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Board of Zoning Adjustment
District of Columbia
CASE NO. 17300
EXHIBIT NO. 24A2

St. Patrick's
EPISCOPAL DAY SCHOOL

PETER A. BARRETT
Head of School

ST. PATRICK'S EPISCOPAL DAY SCHOOL
CARPOOL INITIATIVE
December 2003

History
In planning for a new site for our emerging Grades 7 and 8 program during the winter of 2001-2002, St. Patrick's Episcopal Day School studied traffic and parking conditions at our existing Whitehaven Campus at 4700 Whitehaven Parkway, NW, as well as at the proposed location of the MacArthur Campus at 4925 MacArthur Boulevard, NW. The **Carpool Initiative** emerged from a traffic analysis by our consultant, Wells & Associates LLC, as well as subsequent conversations with representatives of the District Department of Transportation (DDOT), as St. Patrick's sought to understand more fully and then to moderate the traffic impact of the school on the surrounding community of which it is a part.

Introduced to the school community in the spring of 2002, the **Carpool Initiative** was successfully implemented across the 2002-2003 school year and continued in the 2003-2004 school year. A driveway reconstruction project, completed during the summer of 2003, enabled a new traffic pattern that has significantly improved arrival and dismissal traffic flow. In addition, two DC police officers now direct traffic during the main arrival and dismissal periods.

Purpose
At the core of the **Carpool Initiative** is an effort to change families' fundamental approach to delivering children to—and retrieving them from—St. Patrick's School, an approach that in the past has undervalued carpooling. That effort best began with the afternoon carpool, where St. Patrick's effectively structured its first aggressive initiative in this area, so most of the procedural changes below are dismissal-based. However, this initiative also includes a significant arrival-based incentive provision, and St. Patrick's stands ready to institute additional arrival-based measures, based on what it learns from continued experience with the **Carpool Initiative** in full.

Goal
The goal of the **Carpool Initiative** is to achieve and maintain an average vehicle occupancy (AVO) of students dropped off at—and retrieved from—the Whitehaven Campus of 1.60. The goal resulted from St. Patrick's discussions with DDOT, based on the calculation which, when applied to arrival carpool, would result in no net increase in vehicles with the addition of vehicles carrying the proposed 60 students in Grades 7 and 8 to the Whitehaven Campus for subsequent shuttle bus delivery to the MacArthur Campus.

*[Notes regarding the **Carpool Initiative**'s focus on dismissal measures: 1) With respect to both the length and persistence of queuing along Whitehaven Parkway, the dismissal process had, historically, been by far the more problematic. Using driveway dwell time as an indicator of steady carpool flow, the Wells & Associates traffic analysis put the average morning dwell time at 58 seconds and the average afternoon dwell time at two minutes and 35 seconds, more than two and a half times longer. 2) Afternoon dismissal has provided us with an opportunity to assess the effectiveness of preferential dismissal times, for which there is no appropriate corresponding morning mechanism. 3) Because student trips originate from the school, monitoring compliance with preferential dismissal times will be more direct, and the possible need to move to financial disincentives more apparent.]*

Plan Elements

The **Carpool Initiative** is comprised of several elements, including:

- community education,
- carpool marketing,
- preferential afternoon dismissal times for carpooling families,
- financial incentives for families with both Nursery School and Elementary School students at arrival time,
- monitoring mechanisms for parental compliance,
- monitoring success in meeting AVO goals,
- financial disincentives if the program fails to meet its minimum AVO goals, and
- further monitoring of success in meeting AVO goals.

Community Education

This program component includes:

- a section of the *Parent Handbook and Directory*, introduced in the 2002-2003 edition—"Attendance, Transportation, Arrival, Dismissal"—that establishes carpooling as a clear priority of the school and informs parents of carpooling procedures;
- the July transportation mailing to all families, which reviews the importance of carpooling and the history, goals, and procedures of the **Carpool Initiative**; includes a zip code directory and a set of neighborhood maps to assist families in forming carpools; and conveys the required "Arrival/ Dismissal Information and Authorization Form," on which families must identify carpool participants; and
- a series of occasional letters to families and *Thursday Bulletin* articles, during the school year, that restate the importance of carpooling, review carpooling goals and procedures, and track achievement of those goals.

Carpool Marketing

Parents whose "Arrival/ Dismissal Information and Authorization Form" or whose repeated arrival at school to drop off or retrieve just one student indicates that they are not participating in a carpool will receive follow-up communications from school reiterating the school's commitment to carpooling, asking them to form a carpool, and suggesting specific families to consider as carpool possibilities, based on our database. These communications will also remind families that the school's failure to meet its carpool goals will result in financial disincentives for families who do not form carpools.

Preferential Dismissal Times for Carpooling Families

Prior to implementation of the **Carpool Initiative** in September 2002, all cars retrieving students at day's end, regardless of how many students, could arrive beginning at 2:40 p.m., with dismissal beginning at 2:50 p.m. The dismissal process generally concluded at approximately 3:15 p.m. Friday dismissals were earlier.

The **Carpool Initiative** provides two preferential dismissal times, based on the number of students in a carpool. Cars retrieving three or more students may arrive beginning at 2:45 p.m., with dismissal of students beginning at 2:50 p.m. Cars retrieving at least two students may begin arriving at 3:00 p.m. Cars retrieving one student may begin arriving only after 3:15 p.m. Cars arriving earlier than their allotted times are directed to return at the proper time. The only exceptions to these preferential dismissal times are cars retrieving Nursery School students. These cars may arrive beginning at 2:45 p.m., regardless of the number of Nursery School students they are retrieving, because we think it is developmentally inappropriate to prolong the wait time for our youngest (three- and four-year-old) students.

On Fridays, the preferential dismissal times are different, given the different dismissal times for Lower School (Kindergarten through Grade 3) and Upper School (Grades 4 through 6) students. Under the **Carpool Initiative**, parents of Nursery School students can arrive at 11:50 a.m. to pick up *only* Nursery students. Cars picking up Nursery School *and* Lower School students or three or more Lower School students can begin arriving at 12:10 p.m. Cars picking up two Lower School students can begin arriving at 12:20 p.m. Cars picking up one Lower School student can begin arriving at 12:30 p.m.

Preferential dismissal times on Fridays for students in Upper School Grades 4 through 6 remain the same as the Monday through Thursday times.

Financial Incentives and Disincentives

In designing the **Carpool Initiative**, St. Patrick's studied the use of financial disincentives for not carpooling if the **Carpool Initiative** fails to enable the school to meet its minimum AVO goals. However, any program that increases the cost of attending St. Patrick's, such as financial disincentives, will have a disproportionate impact on families with the least ability to pay, especially those families that participate in the school's Financial Aid Program.

The **Carpool Initiative** does involve one financial incentive that has increased the vehicle occupancy for certain families and reduced the overall number of vehicle trips to St. Patrick's—eliminating the Early Arrival Program fee for Nursery School students who have older siblings or carpool-mates in the Lower and Upper schools, Kindergarten through Grade 8. Prior to the **Carpool Initiative**, some families may have chosen to make two trips, one on either side of 8:00 a.m. for their older children and the other around 9:00 a.m. for their Nursery School children, rather than pay the $750 fee. (Some families choose not to participate in the Early Arrival Program so that their Nursery children will not have such a long day.) Elimination of the Early Arrival Program fee for Nursery School students who arrive in cars with older students in Kindergarten through Grade 8 has resulted in a significant increase in the number of children in the Early Arrival Program as well as an increase in AVO during morning arrival.

St. Patrick's has considered requiring parents to pay an annual fee (amount to be determined, but perhaps $750, with proceeds benefitting the Palisades Community Fund and other service initiatives) for not participating in the **Carpool Initiative**. If the school found it necessary to move to financial disincentives, parents would sign a contract with the school indicating their participation in the **Carpool Initiative** or else pay the annual fee. Preferential dismissal times for families would continue, even if the school moved to financial disincentives to achieve its minimum AVO goals. The school would reserve the right to exercise discretion in assessing the annual fee, based on financial or geographic hardship.

Performance Monitoring

St. Patrick's will engage Wells & Associates to conduct AVO surveys three times during the school year, once each in the fall, winter, and spring. These surveys will occur at randomly selected arrival and dismissal times. St. Patrick's will report the results of these surveys to DDOT, to Advisory Neighborhood Commission 3D, and to the appropriate community liaison committee established by any order of the Board of Zoning Adjustment.

Attached to this document is a chart prepared by Wells & Associates—provided to St. Patrick's on November 12, 2003—that shows the vehicle occupancy counts before the **Carpool Initiative**, at two points in its first year of operation (9/25/02 and 1/28/03), and at the first count in the current school year (11/5/03).

Plan Review

St. Patrick's will seek further review from ANC 3D and DDOT of any substantive revisions in the **Carpool Initiative**, and of data from monitoring of the program.

St. Patrick's
EPISCOPAL DAY SCHOOL

PETER A. BARRETT
Head of School

July 1, 2004

Mr. Ken Laden
Associate Director for Transportation Policy and Planning
District Department of Transportation
Government of the District of Columbia
Frank D. Reeves Municipal Center
2000 14th Street, NW 6th Floor
Washington, DC 20009

Dear Mr. Laden:

In our Carpool Initiative, St. Patrick's Episcopal Day School has committed to report to DDOT and Advisory Neighborhood Commission 3D the results of average vehicle occupancy counts conducted at school arrival and dismissal times.

I am pleased to report the results of the three stipulated AVO surveys conducted on a random basis during the 2003-2004 school year. Attached is a summary prepared for St. Patrick's by Wells & Associates LLC that reports the results of the surveys conducted in 2003-2004, as well as three earlier surveys, including one prior to implementation of the Carpool Initiative.

Counts Show Program's Continued Success

The St. Patrick's Carpool Initiative establishes an AVO goal for students dropped off at—and retrieved from—the Whitehaven Campus of 1.60. We were delighted to see that AM and PM Peak Hour numbers essentially matched our highest numbers ever in our most recent survey, conducted on Wednesday, May 26, during the last full week of school. The May 2004 survey showed an AM Peak Hour AVO of 1.81 (just shy of our September 2002 high of 1.82) and a PM Peak Hour AVO of 1.84 (again, just shy of our September 2002 high of 1.85). The AM and PM Peak Periods—at 1.80 and 1.74, respectively—meet or exceed the previous highs from September 2002. These results capture the continued success of the Carpool Initiative.

Not lost on us here at St. Patrick's is the reality that the intervening counts—conducted in January and November 2003 and April 2004—showed a generally downward trend in our AVO numbers, sometimes slight and sometimes more than slight, although we have consistently met our stated goal. The "Community Education" and "Carpool Marketing" sections of the Carpool Initiative commit us to certain steps to emphasize for our community the expectation that all families will participate in carpools for arrival at and dismissal from school. We will redouble our efforts this summer and then, as needed, across the fall and the balance of the school year as set out in the Carpool Initiative to make that expectation a reality.

Driveway Reconstruction, Police Presence Offer Additional Safety

While the AVO counts demonstrate the continued success of St. Patrick's Carpool Initiative, there have been other changes to our arrival and dismissal procedures that have significantly increased their safe and smooth operation. First, with the reconstruction of our driveway and the contiguous sidewalk in the summer of 2003, we have been able to reverse the flow of vehicles within the driveway to a west-to-east flow. As a result, students now exit vehicles (at arrival time) directly onto the sidewalk and need not cross the driveway, as was the case before the driveway and sidewalk reconstruction. Second, we have experienced the real benefits of having DC police officers directing traffic at arrival and dismissal times, generally one at the driveway entry point and one at the driveway exit point. These developments, which were in place across the 2003-2004 school year and will continue in subsequent years, have combined with the Carpool Initiative to improve the effectiveness of our operations.

Please let me know if there is any further information concerning the St. Patrick's Carpool Initiative that would be helpful to DDOT at this time. Otherwise, we look forward to continuing to report to you on an annual basis.

Sincerely,

Peter A. Barrett
Head of School

Attachment: "Table 1, St. Patrick's Episcopal Day School Vehicle Occupancy Counts"

cc: Mrs. Alma Gates, Chair, Advisory Neighborhood Commission 3D
ANC 3D Commissioners

Table 1
St. Patrick's Episcopal Day School
Vehicle Occupancy Counts
Before and After Carpool Program

Time Period	Before Carpool Program	After Carpool Program				
		Wednesday, Sept. 25, 2002	Tuesday, Jan. 28, 2003	Wednesday, Nov. 5, 2003	Wednesday, April 7, 2004	Wednesday, May 26, 2004
AM Peak Period (7:00 to 8:30 AM)						
Vehicle-Trips	223	212	214	201	195	187
Students	311	382	368	342	321	336
Average Vehicle Occupancy (AVO)	1.39	1.80	1.72	1.70	1.65	1.80
AM Peak Hour						
Vehicle-Trips	214	205	212	190	192	182
Students	302	374	366	328	317	330
Average Vehicle Occupancy (AVO)	1.41	1.82	1.73	1.73	1.65	1.81
PM Peak Period (2:30 to 4:30 PM)						
Vehicle-Trips	175	224	188	160	138	167
Students	235	380	313	257	221	290
Average Vehicle Occupancy (AVO)	1.34	1.70	1.66	1.61	1.60	1.74
PM Peak Hour						
Vehicle-Trips	106	155	139	105	115	138
Students	141	286	250	178	192	254
Average Vehicle Occupancy (AVO)	1.33	1.85	1.80	1.70	1.67	1.84

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

MEMORANDUM

TO: Peter A. Barrett
Head of School
St. Patrick's Episcopal Day School

FROM: Martin J. Wells, P.E.
Catherine Proot

DATE: December 8, 2004

SUBJECT: Average Vehicle Occupancy Counts

As requested, Wells & Associates conducted vehicle occupancy counts in the drop-off/pick-up lane at St. Patrick's Episcopal Day School on Wednesday, November 10, 2004.

The purpose of these counts was to measure the average vehicle occupancy (AVO) during the morning and afternoon peak hours and peak periods for the current semester. Similar counts were conducted: (1) before the Carpool Initiative was implemented, (2) on Wednesday, September 25, 2002, after the Carpool Initiative was first implemented, (3) on Tuesday, January 28, 2003, (4) on Wednesday November 5, 2004, (5) on Wednesday, April 7, 2004, (6) on Wednesday, May 26, 2004, and (7) on Wednesday, November 10, 2004. The results are summarized in the attached table.

Prior to the Carpool Initiative, AVO's during the critical morning and afternoon peak hours were 1.41 and 1.33 students per vehicle, respectively. The goal of the Carpool Initiative was to increase AVO to 1.60 students per vehicle. The morning and afternoon peak hour AVO increased to 1.82 and 1.85 students per vehicle, respectively, after the Carpool Initiative was first implemented. The Carpool Imitative exceeded the 1.60 AVO goal by 14 to 16 percent.

St. Patrick's has managed to exceed the AVO goal across time. The current AVO morning and afternoon peak hour AVO's are 1.82 and 1.92 students per vehicle, respectively, which are fourteen to twenty percent above the 1.60 AVO goal. The AVO goal also is maintained during the AM and PM peak periods.

We recommend that St. Patrick's continue to operate the current Carpool Initiative in order to maintain AVO's at or above 1.60 students per vehicle.

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AM Peak Period (7:00 to 8:30 AM)							
Vehicle-Trips	223	212	214	201	195	187	192
Students	311	382	368	342	321	336	348
Average Vehicle Occupancy (AVO)	1.39	1.80	1.72	1.70	1.65	1.80	1.81
AM Peak Hour							
Vehicle-Trips	214	205	212	190	192	182	186
Students	302	374	366	328	317	330	339
Average Vehicle Occupancy (AVO)	1.41	1.82	1.73	1.73	1.65	1.81	1.82
PM Peak Period (2:30 to 4:30 PM)							
Vehicle-Trips	175	224	188	160	138	167	145
Students	235	380	313	257	221	290	271
Average Vehicle Occupancy (AVO)	1.34	1.70	1.66	1.61	1.60	1.74	1.87
PM Peak Hour							
Vehicle-Trips	106	155	139	105	115	138	132
Students	141	286	250	178	192	254	254
Average Vehicle Occupancy (AVO)	1.33	1.85	1.80	1.70	1.67	1.84	1.92