Transportation Impact Assessment

1) Goals
   • Assess Traffic Impacts for Evaluation by School Building Committee
   • Understand Current Conditions
   • Provide Recommendation for:
     - Safety for Children
     - Adequate Drop-Off/ Circulation/ Parking
     - Minimize Impacts to Area

2) Work Performed
   Existing Conditions
   • Traffic Counts
   Safety Review
   • Speed Studies
   • Accident Review
   • Sight Distance
   Traffic Generation
   • Based Upon Students/Staff
   Future Conditions – Analysis
   • Conditions With and Without School

3) Recommendations
   • Safety
   • Access
   • Minimize Impact
Safe environment can be maintained

Delays and Queue - Limited to short Periods (20-25 Minutes)

Study Area Intersection
Safe environment can be maintained

Delays and Queues - Limited to short Periods (20-25 Minutes)

Heath Street Daily Traffic Count

Heath Street 24 - Hour Volume Two-Way

School Peak

School Peak
Safe environment can be maintained

Delays and Queue - Limited to short Periods (20–25 Minutes)

Existing Delay and Queue Length (7:30 – 8:00 AM)

Queue Length: 8 Vehicles
Delay: 60 Seconds

Queue Length: 18 Vehicles
Delay: 212 Seconds

Queue Length: 24 Vehicles
Delay: 185 Seconds

Queue Length: 14 Vehicles
Delay: 88 Seconds

Queue Length: 2 Vehicles
Delay: 14 Seconds

Queue Length: 30 Vehicles
Delay: 69 Seconds
Accident Data

- **Heath Street at Oak Street**: No Accidents
- **Boylston Street at Hammond Street**: 20 Accidents
  - 4.0
  - 0.21
  - 0.76
- **Heath Street at Hammond Street**: 3 Accidents
  - 0.6
  - 0.09
  - 0.76
- **Hammond Street at Soule Recreation**: 2 Accidents
  - 0.40
  - 0.07
  - 0.58
- **Heath Street at Dunster Road**: 1 Accident
  - 0.20
  - 0.11
  - 0.58
- **Heath Street at Cary Road**: No Accidents
- **Heath Street at Woodland Road**: No Accidents
- **Heath Street at Randolph Road**: No Accidents

**Horace James Circle**: 52 Accidents
- 10.4
- 0.61
- 0.58

**Legend**:
- # Accidents
- Average # Accidents Per Year
- Crash Rate
- District Rate

*Vanasse & Associates, Inc.*
Transportation Engineers & Planners
**Trip-Generation Summary**

**ASSUMPTIONS**
- 800 Students
- 4% Daily absenteeism
- 15 Students carpool with staff
- 25 students bus with METCO
- 50 students walk
- 200 students bus
- Student car occupancy of 1.45 student/car
- Evening Traffic is 62% of Morning Traffic

<table>
<thead>
<tr>
<th>Time Period/Direction</th>
<th>Staff</th>
<th>Buses</th>
<th>Drop-Off/ Pick-Up</th>
<th>Total Trips</th>
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## Trip Generation Comparison

<table>
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<tr>
<th>Time Period/Direction</th>
<th>Industry Standards (ITE)</th>
<th>Study Projection (VAI)</th>
<th>Increase</th>
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<tr>
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<tr>
<td><strong>Total</strong></td>
<td>224</td>
<td>481</td>
<td>257</td>
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*Note: VAI Projections are twice industry standards for a more accurate and conservative estimate*
Safe environment can be maintained

Delays and Queue - limited to short periods (20-25 minutes)

Trip Distribution
Student Drop-off – Weekday Morning
Safe environment can be maintained

Delays and Queue - Limited to short Periods (20-25 Minutes)

Note:
Brookline Public School Traffic Will Be on Brookline Roads irrespective of where School is built
Safe environment can be maintained

Delays and Queue - Limited to short Periods (20-25 Minutes)

Delay Increase – (7:45-8:05 AM)
Recommendations
Pedestrian Access and School Signage Plan
Recommendations
Heath Street At Woodland Road
Recommendations

Site Distance Plan
Recommendations

Project Access
- The main driveway off Heath Street
- A left-turn entering only driveway is proposed off Woodland Road
- Woodland Road remains one way
- A bus/service driveway is proposed off Heath Street

Pedestrian Improvement

New crosswalks
- Heath Street
- Hammond Street
- Woodland Road

Sidewalks entering the site
- Heath Street drive
- Woodland Road drive
- Bus/service drive

Woodland Road traffic calming improvements
- A raised crosswalk at the new School driveway
- Bicycle lane considerations along Woodland Road
- Continuous sidewalk along the north side of Woodland Road.
Recommendations

Off-Site

Hammond Street at Route 9 and Hammond Street at Heath Street
- This intersection should be retimed and coordinated

Heath Street at Woodland Road
- This intersection should be realigned

Bicycle Considerations

Bicycle usage to the site will be limited
- Bicycle racks should be provided
- Bicycle consideration by the Town:
  - Heath Street
  - Woodland Road

Transit Usage

Transit usage will be limited to staff
- Promote staff usage

Busing

- 200 Students
- 25 METCO Students
Recommendations

School Drop-Off and Pick-Up Traffic Management Plan
- Police detail officer
- School staff should be stationed at the drop-off
- A designated drop-off/pick-up area
- A lane along the entryway will remain unobstructed
- Parents and caregivers will be given information on school drop-off and pick-up times and procedures

Construction Management Plan
A detailed Construction Management Plan should be prepared and reviewed by the Town

Traffic Monitoring
Within three months after school opening and annually
- Pedestrian safety
- Crossing guards
- Police detail
- Level of student busing
Summary

SUMMARY

• Safe environment can be maintained
• Delays and Queue - Limited to short Periods (20-25 Minutes)
• School Traffic Before Existing Peak
• Traffic Conditions Will be manageable

Qualitative Assessment: Good site for new School