



MSBA Superintendent - Designer Roundtable New School Exterior Circulation Design — Planning for a Safer Arrival and Dismissal Today

June 2024

Judith Crocker, MA Statewide Coordinator and Outreach Supervisor



Agenda

- Massachusetts Safe Routes to School (SRTS)
- Foundations for Exterior School Site Planning
- Evaluation Criteria
- Mitigation & Construction Communication
- School Policy
- Examples
- Q&A





Massachusetts Safe Routes to School







Safety First









SafeRoutes National Center for Safe Routes to School







National Center

(Technical Assistance) **Department of**

Transportation (Policy, \$\$\$)











Safe Routes **Partnership** (Advocacy)





Massachusetts Safe Routes to School

Partner Schools 1,165+ Alliance Partners 250+





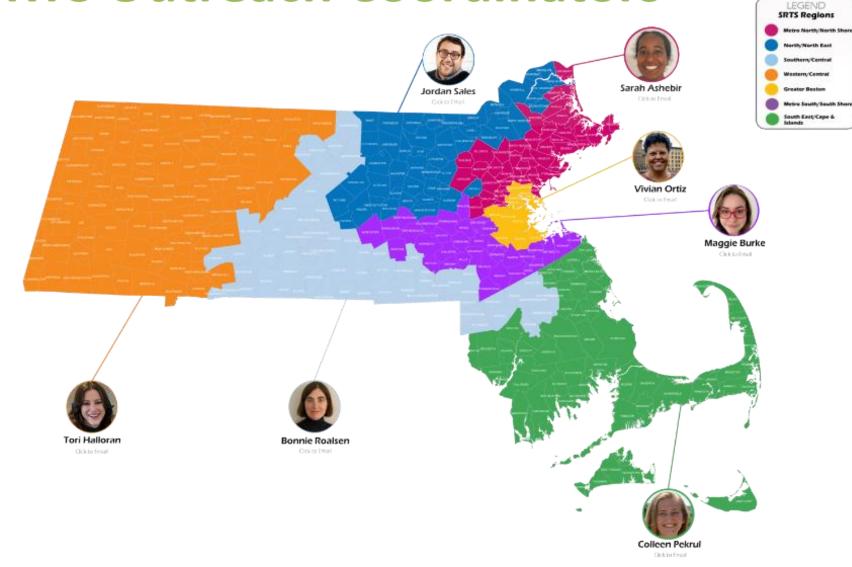




MA SRTS Outreach Coordinators



https://www.saferoutespartnership.org/resources/2022-state-report-map







Meeting Local Needs



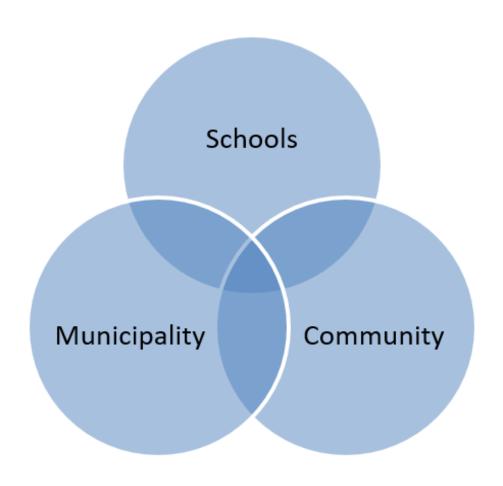
- Physical Activity
- Education
- Safety & Independence
- Traffic Congestion
- Built Environment
- Attendance and Tardiness
- New Construction/Swing Space
- Redistricting







Stakeholders









Lawrence Stakeholders

LPS-Safe Routes to School Task Force

DPW
Engineering
Mayor Health Task Force
Planning
Police
Recreation Dept

Schools Municipality Community **Families**

Lawrence Public Schools
Lawrence Public Charter Schools
School Committee
Wellness Committee
PTO/PTAs

Boys & Girls Club Groundwork Lawrence Mass in Motion Neighborhood Associations YMCA

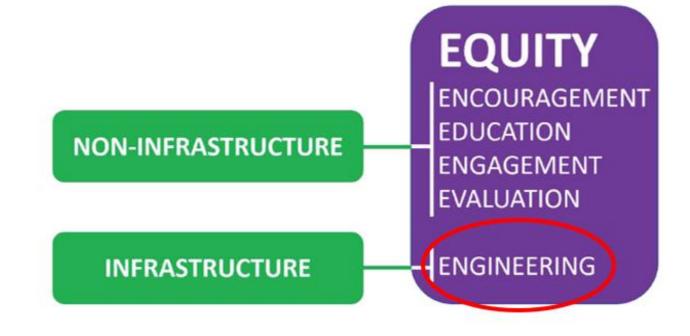






The Six E's









Accommodating Five Travel Modes in every School Zone

















Engineering







Arrival/Dismissal Observation

Walk Audit





Engineering

Arrival & Dismissal Plan: Rumney Marsh Academy



Arrival & Dismissal Plan: Rumney Marsh Academy

Please be mindful of crosswalk, sidewalk, parking lot, and roadway safety.

> For everyone's safety, all adults must sign in at the front office.

School Hours

7:35 a.m. - 2:20 p.m.

Arrival

- 7:35 a.m. 7:50 a.m. School breakfast
- 7:50 a.m. Students arriving after this time will be marked tardy and will need to sign in at the front office

Dismissal

2:20 p.m.

Beginning in January 2022, the sixth grade door will no longer be used

- ✓ Walkers Please enter through the closest entrance.
- Bikers Please use the bike racks located at the front and rear of the building and enter through the closest entrance.
- <u>Buses</u> ONLY use the designated <u>front</u> school driveway. Students then enter through the front entrance (formally the <u>seventh grade</u> door).
- Family Vehicles ONLY use the designated <u>rear</u> school driveway. Students then enter through the rear entrance (formerly the <u>eighth grade</u> door).
 - Pull all the way to the school's back door (formerly the 8th grade door)
 - Do NOT pass loading/unloading vehicles
 - Place your vehicle in park
 - Do NOT drop off or pickup in the high school parking lot
 - Do NOT idle your vehicle engine
 - Students should ONLY enter or exit a vehicle through the right passenger side
 - Yield to pedestrians in crosswalks

✓ Changes to Dismissal - The front office requires a written note.

Exterior Circulation Planning & Communication





Does your school have an Arrival/Dismissal Plan?

Plan Content:

- ✓ Customized per school
- ✓ Includes a map, text, and school hours

Communication:

- ✓ Publish on website and in school handbooks
- ✓ Distribute in school newsletters and summer school mailing
- ✓ Communicate plan to Crossing Guards and the police
- ✓ Multiple languages





Foundations for Exterior School Site Planning & Policy





Planning & Policy

- ✓ All students arrive and depart school.
- ✓ Massachusetts' nearly 1,000,000 students and staff arrive and depart their school properties twice daily using *numerous modes of transportation*.
- ✓ Supporting and managing these school-related interactions on and abutting school property prioritizes the *health and safety* of those on school campus and within the greater community.





Effective Safety Measures

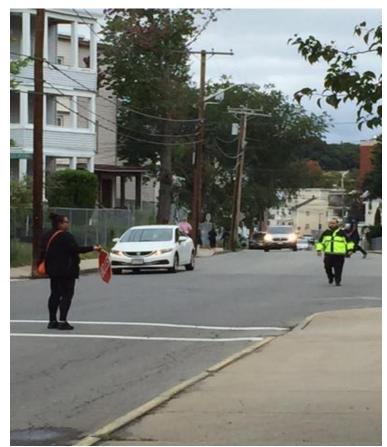






Keeping Everyone Safe











Families are not IN traffic, They ARE the traffic











School versus Municipal Property

Municipal Property

- Signage rules are very specific
- Need local government approvals recommended by traffic engineers to enlist change
- All schools abut municipal property

School Property

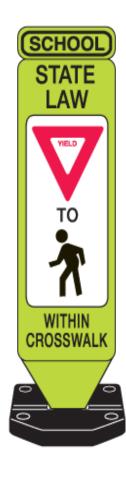
- Signage rules are inconsistent
- Do not need approvals to enlist change
- School principals are property managers





Signage











Informational Signage













Regulatory Signage

R2-1

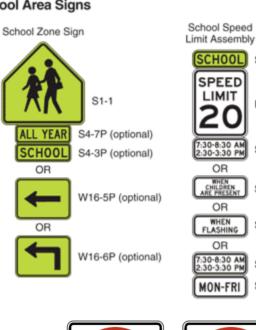
S4-1P

S4-1P

S4-6P

Figure 7B-1. School Area Signs







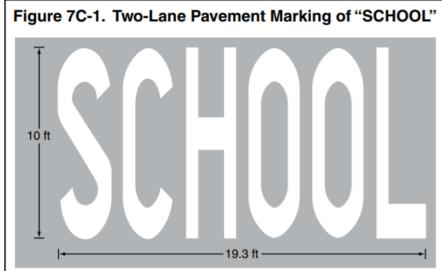














Establishing Evaluation Criteria





Who - Principals and School Committees









How - #1 Separation of transportation modes













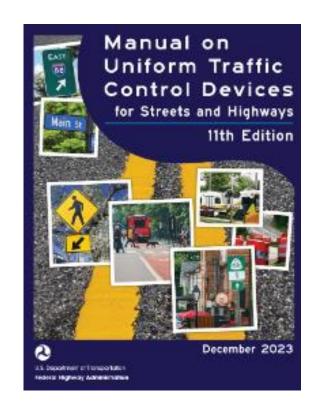








How - #2 Proper use of regulatory and informational signage









How - #3 School's front door use is for mass transit, walkers, bikers, emergency & handicapped access





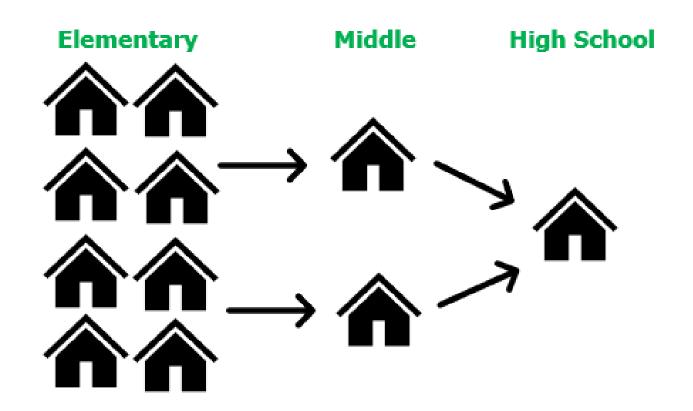








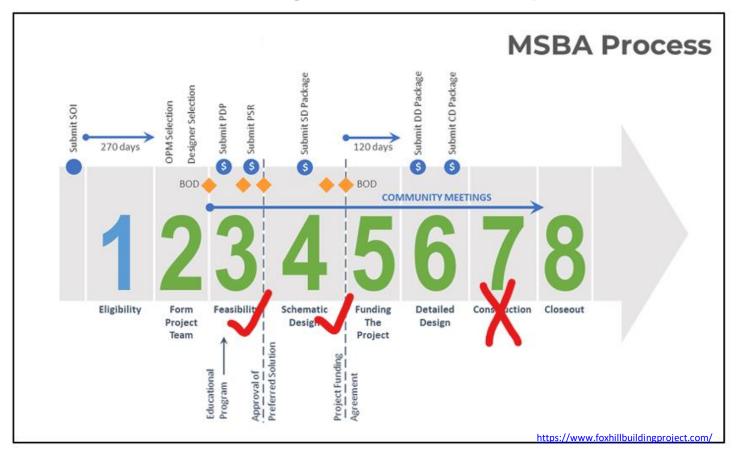
How - #4 Uniform arrival and dismissal planning and communication







When – During the Feasibility or Schematic Design Phase









Additional Evaluation Criteria



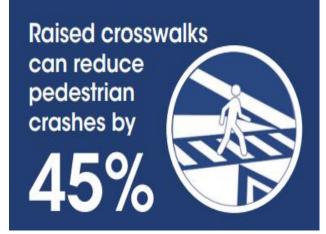


Comfort, Visibility, & Line-of-Sight

- Raised crosswalks
- Crosswalk pattern
- Reflective signage
- Pedestrian plaza
- Building access points
- Ball field proximity to parking lots
- Bollards
- Human nature
- Bike lanes









https://safety.fhwa.dot.gov/ped_bike/step/docs/techSheet_RaisedCW2018.pdf





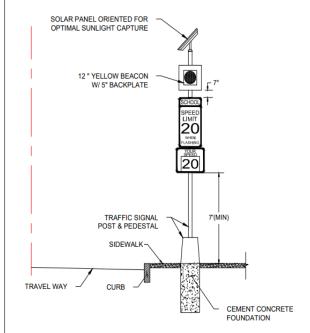
Signage

- No Idling
- No dogs
- Shared property use
- School zone signage



IMG ANIMALS IN SCHOOL
https://z2policy.ctspublish.com/masc/browse/masterset/maste

r/IMG/z2Code IMG



IOTES:

REFER TO THE SPECIAL PROVISIONS FOR SIGN DIMENSIONS.
THE NEMA ENCLOSURE SHALL BE POLE-MOUNTED. THE ENCLOSURE SHALL BE PLACED IN A MANNER WHERE IT WOULD NOT CONSITUTE A PROTRUDING OBJECT UNDER ADA/ABA REQUIREMENTS.

MAJOR ITEMS LIST

- 1 CEMENT CONCRETE FOUNDATION PER 812.30.1
- 1 TRAFFIC SIGNAL POST AND PEDESTAL
- 1 CIRCULAR YELLOW BEACON
- 1 S5-1 SIGN
- 1 SPEED FEEDBACK CHANGEABLE MESSAGE SIGN
- 1 RADAR UNIT
- 1 SOLAR PANEL SYSTEM
- 1 NEMA ENCLOSURE FOR ALL COMPONENTS NEEDED TO MEET FUNCTIONAL REQUIREMENTS PER SPECIAL PROVISIONS

PLUS ALL MOUNTING AND SUPPORTING HARDWARE AND WIRING NECESSARY TO COMPLETE A WORKING SYSTEM.

MASSACHUS Department of Transportation Highway Division SECTION 824

Combination Dynamic Speed Feedback and School Zone Speed Limit Sign Assembly





Bike Racks



- Location(s)
- Style
- Covered
- Quantity

Staggered Dismissals

"True" Walkers
Bikers
Bussed Students







Bussing

- Dedicated bus lane
- Turning radius (AA)
- Length of queue area
- Egress accessibility
- Mass transit use
- Van use













Family Vehicles

Accommodations for queue length

Parking

- Staff, visitors, handicapped
- Students
- Signage
- Shared community use

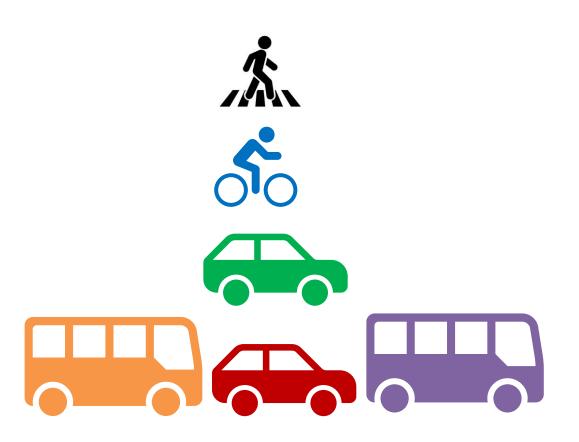


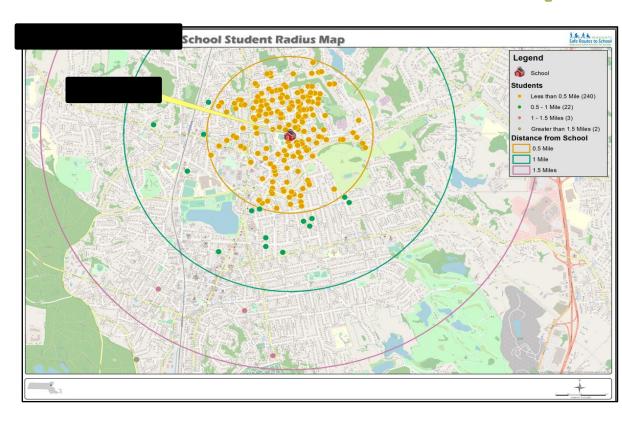
https://www.lancerspiritonline.com/37378/opinion/editorial-new-traffic-pattern-keeps-students-safe/





Modal Count Assumptions Student Address Maps









Mitigation & Construction Communication





Mitigation

- Conflict between two or more transportation modes
- Personnel training
- Need for staff or Crossing Guards to control modal flow

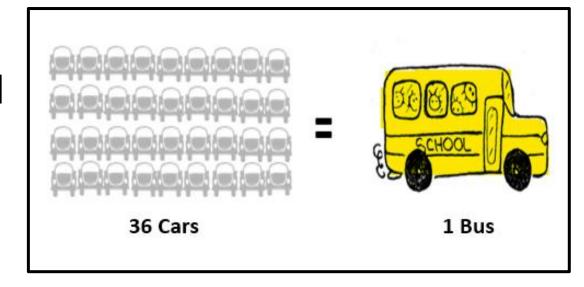






School Construction Process

- Requires a new school circulation plan
- May require phased current school circulation plans, based on land and current building use
- Suggest highlighting bus ridership, if feasible







School/District Website Documents

BURLINGTON ELEMENTARY SCHOOL BUILDING COMMITTEE

Home

About

Existing Conditions

Official Documents

Preliminary Design Program Options

Agendas & Minutes

More

Fox Hill Statement of Interest

Fox Hill Feasibility Study Agreement

Fox Hill Maintenance and Capital Planning Record

Fox Hill Initial Compliance Certification

Fox Hill MSBA Enrollment Agreement

MSBA PDP Review Comments Cover Letter
MSBA PDP Review Comments Attachment A

1Facilities Assessment Subcommittee Guidance Memorando MSBA's Staff Recommendation for 2018 STE Area Guidelines

Preliminary Geotechnical Report - 3/11/23

Fox Hill Facilities Audit - 3/27/17

Fox Hill 2021 AHERA Report

Fox Hill Hazardous Materials Report

Fox Hill Environmental Site Assessment

Fox Hill Safe Routes to School Existing Plan

Traffic Existing Conditions Report - April 2023

Fox Hill Traffic Assessment Progress Memo (June 2023):

Further analysis will be required, the remainder of the study will be concluded after PDP

Criteria Matrix Results
Fox Hill ES PDP Submission
Fox Hill Enrollment Projections
Fox Hill Educational Program (Draft)
Fox Hill Space Summary (Draft)

Fox Hill and Pine Glen Educational Program (Draft)

Project Schedule 6/28/23
Total Project Budget Form
Total Project Budget Summary Form
PDP Estimate 6/21/23
Summary of Basis of Design Costs for PDP

https://www.foxhillbuildingproject.com/





School Policy





Why Now? Safety

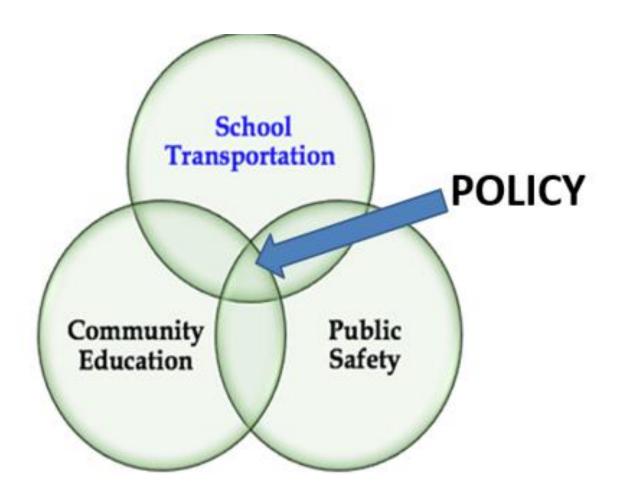
There is a NEED for sustainable transportation policies that encourage desired transportation modes.

- Perceived convenience with 2+ cars in most driveways
- Family vehicle queuing on public roadways
- Most school properties designed for walkers and buses, not family drivers and for less staff
- Family fees for most "extras" including school buses
- Everything climate change and carbon footprint
- New England Weather
- Backpacks and Chromebooks





Policy sets the Foundation for Behavioral Change







Policy Builds Uniform Expectations Across a District

Elementary-Middle-High

Policy Defines Preferred Behavior







Wellness Policy – SRTS Active Transportation Amendments

https://www.mass.gov/info-details/safe-routes-to-school-equity#school-wellness-policy-%E2%80%93-amended-active-transportation-language-

Use to codify the benefits of safe student active transportation

- ✓ Municipal counterpart is Complete Streets Policy
- ✓ Current policies exist for school buses
- ✓ Partnered with Massachusetts Association of School Committees
- ✓ Includes language that:
 - Encourages walking and biking to school
 - Provides for appropriate infrastructure, resources





Current School Traffic Safety & Mitigation Policy

Lexington Public Schools:

https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEAC/z2C ode EEAC

File: EEAC - TRAFFIC SAFETY AND MITIGATION

The School Committee and administration strive to ensure overall safety of students, employees, and community members while on school property. The School Committee encourages walking, bicycling, school bus, carpool, and other means of mass transit to access school property. In addition, the School Committee is aware of and understands that traffic conditions on school property and subsequently residential streets abutting school property affect the neighborhoods' livability.

The goal of the School Committee Traffic Safety and Mitigation Policy is to improve safety by affecting driver behavior and the quality of life for residents, pedestrians, bicyclists, and motorists. In addition, it is to ensure that school traffic plans do not hinder quick response time for emergency service vehicles including fire trucks, police cars, ambulances, and large vehicles such as school buses and trucks used for providing essential municipal, school, and resident services.





Current School Traffic Safety & Mitigation

BLUE ZONE RULES FOR DROP-OFF



STOP

at the blue curb





Drive away

safely!

Procedure



Mason-Rice School, Newton Blue Zone Video

https://youtu.be/444yI5U2MT

Help Keep the Blue Zone Safe

The Blue Zone in front of the school (marked by a blue curb and blue signs) is an active pick up and drop-off area designed for our children's safety. We need everyone's cooperation to make school pick up and drop-off safe and efficient.

In the Blue Zone during designated hours:

- ✓ There is active loading and unloading only: adults should remain in car.
- Children should exit on the sidewalk side only, not out into the street.
- No parking, U turns, or double parking is allowed.
- ✓ By state law, no idling is allowed. Keep the air clean for young lungs!
- Follow the directions of crossing guards, school staff, and police.
- Parents cannot escort their children to their classrooms.

is my child ready for the Blue Zone?

- Open your child need help opening the curbside car door?
- Open your child need "one last hug" before entering school?
- Open Solution 2 Does your child resist getting out of the car at drop-off?
- Open your child need help getting belongings into school?

If any of these statements are true, the Blue Zone Isn't appropriate for you.

Your child must be able to exit the vehicle independently and promptly upon arriving at school and proceed to the school entrance. School staff will make sure that your child will safely arrive at his or her classroom after drop off.

What If we can't use the Blue Zone?

- ✓ Park on neighborhood streets, but observe all parking restriction signs and yellow curbs. Do not block driveways or curb cuts. Cross safely.
- ✓ Consider dropping off your child along safe walking routes further away.
- ✓ Always watch for other parents and kids crossing the street.
- ✓ Consider walking, biking, or participating in a carpool on as many days

We want every child to arrive at school and get back home safely. Patience, courtesy and understanding help make things go smoothly and set a good example for our students. Thanks for doing your part!

Newton Safe Routes to School









Draft SRTS School Transportation Safety& Mitigation Policy

Use to codify circulation evaluation criteria used for traffic safety and mitigation on school property

- ✓ Goes beyond current smart growth design practices followed by MSBA guidelines or LEED design
- ✓ Template for policy makers to clarify their expectations
- ✓ "If you build it, they will come"
- ✓ Set best practice standards for new construction





Proposed SRTS School Transportation Safety & Mitigation Policy



School Transportation Safety and Mitigation Policy

While on school property, the general safety of students, staff, and the community is an overarching commitment of any public school district. Supporting active transportation and managing school travel mode interactions on and abutting school property prioritizes the health and safety of students and strengthens equitable opportunities for sustainable travel across all _______ Public Schools. In addition to public safety vehicles, walkers, bicyclists, school bus/van riders (where applicable), carpools, and other means of mass transit should have preferred access to school property. Mitigation includes the management of points of conflict between all transportation modes.

Purpos

The adoption of a universal school transportation policy that codifies criteria used for transportation safety and mitigation on and abutting _______school property will improve the safety and equity of all modes of student arrival and dismissal through:

- · separation of transportation modes;
- proper use of regulatory and informational signage;
- dedicated arrival/dismissal use of the school's front entrance;
- · uniform arrival and dismissal planning and communication;
- . encouragement of desired student transportation modes.

Such transportation policy elements will be in keeping with smart growth school building design and construction practices utilized under Leadership in Energy and Environmental Design³, Massachusetts School Building Authority guidelines³, municipal Complete Streets Policy³, and

Public

MASSACHUSETTS Safe Routes to School

Schools Wellness Policy*.

School District Responsibilities On and Abutting School Property

- The School Committee and school administration are responsible for school transportation safety and its mitigation on and abutting school property.
- School principals act as school property managers, implementing policy and operational
 procedures for the safe and appropriate transfer of arriving and departing students.
- Students, parent/guardians, staff, and the community are responsible for following all posted school transportation safety policies, regulations, and procedures.

School Transportation Safety and Mitigation Process

- Superintendents/designees will manitur the implementation of the policy and provide necessary support to principals and facilities/designee.
- Superintendents/designees will be appointed to the municipality's Transportation Safety Group
 or similar staff-orientated municipal working group.
- Principals will implement the policy through individual school building arrival and dismissal procedures.
- Change to a school's arrival /dismissal plan must be reviewed by the municipality's
 Transportation Safety Group or similar before being approved by the School Committee and implemented by the school principal.

Separation of Transportation Modes

- All efforts will be made to implement a school circulation plan where pedestrians, bicyclists, buses, and family vehicles have minimal interaction with each other. All efforts will be made to limit the areas of conflict between transportation modes on school property.
- Where appropriate, trained staff and/or engineering methods will be utilized to increase safety
 in areas of model interaction. Any trained staff assisting in arrival and dismissal will be identified

4 Cabout	Mellogen	Policy	

Safe Routes to School

arments that meet ANSI 107 (OSHA) requirements and by using hand-signaling

22822

ssonable, signage and pavement markings used on _______Public Schoo rry will be Manual on Uniform Traffic Control Devices (M.U.T.C.D.) compliant. Impliant No Idling signage will be used on all school properties.

signage can be used to augment M.U.T.C.D. signage and pavement markings, g that these are not enforceable by the police. In and parking regulations promulgated by the Commonwealth of Messachusetts

are enforceable by police on school property.

given by school designated traffic personnel must be followed by families and staff

Planning and Communicatio

I and dismissal plans will include a map identifying the location of all student on modes on school property; text of the arrival and departure procedure; and If model transportation locations differ for arrival versus dismissal, two maps may

I and dismissal plans will be published on the school website and school
They will be reviewed annually by the principal and superintendent/designee to the
a Transportation Safety Group or similar.

e development of any school arrival and dismissal plan will include input from instration, the building principal, police, Department of Public Works, Town building facilities, and a Massachusetts Safe Routes to School representative. will be ocated on the district calendar and school web sites.

esired Student Transportation Modes

assible, any _____Public School's front entrance will be used for pedestrians, sed students, handicapped accessibility, and public safety.

to School

in proximity to the school's front door.

PHWA: State Supplement: Massachusetts F. 1.9MB) https://mutod/fhwa.dot.gov/.

exiv/chapter90/section16s

about-bicycles#massachusetts-laws-

dy/chapter90/section12a

ideXV/Chapter94c/Section32



³ 2020 U.S. Green Building Council, Leadership in Energy and Environmental Design https://www.usgbc.org/resources/lead-v41-om-beta-guide

² Massachusetts School Building Authority, https://www.massschoolbuildings.org/programs/model_school

³ Massachusetts Complete Streets Policy, https://www.mass.gov/files/documents/2018/08/13/FundingProgramGuidance.pdf

Examples of SRTS Exterior Circulation Site Planning



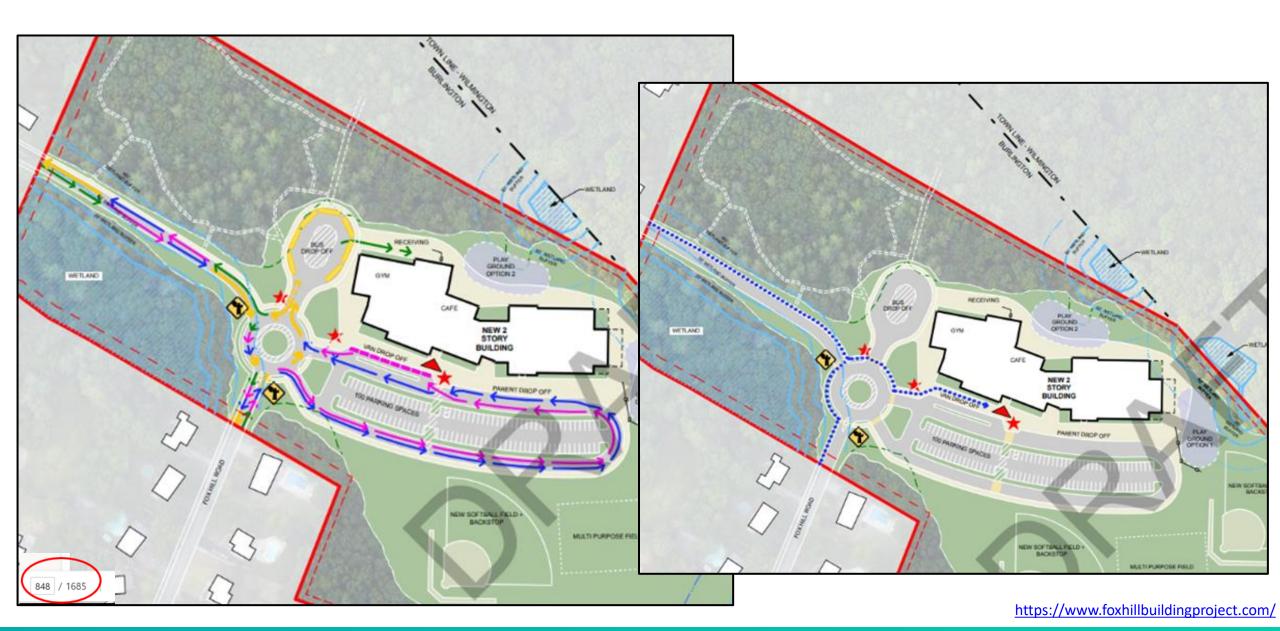




https://sites.google.com/walthampublicschools.org/waltham-high-building-project/home

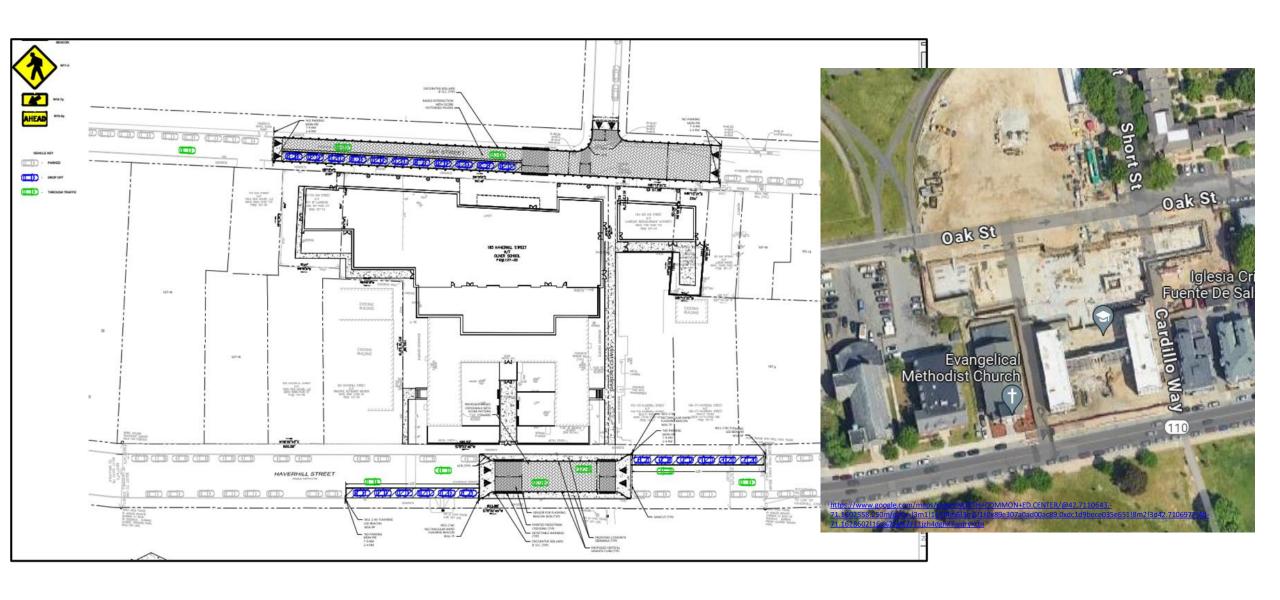
















LEGENDS: PARENT PICK-UP/ DROP-OFF TRAVEL BUSES ONLY **BRIDGE ELEMENTARY**

After Policy Improvements





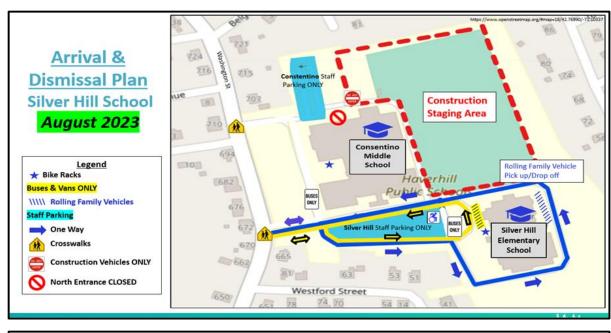


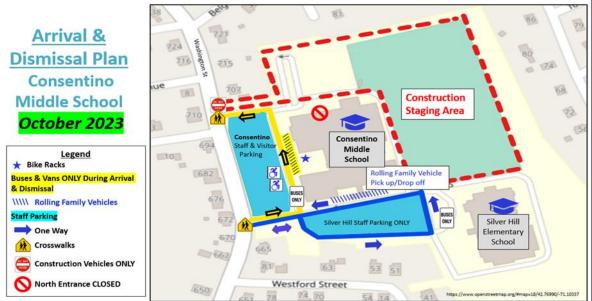












Phased Arrival/Dismissal Plan

Arrival & Dismissal Plan: Consentino Middle School

Safety is #1 During Construction

Please be mindful of crosswalk, sidewalk, parking lot, and roadway safety.

Follow BOTH Silver Hill and Consentino traffic patterns.

For everyone's safety, all adults must use the front door and sign-in at the main office.

School Hours

8:05 a.m. - 2:45 p.m.

Arrival

- 8:05 a.m. Breakfast program
- 8:05 a.m. Students enter the building

Dismissal

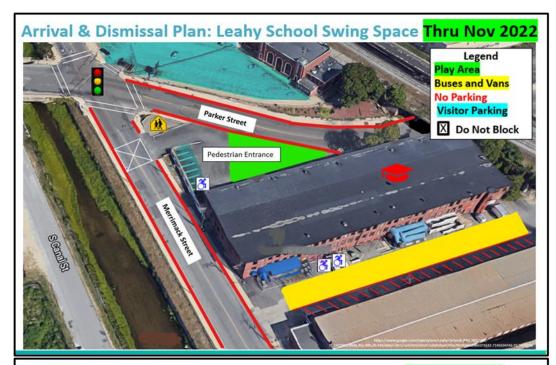
2:45 p.m.

- ✓ Walkers Please enter through the front entrance.
- ✓ Bikers Racks are located near the front entrance. Students enter through this entrance.
- ✓ <u>Buses, Vans, and Permitted Vehicles</u> Only use the designated bus lane in front of the school. Students enter through the front entrance.
 - <u>Family Vehicles</u> This site has LIMITED parking which is reserved for staff and handicapped parking only. These spaces are NOT to be used for school scheduled arrival/dismissal.
 - ONLY use the rolling Drop-Off/Pick-Up area at the side entrance
 - Do NOT drop-off or pick-up in the Silver Hill parking lot or bus lane
 - · Do NOT use the Silver Hill parking lot to access the rolling Family Vehicle area
 - · Do NOT park near crosswalks or private driveways
 - Yield to pedestrians and Crossing Guards in crosswalks
 - · Do NOT jaywalk or cross midblock
 - · Do NOT park in posted "NO PARKING" areas

holinal Aus







Arrival & Dismissal Plan: Leahy School Swing Space Thru Nov 2022

Please be mindful of crosswalk, sidewalk, parking lot, and roadway safety.

For everyone's safety, all adults must sign in at the main office via the One Parker Street parking garage roof entrance.

School Hours

7:50 a.m. - 2:50 p.m.

Arrival

- 7:40 a.m. Breakfast program
- 7:50 a.m. Students enter the building. Students arriving after this time will be marked tardy and will need to sign-in at the main office.

Dismissal

2:50 p.m.

The use of school buses from/to the Lebanon Street is encouraged

- Walkers Please enter through the ramp at one Parker Street
- · Do not congregate on the sidewalks or the garage ramp
- · Students enter through the main entrance
- Buses, Vans, and Permitted Vehicles Only use the designated bus lane in the 55 Merrimack Street shared driveway. Students enter through the shared driveway
- Family Vehicles This site has LIMITED parking which is reserved for visitor and handicapped parking only. These spaces are NOT to be used for school scheduled arrival/dismissal. Consider using designated satellite parking areas.
 - Do NOT drop off or pick up on Merrimack Street
 - · Do NOT park near crosswalks or private driveways
 - · Yield to pedestrians and Crossing Guards in crosswalks
 - · Do NOT make U-turns or jaywalk
 - · Do NOT park in posted "NO PARKING" areas
 - · Obey the traffic signals

✓ Changes to Dismissal - The front office requires a written note.

Phased Arrival/Dismissal Plan





School Bus Shuttle



Arrives: Lebanon Street at 3/3:20 p.m.* *According to your student's bus pass

For those who need to drive to the bus stop, please do not park on Lebanon Always arrive 5 minutes early for your student's bus

Family Vehicle Designated Areas

Old Station Square parking lot

·South Lawrence Public Library, 135 Parker St

Student Safety is #1

Leahy Site Restrictions:

- No family vehicle area







Take Aways

Exterior Circulation Planning should occur BEFORE the Construction Phase

SRTS Role: Educating School Committees and School Building Committees to define their circulation planning criteria

SRTS Tools: Wellness Policy Active Transportation Amendments

Draft School Transportation Safety & Mitigation Policy
Arrival/Dismissal Plans & Reports
Site Planning Guidance





Supporting Our Student Commuters













Judith Crocker, Statewide Coordinator

judy.crocker@aecom.com #781-454-6617



www.facebook.com/SafeRoutes.MA



in



Resources

Massachusetts Safe Routes to School

https://www.mass.gov/safe-routes-to-school

Safe Routes to School National Partnership

The Safe Routes Partnership is a national nonprofit organization working to advance safe walking and rolling to and from schools and in everyday life, improving the health and well-being of people of all races, income levels, and abilities, and building healthy, thriving communities for everyone.

https://www.saferoutespartnership.org/

MassDOT Municipal Resource Guide for Walkability

MassDOT created this Guide to help municipalities address some of the most common questions and challenges regarding walkability.

https://www.mass.gov/files/documents/2018/09/17/MunicipalResourcesGuideForWalkability 2018-08-24.pdf

MassDOT Complete Streets Program

The MassDOT Complete Streets Funding Program provides technical assistance and construction funding to eligible municipalities. Eligible municipalities must pass a Complete Streets Policy and develop a Prioritization Plan. All Program news, guidance, and registration information are available through an online Portal.

https://www.mass.gov/complete-streets-funding-program

Manual on Uniform Traffic Control Devices

The Federal Highway Administration's guide to traffic control devices for all public streets, highways, bikeways, and private roads open to public travel.

https://mutcd.fhwa.dot.gov/

Traffic Safety Grants

https://www.mass.gov/service-details/traffic-safety-grants

Mass DEP Green Team

THE GREEN TEAM is an interactive educational program that empowers students and teachers to help the environment through waste reduction, recycling, composting, energy conservation and pollution prevention. Participating classes receive certificates of recognition and are eligible to win awards.

https://thegreenteam.org/

Massachusetts Anti-Idling Law

This state law outlines that any vehicle idling for more than five minutes is excessive. Many Massachusetts communities have stricter local by-laws.

https://malegislature.gov/laws/generallaws/parti/titlexiv/chapter90/section16a

Massachusetts Handsfree Law

https://malegislature.gov/laws/generallaws/parti/titlexiv/chapter90/section12a

Massachusetts Bicycle Laws

These laws require following rules of the road and helmet use for youth aged 16 or younger. https://www.mass.gov/info-details/massachusetts-law-about-bicycles#massachusetts-laws-

Massachusetts School Zone Law

The school zone is defined as a 300-foot radius of the real property comprising a school property. https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXV/Chapter94c/Section32j

MassTrails Grants

MassTrails provides matching grants to communities, public entities and non-profit organizations to design, create, and maintain the diverse network of trails, trail systems, and trails experiences used and enjoyed by Massachusetts residents and visitors. Applications are accepted annually for a variety of well-planned trail projects benefiting communities across the state.

https://www.mass.gov/guides/masstrails-grants



