



WELLS + ASSOCIATES

MEMORANDUM

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DATE: April 18, 2011

SUBJECT: Lab School of Washington
Traffic and Parking Compliance and Long-term Parking Solution;
Washington, D.C.

2011 APR 21 PM 2:20

INTRODUCTION

This document presents the Lab School of Washington's (LSW) compliance with Board of Zoning Adjustment (BZA) Order 17383-A at the main campus on Reservoir Road. It also analyzes the need for additional parking as part of a long-term parking solution for the property. The site location is shown on Figure 1.

Currently, 200 faculty and staff serve 356 students enrolled in grades Kindergarten to 12 as outlined below:

<u>Location</u>	<u>Students</u>	<u>Staff</u>
Main Campus	279	166
Foxhall Campus	<u>77</u>	<u>34</u>
Totals	356	200

Surface parking spaces are provided on both the Main Campus on Reservoir Road (87 marked spaces) and Foxhall Campus (24 marked spaces). The focus of this study was to review the traffic count and parking information collected since the project was approved in 2007 for compliance with the BZA Order 17383-A.

BOARD OF ZONING ADJUSTMENT
District of Columbia

CASE NO. 18237

EXHIBIT NO. 9



Figure 1
Site Location

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DC OFFICE OF ZONING
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Board of Zoning Adjustment (BZA) Order

The District of Columbia Board of Zoning Adjustment (BZA) approved Decision and Order 17383-A that imposed the following:

1. *The maximum enrollment shall be 330 students.*
2. *The maximum number of faculty, staff, and administrative personnel, including part-time employees, shall be 182.*
3. *Within 30 days of the beginning of each academic year, the School shall provide to ANC 3D a report indicating the current student enrollment and the number of faculty/staff.*
4. *The School shall fully implement and comply with Plan A of the Traffic Management Plan (TMP) (Exhibit 66).*
5. *Within 45 days of each traffic monitoring survey required by the TMP, the School shall provide DDOT and ANC 3D a report indicating its compliance with the TMP. Compliance with the TMP will be measured by the School's progress in reducing its AM traffic generation rate from 196 to 165, as described in its Traffic Study (Exhibit 25, Tab H) and its letter of May 5, 2006 (exhibit 82) and by its balancing of its parking supply with its parking demand.*
6. *Forty-three (43) new angled parking spaces must be in place along Whitehaven Parkway within 9 months of the effective date of this order for the School to be in compliance with 206.3's requirement for ample parking. These spaces must be consistent with the plans prepared by VIKA Engineers (Exhibit 56), and with the provisions of Chapter 25 of the Zoning Regulations. There will be no structures or lighting relating to the parking spaces and the area will be paved in accordance with DDOT requirements. (COMPLETE)*
7. *This approval of the increase in enrollment and faculty and staff limits is limited to a **FIVE YEAR TERM** from the effective date of this Decision and Order. In the event that this approval lapses, the enrollment and faculty and staff limits will revert to those imposed in BZA Order No. 16273, specifically 310 students and 95 faculty and staff.*

BZA Traffic Test

The intent of BZA Condition 5 was to reduce AM peak hour inbound trips and traffic congestion at LSW's main driveway on Reservoir Road, queues that back up onto MacArthur Boulevard, and consequent negative traffic impacts on the adjacent community. This requirement considers all trips generated by the property, not just trips at the main entrance on Reservoir Road, but also by visitors and staff who drive and park in off-site facilities and walk to the campus. The BZA Order mandated that using the gross number of trips, including all trips generated by parking provided by LSW on-site and off-site, be used to determine compliance with the Order. This is a conservative measure of trip generation and impacts since not all of the vehicle trips generated by the school impact the main driveway and adjacent intersections.

Data Collection and Summary

Surveys conducted by Wells + Associates in Fall 2005, before the BZA approval, indicated that The LSW generated a total of 196 inbound vehicle-trips during the 7:45 to 8:45 AM peak hour. One-hundred-thirty-six (136) trips (or 69 percent of all trips) were measured at LSW's main driveway on Reservoir Road, 22 (or 11 percent) were measured at the nearby Safeway and CVS lots on MacArthur Boulevard, and 38 (or 19 percent) were measured at other off-site locations, primarily on Reservoir Road.

Eleven identical surveys were conducted subsequent to BZA approval during the Spring and Fall semesters in 2007, 2008, 2009, on February 2, April 7, and April 20 during the Spring 2010 semester, and on January 25, 2011 during the Spring 2011 semester.

The number of AM peak hour inbound trips varied from a low of 154 in Spring 2008 to a high of 208 during Fall 2007. The Spring 2010 counts declined from 190 on February 2, to 177 on April 7, to 171 on April 20 due to LSW's re-doubled efforts to restrict faculty/staff arrival times to before 7:45 AM and encourage faculty/staff to carpool or take the LSW shuttle bus instead of driving alone. In January 2011, these efforts resulted in a reduction in peak hour trips to 160 AM inbound trips, below the mandated threshold established by the BZA.

Traffic Test Results

Over the past four (4) years LSW has worked consistently to achieve the target goal of 165 total peak hour trips. The attached figure summarizes the number of total trips generated by LSW between Fall 2005 and January 2011. As a result of these efforts, progress was made recently between Fall 2009 and April 2010, and compliance with the Order has been achieved in January 2011. In addition, field observations made during the recent counts showed that LSW has refined its on-site traffic management techniques to reduce queuing on MacArthur Boulevard and impacts on the intersections in the immediate vicinity of the site (see details on page 8). These results show that the measures employed at the school are effective and should continue to be refined to further reduce peak hour trips.

BZA Parking Test

The primary intent of the BZA Order was to bring LSW's parking supply and demand into balance. The BZA intended for LSW to provide a sufficient number of spaces to adequately accommodate LSW's peak parking demands.

In Fall 2005 LSW provided 107 spaces on the LSW campus (including 87 marked spaces and 20 unmarked spaces). The measured peak parking accumulation (or demand) at that time was 175 vehicles. Ninety-one (91) (or 52 percent) parked on the LSW campus; 84 (or 48 percent) parked on adjacent public streets (primarily Reservoir Road and Whitehaven Parkway and in the nearby Safeway and CVS

lots without formal agreements with these property owners. LSW's parking demand, again, was measured at 175 spaces in Spring 2007.

LSW has consistently reduced parking demand since Spring 2007. The 155-space parking demand measured in Fall 2007 exceeded the 152-space parking supply (107 on-site spaces (87 striped/20 stacked), 15 spaces at the CVS lot, and 30 spaces at the George Washington University garage) by only three (3) spaces (or by only two (2) percent). In Spring 2008 LSW constructed 43 spaces on Whitehaven Parkway. Pursuant to the BZA's mandate 17383-8, the school does not exclusive use of these spaces; the school uses approximately 26 of these spaces. Parking demands measured on six (6) occasions since Fall 2007 have consistently and significantly been below LSW's 178-space parking supply. In fact, the parking demand measured in January 2011 was just 103 vehicles. Accordingly, LSW meets the intent of the BZA parking test as shown on the attached chart.

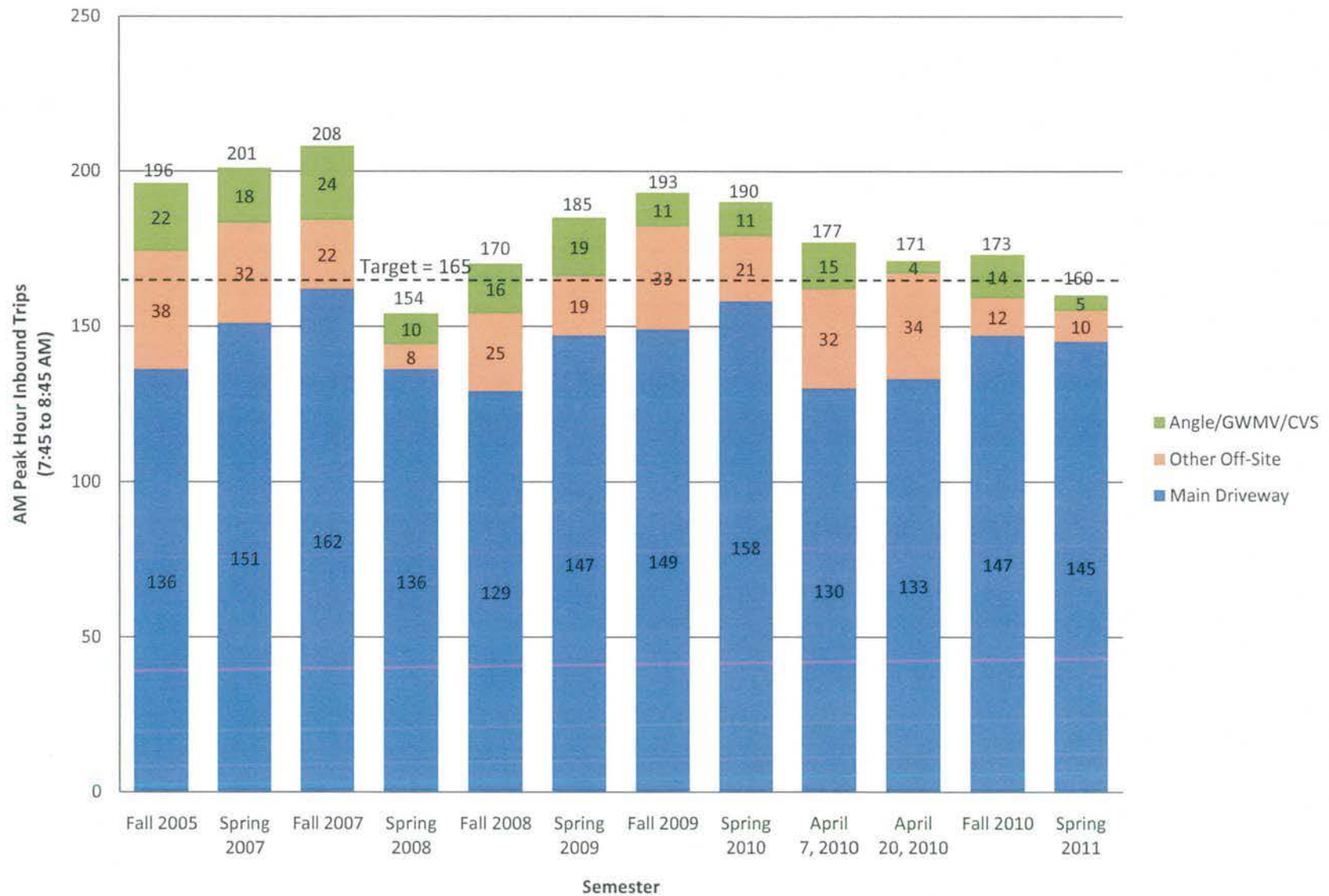
The lease for the 30 parking spaces at George Washington University is scheduled to terminate in August 2011 and is currently being considered for renewal by LSW. Based on the recent parking count that revealed an overall parking demand of 103 spaces, only three (3) vehicles utilized the GWU parking facility, suggesting that this parking is not needed. However, if the lease for these spaces is not renewed, any LSW faculty or staff that is forced to use this parking would be reimbursed by LSW for the daily parking fee to avoid any spillover parking within the neighborhood. Further, this program will be evaluated by LSW on a monthly basis to identify the faculty/staff members being reimbursed to encourage them to use transit rather than driving.

Long-Term Parking Solution

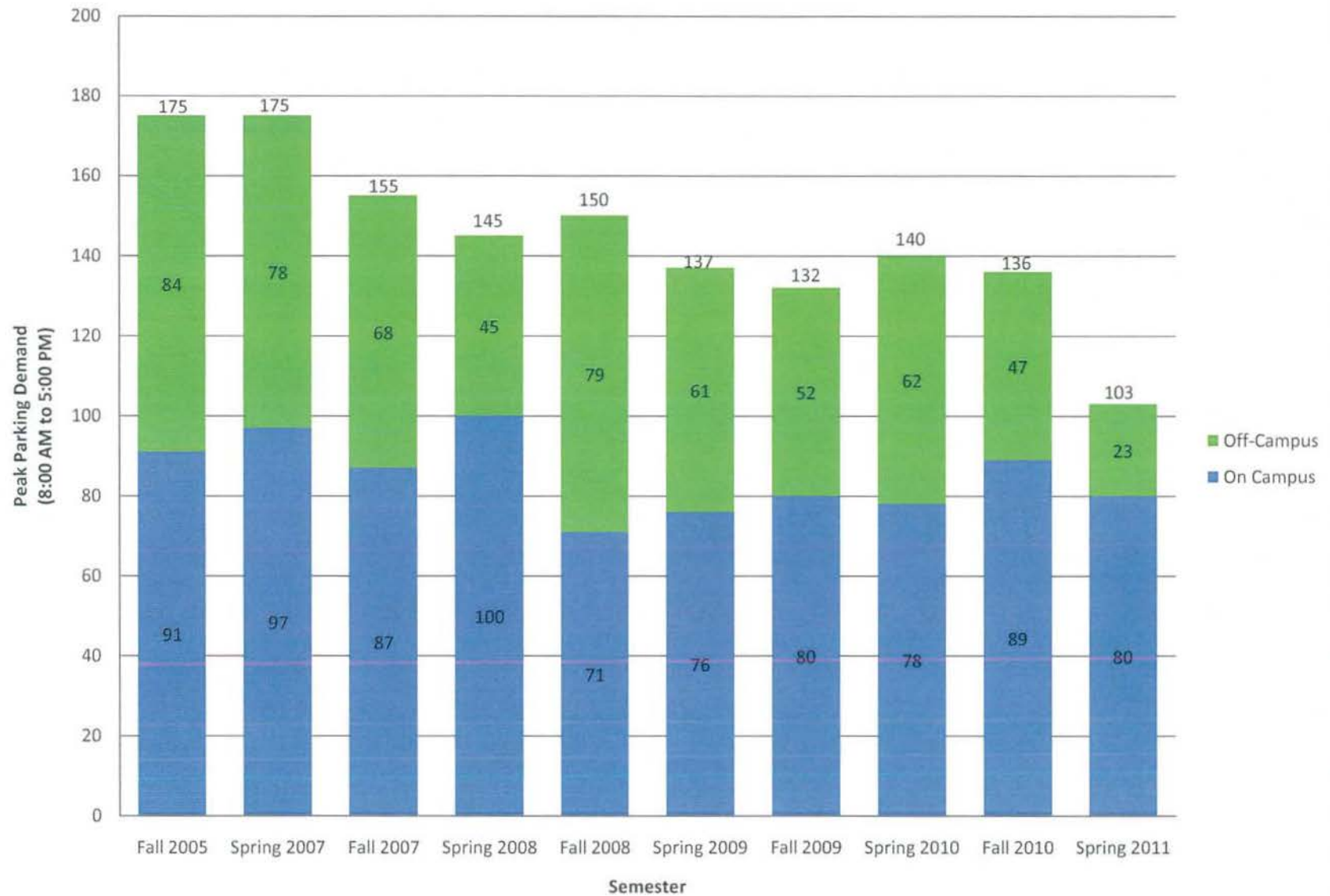
As part of the BZA application, LSW contemplated the need to either construct a parking garage or acquire off-site spaces through the acquisition of additional property. LSW indicated that it would take approximately five years (from 2007) to for the school to locate property and raise funds for additional parking.

Based on the results of the parking surveys, the demand for parking by LSW has consistently decreased from 2005 to 2011, from 175 spaces to approximately 100 spaces (or by approximately 40 percent). Thus, assuming LSW maintains some portion of off-site parking through leases or other means, there is no need for additional parking. It is also noted that the angled parking on Whitehaven Parkway is not exclusively for LSW use. Surveys indicate that only 26 of the 43 parking spaces are used by LSW staff or visitors. The remaining 17 spaces are used by the public.

Lab School of Washington Inbound Trip Generation



Lab School of Washington Peak Parking Demand



Trip Reduction and Sustainability Initiatives

The most recent survey of traffic and parking demand at the main campus indicates compliance with the BZA order is directly attributable to a number of actions taken by LSW which includes several Transportation Management Plan (TMP) initiatives to reduce peak hour trips and parking demands.

These include the following:

1. Established a highly successful shuttle program between the school and the Rosslyn, Foggy Bottom, Dupont Circle, and Tenleytown Metrorail stations.
2. Provide a monthly Metrocheck benefit of \$220 to encourage employees to take public transportation.
3. Requires faculty and staff who do not have assigned parking on the Main Campus to park in off-site parking lots.
4. Enrolled in the "Guaranteed Ride Home" program to encourage use of public transportation.
5. Provides bike racks and showers for faculty and staff who bike to the Campus.
6. Requires faculty and staff to arrive at the campus before 7:45 AM to ensure their arrival does not conflict with the arrival of students.

While these are significant efforts that are effectively reducing peak hour trips and parking demands, there are a number of additional sustainability initiatives that LSW should consider in order to maintain compliance with the maximum enrollment of 330 students and 182 faculty/staff. These include the following:

General Campus Initiatives

1. Join the Green Schools Alliance. (www.greenschoolsalliance.org).
2. Replace or plan to replace the existing shuttle fleet with hybrid shuttles, if feasible.
3. Determine if biofuel or biodiesel can be used to power the buses. Add decals on these buses or shuttles indicating these methods are being used, if appropriate.
4. Institute a "no-idling" rule for waiting buses and vehicles.
5. Review bicycle usage to be sure adequate bike racks and facilities are provided.
6. Join the Washington Area Bicyclist Association (www.waba.org).

7. Participate in Federal Bike Incentive program.
8. Work with other land owners, schools, and businesses to expand the Circulator bus service and/or existing service in the area to reduce overall trip making by others as well as LSW. This may not directly impact the peak hour or parking demand of the school, but will show the commitment to overall trip reductions in the area.
9. Consider an evaluation using the Sustainable Transportation Access Rating System (STARS) (www.portlandonline.com/transportation/index).
10. Provide updates to families on a regular basis regarding these initiatives, their importance, and their effectiveness.
11. Encourage and document environmental and sustainability education.
12. Review and implement energy efficient capital improvements at the school that include the HVAC system, windows, solar panels and boilers.

Student Initiatives

Student trips account for 75 percent of all peak hour trips generated by the school. Thus, these initiatives are designed to reduce student trips.

1. Start an early arrival exercise program to reduce peak hour vehicle trips.
2. Consider expanding the current shuttle bus service based on zip code and student data. The zip code information from November 2010 indicates the following:
 - 40 percent of all students live in DC.
 - 35 percent of all students live in MD.
 - 25 percent of all students live in VA.

Based on the zip code information provided, the majority of Maryland students live in Montgomery County. Only a minor percentage lives in Prince George's County. A follow-up survey of families is recommended to determine if and where the service should be expanded.

3. Update and expand the carpool initiative.
4. Review the DC Safe Routes to School program. Although there may only be a limited number of students and faculty/staff that walk, a program can be started through the DC Safe Routes to School Coordinator.

Faculty and Staff Initiatives

A reduction in faculty and staff trips will directly impact the parking demand of the facility rather than peak hour trip generation since some initiatives (such as an early arrival) have been implemented.

1. Un-assign the reserved parking spaces within the main campus parking area to better utilize the available parking supply. This may require the installation of a card-reading system to alert employees when the parking lot reaches capacity. This would likely increase the utilization by 15 to 20 percent.
2. Coordinate carpool program for employees with financial incentives for joining the program and penalties for driving alone.
3. Increase Metrochek contribution in order to increase ridership. It appears that the current shuttle service from Tenleytown and Dupont Circle (Red Line) Metrorail stations covers staff located north and west of the site, and that the Rosslyn station shuttle collects staff from Virginia using the orange and yellow/green lines. There does not appear to be a significant number of staff members to the east of the school that could be served by a shuttle.
4. Coordinate with other adjacent shuttles from GWU (Mount Vernon Shuttle) and Sibley Hospital shuttle to combine trips and/or allow faculty to use these services.
5. If necessary, evaluate the parking usage at the GWU lot on a monthly basis to identify specific users and discuss ways to encourage transit use rather than driving.

Conclusion

The Lab School of Washington's Transportation Management Plan (TMP) complies with BZA Order 17383-A to reduce the AM peak hour vehicle trip generation and balance parking supply and demand, as proven by actual traffic and parking counts.

LSW has worked consistently over the last four (4) years to achieve the target goal of 165 total peak hour trips. As a result of these efforts, progress was made recently between Fall 2009 and April 2010, and compliance with the Order was achieved in January 2011 as a result of efforts to restrict faculty/staff arrival times, encourage carpooling, or using the LSW shuttle bus instead of driving alone.

Parking demand has consistently been less than parking supply for several years. Accordingly, additional parking is not required to adequately accommodate LSW's peak parking demands. The addition of parking would only encourage driving, further impacting neighborhood streets. Additional parking would have a negative effect on the school's effort to reduce the number of inbound trips to the school.

On-going enhancements to the TMP, coupled with sustainable initiatives by the School will continue to reduce travel demands and impacts on the surrounding neighborhood.

Questions regarding this document should be directed to Wells + Associates.