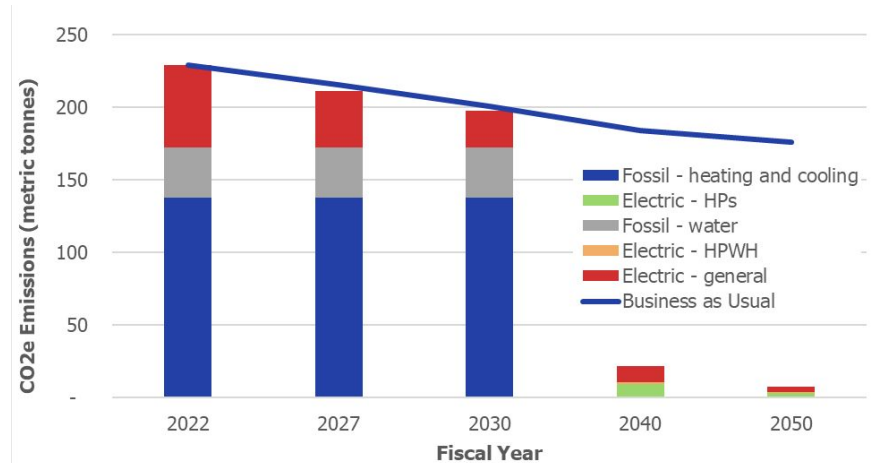
If the Town pursues new construction, the Specialized Stretch Code will pertain to this building. The Town will explore designs that are all electric, with the goal of offsetting all of the building's energy use with on-site renewable energy. In doing so, the Town will work to ensure the building's roof and parking lot are designed to accommodate solar arrays, even if they are not installed until a future date. As part of a new construction design, the Town will also consider the viability of a ground source heat pump (GSHP) system to support the building's heating and cooling needs.

If the Town chooses a renovation approach, some of the above strategies may also be considered. Without changes to the existing HVAC distribution system, a GSHP may not be possible and a VRF system may be another option to explore.

Regardless of the approach taken, for the purpose of this Roadmap, the Town anticipates all major HVAC equipment will be replaced within ten years (by the end of 2024).



**Figure 14. Memorial Elementary School's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**



## #9: Lilja Elementary School (218 MT CO2e)

Lilja Elementary School is very similar to Brown Elementary. It was built in 1950, and was completely renovated in 1996. Then, in 2017, a modular building was added.

Like Brown, Lilja is approximately 60,000 square feet in size and has 21 classrooms. It has a forced hot water system that relies on two natural-gas fired boilers. Four air handlers provide conditioning for larger spaces, including the cafeteria, library and admin spaces, music room and gym. A significant amount of lighting fixtures were retrofitted to LED in recent years.

The building has solar arrays on multiple roof spaces, but the solar was installed “behind and does not reduce on-site electricity demand. It has a legacy controls system.

### *Decarbonization Roadmap*

Lilja is also currently participating in a scoping study to determine if it is a good fit for Eversource’s Deep Energy Retrofit program.

### *Energy Efficiency*

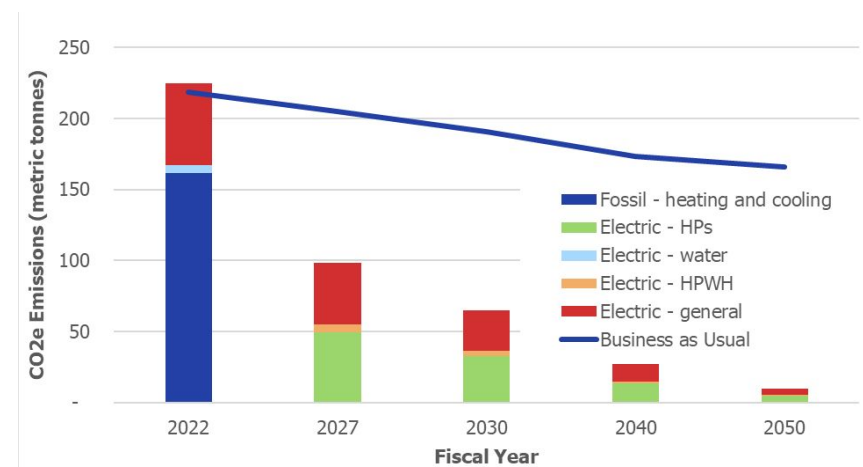
Energy efficiency measures may include ensuring BMS and ventilation efficiencies. However, there are limitations to Lilja’s controls, which is unable to accept new data points.

### *Electrification*

Upgrades to the building’s air handling units (AHUs) and building management system are necessary in the coming five years, and Natick will leverage consultant recommendations to pursue opportunities for electrification. The school’s boiler is expected to reach its end-of-useful life around 2029, and VRF heat pumps may be an appropriate approach to electrification.



**Figure 15. Lilja Elementary School’s Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**





## #10: Chase Arena, Ice Rink (199 MT CO2e)

The William L. Chase Arena is a public ice skating facility that is owned by the Town of Natick. Since 2003, it has been operated through a partnership between the Town and FMC Ice Sports that is overseen by an Rink Oversight Committee. The rink is open year-round and offers a full service skating facility with an extensive variety of programs for all ages and abilities.

The building's roof hosts part of the DPW's multi-building solar array, which was installed in 2017. It relies on two gas-fired boilers to condition the building.

### Decarbonization Roadmap

#### Energy Efficiency

As a skating rink, the Chase Arena does require a significant amount of energy to maintain ice, especially given that the building is frequently utilized from 6AM - 11PM. FMC is responsible for paying for the rink's energy costs and has taken great effort to increase energy efficiency over the years. Since taking over operations, FMC has converted lighting to LED, installed a high efficiency heating system, and taken steps to insulate the building.

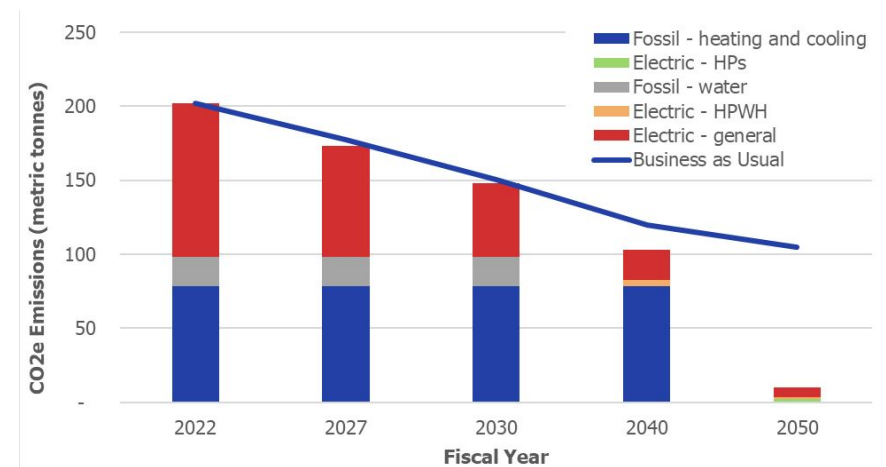
Further opportunities should continue to be explored and Natick will work with FMC to ensure the building is evaluated on a regular basis for energy savings.

#### Electrification

In 2023, FMC replaced the building's predominant heating system and water heater. The new system has an estimated useful life of 25 years; as decarbonization opportunities are not anticipated until the final years envisioned in this Roadmap.



**Figure 16. Chase Arena's Estimated Future Emissions, if Decarbonization Opportunities are Fully Realized**





# Vehicle Decarbonization Roadmap

# Vehicle Decarbonization Roadmap

Natick will take a gradual approach to decarbonizing its fleet and will prioritize transitioning vehicles that:

- Are due for replacement
- Have zero emission vehicles (ZEV) alternatives available that meet operational and charging/maintenance needs, and
- Are available on the market at a low cost.

In the near future (2025-2030), this will primarily involve administrative vehicles (such as passenger sedans, light-duty trucks, and light-duty vans). Emergency vehicles, specialty equipment, and medium-duty trucks will be considered in later stages.

## Zero-Emission Vehicle First Policy

Natick's approach to decarbonizing its municipal fleet is detailed in its Zero-Emission Vehicle (ZEV) First Policy, which requires Town staff to prioritize the purchase of ZEVs for new vehicles, when a ZEV is available that can meet operational needs. It does not require the purchase of electric vehicles and will not encourage or allow for the purchase of a vehicle that does not meet operational needs.

In implementing the ZEV First Policy, the Equipment Maintenance Supervisor, in collaboration with department heads, will evaluate the needs of a vehicle that is scheduled to be replaced or added and assess ZEV options. This analysis will follow the below process:

Step 1: Evaluation of operational needs, such as:

- Expected daily miles driven/range
- Necessary hauling/towing capacity
- Required customizations or upfits (e.g., emergency lights)

Step 2: Review of vehicles that are available to meet operational needs, following the below hierarchy, as set by DOER:

1. Battery-electric vehicle (BEV)
2. Plug-in hybrid electric vehicle (PHEV)

3. Hybrid electric vehicle (HEV) or other alternative fuel vehicle (AFV)
4. Most fuel efficient available standard vehicle operated by an internal combustion engine (ICE) fueled by fossil fuels

Step 3: Evaluation of charging/maintenance requirements

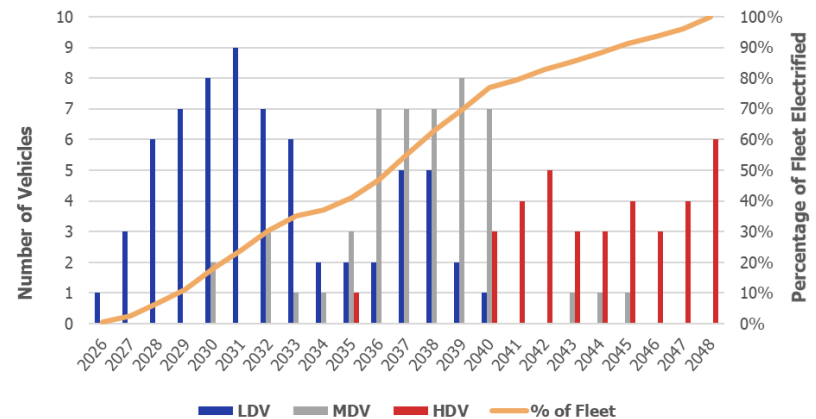
- Availability of charging infrastructure
- Ability of Equipment Maintenance to support the vehicle

In accordance with the proposed policy, if a BEV is not available that can meet Natick's operational needs and charging/maintenance requirements, then the next category in the hierarchy will be considered for purchase, and so forth.

## Procurement Timeline

The following procurement timeline is based on cost-effectiveness, annual budget considerations, and the remaining useful life of each vehicle in Natick's existing fleet. Please note that these assumptions are subject to change based on evolving factors such as market development and vehicle availability.

**Figure 17. Estimated Timeline for Fleet Electrification**



**In 2025-2030, this Roadmap projects that 43 light- and 2 medium-duty vehicles** can be converted to electric. These are primarily sedans, SUVs, and pickup trucks—all of which have mature EV market options that are cheaper and cleaner to operate than their gas/diesel alternatives. Strong state incentives make immediate purchase possible and recommended.

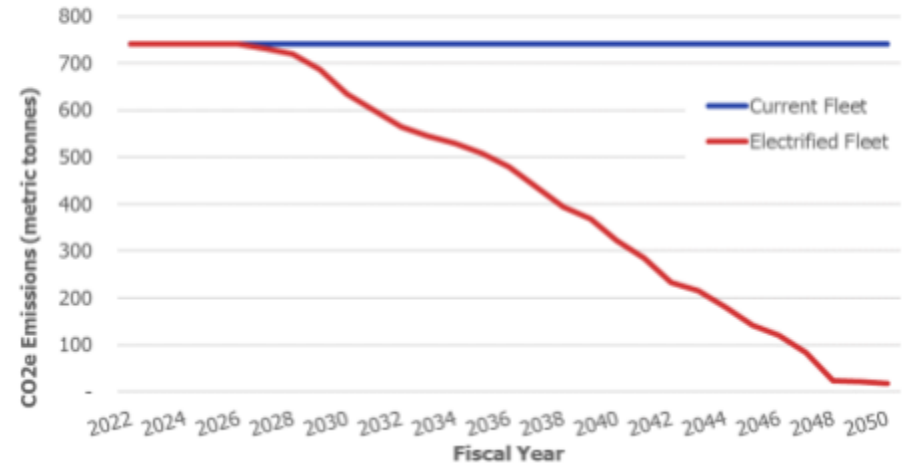
**Between 2031-2040, another 21 light-, 37 medium-, and 1 heavy-duty vehicles** are expected to be converted to ZEVs. These vehicles comprise LDVs, transit vans and pickup trucks. This will allow Natick to reap the benefits of projected reductions in battery costs, and global competition that is expected to reduce vehicle cost. The medium- and heavy-duty market is in the early stages of development, and we anticipate significant advancements will lead to increased cost-effectiveness in the future.

**In 2041-2050, the remaining 2 light-, 10 medium-, and 35 heavy-duty vehicles** will be cost-competitive candidates for EV replacement. These HDVs are mostly fire trucks and heavy-duty trucks. Currently, electric alternatives for these vehicle types, particularly those with specialty features like mounted cranes and [snowplows](#), are limited or non-existent. [GM announced](#) plans to launch EV heavy-duty trucks by 2035.

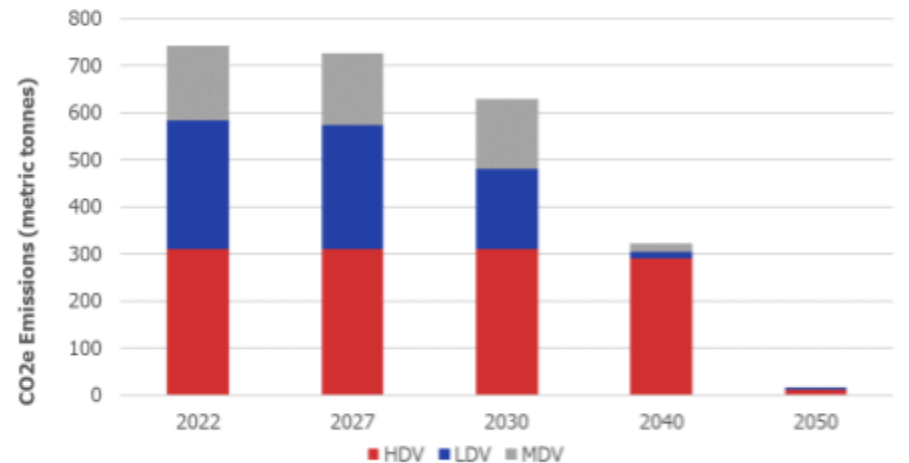
## Projected Impact

Converting the current fleet of internal combustion engine vehicles to battery electric vehicle platforms could result in avoiding 9,500 metric tonnes of CO2e emissions cumulatively through 2050.

**Figure 18. Projected Fleet Emissions**



**Figure 19. Projected Emissions by Weight Class**



# Light-duty Vehicles (281 MT CO2e)

There are 66 light-duty vehicles in Natick's fleet. Light-duty vehicles are used across departments with the highest concentration in Police (39%), Administration (25%), and Facilities (14%). Non-emergency vehicles are primarily used for inspections, transporting tools and hauling light cargo to work sites. Plows are not added to these vehicles, towing capacity is not a factor, and the average daily range is less than 30 miles, in some cases significantly less.

## Decarbonization Roadmap

### Market Availability

The light-duty EV market has expanded significantly since Natick's first EVs were purchased in 2016. New models typically have ranges between 250-300 miles, well above Natick's average daily usage. Numerous electric options are available for passenger SUVs, vans, and light-duty pickups. There is also one pursuit-rated electric cruiser available (the Chevy Blazer) and others are expected to become available soon. This means nearly all of Natick's light-duty vehicles have EV counterparts that would meet operational needs.

### Charging Infrastructure

Light-duty vehicles have smaller batteries that allow for Level II chargers to provide sufficient charging within a reasonable time. The typical Natick use case would allow for once-a-week overnight charging without disrupting operations and Natick is working to install a total of approximately eight Level II chargers in spring 2025. These will be located where the majority of light-duty vehicles are parked (behind Police/Fire, at the DPW and the Maintenance shop).

Police cruisers have different charging needs. These vehicles drive an average of 60 miles per day, but operate 24/7. They require faster charging during less predictable periods of time, which can be addressed by DCFC chargers or faster Level II chargers. Natick will work to install these chargers at Police/Fire in conjunction with the transition of light-duty, emergency vehicles.

Figure 20. Composition of Light-duty Fleet

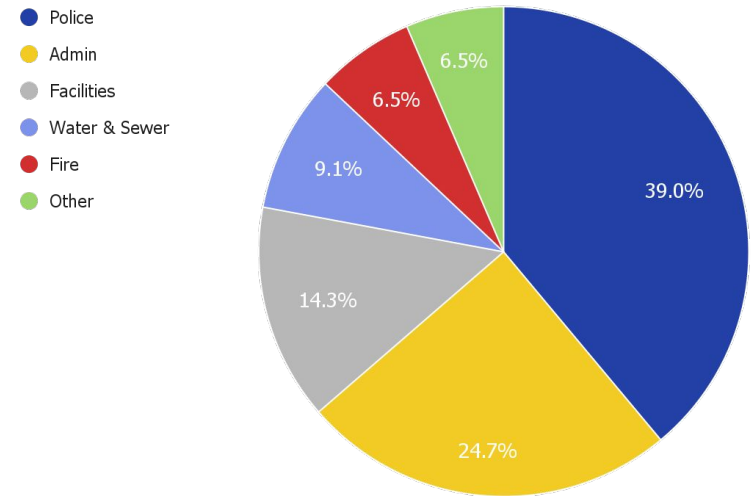
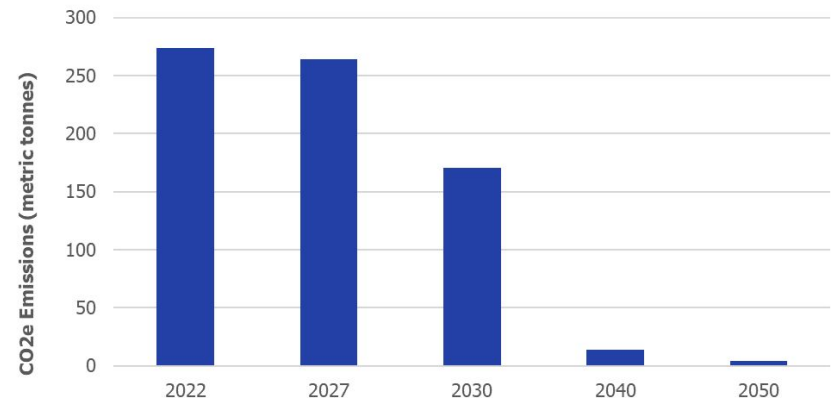


Figure 21. Estimated Light-duty Fleet Emissions, if Decarbonization Opportunities are Fully Realized



## Medium-duty Vehicles (157 MT CO2e)

There are 49 medium-duty vehicles in Natick's fleet, weighing between 10,001 - 26,000 lbs. The majority of medium-duty vehicles are operated by various departments within the DPW, including Water & Sewer, Highway, and LFNR. The majority of medium-duty trucks at DPW are Ford F350-600s. These are used for plowing and moving moderate to heavy cargo and trailers, and often require hauling capacity of over 20,000 lbs. Their average daily range is low, often not exceeding 25 miles per day.

Fire has the largest number of non-DPW medium-duty vehicles. Their vehicles are at various fire departments around Town and are not centrally located.

### Decarbonization Roadmap

#### Market Availability

Unlike the light-duty market, the medium-duty EV market is still in a developmental phase. While some medium-duty transport vans with sufficient range are available, there is currently a lack of medium-duty vehicles that can meet Natick's operational needs. Manufacturers have estimated 2028 as the earliest the market will see medium-duty EVs with sufficient towing capacity.

#### Charging Infrastructure

Medium-duty vehicles have larger batteries, but can still get sufficient charge in reasonable time from a standard Level II charger. Faster Level II chargers could also support medium-duty vehicles that may sometimes operate off-hours (such as those doing night road work).

However, significant coordination with the utility will be required to support medium-duty charging, especially for DPW vehicles which, due to their location and the number needed, are expected to require a new electrical service. As such, a wait and see approach is likely, given the uncertain market timing of medium-duty EV rollouts.

Figure 22. Composition of Light-duty Fleet

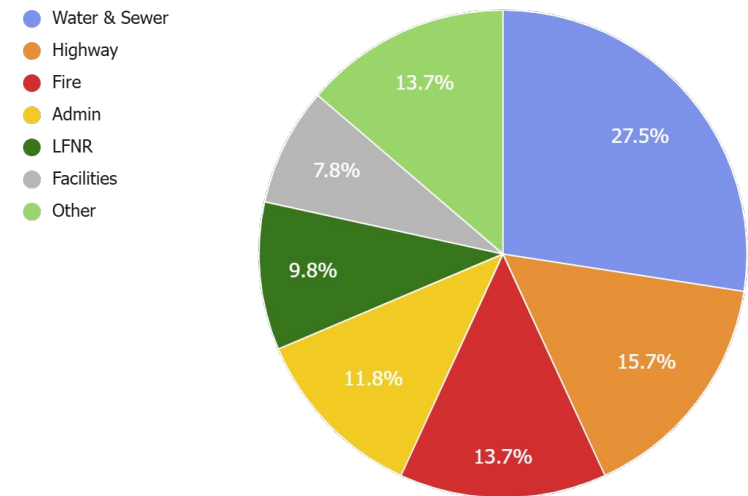
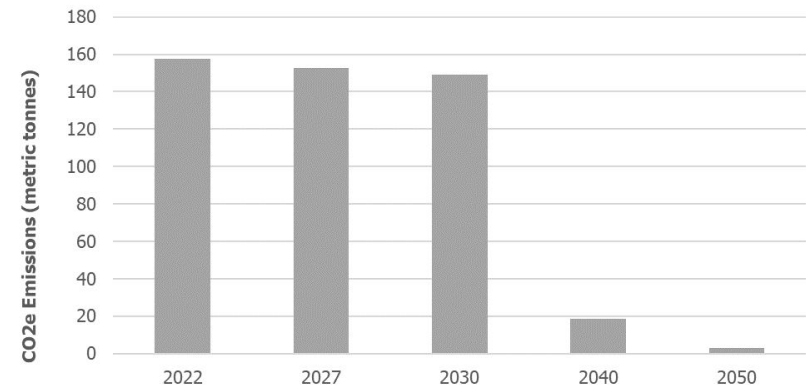


Figure 23. Estimated Light-duty Fleet Emissions, if Decarbonization Opportunities are Fully Realized



## Heavy-duty Vehicles (310 MT CO2e)

The heavy-duty portion of the fleet consists of 36 vehicles over 26,00 lbs. The majority of these vehicles are operated by DPW divisions, including Sanitation, Highway, and LFNR. The remainder are operated by Fire. The daily range of heavy-duty DPW vehicles varies, with trash and recycling trucks having a higher daily average (about 70 miles, due primarily to the distance between Natick and the incinerator and the recycling processing facility).

### Decarbonization Roadmap

#### Market Availability

The market for heavy-duty EVs is in an early stage. Available equipment is unproven or currently unable to meet Natick's operational needs. In 2024, electric recycling and garbage trucks lack the range needed to collect and haul daily routes. A growing number of electric fire trucks are on the market, but they are relatively new and often cost prohibitive. A wait and see approach is the best course of action for heavy-duty vehicles in the short term.

#### Charging Infrastructure

The charging needs of heavy-duty vehicles varies. Some can charge on Level II or DCFC ports, while others can only receive power from DCFC. At present, DCFC is often the most practical, given the size of the battery in heavy duty vehicles, but this may change over time. Most heavy-duty vehicles are located at the DPW. As previously noted, serving this area would require a new service. Space may be another challenge. DCFC chargers have larger footprints that would impact already limited and highly managed space. Heavy-duty vehicles often share space and need to be constantly moved which can create logistical problems for charger/cord placement.

These challenges are not insurmountable, and other municipalities have already successfully deployed heavy-duty electric vehicles. As the market for heavy-duty develops, Natick will work to develop a charging plan that considers costs, physical footprint and logistics.

Figure 24. Composition of Light-duty Fleet

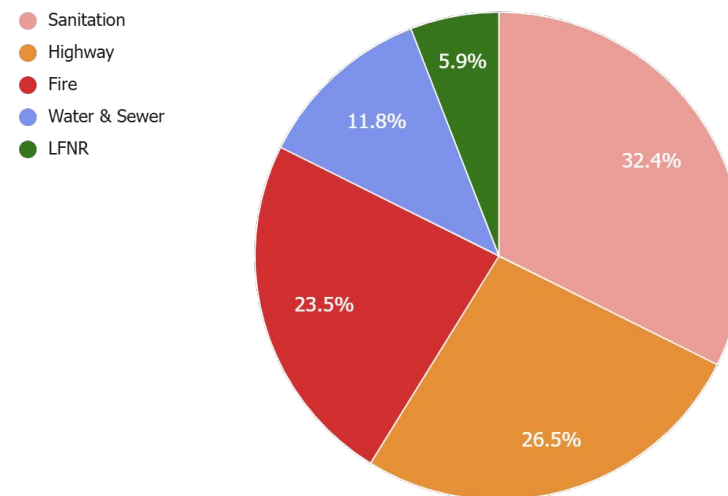
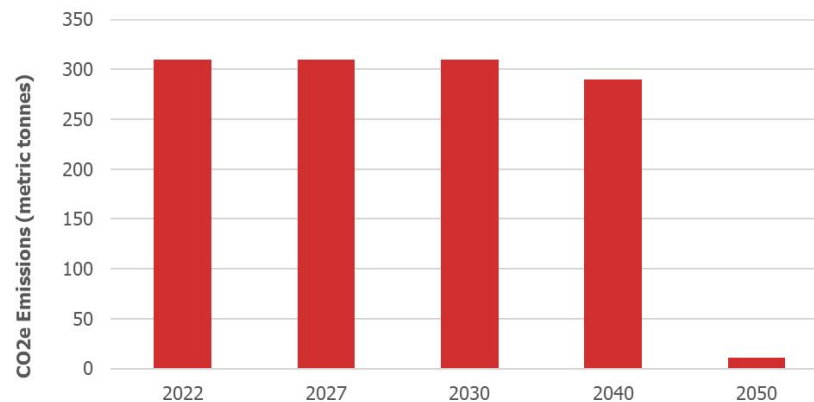


Figure 25. Estimated Light-duty Fleet Emissions, if Decarbonization Opportunities are Fully Realized



# Next Steps

This roadmap illustrates that the Town of Natick can effectively meet the emissions reductions targets set by the Secretary and required for the Climate Leader Community certification. By 2050, the electrification measures outlined in this roadmap are estimated to reduce Natick's GHG emissions by nearly 75 thousand cumulative MT CO<sub>2</sub>e, lowering our EUI by nearly 40 percent.

To become a certified Climate Leader, Natick will move forward with several planned projects aimed at reducing energy consumption and GHG emissions, such as those at Bennett-Hemenway Elementary, and will strive to implement this Municipal Decarbonization Roadmap.

## Implementation

Implementation of this Roadmap will be administered by the Sustainability Office, with support from the Town Administrator and Superintendent of Schools.

### *Municipal Decarbonization Working Group*

To support implementation, Natick plans to launch a Municipal Decarbonization Working Group, whose composition will be determined by the Natick's Town Administrator and Superintendent of Schools. This group may include:

- Deputy Town Administrator
- Executive Director of Public Works & Facilities
- Representative from Natick Public Schools
- Sustainability Director
- Facilities Management Director
- Equipment Maintenance Supervisor

Together these staff will work to implement the roadmap. The group will use the ZEV First Policy to guide fleet decisions and will

draft clear guidelines to support building-related decisions. The group will also work together to update this Roadmap every three years, as required by the Climate Leader Communities program.



**Table 1. Fiscal 2022 Municipal Emissions**

	Electricity	Fossil Fuels	Total	Percent of Total
<b>Town Buildings</b>	<b>701</b>	<b>585</b>	<b>1,286</b>	<b>22.9%</b>
Police & Fire Headquarters	137	134	271	4.8%
Morse Library	138	91	229	4.1%
Ice Rink	101	98	200	3.6%
DPW Headquarters	46	123	169	3.0%
Community Senior Center	73	47	120	2.1%
Town Hall	78	-	78	1.4%
Cole Recreation Center	16	53	69	1.2%
Fire Dept West Natick - Station 4	56	1	57	1.0%
Golf Course	27	-	27	0.5%
LFNR Garage	5	16	20	0.4%
Fire Dept East Natick - Station 3	9	11	20	0.4%
Fire Dept South Natick - Station 2	9	11	20	0.4%
Oak Street Storage	3	-	3	0.1%
Recycling Center	3	-	3	0.1%
<b>Schools</b>	<b>1,204</b>	<b>1,588</b>	<b>2,792</b>	<b>49.7%</b>
Natick High School	460	260	720	12.8%
Bennett-Hemenway Elementary School	146	242	388	6.9%
Wilson Middle School	147	220	367	6.5%
Brown Elementary School	146	136	282	5.0%
Memorial Elementary School	56	172	228	4.1%
Lilja Elementary School	56	162	217	3.9%
J F Kennedy Middle School	169	164	333	5.9%
Johnson Elementary School	16	153	169	3.0%
East School	8	79	88	1.6%
<b>Street/Traffic Lighting</b>	<b>111</b>	<b>0</b>	<b>111</b>	<b>2.0%</b>
Streetlights	66	-	66	1.2%
Traffic Lights	24	-	24	0.4%
Park / Facility Lights	21	-	21	0.4%
<b>Vehicles</b>		<b>742</b>	<b>742</b>	<b>13.2%</b>
Vehicles		742	742	13.2%
<b>Water &amp; Wastewater</b>	<b>588</b>	<b>85</b>	<b>673</b>	<b>12.0%</b>
Springvale Water	260	82	342	6.1%
Elm Water	162	-	162	2.9%
Wastewater Pump Stations	120	2	122	2.2%
Water - various locations	41	1	42	0.7%
Water - Morse Pond	5	-	5	0.1%
<b>Charging Stations</b>	<b>7</b>		<b>7</b>	<b>0.1%</b>
Charging Stations	7	-	7	0.1%
<b>Total</b>	<b>2,618</b>	<b>3,000</b>	<b>5,618</b>	<b>100.0%</b>

**Table 6. Possible Decarbonization Measures by Building**

Building	Possible Efficiency Measures	Possible Year for Heat Pump Hot Water Heater	Possible Year for Heating System Replacement	Possible Heating System Replacement	Possible Year for Solar PV
Natick High	- Ensure efficient BMS run times/temperature settings - Upgrade lighting controls and fixtures as needed	2026	2037	Ground-source Heat Pump (GSHP) Heat Pump Packaged Rooftop Unit (HP RTU)	Existing
Kennedy Middle	- Ensure efficient BMS run times/temperature settings	2036	2050	HP RTU	Existing
Wilson Middle	- Ensure efficient BMS run times/temperature settings	2033	2026	HP RTU	Existing
Ben-Hem Elementary	<i>No EE measure recommendations</i>	2026	2026	Ducted Air-source Heat Pump (ASHP) HP RTU	Existing
Police & Fire Headquarters	- Monitor temperature setpoints and/or add additional control points - Ensure efficient ventilation rates - Upgrade lighting controls and fixtures as needed	2026	2030	Variable Refrigerant Flow system (VRF) HP RTU	Not feasible
Morse Institute Library	- Ensure efficient BMS run times/temperature settings - Upgrade lighting controls and fixtures as needed	2037	2031	VRF (for boilers)	Not feasible
Ice Rink	- Monitor temperature setpoints and/or add additional control points	2038	2048	HP RTU	Existing
Town Hall	- Monitor temperature setpoints and/or add additional control points	2034	2030	VRF	Not feasible
Community Senior Center	- Upgrade lighting controls and fixtures as needed	2026	2050	VRF	Existing
Brown Elementary	- Ensure efficient BMS run times/temperature settings - Upgrade lighting controls and fixtures as needed	2026	2028 (update planned for ~2026)	VRF	Not feasible
Fire Dept West - Station 4	- Ensure efficient ventilation rates	2036	2046	HP RTU	Existing

Memorial Elementary	- Monitor temperature setpoints and/or add additional control points - Ensure efficient ventilation rates	TBD	TBD based on renovation/ replacement timeline	GSHP VRF	Existing
Lilja Elementary	- Monitor temperature setpoints and/or add additional control points - Ensure efficient ventilation rates - Upgrade lighting controls and fixtures as needed	2026	2028 (update planned for ~2026)	VRF	Existing
DPW HQ	- Monitor temperature setpoints and/or add additional control points - Ensure efficient ventilation rates	2035	2028 (first floor), 2044 (second floor)	HP RTU	Existing
Cole Recreation Center	- Monitor temperature setpoints and/or add additional control points - Ensure efficient ventilation rates	TBD	TBD based on renovation/ replacement timeline	VRF GSHP	Opportunity for 83+ kW Canopy
Johnson Elementary	- Ensure efficient ventilation rates	TBD	TBD based on renovation/ replacement timeline	TBD	N/A
Fire Dept East - Station 3	- Monitor temperature setpoints and/or add additional control points	2037	2027	Ductless ASHP	Not feasible
East School	- Ensure efficient ventilation rates	2036	2027	VRF	Requires Phase 3 power upgrade
Fire Dept South - Station 2	- Monitor temperature setpoints and/or add additional control points	2026	2027	Ductless ASHP	Not feasible
LFNR Garage	<i>No EE measure recommendations</i>	2027	2026	Ducted ASHP	N/A
Oak Street Storage	TBD based on renovation/ replacement timeline				

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**ITEM TITLE:**

Non-Rep Schedule - New line for PSAT/SAT Tech Coordinator

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND INFORMATION:**

**RECOMMENDATION:**

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**ITEM TITLE:**

Zero Emissions Vehicle Fleet & Roadmap

**DATE:**

**ITEM TYPE:**

**ITEM SUMMARY:**

**BACKGROUND INFORMATION:**

**RECOMMENDATION:**

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