

School Transportation Report 2011

Safe Routes to School, Lexington Public Schools Transportation, Lexpress

Summary

How do Lexington's nearly 6400 students get to and from school? Is the transportation method a function of their particular school, day of the week, grade, or morning versus afternoon? Why does your student take the school bus? Why not?

Together, the Lexington Sidewalk Committee's Safe Routes To School (SRTS) program, Lexington Public Schools (LPS), and Lexpress sponsored a parent survey in March 2011 in order to better understand how well our present public school transportation system serves the needs of our students. The goal of the anonymous survey is to gather information on how to best improve issues such as traffic congestion and safety at our nine neighborhood schools. The last survey of this nature was performed in 2002 by the Lexington No-Idling Committee and the Lexington PTA/PTO Presidents Board.

Of the approximately 4,100 Lexington public school families surveyed using the LPS Global Connect system, the response rate was 30%. Based on the tabulated results and comments provided, the overwhelming tone of the survey respondents echoed that our public school community wants *change*. Parents used the survey to express both their dissatisfaction and approval with the current transportation system.

Overall, the culture of what is presently accepted as suitable modes of school transportation need to be modified for the well-being of our students and the community at-large. Collectively, *more students need to use the school bus, more students should consider walking or bicycling, and deterrents should be made to drivers* in order to decrease the number of vehicles on school grounds. Likewise, the *school bus service should be modified* in order to better serve its population.

Based on the conclusions formulated from the results of the survey, the following action items are suggested as possible solutions.

1. For Improving Transportation Safety
 - Develop a uniform school arrival/dismissal policy.
 - Address school bus behavior.
 - Work closely with LPD and school resource officers.
 - Provide sturdy, visible bus passes.
 - Make school zones more visible for vehicular traffic.
2. For Increasing School Bus Ridership
 - Improve communication with the community.
 - Work towards creating a more flexible afternoon transportation offering.
 - Promote localized bus stops.
 - Encourage and promote school bus ridership.
3. For Controlling Costs
 - 31% of the comments submitted focused on cost. LPS is fully aware that it charges a higher fee than surrounding districts. Understanding this, the authors chose not to include cost as a variable in the survey. In addition, the authors feel that further investigations into sound financial solutions are beyond the capacity of this document except for basic commentary.

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Introduction

How do Lexington's nearly 6400 students get to and from school? Is the transportation method a function of their particular school, day of the week, grade, or morning versus afternoon? Why does your student take the school bus? Why not?

In preparing the 2011-12 school fiscal budget, Superintendent Dr. Ash identified the line item of Lexington Public Schools school bus transportation as an area which would require additional funding if level services are to be maintained. The service of school bus transportation typically does not break even – it continues to be subsidized even though it is a fee-for-service. For 2010-11, more students have qualified for both free distance-eligible bus service (state mandated if grade K-6 student lives 2 miles or greater from school) and for assistance due to financial hardship. The result has been an increase in student school bus ridership but a greater deficit in school bus funding.

Currently, 33% of Lexington students are bussed. With 150-250 vehicles transporting the majority of students to the town's nine schools *each* am and pm, many in our community feel that it is time to re-examine ways to increase school bus ridership and alternative transportation methods in order to decrease the number of cars at Lexington schools.

Together, the Lexington Sidewalk Committee's Safe Routes To School (SRTS) program, Lexington Public Schools (LPS), and Lexpress sponsored a parent survey in March 2011 in order to better understand how well our present public school transportation system serves the needs of our students. The goal of the anonymous survey is to gather information on how to best improve issues such as traffic congestion and safety at our nine neighborhood schools. The last survey of this nature was performed in 2002 by the Lexington No-Idling Committee and the Lexington PTA/PTO Presidents Board.

For the School Transportation survey 2011, see Appendix I.

For the comments received from the School Transportation Survey 2011, see Appendix II.

Results

Of the approximately 4,100 Lexington public school families surveyed using the LPS Global Connect system, 1,237 responses (30%) were received within the twelve days that the survey was open. The survey consisted of 9 questions where multiple responses were allowed so as to meet the needs of families with more than one public school-aged child. Because of this, the constant sum of these questions will not equal 100%. An open-ended response section was also included, which collected 664 comments (54%).

Calculated Results

~How old is your student(s)?

Parents responded that their students are aged 11-13 (40%), 8-10 (36%), 14-16 (29%), 5-7 (29%), and lastly 16-18 (21%). The respondents were therefore rather evenly distributed over school groupings.

~ What school does your child attend?

The single highest single response rate by school came from LHS (40%), followed by the two middle schools (16% and 22%) (collectively 38%). The elementary response rate varied from 9-11% (collectively 59%).

~How is your student(s) transported *to* school?

	Transportation TO School					
	Driven	School Bus	Walk/Bike	Carpool	Lexpress	MBTA
Elementary	47%	28%	19%	6%	0%	0%
Middle	31%	45%	17%	6%	0%	0%
High	51%	15%	15%	6%	10%	2%

The percentages of students who ride the school bus are consistent with current figures from the LPS Transportation office. The high number of high school students being driven can be explained for the majority drive or carpool versus taking the bus once they reach (or a sibling) age 16.5.

~How is your student(s) transported *from* school?

	Transportation FROM School					
	Driven	School Bus	Walk/Bike	Carpool	Lexpress	MBTA
Elementary	46%	27%	18%	9%	0%	0%
Middle	28%	43%	21%	7%	0%	0%
High	41%	15%	19%	6%	16%	3%

A greater number of high school students use public transportation (Lexpress or MBTA) as a means of departing school. Slightly more middle and high school students walk home.

~If your student(s) engages in afternoon activities which affect how they depart school, please name them.

	After School Activities				
	Extended Day	Sports	Clubs	Other	Music
Elementary	33%	22%	9%	21%	14%
Middle	0%	40%	35%	13%	12%
High	0%	35%	34%	18%	13%

76% of those surveyed responded that their student participates in after-school activities which directly affect how they depart school.

~ If your student(s) *rides* the bus, please tell us why.

	Does Ride the School Bus				
	Convenience	Safe	Timely	Eco-friendly	Socialization
Elementary	37%	18%	15%	14%	10%
Middle	39%	19%	15%	14%	7%
High	38%	20%	19%	12%	6%

45% of those surveyed responded that their student does use the school bus. Of those students using the school bus as a mode of transportation, the majority of respondents were elementary parents, followed closely by middle school and lastly high school.

~ If your student(s) *does not ride* the bus, please tell us why.

	Does NOT Ride School Bus				
	Cost	Not Timely	Discipline	Safety	Not Ready
Elementary	49%	19%	12%	10%	9%
Middle	54%	21%	10%	10%	10%
High	55%	27%	N/A	N/A	10%

60% of those surveyed responded that their student does not use the school bus. Of those students *not* using the school bus as a mode of transportation, the majority of respondents were elementary school parents, followed by high school and middle school.

~ If your student(s) is driven to school, why do you make that choice?

	Reasons Why Student is Driven to School		
	Elementary	Middle	High School
No place to cross street	23%	15%	9%
No sidewalk			
Cars too fast			
Bad weather	14%	19%	16%
Too far to walk	11%	11%	15%
Drop-off on way to work	8%	9%	13%
Convenience	8%	9%	13%
Safety	11%	7%	6%
After school activities	7%	8%	9%
Backpack too heavy	3%	10%	8%

Conclusion

Based on the tabulated results and the comments provided, the overwhelming tone of the survey respondents echoed that our public school community wants change. Parents used the survey to express both their dissatisfaction and approval with the current transportation system.

Overall, the culture of what is presently accepted as suitable modes of school transportation need to be modified for the well-being of our students and the community at-large. Collectively, *more students need to use the school bus, more students should consider walking, and deterrents should be made to drivers* in order to decrease the number of vehicles on school grounds. Likewise, the school *bus service should be modified* in order to better serve its population.

The major concerns of cost, convenience, and bus behavior are identical for both the 2002 and the 2011 surveys. Major changes in school culture occurring in the timeframe between the surveys are reflected with the present increase in amount of time school staff spends monitoring traffic as well as the shear volume of vehicular traffic experienced at each school on a twice daily basis.

1. Community desires change:
 - Families want the LPS Transportation service parameters to change in order to better accommodate student's expanded schedules and needs. Many expressed the need for a flexible afternoon transportation option.
 - Families want the cost of the transportation service to change in order to be more affordable and to be perceived as reasonable.
 - Families want their neighbor's behavior to change by being more courteous and respectful.
 - Families wish for school traffic rules apply to everyone.
 - Many families expressed their concern that the present volume of school vehicular traffic is dangerous and should be addressed.
2. Positive responses regarding the survey:
 - Many families were thankful for the opportunity to voice their opinion and that the issue of school transportation was being addressed.
 - Many families praised their bus drivers.
 - Many families praised the school bus as a safe and convenient mode of transportation.
3. Negative responses regarding school bus ridership:
 - Cost – The universal term used to describe the current fee schedule was prohibitive.
 - Many families reported that the school bus is not timely and have discipline and safety concerns.
 - Length of bus route – Fewer students using the bus service equates into fewer buses and therefore, longer routes.
 - Timing of bus route – LPS uses one fleet of school buses to service all schools by making multi-runs in succession, the order being high school then middle school followed by elementary students. Buses arriving late for elementary students, both at bus stops and arriving to school are most often due to traffic delays on the HS and MS routes. The chief cause of these delays is inaccessibility of school grounds due to on-site vehicular traffic. The second greatest cause is weather.
 - Other – accessibility, sidewalk conditions, vehicular speed and volume of traffic

It should be stressed that the purpose of this survey is not to devise ways in which to make it easier for anyone other than school buses and staff to drive onto school grounds. No new parking spots are being proposed at any school. Each school is physically designed for staff and limited visitor parking, along with a limited live drop-off/pick-up area. The existing school infrastructure is not designed to accommodate the present volume of twice daily vehicular traffic, including the relatively new Fiske and Harrington Schools. This was purposely planned at the latter two schools as a matter of safety, physical constraints, and transportation choice priorities.

The survey results speak loudly of the need for a modification of the present culture of personal vehicular travel on school grounds. The infrastructure design of LPS and Lexington neighborhoods were not meant to sustain hundreds of cars per day. The

situation poses a public health risk. The resulting gridlock and logjam of parent vehicles create difficulties for emergency vehicles (most notably past incidents involving ambulances at Diamond and Bridge), obstruct local roadways, pollutes, and creates a quagmire for students and staff trying to safely navigate the situation. Add poor weather, limited visibility due to the sheer quantity of cars, and winter's snow and ice and the combination is a pedestrian and vehicular nightmare. In addition, seeing as LPS uses its school bus fleet in succession for its nine schools, delays at any site causes a cascade affect and can directly be targeted as a primary reason for school bus tardiness (at bus stops pickups, arriving to school, picking up from school, and afternoon bus stop deliveries).

The easiest solution for easing vehicular traffic is to make it more difficult for parents to drive onto school property. Encouraging alternate modes of transportation, such as walking, biking, and using public transportation (school bus, Lexpress, MBTA) should be greatly encouraged. Suggestions toward this end include dismissing walkers and busers before others; enforce and install more No Parking areas, and improve local sidewalks and pathways. Think of the revenue that could be generated if each personal car was charged a toll to enter school grounds!

Taking the school bus is perhaps the least structured part of the public school student's day. Incorporating aspects of a student's responsibility into their mode of transportation to school by employing the already existing Open Circle program and LPS Anti-Bullying Policy might help address perceived discipline and some safety issues. Positive aspects of their daily travels might be included as positive feature from the storyline of "How Full is Your Bucket." In addition, wider utilization of the Safe Routes to School program with its mission of safety, exercise, and fostering a sense of community should be encouraged.

Interestingly, the aspect of school bus timeliness and overall safety directly correlated to whether or not the student took the bus. Those who use the school bus service thought it to be convenient, safe, and timely versus those who do not ride the school bus due to the service being not timely as well as discipline and safety issues.

Based on these conclusions formulated from the results of the survey, the following action items are suggested as possible solutions.

Suggested Action Items for Improving Transportation Safety

1. Develop a uniform school arrival/dismissal policy. With Lexington's model of nine neighborhood schools come nine different infrastructure designs and school priorities. Regardless of what works best for each school, some basis of uniformity would provide a consistency in what is expected behavior and demeanor, both for students and parents as well as principals and staff. This would also provide for a smoother transition as families move-on from one school building to the next. Such a policy should include uniform and proper use of dedicated bus lanes, proper reporting and follow-up of school bus disciplinary cases, priority for busers and walkers as well as consistent dismissal times.

Optimally, those students taking the bus or walking would be released first, followed by those being driven. Any such policy should be mailed and emailed to each public student household in addition to newspaper coverage. A round table meeting involving LPS Central Administration, LPS Transportation, principals, assistant principals, DPW, Engineering, C & W Bus Company (present holder of school bus contact), Safe Routes to Schools, Lexington Police (representing LPD, school resource officers, and crossing guards), School Facilities, Selectmen, PTA representatives, and the Town Manager may prove to be the most efficient and fruitful manner in which to address this issue. Some consultant help may also be available through the existing Readiness and Emergency Management for Schools grant program.

2. Address school bus behavior. Many respondents named bullying, unsafe bus behavior and bus stop behavior as deterrents for allowing their students to use the school bus. School bus drivers give priority to driving the bus and not to closely monitoring bus behavior of up to 40 students. Discipline and a student's responsibility of decorum should be addressed as a team approach. The premise of a student taking ownership and pride in his school should include the school bus. Suggestions for improvements include better advertising of the LPS anti-bullying policy, creating a fifth grade buddy system to help younger elementary students, having a copy of the school bus discipline contract posted on the bus along with assorted helpful safety reminder posters (check with C & W Bus in order to meet fire code and eligibility), and the possibility of having electronic monitoring on each bus. The latter would aid in observing both student and driver behavior. Follow-through for those students bus drivers see as violating the discipline contract should be properly handled by each school's principals. Employ the principles of the Open Circle Program and the LPS Anti-Bullying Policy.
3. Work closely with the Lexington Police and school resource officers. Working with the LPD/school resource officers, ensure greater enforcement of crosswalk, right on red, speeding, idling, and no passing of school buses displaying flashing lights by vehicular violators would be a positive deterrent for all violators and make pedestrians, bicyclists, and bus riders safer. In addition, these professionals could help enforce school traffic policies as needed. Technology is also presently available for exterior electronic monitoring on school buses in order to observe such unsafe driver behavior near buses.
4. Provide sturdy, visible bus passes. Suggestions have been made to laminate school bus passes, which are distributed to each student authorized to use the bus service. This may eliminate unauthorized students from taking the bus. Passes would be placed on the exterior of a student's backpack using a tie-wrap for elementary and middle school students. A unique, holographic sticker could be placed on high school ID's before they are distributed in the early fall. Using technology such as smart cards, these identification cards could evolve to include other school services.
5. Make school zones more visible for vehicular traffic. Many neighborhood roadways are posted for speeds of at least 30mph and many of the major thoroughfares have 2 lanes in each direction. Neither creates a pedestrian friendly

- environment. Traffic calming measures such as installing more visible signage for notification of entering a school zone in order to reduce vehicular speeds as well as religious striping of crosswalks would create safer surroundings for our students as well as enforcing the local speed limit.
6. Resolution of action items from survey comments section. An integral part of SRTS is determining how to best troubleshoot problem areas identified by families in our various neighborhoods. The survey respondents identified numerous action items which are possible to address quickly using in-house services of the DPW, Engineering, and PTA SRTS Committees. These problems ranged from adjusting pedestrian/ traffic signal timing to shrubbery removal encroaching on pedestrian pathways to eliminating the use of radios by bus drivers.

Suggested Action Items for Increasing School Bus Ridership

1. Improve communication with the community. A number of parental comments were based on false information and misconceptions. Efforts to better communicate the facts on school bus transportation may include an updated and more user-friendly FAQ section on the newly designed LPS website including links to common sites such as LPS Transportation, Sidewalk Committee's Safe Routes to School, and the new LPS Creating Safe Schools program, PTA/PTO sponsored meetings (one for elementary and one for middle/high school grades) discussing school transportation, encouraged participation in SRTS programs, and better communication of school traffic patterns and rules to parents.
2. Work towards creating a more flexible afternoon transportation offering. A common complaint/suggestion involved high schoolers' need, and to a lesser extent middle schoolers, for flexibility in their transportation needs due to after school activities and to a lesser extent the LHS X-Block. For elementary students, one-third of respondents enroll their student in an afternoon extended day program. A majority of respondents voiced that they do not take the bus for their students would only use it one-way, given the present school bus schedule. *A second survey was distributed in late April in order to ascertain if interest exists for a flexible afternoon transportation option offered jointly between LPS and Lexpress. The results will follow.*
3. Promote localized bus stops. The sense of entitlement expressed by many paying parents to ride the school bus has, in part, help to elongate bus routes. The length of time a student is on a bus could be shortened if bus stops were to be more localized, based on safe meeting areas. Individual stops are frowned upon unless the stop is safer in such a location.
4. Encourage and promote school bus ridership. The number of buses available depends on the number of students. The fewer the students, the fewer the number of buses and therefore the longer the routes. The school bus is a good value and is generally accepted as being the safest manner in which any student can be transported to/from school. LPS could work more closely with other town committees and organizations in order to better encourage students to ride the bus or other forms of mass transportation.

Controlling School Transportation Costs

The single, most dominant theme of the parent survey responses centered on cost. 31% of the comments submitted focused on the perceived high cost of using the school bus. LPS is fully aware that it charges a higher fee for bus service than other districts in the surrounding area. Understanding this, the authors purposely chose not to include cost as a variable in the survey. While the scope of this survey identifies this variable as being significant, the authors feel that further investigations into sound financial solutions are beyond the capacity of this document except for basic commentary. Changing the fee structure is not an easy answer.

What is the history of fee-for-service school busing in Lexington? The town has charged for school bus ridership since the turn of the century in order to alleviate strain from the LPS operating budget. As a subsidized service, the fee saw its greatest increases following the failure of the 2004 town override and in 2007 with the national jump in fuel prices. Presently, the fee has not changed since 2008. The LPS operating budget is used to close the gap between the actual service cost and collected ridership fees.

Reasons for the high cost of the LPS school bus service include higher contractual costs due to the inclusion of requested line items by the town. These include seatbelts and retrofitted or new school bus engines for fuel and pollution efficiencies. A high student/bus route cost can also be attributed to the geographic distribution of students who elect for school bus service. Inherent inefficiencies exist when a certain level of bus ridership is not maintained while certain quantities of buses are required to manage the assigned bus routes.

Basic costs of the public school bus include fuel, federally mandated service for grades K-6 students living beyond a two mile radius from school, population of the ridership (geographic and grade distribution within the town), and contractual needs.

The following are three scenarios for lowering school bus transportation costs:

- Provide service at cost.
- Provide service at a subsidized cost.
- Do not provide bus service except for mandated requirements.

The Lexington school bus service is partially subsidized even though it is a fee-for-service. The program does not have a history of breaking even. In order to lower its present cost point, the following needs to occur:

- Increase ridership by approximately 1000 students.
- Increase ridership for high school students (buses are generally less than half full).
- Elementary and Middle school buses are generally full.

Therefore, the number of buses needs to be cut or increase the ridership dramatically at the high school level. Adding buses at the elementary or middle school level may shorten the individual bus routes but would not greatly lower the overall cost of the service.