

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: District of Columbia Board of Zoning Adjustment

FROM: Samuel Zimbabwe *sz*
Associate Director, PPSA
District Department of Transportation

DATE: October 18, 2012

SUBJECT: BZA Case#18426
National Presbyterian School

RECEIVED
D.C. OFFICE OF ZONING
2012 OCT 19 AM 8:41

APPLICATION

The National Presbyterian School (the "Applicant"), pursuant to 11 DCMR §§ 3104.1 and 3103.2, is seeking a special exception to allow the physical expansion of an existing private school to include a three story addition and increase in the student enrollment cap to 320 and the facility and staff cap to 70 individuals under section 206, and a variance from the side yard requirements for a temporary modular trailer under section 405, in the R-1-B District at premises 4120-4124 Van Ness Street, N.W. (Square 1724, Lot 805).

RECOMMENDATION

The District Department of Transportation (DDOT) has no objection to the special exception request to increase the enrollment cap to 320 students and 70 faculty/staff, provided that the Applicant implement their proposed Transportation Demand Management (TDM) measurements in full and also monitor the performance of the proposed TDM measures on reducing vehicle trips.

TRANSPORTATION ANALYSIS

DDOT is committed to achieving an exceptional quality of life in the nation's capital by encouraging sustainable travel practices, constructing safer streets and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within, and take advantage of, the District's multimodal transportation network.

Roadway Capacity and Operations

The Applicant's traffic analysis provided existing roadway conditions for a previously agreed upon study area. To these existing conditions, the Applicant added forecasted trips on the local road network generated by the proposed enrollment increase. DDOT is in general agreement with this overall approach to estimating the impact from the Applicant's proposed development on the roadway network.

Site Access

Access to the Site is proposed to continue to be via Van Ness Street for morning drop-off and afternoon pick-up; while access is available from Nebraska Ave (a principal arterial) only during the afternoon student pick-up time which occurs about 2 hours prior to the traditional PM commuting hour. Site access via Nebraska Ave is closed-off during the student drop-off period because it coincides with the AM commuting peak hour.

Trip Generation

The Applicant is requesting an increase in the enrollment cap to 320 students and 70 staff from the current enrollment of 273 students and 64 employees. The Applicant estimated the future trip generation of the proposed increase in the enrollment cap by linearly extrapolating the existing trip generation under the current enrollment cap. DDOT is in general agreement with this methodology. The Applicant estimated that the increase in enrollment cap will result in an increase of 104 AM Peak hour trips (59 inbound/45 outbound) and 49 PM peak hour trips (23 inbound/26 outbound). As noted by the Applicant, this estimate is conservative because there will likely be less vehicle trips due to the Applicant incorporating a suite of TDM strategies. Prior to this school year, the Applicant employed not TDM measures.

Study Area

DDOT requested that the Applicant analyze the existing and future operating conditions (with an approved increase in the enrollment cap) at the following two intersections:

1. Nebraska Ave & Van Ness Street
2. Van Ness Street & NPS driveway entrance\41st Street

These intersections were chosen based upon their proximity to the Site. Other intersections may see new vehicle trips, but DDOT believes the number of new trips at other intersections will not be impactful.

Level of Service

The Applicant utilized the Highway Capacity Manual software to analyze the Level of Service (LOS) and vehicle delay of the study area intersections, per DDOT's *Design and Engineering Manual*. The Applicant compared current LOS with year 2015 LOS for the study area intersections. The results of the capacity analysis show no change in the overall LOS for the intersection of Nebraska Avenue and Van Ness Street, as well as no change in the LOS for the intersection approaches. The eastbound and westbound approaches of Van Ness Street show a minimal increase in delay.

For the intersection of Van Ness Street and the driveway entrance\41st Street, the eastbound and westbound approaches showed no measurable decrease in LOS or increase in delay. The northbound

approach (the private school driveway) showed a large increase in the AM peak hour delay. However, this delay on private property has little impact on the District's public roads. The southbound approach 41st Street) will have a slight increase in vehicle delay.

DDOT notes that the PM peak hour for the National Presbyterian School is approximately 2 hours earlier in the day than the traditional commuting PM peak hour that will be seen on Van Ness Street and Nebraska Ave. Accordingly, there is only a small effect on PM commuting peak hour traffic due to student pick-up. Further, DDOT notes that the Applicant has arranged for a MPD Officer to control traffic at the intersection of Van Ness and the Applicant's driveway entrance during the morning drop off.

Existing Vehicle Queuing on District Roads

In addition to an LOS analysis, the Applicant observed the existing queuing conditions on westbound Van Ness at the entrance to the Site. The Applicant noted only a few cars queued up at any given time in the AM peak hour. DDOT independently confirmed this observation.

Transportation Demand Management

The Applicant has proposed the following Transportation Demand Management (TDM) strategies:

- Designating a TDM coordinator.
- Educating parents on TDM measures available at the beginning of the school year.
- Incentivizing car-pooling through faster drop-off and pick-up.
- Adding a ride-matching component to the Applicant's website that will integrate Google maps with the School's directory to show ridesharing opportunities. NPS may supplement this effort with SchoolPool from the Metropolitan Washington Council of Government (MWCOC). SchoolPool allows parents to create on-line profiles that can be used to find other parents for trip-sharing.
- Subsidizing public transit and walking/cycling for employees. Subsidies include:
 - SmarTrip Cars valued at 50% or 100% of the commuting cost via Metrobus or Metro rail, depending on how much the recipient employs transit in their commute.
 - Equivalent stipend for walkers and cyclists.
- Participating in the District's Safe Routes to Schools program.
- Incorporating "semi-regular" walk/bike to school days that incentivize biking and walking for students.

DDOT is in general agreement with the proposed TDM measures and believes they should be made a condition of BZA approval.

Performance Monitoring

The Applicant is proposing annual monitoring of trip generation and mode split for both students *and* employees. DDOT acknowledges that because some employees travel with their children, who are also students, precise measurement of student and employee mode share may not be possible. The Applicant will provide the results from the monitoring to DDOT annually, starting with the 2012-2013 school year, with data being collected in May of each year. DDOT agrees with the Applicant's proposal to monitoring trip generation and mode split, with the addition of reporting of the TDM measures in place the day that the trip generation and mode split are monitored. DDOT believes that the proposed monitoring should be made a condition of BZA approval.

Parking

Ample on-site parking exists to accommodate any increases in parking demand. Accordingly, on-street neighborhood parking occupancy will not be affected.

CONCLUSION

The District Department of Transportation (DDOT) has no objection to the special exception request for the requested increase in the student and employee cap, provided that the Applicant implement the proposed TDM measurements and conduct performance monitoring to ensure that the desired vehicle trip reductions materialize.

SZ|bw