

**ST. PAUL'S COLLEGE  
TRANSPORTATION IMPACT STUDY  
WASHINGTON, D.C.**

Prepared by:  
Wells & Associates, Inc.

September 2007

**OVERVIEW**

## Section I INTRODUCTION

### OVERVIEW

EYA has filed a PUD application to develop approximately 10 acres of land on the 20-acre St. Paul's College campus, generally located east of 4<sup>th</sup> Street, between Hamlin Street and Jackson Street in the northeast section of Washington, D.C. The site location map is shown on Figure I-1.

As proposed, the development would consist of a maximum of 260 townhouse units. Access to the site would be provided via Jackson Street, Hamlin Street, 5<sup>th</sup> Street, and 6<sup>th</sup> Street. The proposed site plan for the development is shown on Figure I-2.

For the purposes of this study, construction of the residential development was assumed to begin in 2009 and be completed by 2014.

### STUDY SCOPE

#### Overview

In order to assess the impacts of the proposed development on the surrounding roadway network, the Applicant commissioned this transportation impact study.

Representatives of the development team met with representatives of the District Department of Transportation (DDOT) to identify the study scope and agree on specific study parameters. A summary of the scope of work is included in Appendix A.

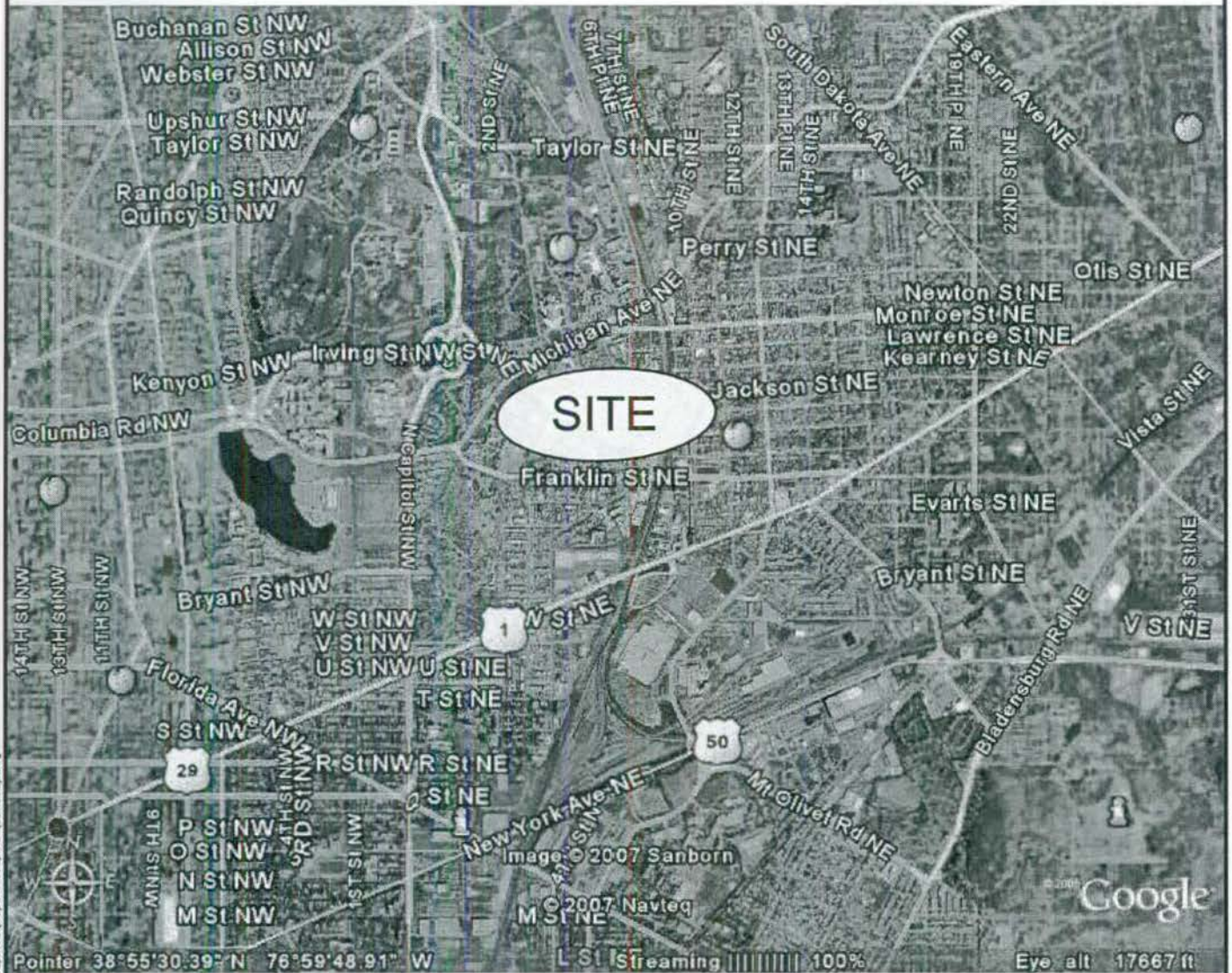
### Study Area

The study area was selected based on those intersections that potentially could be affected by the proposed development. The following intersections were selected for detailed analysis:

1. Michigan Avenue/Harewood Road
2. Michigan Avenue/4<sup>th</sup> Street
3. Franklin Street/4<sup>th</sup> Street
4. Franklin Street/5<sup>th</sup> Street
5. Franklin Street/6<sup>th</sup> Street
6. Franklin Street/7<sup>th</sup> Street
7. Hamlin Street/7<sup>th</sup> Street
8. Jackson Street/7<sup>th</sup> Street
9. Monroe Street/7<sup>th</sup> Street

### Study Objectives and Methodology

The objectives of this study were to: (1) evaluate existing transportation conditions, (2) evaluate future (2014) transportation conditions with and without the proposed redevelopment, and (3) identify transportation impacts related to the proposed development.



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Figure 1-1  
Site Location



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**COMPOSITE SITE PLAN**

VKA REVISIONS

NO.	DATE	BY	CHKD.	DESCRIPTION
1	JUN 2007	CB	CB	ISSUED FOR PERMIT
2				
3				
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5				
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DATE: JUN 2007  
 DES: CB  
 DWG: CB  
 SCALE: 1"=50'  
 PROJECT FILE NO: 1453  
 SHEET NO: 4

Figure 1-2  
 Site Plan



Tasks undertaken in this study included the following:

1. Review of development plans provided by EYA.
2. Correspondence with DDOT staff regarding the traffic study scope.
3. A field reconnaissance of existing roadway and intersection geometrics, traffic controls, and speed limits.
4. Turning movement counts at the study intersections during the AM and PM peak periods.
5. Analysis of existing and projected levels of service at the study intersections.
6. Estimation of the number of AM and PM peak hour trips that would be generated by the proposed development and the other planned developments in the area.
7. Recommendation of improvements required to mitigate the impact of the proposed development.

The conclusions and recommendations of this study are as follows:

1. Currently, all study intersections operate at acceptable levels of service (i.e. LOS D or better), with the exception of the following intersections:
  - Michigan Avenue/Harewood Road
  - Michigan Avenue/4<sup>th</sup> Street
  - Franklin Street/4<sup>th</sup> Street
  - Franklin Street/6<sup>th</sup> Street
  - 7<sup>th</sup> Street/Monroe Street
2. Under background conditions (with pipeline developments), the following intersections have lane groups that would operate deficiently under background conditions:
  - Michigan Avenue/Harewood Road
  - Michigan Avenue/4<sup>th</sup> Street
  - Franklin Street/4<sup>th</sup> Street
  - Franklin Street/5<sup>th</sup> Street
  - Franklin Street/6<sup>th</sup> Street
  - Franklin Street/7<sup>th</sup> Street
  - 7<sup>th</sup> Street/Monroe Street
3. The proposed development is anticipated to generate an estimated 72 AM peak hour vehicular trips and 86 PM peak hour vehicular trips.
4. According to the DCMR, 251 on-site parking spaces would be required for the residential development. The proposed development would provide 542 parking spaces.
5. The increase in traffic at the study intersections is expected to have little effect on traffic operations and could be offset by minor timing adjustments at a few signalized intersections.
6. The peak hour traffic signal warrant is not met at the Franklin Street/6<sup>th</sup> Street intersection under the projected total future traffic volumes during the AM and PM peak hours.
7. Sufficient gaps in the traffic along Franklin Street are available to accommodate vehicles turning from either 5<sup>th</sup> Street or 6<sup>th</sup> Street.
8. The following improvements would be required to offset the impact of the proposed development:
  - At the Michigan Avenue/Harewood Road intersection, slight adjustments to the green times during the AM and PM peak hours;
  - At the Michigan Avenue/4<sup>th</sup> Street intersection, slight adjustments to the green times during the AM peak hour;
  - At the 7<sup>th</sup> Street/Monroe Street intersection, slight adjustments to the green times during the PM peak hour.
9. Consideration should be given to installing signs to help lower speeds and updating pavement markings (specifically crosswalks) on Franklin Street.
10. Background traffic growth, including traffic associated with the pipeline developments, can be accommodated with the following improvements. These improvements are *not* necessary to mitigate the impact of the proposed development.
  - Restriction of on-street parking on the west side of 4<sup>th</sup> Street between Franklin Street and Evarts Street during the AM and PM peak periods.
  - Minor adjustments to the signal timings at the Franklin Street/7<sup>th</sup> Street intersection during the AM and PM peak periods.
  - Restriping of Monroe Street to provide four travel lanes between Michigan Avenue and 8<sup>th</sup> Street. Restriction of on-street parking would be required on the south side of Monroe Street east of its intersection with Michigan Avenue and west of its intersection with 8<sup>th</sup> Street during the AM and PM peak periods.