



PAUL BRODEUR  
Mayor

## CITY OF MELROSE

## OFFICE OF THE MAYOR

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Melrose, Massachusetts 02176  
Telephone - (781) 979-4440  
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June 30, 2020

Massachusetts Department of Transportation  
Complete Streets Program  
10 Park Plaza, Suite 4160  
Boston, MA 02116  
Attn: Municipal Grants Program Administrator

Subject: City of Melrose – Hoover School Complete Streets Grant Application

Dear Complete Streets Grant Administrator:

The City of Melrose is excited to submit this application for Complete Streets funding for improvements around the Hoover Elementary School. Melrose prides itself in being a community that promotes walkability and bikeability, incorporating Complete Streets elements in all of our projects whenever feasible. The neighborhood surrounding the Hoover School presents significant challenges to the ability for students to safely arrive at school by any mode other than a vehicle. The surrounding streets were built without sidewalks, which inhibits the willingness of many parents/guardians to allow their children to walk to school. Furthermore, with elementary school aged children being too young to bike in the street, there is nowhere for them to safely ride bikes or scooters to school either. This project will provide infrastructure for all of these uses.

Based on work performed by the City in conjunction with the Safe Routes to School program, nearly half of all Hoover School students live within 0.5 miles of the school, yet the vast majority of students are driven to and from school. Our hope is that by adding sidewalks to the surrounding streets, we can encourage walking and biking to school and reduce vehicle trips.

Additionally, the proposed sidewalks, curb extensions, and enhanced crosswalk and ramp amenities will benefit the entire neighborhood, including those walking to nearby transit and those with disabilities using our infrastructure.

This project is an important final component to our utility and roadway work in this neighborhood, thus we are hopeful that funding will be successfully obtained in 2020.

If you have questions about this application, please contact DPW Director Elena Proakis Ellis at 781-507-5952 or [eproakis@cityofmelrose.org](mailto:eproakis@cityofmelrose.org).

Sincerely,

Paul Brodeur  
Mayor



Date:	6/30/2020	Municipality	Melrose	Total Request:	\$ 400,000.00	(Must match total of Exhibit B, Preliminary Estimate and not exceed \$400,000)												Municipal VERIFICATIONS																	
FY20 R2	Name/Title Municipal Contact:	Elena Proakis Ellis Director/City Engineer		DPW		FY 17	FY18	FY19	FY20	See Dropdown menus for answers Columns H - AD, AH												Municipality has verified that projects are only on locally-owned roadways. MassDOT-owned roadways are not elig Has the Project scope/infrastructure changed from the Prioritization Plan? If yes, explain reason in Exhibit A. Municipality has verified High crash bicycle or pedestrian crashes with MassDOT data, or has described RPA desi Municipality has verified School, Seniors and Environmental Justice designations and identified schools/senior centers in Exhibit A.													
	MassDOT District	4		Previous Application	No	Yes	No	Yes																											
	Housing Choice Community Designation (see instructions)	Yes		Previous Award	No	Yes	No	No																											
	Below Median Household Income (US Census Bureau)	NO																																	
Project Details			Infrastructure Codes	Complete Streets Project Location			Complete Streets - Safety - Mobility - Equity															Funding Request			Design Stage	Construction Schedule									
Rank	Project Name (Street and Infrastructure Improvement)	Project Description (brief narrative about the project need, condition of infrastructure, and how a network gap or safety issue will be addressed).	Complete Streets Project Type (refer to the Eligible Projects Worksheet)	Project Limits/Location	Project Start Location: X,Y Coordinates (MA State Plane meter)	Project End Location: X,Y Coordinates (MA State Plane meter)	Network Gap	Modes Served			Crash Location	Specify Safety Countermeasures											SRTS	SRFS	EJ	Total Estimated Project Cost	Funding Requested (Must match Exhibit B Preliminary Estimate )	Other Funding Source(s) and Amount (if applicable)	If Design is needed, what stage of design is the project in?	Anticipated Construction Duration (number of months)	Desired Construction Start Date (month/year)				
							Is a Network Gap being filled? See Instructions	Bicycle	Pedestrian	Transit	Vehicle/Freight	Is the project located in a High Crash location? Further discuss the Safety Need in Exhibit A and indicate data source.	Roundabout/Mini Traffic Circle	Crossing Island	Pedestrian Hybrid Beacon (HAWK)	Pedestrian-Activated Warning Device	Road Diet	Lane Narrowing	Pedestrian Signal Upgrade	Sidewalk	Shared Use Path/Separated Bike Lane	On-road Bike Lane	Raised Intersection or Crossing	Intersection Reconstruction	Tighten Curb Radii/ Curb Extension							Transit Improvement	Does this project improve safety or accessibility within one mile of a school?	Does this project improve safety or accessibility within 1/4 mile of a Senior destination?	Is an Environmental Justice Population Served?
13	Hoover School Sidewalk Network Improvements 1	Installation of new sidewalks and curbing on one side of the street, accessible curb ramps, and re-alignment/restriping of crosswalks in the vicinity of the Herbert Clark Hoover Elementary School. Adding sidewalks to this neighborhood would eliminate multiple sidewalk gaps and create a safe walking environment for students of the school as well as mobility of pedestrians in the surrounding neighborhood and transit riders on the MBTA #131 bus route. The project will also include realignment of the Glendower/Birch Hill intersection to form a "T," addition of a bike rack and safer off-road location for children biking/scootering to school, traffic calming, and an RRFB on Whitman Avenue.	S1, S2, S6, S7, S14, B3, BO, P1, P2, P3, P5, P8, P9, P12, T1	The project addresses the immediate area of the Hoover Elementary School, including Echo/Hawthorne Street, Glendower Road, and portions of Whitman Avenue and Park Street.	236,659 m, 911,619 m	236,286 m, 911,064 m	Y	Y	Y	Y	Y														Y	Y	Y		Y	\$409,075.47	\$400,000.00	Gas main replacement on Echo Street was completed by National Grid in 2019. Echo and Hawthorne Streets are currently receiving water upgrades using MWRA water loan funds. Roadway restoration will use a combination of Chapter 90, National Grid, and City funds. The total dollar value of this ancillary work is not yet known but exceeds \$500,000. Additionally, the estimated \$9,075 from this project that exceeds the MassDOT grant will be funded using City funds.	Final	5 months of construction over 9 month period	09/20-11/20 & 5/21-6/21





**Complete Streets Funding Program  
Tier 3 Project Application  
Exhibit A - Scope of Work Narrative**

**Municipality** \_\_\_\_\_ **Melrose** \_\_\_\_\_ **Date** 6/30/2020 \_\_\_\_\_

Please describe each project and how it achieves Complete Streets in your community. What are the community benefits? What are the modes being served? What is the asset condition, network gap, accessibility or safety issue that is being addressed? What populations and destinations will be served? How will the proposed infrastructure address the issues you have described? If applicable, provide additional information regarding how this project serves and Environmental Justice community or what school is within 1 mile, or senior facility within ¼ mile? (Save as a Word document, do not PDF). Include the eligible infrastructure codes; side of the street; width of sidewalks or bike lanes; and any other projects your project will connect to.

**Describe Projects in the order they appear on Tier 3 Project Application:**

**Project Rank #13 Name: Hoover School Sidewalk Network Improvements 1**

The City of Melrose is pleased to submit this important, shovel-ready project for funding consideration under the MassDOT Complete Streets program. The City submitted an application for this project in Fall 2019 and did not receive funding. Upon meeting with a Complete Streets staff member, the City was given guidance on supplemental information to submit to support a resubmitted application in 2020. This information has been included herein.

The Hoover School is one of five elementary schools in Melrose, serving grades K through 5. The City does not have school buses for any of our schools, aside from METCO buses and special needs provisions. As such, the school relies heavily on all other modes of transportation for arrival and dismissal.

In the 2019-2020 school year, the Hoover School had an enrollment of 319 students. This is up from 252 students in 2014, an increase of more than 25% in just five years. In order to accommodate the influx of new enrollments citywide in the youngest grades, the School District added modular kindergarten classrooms to this building in 2017.

The Hoover School neighborhood lacks sidewalks on most streets surrounding the school. The attached photographs show the existing conditions in the neighborhood. In 2018, using City funding sources and Chapter 90 funds, sidewalks were added to nearby roadways on Hancock Street and portions of Spear Street that were previously lacking sidewalks. These sidewalk additions were completed in accordance with the City's Complete Streets policy that requires all projects, regardless of funding source, to consider improvements to network gaps and other Complete Streets principles

when other work is being performed. These streets were both in the 2018 paving program and thus had their sidewalk gaps addressed at that time. While this work addressed some nearby neighborhood streets, as shown on the attached figure, the roads leading immediately to and from the school still do not have sidewalks on either side.

The Hoover School has always struggled with the lack of sidewalks in the immediate neighborhood, along with vehicle congestion during arrival and dismissal. The increased enrollment has worsened this situation. In order to better understand the travel modes used for arrival and dismissal at the Hoover School, school and City staff, working through our Mass in Motion coordinator and with MassDOT's Safe Routes to School (SRTS) liaison, conducted a survey of Hoover School parents in spring 2019. The response rate was 48%. Results of the survey showed that only 41% of students living within a half mile of the school are walking or biking to school, as compared to an expected percentage of 60%. Based on the survey responses, 48% of students live within this first half mile. A total of 75% of students surveyed live within one mile of the school. The attached SRTS report shows the full results of the survey. Included in this report is a map showing the locations of the respondents and their proximity to school. The map highlights the issue with the lack of sidewalks leading to the school, showing that numerous students living in the immediate neighborhood are arriving to school by car. This map also confirms that the Hoover School includes students from one Environmental Justice area within Melrose (in the Wyoming Hill neighborhood).

In the time since the City submitted our first application for this project in fall 2019, we have now worked with our SRTS liaison to perform additional work to help identify the greatest needs in the neighborhood. Judy Crocker from MassDOT conducted arrival and dismissal observations and produced a detailed report that includes numerous recommendations for improvements to the neighborhood to enhance the safety and desirability of walking and biking to the Hoover School. As a result of the coordination on these two initiatives, the Hoover School was the recipient of a Bronze award from the SRTS program earlier in 2020. This was due to the successful coordination between the City's Pedestrian and Bicycle Advisory Committee, the Hoover School PTO and other parents, the City's Mass in Motion program, the Department of Public Works, and MassDOT. A related press release is attached to this application detailing this success.

The SRTS School Arrival and Dismissal Report is attached to this application. This report shows that at arrival time on the date observed in October 2019, only 71 students walked or biked to school, while 215 vehicles dropped off students. The report details a long list of recommendations to improve and encourage walking and biking. With this new information in hand, this resubmitted application includes as many of the structural/engineering recommendations from the report as feasible. In addition, the City and the school community are committed to separately implementing the education, communication, enforcement, and encouragement recommendations.

The proposed project will focus on areas with no sidewalks, installing sidewalks on one side of those roadways in closest proximity to the school and in the most heavily traveled areas. In addition, the project will implement the following recommendations from the SRTS report:

- Add school zone signage.
- Add vertical granite curbing in the area where vehicles pull onto areas where students walk and cones are needed daily to prevent this behavior.
- Add additional MUTCD 'no idling' signage.

- Install an additional bike rack.
- Add signage to better prevent parking in the water pump station driveway adjacent to the walking path through the woods, which creates a hazard when cars back out of the driveway.
- Install MUTCD signage and refresh pavement markings to indicate circulation patterns.
- Refresh other pavement markings for crosswalks, and add hatching ('ladder style') to crosswalks at all side street crossings and crossings on school grounds.
- Add 'yield to pedestrian' signage at crosswalks.
- Change Glendower/Birch Hill intersection from a "Y" shape to a "T" shape.
- Install a sidewalk on Whitman Ave. (among other streets leading to and from the school)
- Add "No Parking Here to Corner" signs on Echo Street where the cones are currently placed (also proposing vertical granite curbing and sidewalk in this area).

In addition, the City, the Ped-Bike Committee, and Hoover School parents have expressed interest in pursuing a community art project in this neighborhood, which could help to make crosswalk areas more visible and could help better designate particular areas and circulation patterns for arrival and dismissal. This project would be performed using supplemental funding from other sources such as City funds or other grant opportunities.

The list of streets for sidewalk addition was modified slightly since the prioritization plan, to target the streets closest to the school first. (All of the proposed streets were listed in the original prioritization plan, but some had originally been listed in Project No. 14, Hoover School Sidewalk Network Improvements 2, rather than No. 13.) The hope is that walking rates can be improved once sidewalks are in place, to increase student safety, promote healthy lifestyle choices, and improve system efficiency for all modes used on school grounds during arrival and dismissal times. Better signage, line painting, and associated parent education, along with curb extensions at the Glendower/Birch Hill intersection and a rectangular rapid flashing beacon crosswalk signal at the Whitman Ave. crossing will also result in improved traffic circulation and traffic calming for parents, teachers, freight deliveries to the school, and other drivers in the neighborhood.

At the elementary school level, adding sidewalks also promotes bicycle and scooter riding, since children would tend to ride on sidewalks rather than in the road. The addition of a new bike rack will also promote bicycle riding, along with additional education and programming to promote the benefits of riding bikes and associated safety training. Our SRTS liaison has indicated that "if a student does not feel safe/comfortable bicycling/scootering on the road, then they may use the sidewalk with the understanding that we share the sidewalk with pedestrians." She notes that pedestrians have the right-of-way on sidewalks, and children on bicycles should walk their bikes when passing pedestrians on the sidewalk. Given the level of traffic congestion around the school with the many parents using vehicles to drop off and pick up students, riding on the roadway as an elementary school aged child is not preferred; offering a sidewalk provides a way to safely arrive at school by bicycle or scooter. The current lack of sidewalks is a barrier to the ability to walk and bike to school for many families, and the implementation of the proposed project will make walking and biking safer and more feasible. The City firmly believes that any on-street bike infrastructure (i.e., bike lanes) in this neighborhood would not promote student riding, while the sidewalks will truly promote such activity.

In conjunction with this project, the City has been exploring opportunities for facilitating “walking school buses.” This initiative is being coordinated jointly between the Melrose Pedestrian and Bicycle Advisory Committee, the SRTS liaison, and Hoover School parents.

In addition to the benefits to school aged children, this project provides a significant benefit to the neighborhood’s transit riders. As shown on the figure entitled ‘Transit Benefits of Proposed Sidewalks,’ the MBTA Bus Route #131 is at one end of the proposed new sidewalks, at the intersection of Whitman and Grove Streets. A prior bus route, the #106, used to travel down Lebanon Street but was modified in 2019 to end in Malden, eliminating this Melrose connection. Thus, the #131 bus route is used even more frequently by this neighborhood, which is approximately equidistant to both the prior #106 and the current #131 route. As shown on the figure, the entire neighborhood from Park Street to Whitman Avenue, then all of the streets in the Glendower, Echo, Beacon, and Whitman neighborhoods do not presently have access with sidewalks to the MBTA bus stops. The addition of the proposed sidewalks will safely connect these neighborhoods with the bus, which goes to both the Melrose Highlands and Wyoming Hill Commuter Rail stops, as well as the Oak Grove subway stop on the Orange Line.

This project has been selected as the next in line for Complete Streets funding because it dovetails with utility work in the subject neighborhoods. Despite not having received Tier 3 funding in the last round, the City has proceeded with our utility work in the neighborhood, to be ready to construct sidewalks when funding is available. The City is presently constructing water main improvements on Echo and Hawthorne Streets that are scheduled to be completed in July 2020. In addition, National Grid replaced the gas main on Echo Street in fall 2019, to remove leak prone cast iron pipes. This work will result in new utilities under these roadways, followed by final paving. As such, the proposed Hoover School Sidewalk Network Improvements project is the logical next step for the Complete Streets program. If funding is not received in this round, the City may miss the opportunity to complete this project in conjunction with 2021 final paving. This Complete Streets project is shovel-ready, with publicly procured on-call contracts already in place with the sidewalk/curbing contractor, a sign materials provider, and a line painting contractor. The project is positioned to begin construction immediately upon award.

The attached aerial map shows the proposed work areas and which side of the road is most feasible for sidewalk installation. A total of 2,900 linear feet of new sidewalks is proposed. The project would strive to install 5-foot sidewalks with a small grass strip in each location, although sidewalk widths in some areas may vary slightly. Compliance with accessibility standards will be maintained, and accessible curb ramps would be added at all crossings. Additionally, the intersection at Glendower and Birch Hill Road is proposed to be reconfigured, substantially narrowing the crossing distance and changing the shape from a “Y” to a “T,” as shown on the attached figure. This work is consistent with the SRTS recommendation noted above. Lastly, the crosswalk near the top of Park Street across Whitman Avenue is proposed to have a pedestrian activated warning device added, as this is a difficult crossing where many students are anticipated to cross once contiguous sidewalks are available between this point and the school. This signal will also benefit transit riders crossing Whitman Ave. to continue along the new sidewalks to the MBTA bus stops.

Sidewalk installation would begin as soon as funding is available, provided that weather conditions allow. Construction would be completed by the end of spring 2021. After this, final paving would take place using a combination of Chapter 90, National Grid, and water system operating funds. This



project fits into the City's approach to implement a coordinated roadway and utility program, while addressing some of the most critical Complete Streets needs in Melrose. At this time, Prioritization Plan Project Nos. 1, 2, and 8 having been completed under the City's first MassDOT Complete Streets grant, Project No. 12 (Cherry Street sidewalks) was completed in 2018-19 using a Housing Choice Community grant, and Project No. 3 has been largely completed using FY2019 retained earnings. The City remains committed to implementing our Complete Streets goals in all types of projects, including routine maintenance, capital projects, and private development approvals.

The proposed work includes, but is not limited to, all incidental labor, materials, and equipment to complete the following project elements: pavement markings and signage (S1), removal of objects in the pedestrian travel path (S2), reducing corner radii (S6), additional regulatory signage (S7), new curbing or edging on uncurbed streets (S14), bicycle parking fixtures (B3), bicycle facilities – other (BO – for sidewalk improvements to allow small children to bike, ride scooters, etc. to school), sidewalk repairs (P1), ADA compliant curb ramps (P2), detectable warning surfaces (P3), new sidewalks (P5), curb extensions at pedestrian crossings (P8), crosswalks (P9), new crossing treatment (P12), and improved walking access to transit stops (T1).

In addition to the submission of this Complete Streets application, the next steps in this project are to work further with the SRTS liaison to create walking and biking maps of the school area and to continue to work on the education, enforcement, and encouragement items noted in the Arrival and Dismissal Report. The City is also interested in initiating SRTS pedestrian and bicycle safety training for students of the school. Finally, following sidewalk installation, the City would hope to complete a second SRTS survey, to compare the new results to the baseline survey conducted earlier this year, to demonstrate the positive impacts of the project. Letters of support for this project are attached to this application.





**COMPLETE STREETS FUNDING PROGRAM Exhibit B**  
**PRELIMINARY ESTIMATE**

City /Town of City of Melrose Date: 6/30/2020

Project Rank #/Name 13 - Hoover School Sidewalk Network Improvements 1

**Item #s** - Standard MassDOT Item numbers can be found on our Construction Cost Estimator/Weighted Bid Prices. Search Items at <https://hwy.massdot.state.ma.us/CPE/ItemSearch.aspx>

Do not exceed MassDOT Allowances for Contingency, Construction Eng. Oversight, Mobilization, Police. See attached sheet.

ITEM #	QTY.	UNIT	DESCRIPTION OF ELIGIBLE REIMBURSEMENT ITEMS ONLY	UNIT PRICE \$	AMOUNT
701	14,535	SF	Concrete Sidewalks	\$ 12.53	\$ 182,123.55
701.1	4,325	SF	Concrete Driveways	\$ 15.49	\$ 66,986.51
702	200	SF	Bituminous Sidewalks	\$ 9.17	\$ 1,834.00
703	70	SF	Bituminous Driveways	\$ 9.17	\$ 641.90
570.2	100	LF	Bituminous Concrete Berm	\$ 20.00	\$ 2,000.00
509	14	EA	Accessible Ramps	\$ 3,000.00	\$ 42,000.00
501	50	LF	Install New Granite Curbing	\$ 55.00	\$ 2,750.00
580	320	LF	R&R Curbing	\$ 35.00	\$ 11,200.00
852/829	20	EA	Signs	\$ 350.00	\$ 7,000.00
868.12	600	LF	Marking White 12" Lines (Crosswalks)	\$ 1.45	\$ 870.00
707.9	1	EA	Bicycle Rack	\$ 1,400.00	\$ 1,400.00
765	2,400	SF	Loam & Seed/Planting	\$ 5.00	\$ 12,000.00
104	4	EA	Tree Removal	\$ 1,860.00	\$ 7,440.00
690	2	EA	Move Masonry Retaining Wall	\$ 10,000.00	\$ 20,000.00
824.11	1	EA	Pedestrian Activated Warning Device	\$ 7,000.00	\$ 7,000.00
SUBTOTAL					\$ 365,245.96
748	1	Lump Sum	Mobilization	1%	\$ 3,652.46
108.24	1	Lump Sum	Traffic Control Devices	1%	\$ 3,652.46
999.01	1	Lump Sum	Police Traffic Control	5%	\$ 18,262.30
	1	Lump Sum	Construction Contingency	5%	\$ 18,262.30
			<b>City-funded Component of Contingency</b>		\$ (9,075.47)
TOTAL			<b>MassDOT Request not to exceed \$400,000.</b>		\$ 400,000.00

*Elena Proakis Ellis*



**Complete Streets Funding Program – EXHIBIT C – Environmental Punchlist**

(Required for Tier 3 Application to be complete. Fill out for each Project location)

Municipality: Melrose, MA MassDOT Highway District #: 4

Proposed Work: Hoover School Sidewalk Network Improvements 1

**NOTE: ALL ENVIRONMENTAL PERMITS / APPROVALS MUST BE OBTAINED PRIOR TO CONSTRUCTION.**

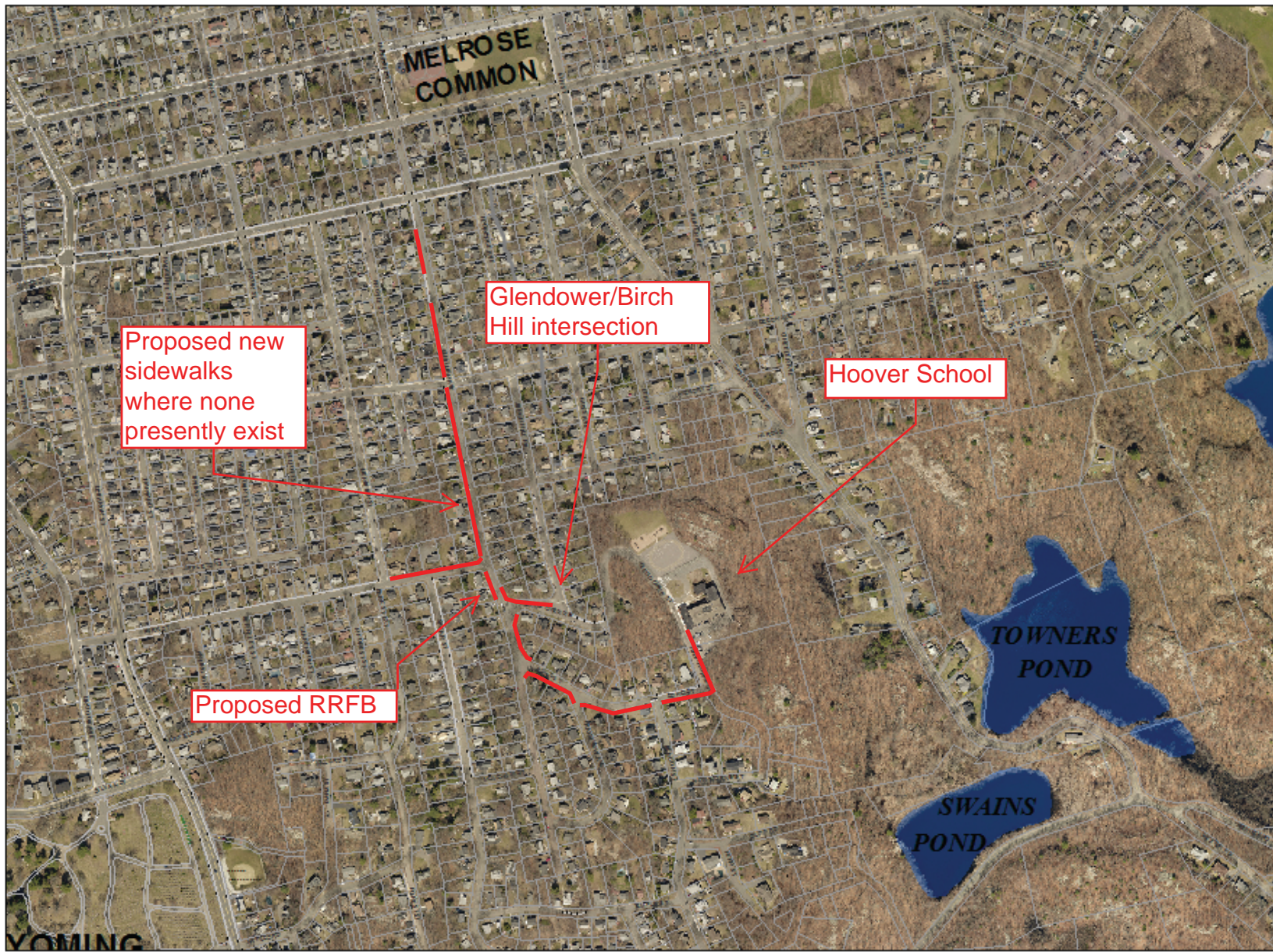
- |  |     |                          |    |                                     |
|--|-----|--------------------------|----|-------------------------------------|
| 1. Will the pavement width increase by four or more feet for one-half or more miles?   | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 2. Will the project alter the bank or terrain located ten more feet from the existing roadway for one-half or more miles, unless necessary to install a structure or equipment?  | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Will the removal of 5 or more trees with diameters of 14 inches or more be required?  | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Will more than 300 ft. of stone wall be removed or altered?   | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. Will the project involve construction of a parking lot with capacity of 150 cars or more?   | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Are any other MEPA review thresholds exceeded (see 301 CMR 11.03)?<br>If your answer is YES to any of questions 1-6, you must file an Environmental Notification Form (ENF).*   | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 7. Will the project be on a "Scenic Road" (Acts of 1973, C. 67)?<br>If your answer is YES, your Planning Board or Selectmen / City Council must give written consent for cutting / removal of trees or changes to stone walls.   | Yes | <input type="checkbox"/> | No | <input type="checkbox"/>            |
| 8. Have all necessary takings, easements, rights of entry, etc. been completed?<br>If a county Hearing is required, it must be held prior to starting work.  | Yes | <u>N/A</u>               | No | <input type="checkbox"/>            |
| 9. Has a Project Notification Form and locus map been submitted to the Massachusetts Historical Commission? Required <a href="https://www.sec.state.ma.us/mhc/mhcpdf/pnf.pdf">https://www.sec.state.ma.us/mhc/mhcpdf/pnf.pdf</a> | Yes | <u>N/A</u>               | No | <input type="checkbox"/>            |
| 10. Is any work proposed in or within 100 ft. of a wetland (stream, pond, swamp, etc.)?*   | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 11. If work is proposed in a wetland or water resource, a permit may be required from the Department of Environmental Protection, Corps of Engineers, etc.   | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

**Validation**

It is recognized that the purpose of this information is to assist the MassDOT Highway Division in approving the Chapter 90I Project Request Form (of which this is a part). Accordingly, the information provided here is intended to be complete and correct with no intentional errors or material omissions. Any action taken by MassDOT Highway Division on the basis of this information shall not legally or financially obligate MassDOT Highway Division to support or defend the municipality, and the municipality shall save harmless MassDOT Highway Division for any action.

Duly Authorized Municipal Officials	Reviewed and Approved for Transmittal by:
	Highway or Conservation Officer's Title
<i>Elena Proakis Ellis</i>	
Elena Proakis Ellis, P.E., DPW Director/City Engineer	
Signatures	Signatures
Date June 30, 2020	Date

**This form should be submitted in duplicate with original signatures to the MassDOT Highway District Office.  
This form should accompany the Project Request Form.**



Proposed new sidewalks where none presently exist

Glendower/Birch Hill intersection

Hoover School

Proposed RRFB

City of Melrose Massachusetts



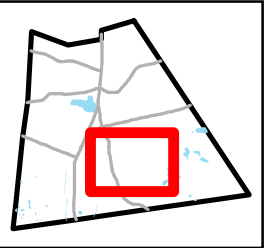
Proposed New Sidewalks and Other Project Elements



**City of Melrose**  
 We are pleased to share this information with you. This is an informational document and is not intended to be a contract or a guarantee of any kind. The City of Melrose reserves the right to change the information contained herein without notice. The City of Melrose is not responsible for any damage or liability that may result from the use of this information. The City of Melrose is not responsible for any damage or liability that may result from the use of this information. The City of Melrose is not responsible for any damage or liability that may result from the use of this information.



# City of Melrose



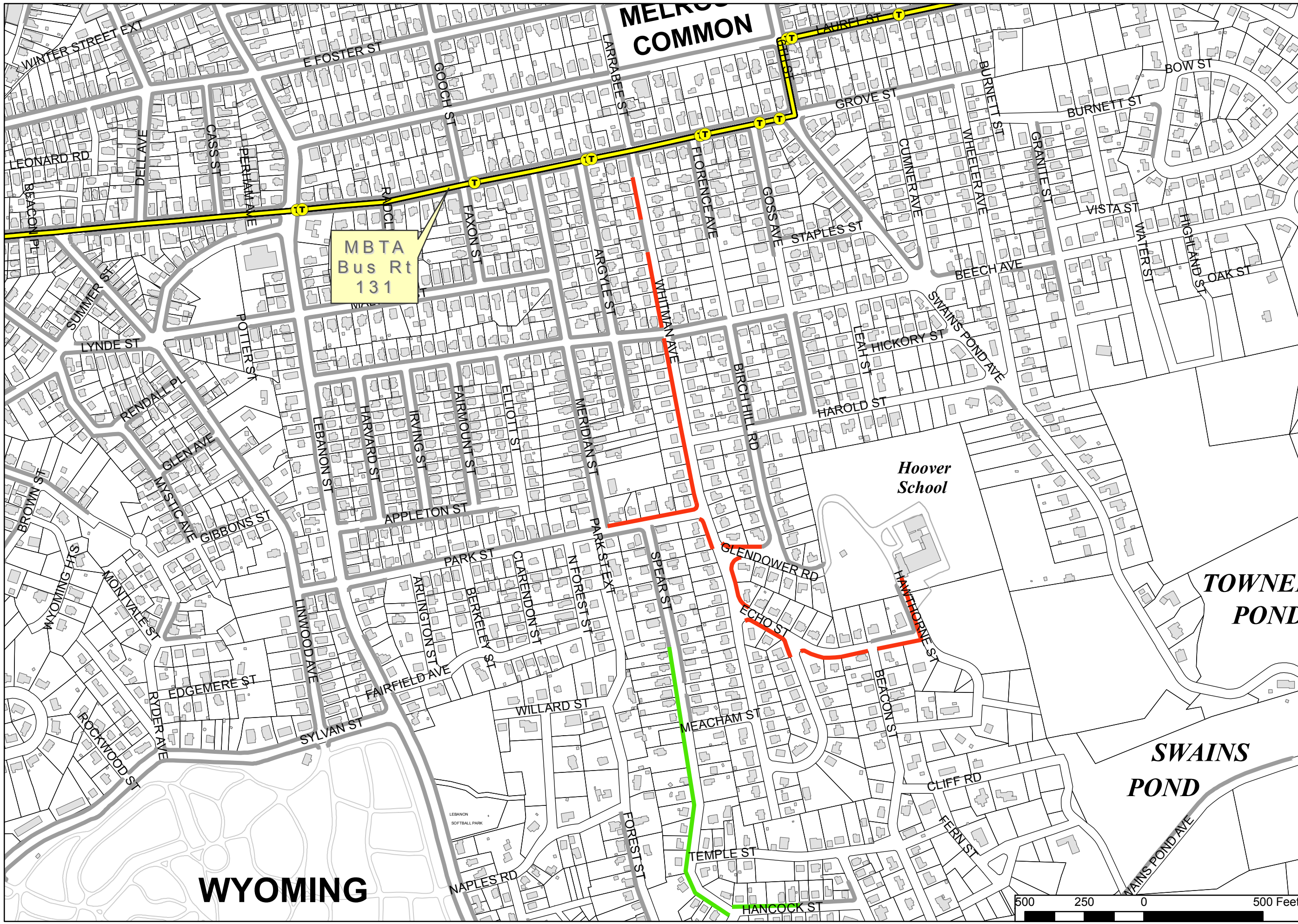
## Transit Benefits of Proposed Sidewalks

- Legend**
- MBTA Bus Stops
  - MBTA Bus Route #131
  - Sidewalks**
  - New Proposed
  - New
  - Existing
  - Buildings



500 250 0 500 Feet

Map created on July 1, 2020



# WYOMING





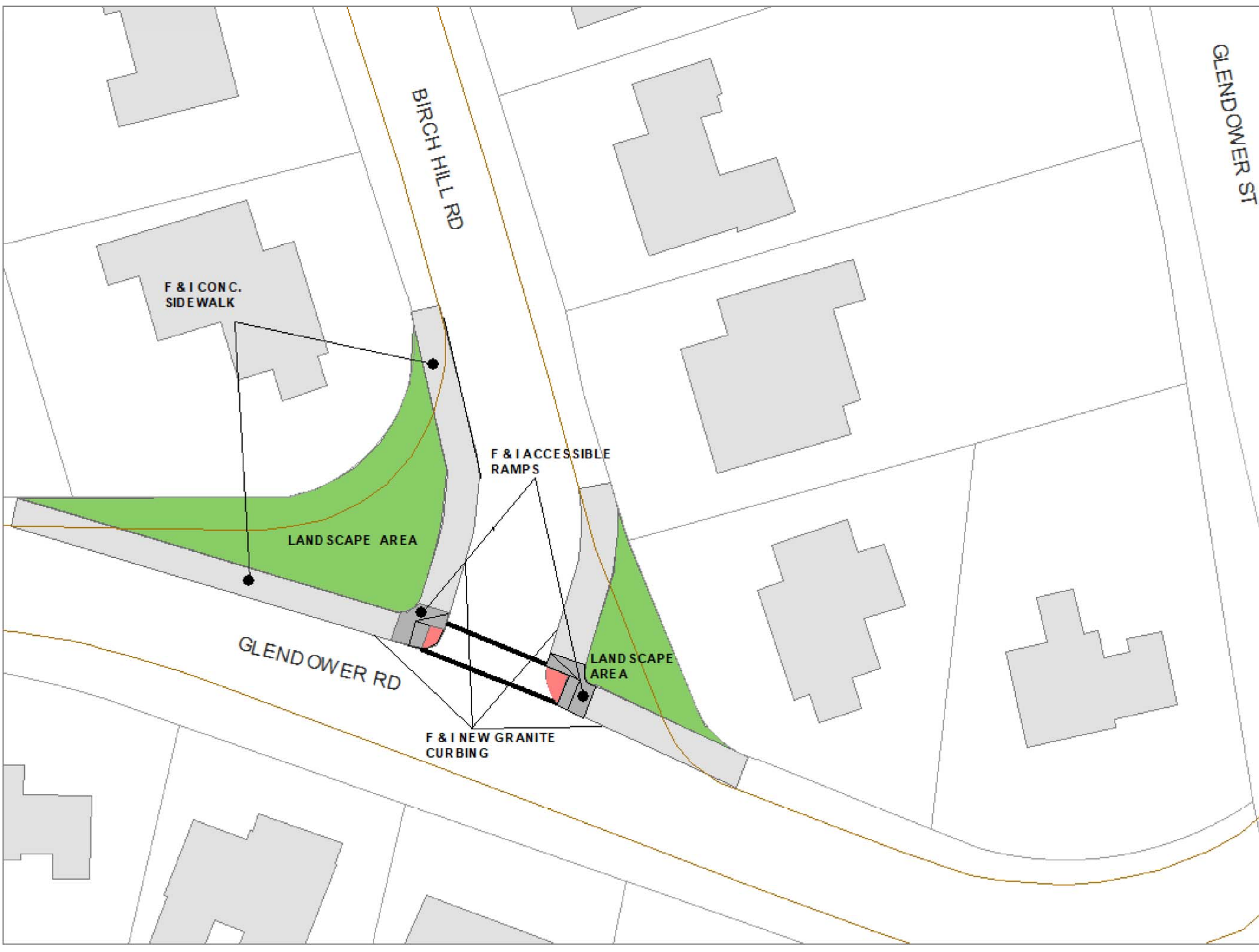


**GLENDOWER RD - BIRCH HILL RD PROPOSED  
INTERSECTION REALIGNMENT**



City of Melrose  
DESIGNATION: DESIGN OF  
The date contained in this document, or any  
supplementing document, has been prepared  
in accordance with the provisions of  
any of the state laws which are provided herein.  
The City of Melrose expressly disclaims  
any representation and warranties, including  
without limitation, the implied warranty of  
merchantability and fitness for a particular  
purpose.

The City of Melrose shall assume no liability for:  
Any errors, omissions, or inaccuracies in the  
information provided regardless of how caused;  
or Any decision made or action taken or not  
taken by the City of Melrose upon any information  
or data furnished.





**EXISTING CONDITIONS PHOTOS – HOOVER SCHOOL NEIGHBORHOOD**



Whitman Avenue (looking south)



Glendower Road (looking east)

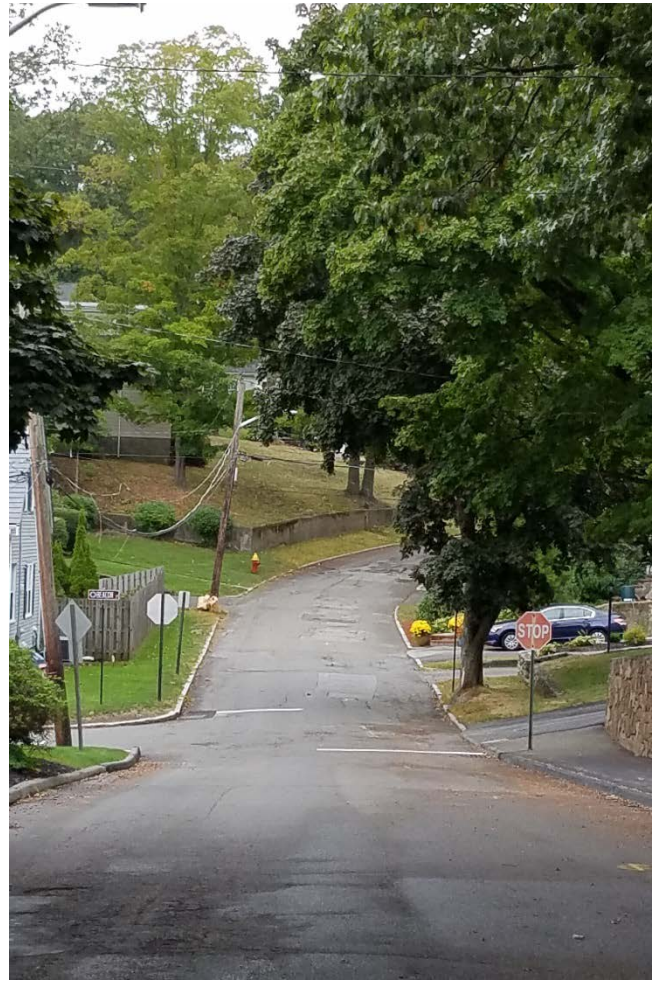


Whitman Avenue (looking north)

**EXISTING CONDITIONS PHOTOS – HOOVER SCHOOL NEIGHBORHOOD**



Park Street (looking west)



Echo Street (looking west)



Echo at Whitman

**EXISTING CONDITIONS PHOTOS – HOOVER SCHOOL NEIGHBORHOOD**



Echo Street (looking east toward school)



Echo Street (looking east toward school; bituminous sidewalk to remain)

**EXISTING CONDITIONS PHOTOS – HOOVER SCHOOL NEIGHBORHOOD**



Echo Street (looking east toward school)



Glendower at Birch Hill (sidewalk ends and intersection has large crossing distance)

## EXISTING CONDITIONS PHOTOS – HOOVER SCHOOL NEIGHBORHOOD



Hawthorne Road - Hoover School Property (facing north)



Hawthorne Road - Hoover School Property (facing north)

(Note that there is one segment of bituminous sidewalk leading to the school that lacks curb ramps or a crosswalk.)





Melrose Pedestrian & Bicycle  
Advisory Committee



Mass Department of Transportation  
Complete Streets Program  
10 Park Plaza, Suite 4160  
Boston, MA 02116

Attn: Complete Streets Grant Administrator

We are writing as elected officers of the Melrose Pedestrian and Bicycle Advisory Committee (Melrose PBC), representing a volunteer group of Melrose residents who advocate with residents and city staff to enhance our city's culture and practice of walking and biking as a primary form of transportation. Many on the committee are Melrose Public School parents, and a member of the undersigned is also a parent of a Hoover school first grader.

**We strongly support the City's renewed Complete Streets funding application for the improvements described in the area of the Hoover School.** Pedestrian and cyclist safety and transit access in neighborhoods, and especially around schools, is a major priority of the Melrose PBC. Since the last Complete Streets application in 2019, the Melrose PBC has led, and actively participated in, efforts to lay the groundwork for this application through a renewed partnership with MassDOT's Safe Routes to School (SRTS) program, including coordinating an arrival and dismissal observation and distributing the resulting recommendations to city and school staff. Efforts are already underway to implement the recommendations of the SRTS report including "walking school bus" and other activities with the support of the Hoover PTO and very engaged parent population. Additionally, the data in the SRTS report showing low walking rates demonstrates the need for this funding and would make significant contributions to our community effort by filling the gaps in the neighborhood sidewalk network and encouraging more families and children to walk and take bicycles and other healthy forms of transportation to school, transit, and for recreation.

Thank you very much for your consideration, and please reach out to us with any questions.

Sincerely,

The officers of the Melrose Pedestrian-Bicycle Advisory Committee:

Jonah Chiarenza, Chair  
[jonahc@gmail.com](mailto:jonahc@gmail.com)

Daniel Krechmer, Vice Chair  
[dkrechmer9@gmail.com](mailto:dkrechmer9@gmail.com)

Ryan Williams, Secretary & Hoover Parent  
[ryan.l.williams@gmail.com](mailto:ryan.l.williams@gmail.com)

Finn McSweeney, Communications Coordinator  
[mcsweeney.f@gmail.com](mailto:mcsweeney.f@gmail.com)





# Melrose Public Schools Administrative Offices

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September 12, 2019

Massachusetts Department of Transportation  
Complete Streets Program  
10 Park Plaza, Suite 4160  
Boston, MA 02116  
Attn: Ms. Eileen Gunn, Municipal Grants Program Administrator

Dear Ms. Gunn,

I am writing as the Superintendent of Melrose Public Schools in support of the City of Melrose's application for sidewalks to be added to the Hoover Elementary School neighborhood.

The Hoover Elementary School is one of five elementary schools in Melrose. It is the only school situated in a residential area that is not bordered by a main thoroughfare. The school is also surrounded by conservation land, limiting the ability to create roads in and out of the school grounds. Furthermore, the neighborhood is marked by high density and rolling hills. As such, the neighborhood was designed without sidewalks in the immediate area leading to the Hoover School property.

Melrose Public Schools has been experiencing a steady increase in student enrollment for the last five years. The student population at the Hoover has gone from 252 in 2014 students to 319 in 2019. Student enrollment in grades kindergarten through five has increased from 1608 student in 2014 to 1894 students in 2019. Two recent demographic studies from NESDEC and the Collins Center at UMASS-Boston indicated continued growth for the ten year period from 2018 to 2028. It is reasonable to expect that the Hoover School will continue to house over 300 students in the future.

Currently, because of the lack of sidewalks, most families drive their children to school. The lot at the Hoover allows for only one way traffic. The congestion on the site has become problematic and concerning regarding student safety. The addition of sidewalks to the Hoover School surround would encourage more students to walk or ride bikes to school. This is obviously a double win in terms of managing congestion and increasing physical activity for students.

I respectfully request that the Massachusetts Department of Transportation fund the sidewalk project for the Hoover School community for the reasons cited. Thank you for your attention to this matter.

Sincerely,

Cyndy S. Taymore  
Superintendent of Schools



## **Press Release - Hoover Safe Routes Program Recognized by State**

The Hoover School safe routes project was designated a Bronze Level Safe Routes to School project by the Massachusetts Department of Transportation in their Safe Routes to School Awards ceremony on June 8. This designation was received following ongoing efforts during the 2019-2020 school year to collaborate with the Commonwealth's Safe Routes to School program to perform a parent survey, along with arrival and dismissal observations. This work led to a series of recommendations that the City is now reviewing to determine actions it can take that will improve the ability for students to walk and bike to school in this neighborhood. This program is a parallel effort with the City's ongoing work to seek grant funding to add sidewalks in the Hoover School neighborhood.

"This recognition shows the power of dedicated residents working together," said Mayor Paul Brodeur. "The families and staff of the Hoover School, our Department of Public Works, and the Pedestrian and Bicycle Safety Committee are all collaborating to make it easier and safer for Hoover students to walk or ride their bicycles or scooters to school. This work will result in significant improvements to our city, and I want to thank all who are part of making it happen."

Official recognition of Melrose's partnership with the Safe Routes to School program makes the city eligible for a number of grants, including the Signs and Lines program, which pays for low-cost measures to improve pedestrian safety, and the SRTS Infrastructure grants program. The award is unusual for a school in the first year of the program.

"For a first-year programmed school, this is a great accomplishment," said Judy Crocker, the Safe Routes to School coordinator at the DOT. "Our program assigns points for school programming/participation throughout the school year and I nominated the Hoover for its can-do attitude with help from the volunteer Ped/Bike Committee, Melrose Department of Public Works, Hoover parents, and Hoover school staff. Hopefully, the school will be at a Gold level in record time!"

"The Melrose Pedestrian and Bicyclist Committee congratulates the Hoover School for its recognition by MassDOT's Safe Routes to School Program," said Jonah Chiarenza, chair of the Ped/Bike Committee. "As prioritized in our forthcoming three-year Plan, the Committee strongly supports improvements for safe, non-motorized access to Melrose Public Schools. We look forward to continued collaboration with the City of Melrose, and our State and local partners, in building a complete network of safe, accessible routes to all of our schools, for people who want to travel on foot, by bike, or via other non-motorized modes."



MASafeRoutesSurvey.org  
Survey Report: Melrose - Herbert Clark Hoover  
Date Printed: August 23, 2019

## Introduction

This report will help your school plan safe transportation options for all students. It contains the results of a survey conducted at Melrose - Herbert Clark Hoover in May 2019. Participating parents/guardians provided information about how students travel to school and their approximate home location. This information can help you identify the right strategies and best opportunities for new projects and investments related to reducing traffic congestion, encouraging walking and biking, and increasing safety around your school.

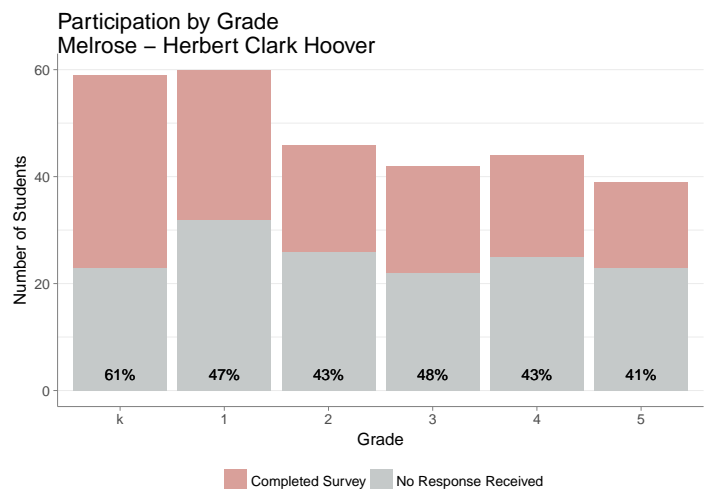
## How to Read This Report

This report measures distance to school in terms of walksheds and bikesheds. A *walkshed* includes all the homes within a certain distance to school, based on mapped sidewalks, pedestrian paths, and low volume roadways. We define walksheds for 0.5, 1.0, and 1.5 mile walking distances to school. A *bikeshed* of 2.0 miles also includes multi-use paths and on-road cycle facilities, where mapped. For a map of the walksheds and bikesheds, see the last page of the report. Where "walkshed" is used alone, it always includes the bikeshed of the same distance.

## Survey Statistics

- Survey Dates: 2019-05-06 to 2019-05-17
- Responses Received: 139
- School-wide Participation Rate: 48% \*

The figure below shows the survey participation rate for each grade. Total enrollment is based on the 2018-2019 school year, per Department of Elementary and Secondary Education \*. Survey responses from each grade were used to estimate the distance and travel choice for the entire grade. The higher the participation rate, the more reliable the survey results are.

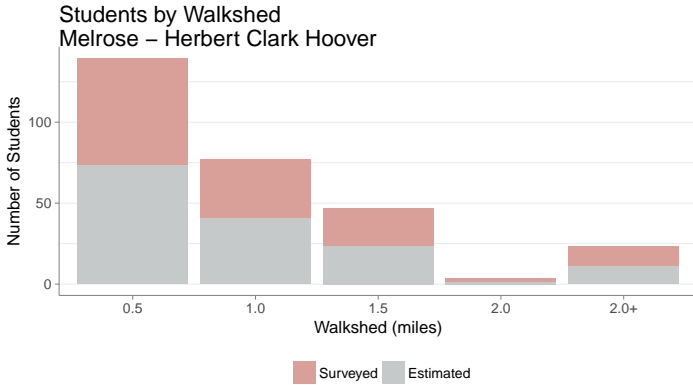


\* Survey data discrepancies may exist in cases where more than one survey was submitted per student, current year enrollment is not currently available, or school enrollment has increase since reported to ESE on October 1<sup>st</sup>.

# Student Proximity

- Average Distance to School: 1.1 miles
- Within 1.0 Mile Walkshed: 75%
- Within 2.0 Mile Bikeshed: 92%

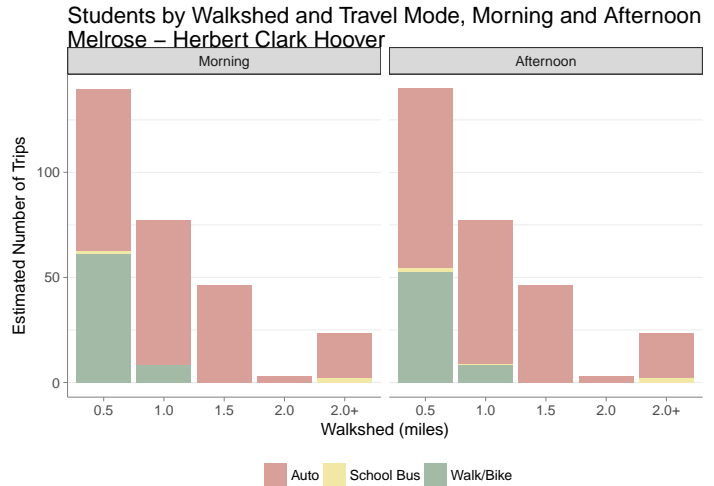
The chart and table below show the number of students surveyed and the total estimated students by walkshed. Student totals by walkshed are estimated assuming that the proportion of surveyed students within each walkshed and grade is proportional to the enrolled students within each walkshed and grade.



### Students By Walkshed

Students	0.5	1.0	1.5	2.0	2.0+
Estimated	140	77	47	3	23
Surveyed	66	36	23	2	12
Percent	48%	27%	16%	1%	8%

Walk share is 24% in the morning and 21.2% in the afternoon.



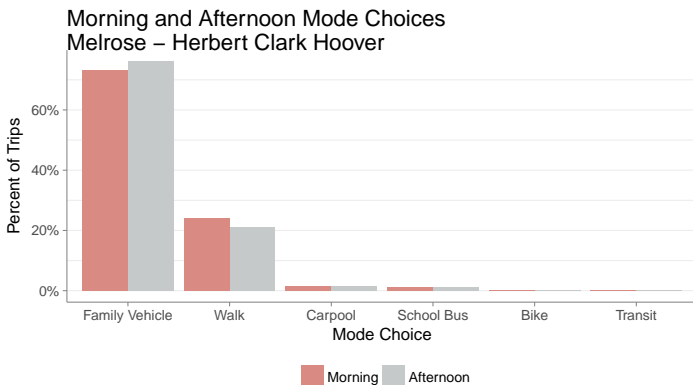
### Estimated Travel Mode, Morning and Afternoon

	0.5	1.0	1.5	2.0	2.0+
<b>Morning</b>					
Auto	77	69	47	3	21
School Bus	2	0	0	0	2
Walk	61	8	0	0	0
<b>Afternoon</b>					
Auto	85	68	47	3	21
School Bus	2	0	0	0	2
Walk	53	9	0	0	0

# Student Travel Choices

- Walk\Bike Trips Within One Mile: 30%
- Walk\Bike Trips Overall: 23%
- Family Vehicle\Carpool Trips Overall: 76%
- School Bus Trips Beyond One Mile: 3%

The chart below shows what percent of trips are made by each travel mode in the morning and afternoon.





# Greenhouse Gas Emissions (GHG) Benefits of Walking and Biking

- Per-student GHGs within 1 mile: 2767 kg
- Per-student GHGs beyond 1 mile: 3515 kg

Transportation generates more than one-third of the total greenhouse gas (GHG) emissions produced in Massachusetts. Increasing the number of trips made by walking or biking is a critical step toward achieving state goals for GHG reduction. The following table shows the estimated annual GHG emissions (in kilograms of CO<sub>2</sub>) for students being driven to school, by walkshed. (It does not include emissions from school buses.) For comparison, the average Massachusetts household drives about 19,000 miles per year, generating approximately 8,000 kg of GHG emissions.

Walkshed	Total (kg)	% of Auto Emissions
0.5	185382	20%
1.0	235214	26%
1.5	271295	30%
2.0	29505	3%
2.0+	187774	21%

Shifting some school commutes from auto to walking or biking can create real benefits for your community. This section estimates the traffic, physical activity, and GHG benefits that might result from increasing walking and biking. It can help you make the case for investing in Safe Routes to School programs and to track your progress over time.

If your school achieved the "expected" values described above based on grade specific averages for each walkshed, it would:

- Reduce number of daily car trips to and from school by 89.
- Provide an additional 23 minutes of physical activity for each newly participating student.
- Reduce annual auto-generated GHG emissions from between 5,933 kg to 10,287 kg, or 0.7% to 1.1%.

## How Your School Compares

The table below compares, for each walkshed, your school's actual walk \ bike share to an expected value reflecting average walking and biking rates across Massachusetts. Each percentage is the share of students in the walkshed that are walking or biking or expected to be walking or biking. The expected value accounts for student grade levels and proximity to school, and is based on more than 6,000 surveys collected statewide since 2011.

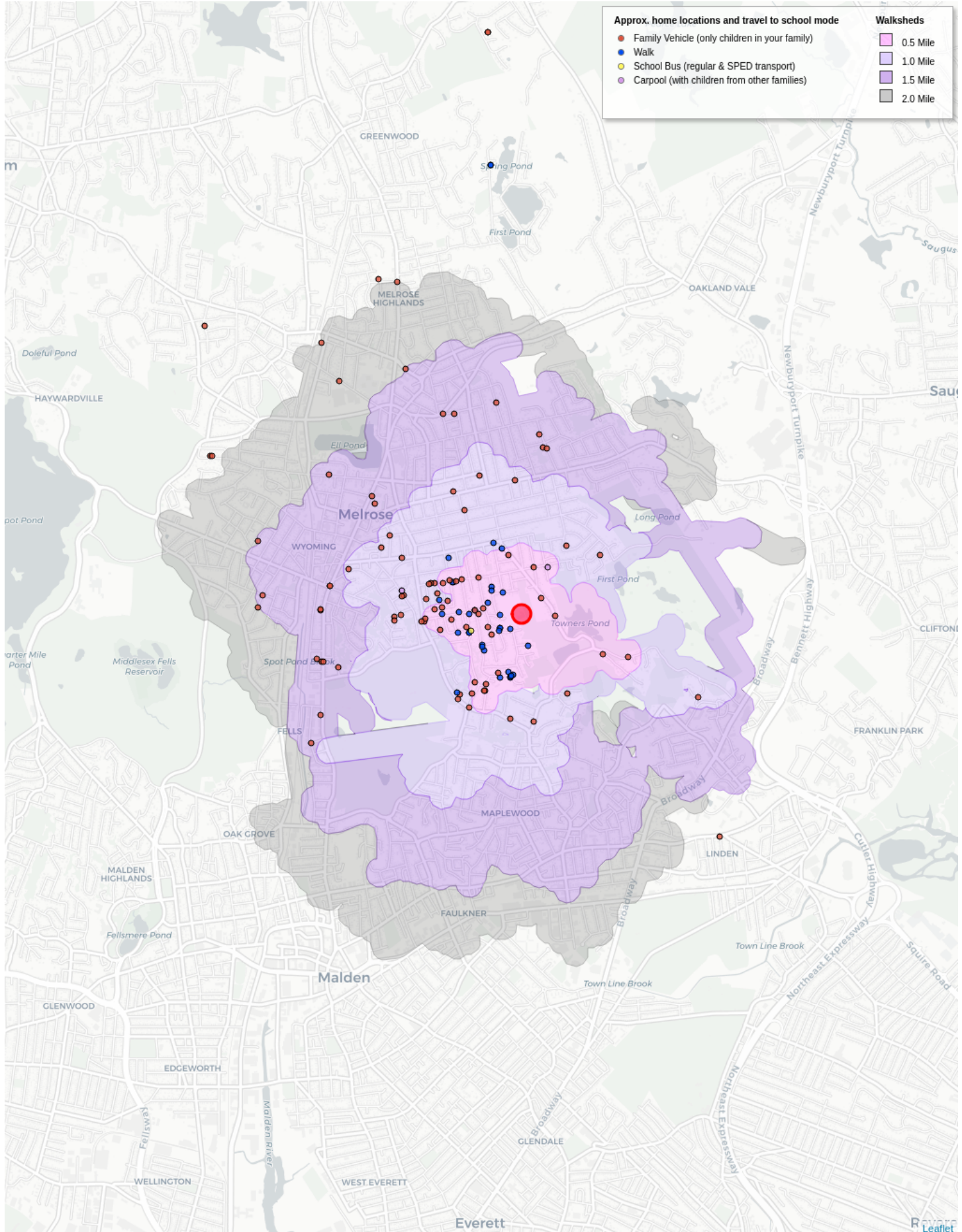
Actual and Expected Walk \ Bike Share					
	0.5	1.0	1.5	2.0	2.0+
Actual	41%	11%	0%	0%	0%
Expected	60%	29%	6%	4%	2%

Approx. home locations and travel to school mode

- Family Vehicle (only children in your family)
- Walk
- School Bus (regular & SPED transport)
- Carpool (with children from other families)

Walksheds

- 0.5 Mile
- 1.0 Mile
- 1.5 Mile
- 2.0 Mile





# School Arrival and Dismissal Report

Herbert Clark Hoover Elementary School

Observation Dates: October 3 and 8, 2019

Safe Routes to School Senior Outreach Coordinator: Judith Crocker



## **Herbert Clark Hoover School**

(DESE 01780017)

37 Glendower Road, Melrose, MA 02176

Grades: K-5

Enrollment: 323

Opened: 1965

Renovated: Unrecorded

School Hours: 8:03 AM – 3:20 PM

Principal: Christina Jo DiCalogero

Contact: 781-979-2183

<https://www.melroseschools.com/hoover-elementary-school>

*This report is for informational purposes only. These recommendations include components of the Massachusetts Safe Routes to School (SRTS) Program. Your local SRTS outreach coordinator may facilitate or take part in discussions and provide direct program offerings. Please note that your SRTS outreach coordinator cannot advocate for state or municipal policy and/or infrastructure-related work. Furthermore, your SRTS outreach coordinator cannot make direct engineering or municipal planning recommendations.*

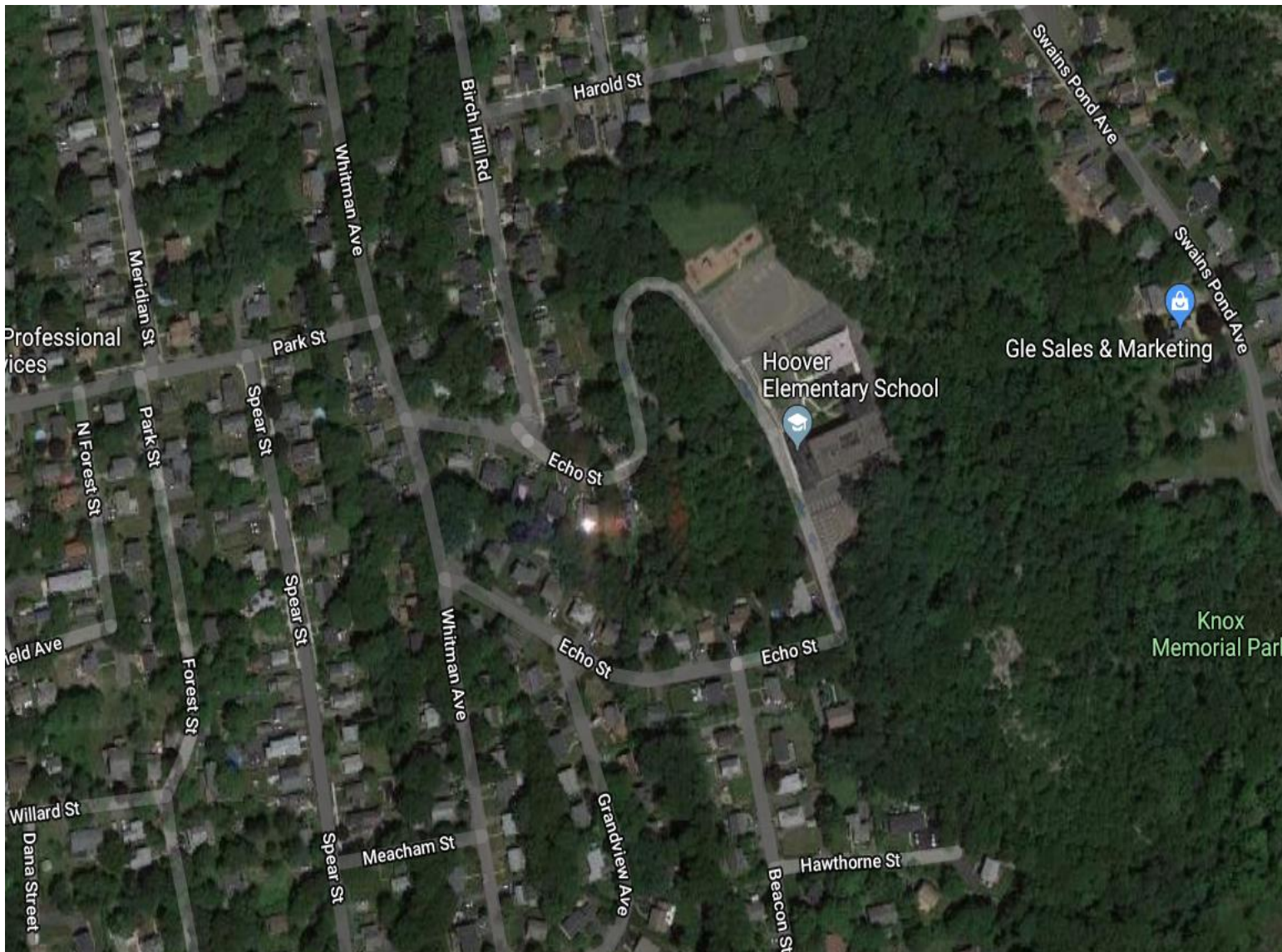


**Introduction**

Melrose is a city of nearly 27,000 residents located in the metropolitan Boston area. It has a land area of 4.8 square miles and is host to eight public and one private school. It is bordered by the municipalities of Malden, Saugus, Stoneham, and Wakefield, and is in the center of the area transected by Routes 93, 95, and 1.

Melrose Public Schools employs a school assignment model that is not solely based on residential school proximity. The only school bus is for METCO students. The Hoover School is located in a hilly, single-family residential neighborhood on a one-way section of roadway abutted by the Knox Memorial Park, a baseball field, hardtop, and playground.

**Hoover School Map**



<https://www.google.com/maps/@42.4494201,-71.0509444,580m/data=!3m1!1e3>



## General Observations

The Hoover School and neighborhood have sidewalk infrastructure in generally fair to good condition. However, since most local streets do not have sidewalks, the community is looking at grant funding to support some local installation. There are two steeply graded seasonal paths that originate at the school property, one leading to the property exit and the other to Harold Street. There is no parking along the opposite side of the street from the school except in front of private homes located before the school's front entrance. A speedbump at the school exit has been removed.

The Hoover School is on a one-way section of road that borders a steep grade on the opposite side from the school. The current arrival/dismissal procedure separates the one bus from family vehicles only at arrival, but does account for pedestrian or bicycle access. There is sufficient onsite staff/faculty parking, green space, one crossing guard, and a pedestrian plaza/hardtop area. The school property lacks queue space for family vehicles.

Dismissal of Grades K-2 students occurs directly staff-to-guardian. Students in grades 3-5 are free to walk or meet their family vehicles independently. The meeting area is on the green space near the side door entrances.

There is no school zone signage and one bike rack.

The October 3<sup>rd</sup> observation was taken from the Echo Street side of the school and the October 8<sup>th</sup> from the Glendower Road side.

## Staff

Many staff members assist with arrival or dismissal of grades K-2, but none wore OSHA vests.

## Designated Bus/Van Lane

The Hoover School uses a short area of curbing that borders an interior driveway loop as a designated bus/van lane on school property. What appears to be the original bus lane is used only for pedestrian and emergency vehicle access.

## Crossing Guards

The crossing guard located at Glendower/Echo/Birch Hill Roads wore OSHA reflective clothing, but did not have a stop paddle. She mentioned the need for parent/guardians to be more considerate and to drive at slower speeds.

## Designated Parent/Guardian Drop-Off/Pick-Up

Student drop-off/pick-up shares the same location as the METCO bus. The area is outlined by two yellow pavement lines on the school driveway and a metal sign.

## Parent/Guardian Parking

On-site parking is insufficient for all the lower grade parents/guardians who need to park in order to pick up/drop off their students. Family vehicles park along the playground, in staff lots around the building, and in the adjoining neighborhoods. Cones are also placed on the elbow of Echo Street and the school property to mark the corner as No Parking zone.



## Arrival Observations

Dates: October 3, 2019: October 8, 2019

Weather: Ranged from 50 degrees Fahrenheit and cloudy to 56 degrees Fahrenheit with rain.

All students entered directly into the building upon arrival.

A total of 71 students\* (24 percent\* of the elementary school population) walked, biked, or scooted to school. Most walkers came from Echo Street, followed by Glendower/Whitman Streets. The two bikers both wore helmets. About a dozen students used the two seasonal paths. *\*It was difficult to ascertain if the number of walkers is an inflated figure due to the high number of parked cars.*

Approximately 215 vehicles (74 percent of the elementary school population) were observed during arrival. This includes 149 queued cars (51 percent) and 66 parked cars (23 percent). Many parents/guardians dropped off their students between the first staff lot and the school's front entrance in order to bypass the designated queue area. Some students were dropped off in the handicapped spots near the playground.

- Most parents/guardians unloaded their students from the preferred right side of the vehicle.
- Some drivers left their vehicles in the queue to help their students exit.
- Some drivers reversed in the queue lane in order to depart.
- The school bus had on its flashers as it approached the school. It needed to back up to depart due to a car parked at the front door.
- The school bus dropped off students at the front entrance, not the designated bus area.
- Some cars passed unloading cars in the queue.
- Cars parked on the Echo, Beacon, Glendower, and Birch Hill Streets and in all school lots.
- Three cars without placards parked in Handicapped spots.
- A service truck entered the wrong way from Glendower, made a U-Turn at the designated drop-off/pick-up area, and proceeded to park.
- 7:20 AM: Six cars dropped off their students at the front entrance.
- 7:35 AM: The bus arrived, and 12 cars dropped off students at the front entrance.
- 7:40 AM: Staff manned the drop-off area. Eight cars dropped off at the front entrance.
- 7:45 AM: The first student car arrived in the queue. Five students walked and six cars dropped off students.
- 7:50 AM: 43 students arrived by car and 29 students walked to school. The family vehicle queue stretched past Beacon Street.
- 7:55AM: 45 students arrived by car and 23 students walked to school. All upper parking spots on Glendower Road were full.
- 8:00 AM: 39-43 students arrived by family vehicle and 21 students walked to school.
- 8:02 AM: The first school bell rang.
- 8:05 AM: 15 students arrived by family vehicle. A few parents/guardians parked and walked their students into the building. The driver of one vehicle walked a student into the building while the car was left running at the school entrance.

## Dismissal Observations

Dates: October 3, 2019; October 8, 2019

Weather: Ranged from 52-63 degrees Fahrenheit and was cloudy.

An average of 75 students\* (26 percent\* of the elementary school population) walked from school and three biked or scootered. Not all wore helmets. *\*It was difficult to ascertain if the number of walkers is an inflated figure due to the high number of parked cars.*

During dismissal, an average of 125 vehicles (43 percent of the elementary school population) were used. This includes 59 queued cars (20 percent) and 66 parked cars (23 percent). Most vehicles idled excessively. Some drivers were observed using their phones while driving. Family vehicles filled all school lot spaces and were observed on Glendower, Birch Hill, Echo, and Beacon Streets.

About 80 parents/guardians congregated near the benches on the school playground area or near the side entrances while waiting for dismissal.

- Two families and a guardian were in the playground/hardtop area while a gym class was being held.
- Two cars parked in the town garage driveway located on the exit driveway near the school property exit.
- One car parked on the sidewalk on Glendower Road.
- One car horn sounded.
- Most cars respected the “Stop” sign at the school property exit.
- 1:25 PM: Family vehicles began to queue and park in open school spots. Most idled excessively.
- 1:35 PM: Two family vehicles queued in the pick-up lane and six parked in the parking lot.
- 1:40 PM: An additional seven family vehicles parked in the lots.
- 1:45 PM: The bus arrived in the designated bus area. Six cars entered the queue area.
- 1:50 PM: All parking spots were full as another four cars parked, including those nearest to the playground on school property and Glendower Road. The queue line reached Beacon Street.
- 1:55 PM: Three cars entered lot, but had to exit due to lack of space. One driver “created” a space.
- 2:00 PM: Eight family vehicles entered the queue line.
- 2:05 PM: Five family vehicles entered queue and five more parked in the back of the school building.
- 2:10 PM: The first walking parents/guardians arrived.
- 2:15 PM: Parents/guardians left their cars and approached school building. The family vehicle queue continued to grow.
- 2:20 PM: One of the cones on the elbow corner of Echo Street (entering the school property) was knocked over. One car double parked in front of the cones. A total of 15 walking parent/guardians came from the two paths. The loading bus did not have its stop arm and flashers in use, and was passed by departing cars.
- 2:30 PM: The last three family vehicles departed.



Crosswalks, bus pick-up, and family vehicle drop-off/pick-up area



Asphalted hill abutting sidewalk next to the hardtop area



Three-season path to Harold Street

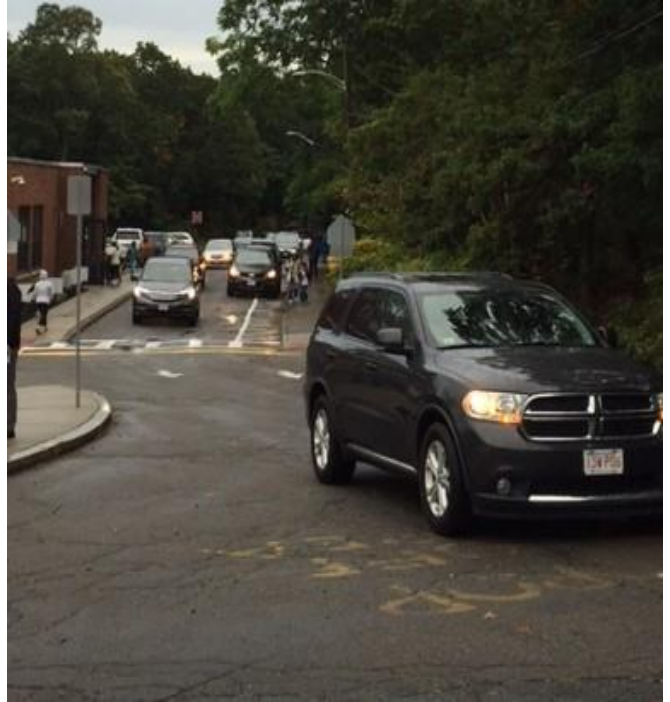


Bike rack on the hardtop area





Student in crosswalk and family vehicle queue



"Drop-off Area" markings and school driveway fog line



Family vehicle queue

### Recommendations for the Hoover Elementary School

There is no separation of pedestrian/bikers from family vehicles except for the use of sidewalks. Currently, all students enter the same side school entrance for general arrival/dismissal regardless of transportation mode. Consider allowing those walkers who approach the school from the Echo Street neighborhood to use the school 's front entrance in order to create a separate access point from driven students.

Educating parents/guardians and posting signage that no one is allowed on the hardtop/playground area during school hours may help to prevent any possible interaction between the public and students during school hours.

### Mitigation Points

- There is a conflict between the front entrance crosswalk and the two lanes of driveway traffic—those vehicles queued for the designated pick-up area and those dropping off students at the front entrance with the departing through-traffic. The school driveway at this location is too narrow to safely sustain two lanes of traffic, lacks line-of-sight for the heavily used crosswalk, and would be expected to be an even narrower roadway with snow.
- The school bus uses a different area depending on arrival or dismissal. This conflicted with family vehicle drop off during arrival. Flashing lights and stop arm use were not observed during dismissal.
- Cars that backed into parking spots along the exit driveway held-up the flow of through-traffic.
- Although posted with “One-Way” and “Do Not Enter” signage, the inner driveway loop directly abutting the school’s arrival/dismissal entrance can be made safer with the use of horses, barrels, balusters, or flex posts.

### Lessening Family Vehicle Congestion on School Property

Without the option of the school bus, recommendations to help mitigate Hoover family vehicle traffic include incentives that encourage more students to walk/bike to/from school and for parents/guardians to refrain from using their personal vehicles on school property. The following traffic reduction suggestions may help lower arrival and dismissal traffic volume while increasing overall student health and safety.

1. Developing walking/biking route maps that offer satellite Park and Walk locations can help alleviate some family vehicle congestion and the latter can double as event parking.
2. Staggered dismissals can work to further separate the modes of student transportation. This can allow *true* walkers/bikers to depart prior to students accessing parked or queued vehicles. Even a five minutes advance dismissal can better separate students who are walkers from those who are driven.
3. Install additional bike racks.

### Encouraging More Students to Walk and Bike to/from School

Encouraging more students to walk or bike to/from school can be achieved through:

1. Pedestrian and bike safety education.
2. Development of a walking/biking route map and walking school buses.
3. Regular celebration of students’ active transportation to/from school via theme days.
4. Education of parents/guardians.
5. Surveying of parents/guardians to learn how they use their chosen transportation mode.
6. Establishment of a Safe Routes to School Task Force to help the program remain sustainable.



**Education/Communication** – directed toward parents/guardians, students, police/crossing guards, and community

1. Educate parents on Massachusetts Hands Free Law, which takes effect February 2020.  
<https://malegislature.gov/laws/generallaws/parti/titlexiv/chapter90/section12a>
2. Educate students and parents/guardians on student egressing on the passenger side of a vehicle.
3. Design a customized arrival/dismissal plan that includes a map, text, and school hours.
4. Publish the school traffic plan – include in/distribute to: school e-newsletters, summer school mailing, school handbook, school website, local police and crossing guards.
5. Discuss the school arrival/dismissal plan and being a good neighbor in the community twice per school year in principal’s newsletter.
6. Allow faculty/staff/administration/parents/guardians to distribute traffic plan to waiting vehicles.
7. Offer student bike and pedestrian safety lessons, including helmet use.
8. Educate about Massachusetts idling laws and environmental impacts. Consider joining the MassDEP Green Team to qualify for free signage and refer to their website for literature and curricula. <https://thegreenteam.org/>
9. Educate school bus and van drivers on proper use of flashing lights and stop arm use.
10. Provide crossing guards with the Crossing Guard Training Guide and Video available at <https://www.mass.gov/service-details/safe-routes-to-school-enforcement>
11. Educate parents/guardians to stay in the queue lane until the entire queue in front of their vehicle exits.
12. Educate parents/guardians to stay in their cars when loading/unloading their students.
13. Educate parents/guardians to use the crosswalk on school property when approaching the school from Echo Street. Many jaywalked closer to the parking lot in order to cross the school driveway.
14. Enforce the school building’s access driveway posted parking restrictions. Parents/guardians were observed using these spots.

**Enforcement**

1. All staff associated with arrival and dismissal should wear reflective OSHA vests.
2. Queueing on public roadways should be prohibited as it is a public safety concern.
3. Install M.U.T.C.D. signage on school property as only M.U.T.C.D. signage is enforceable.
4. Enforce “No Idling” on school property. This can be accomplished by educating both the students and parents/guardians. A fun way to accomplish this is to have a student art contest with the theme of “No Idling.” Print the art four to a page with the reverse citing the state law or school circulation plan, also four to a page. Print on green colored paper, cut the paper into fours, and distribute in the queue line and elsewhere. The artwork can also be put on display in the school. (MGL, Ch 90, section 16A, 310 of CMR, section 7.11 and MGL, CH 111, sections 142A-142M).
5. Enforce No Dogs on School Property and install appropriate M.U.T.C.D. signage.
6. Enforce the existing “No Parking/Standing” and handicapped parking restrictions, particularly at the school’s front entrance.
7. Enforce “No Parking” in the garage building driveway near the school exit. Cars backing out of this spot caused school traffic to stop.
8. Enforce no double parking on Glendower Street. The school bus cannot pass when this occurs. Provide the crossing guard with a stop paddle.



## Engineering

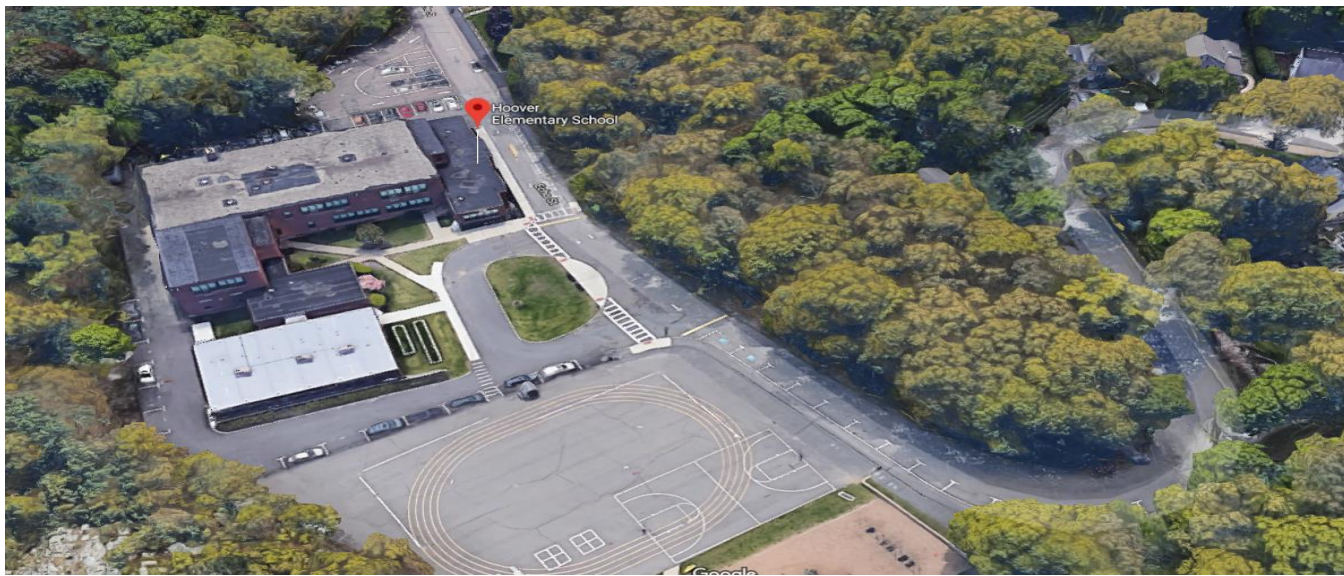
1. Additional M.U.T.C.D. “No Idling” signage is needed throughout the area as most vehicles idled.
2. Install appropriate M.U.T.C.D. signage and refresh current pavement markings to indicate circulation patterns. These should indicate the bus lane (“Buses Only/Do Not Enter”).
3. Instructional circulation signage can help to inform those in the parent/guardian queue area to move all the way forward and to stay in the queue until the traffic ahead of one’s vehicle advances. Sandwich boards and metal signage can be used (e.g. “Move All the Way Forward”).
4. Consider refreshing worn thatched pavement markings on the school driveway in front of the school entrance. This would serve to improve the visibility of pedestrians on this stretch of heavily used sidewalk.
5. Consider making the school through driveway one lane only. In addition to signage, this would increase the safety of the driveway crosswalk. One of the sets of driveway pavement arrows would need to be removed or painted over. Use sandwich boards to temporarily inform drivers of this procedural change.
6. Consider having the bus load/unload in the one designated area.
7. Consider adding pedestrian metal signage indicating “Yield to Pedestrians” on school-related crosswalks to increase pedestrian visibility. Consider including reflective pole strips for added visibility.
8. Consider making all the school’s crosswalks raised for increased pedestrian visibility and traffic calming.
9. Prune overgrown shrubbery near the entrance of the path across from the school’s entrance and near this crosswalk in order to improve line-of-sight.
10. Consider adding “Do Not Enter” to the reverse side of the school through driveway crosswalk signage. This would emphasize the one-way direction of the roadway.
11. Consider adding a safety railing along the sidewalk abutting the hardtop where the hill has been asphalted. A barrier would improve pedestrian safety given the grade and narrow width of the sidewalk. It is currently difficult for a stroller and pedestrian to pass in this area.
12. Consider adding horses, barrels, balusters or flex posts to the entrance and exit of the interior pedestrian driveway loop.
13. Consider posting “No Parking” below the library windows in the parking lot along the right side of the building. This is to ensure that no cars block the access driveway circumventing the school.
14. Change the crosswalk leading from the school to the hardtop area to a ladder-style.
15. Work with DPW to ensure that snowbanks are not created near the Birch Hill crosswalk.
16. Create a walking/biking route map.
17. Form a Hoover Safe Routes to School Task Force or designate where its advocates should best reside.
18. Consider changing the Glendower/Birch Hill interaction from a “Y” shape to a “T” shape. This can be accomplished with tactical urbanism in the short-term or by changing the physical intersection shape in the long-term.
19. Consider installing a sidewalk or fog line on Whitman.
20. Consider changing the crosswalk to Glendower to a ladder-style pattern as used on school property.
21. Add “No Parking Here to Corner” in lieu of cones on the corner of Echo Street/school driveway. Only a regulatory sign can be enforced.
22. Consider using elements of tactical urbanism as a traffic calming mechanism to slow traffic and make the area more inviting for pedestrians. Such changes can help to foster the sense of community among the nearly 80 family members who gathered at dismissal. Examples include:
  - Designate an area for use as a pedestrian plaza for families that does not overlap with student use, such as the driveway that loops around the drop-off area. Consider painting a ground mural, adding additional benches, or a stroller corral. The four benches currently in the

hardtop/playground area and a section of the retaining wall are occupied by parents/guardians waiting at dismissal.

- Consider adding art depicting the Hoover mascot and/or plantings to the open green space in the interior driveway circle to welcome all to the Hoover School.

### **Encouragement**

1. Stagger dismissal times so that walkers/bikers are dismissed first. Separating walkers/bikers from family vehicle traffic increases safety.
2. Encourage walking school buses/bicycle trains to promote greater pedestrian activity and less vehicle congestion.
3. Consider theme walking/biking days to add to the celebratory fun and student engagement. An example is to participate in Safe Routes to School's three flagship days.
4. Encourage Park and Walk options that may help alleviate vehicle volume on school property by offering parents/guardians the option to park in satellite areas. Consider suggesting more areas in the Birch Hill neighborhood versus Echo Street in order to have less traffic pass through school property after dismissal.



For questions or comments regarding this report, please contact:

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