

PM<sub>2.5</sub> CONFORMITY DETERMINATION

COPPIN STATE UNIVERSITY PARKING GARAGE

BALTIMORE CITY, MD

Prepared By:

Rummel Klepper & Kahl

81 Mosher Street

Baltimore, MD 21217

For:

Coppin State University

2500 W. North Avenue

Baltimore, MD 21216

July 2009

**PROJECT DESCRIPTION**

Coppin State University in Baltimore, Maryland plans to build a parking garage to partially relieve an existing deficiency of over 2,000 spaces in on-campus parking. The University lies on either side of West North Avenue (see **Figure 1**). The garage construction is planned for the corner of North Avenue and Loop Road (#15 on the Campus Map), near the main entrance to the campus. A pedestrian bridge across West North Avenue is also provided. The garage will be built in two phases. The first phase, expected to be completed in approximately one year, would provide 240 spaces on three levels. The second phase, anticipated within five years, would provide an additional 260 spaces by adding levels. The garage will be erected at a location of an existing surface parking lot with approximately 100 spaces.

**Figure 1: Campus Map**



## TRANSPORTATION CONFORMITY

Coppin State University is located in the City of Baltimore which is in the Baltimore, MD Fine Particulate Matter (PM<sub>2.5</sub>) nonattainment area. This area was designated as nonattainment for PM<sub>2.5</sub> on January 5, 2005 by the US Environmental Protection Agency (EPA). This designation became effective on April 5, 2005, 90 days after EPA's published action in the Federal Register.

Transportation conformity for the PM<sub>2.5</sub> standards applied on April 5, 2006, after the one-year grace period provided by the Clean Air Act.

On March 10, 2006, EPA issued amendments to the Transportation Conformity Rule to address localized impacts of particulate matter: "PM<sub>2.5</sub> and PM<sub>10</sub> Hot-Spot Analyses in Project-level Transportation Conformity Determinations for the New PM<sub>2.5</sub> and Existing PM<sub>10</sub> National Ambient Air Quality Standards" (71 F 12468). These rule amendments require the assessment of localized air quality impacts of Federally-funded or approved transportation projects in PM<sub>10</sub> and PM<sub>2.5</sub> nonattainment and maintenance areas deemed to be *projects of air quality concern*<sup>1</sup>.

Projects that require hotspot analysis for PM<sub>2.5</sub> are those that are *Projects of Air Quality Concern* as enumerated in 40 CFR 93.123(b)(1):

- (i) *New highway projects that have a significant number of diesel vehicles, and expanded projects that have a significant increase in the number of diesel vehicles;*
- (ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;*
- (iii) *New bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location;*
- (iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*
- (v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>10</sub> or PM<sub>2.5</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violations.*

As discussed in the examples of the preamble to the March 10, 2006 Final Rule for PM<sub>2.5</sub> and PM<sub>10</sub> Hot-Spot Analyses in Project-Level Transportation Conformity Determinations (71 FR 12491), for projects involving the expansion of an existing highway, 40 CFR 93.123(b)(1)(i) has been interpreted as applying only to projects that would involve a significant increase in the number of diesel transit buses and diesel trucks on the existing facility.

---

<sup>1</sup> Criteria for identifying *projects of air quality concern* is described in 40 CFR 93.123(b)(1), as amended.

## Conformity Determination

The following analysis has been prepared on behalf of Coppin State University.

- The proposed parking garage is not anticipated to add any additional traffic, especially diesel vehicles, over no-build conditions. It will serve those attending University activities, many of whom currently search for places to park in the surrounding community.
- Coppin State University Parking Garage Project does not meet any of the criteria set forth in 40 CFR 93.123(b)(1), as amended, to be considered a project of “air quality concern”. The project consists of construction of a multi-level parking garage at the location of a surface parking lot. It is not expected to increase travel on local streets or create any local congestion.
- Based on recent traffic studies performed by the University, local roadways and intersections will continue to operate well below capacity, many at Level-of-Service A, well beyond the time of the proposed construction of the parking garage.
- Those traffic studies indicate that West North Avenue has Average Daily Traffic (ADT) of approximately 12,000 vehicles per day (vpd) with peak hour volumes of approximately 1,000 to 1,300 vehicles per hour (vph). The nearby main entrance to the campus, opposite Thomas Avenue, has an ADT of approximately 6,000 vpd with peak hour volumes under 500 vph. Although there might be slight changes in travel patterns, the project is not expected to change the number of trips to the campus.
- The University’s traffic studies did not include vehicle classification data. However, Baltimore Metropolitan Council (BMC) data for similar streets in this portion of the city have been reviewed. Light-duty vehicles are dominant with a small portion (1% to 3%) of heavy trucks (3 or more axle vehicles). It is expected that the garage would be designed to accommodate light-duty vehicles.
- These traffic volumes and percentages of trucks are well below the EPA examples of “significant” ADT of 125,000 vpd and 8% diesel trucks.
- The garage will be used by people attending activities at the University. Specifically, it will not serve as a park-and-ride facility with diesel bus service.
- The construction of the proposed garage is currently planned for two phases. While the second phase is dependent on funding which has not been secured, it is expected that the work will be completed within five years. Actual construction activities will be much shorter in duration.

- Conformity means that the transportation activity will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards (NAAQS). Based on review and analysis of the traffic data, it has been determined that the Coppin State University Parking Garage Project meets the requirements set forth in 40 CFR 93.109 for conformity.
- Section 176(c) of the Clean Air Act and the Federal Conformity Rule require that transportation plans and programs conform to the intent of the air quality state implementation plan (SIP) through a regional emissions analysis in PM<sub>2.5</sub> nonattainment areas. The Baltimore Regional Transportation Board (BRTB) serves as the Metropolitan Planning Organization (MPO), and therefore it is responsible for the regional conformity determination.
- The currently-approved BRTB Constrained Long Rang Transportation Plan (CLRP), referred to as *Transportation Outlook 2035*, and the 2008-2012 Transportation Improvement Program (TIP) have been determined to conform to the requirements of the Clean Air Act Amendments of 1990. The PM<sub>2.5</sub> conformity determination on the CLRP and TIP was adopted on November 27, 2007, and thus, there is a currently conforming transportation plan and TIP accordance with 40 CFR 93.114. Furthermore, the Coppin State University Parking Garage Project is listed as a part of the conforming TIP.
- The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. Conformity to the requirements of the Clean Air Act Amendments of 1990 means that the transportation activity will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS.
- Based on review and analysis as discussed above, it is determined that the Coppin State University Parking Garage Project meets the Clean Air Act and 40 CFR 93.109 requirements for particulate matter. These requirements are met without a hot-spot analysis because the project **has not been found to be a project of air quality concern** as defined under 40 CFR 93.123(b)(1). The project will not cause or contribute to a new violation of the PM<sub>2.5</sub> NAAQS, or increase the frequency or severity of an existing violation.

## REFERENCES

40 CFR 93. *Determining Conformity of Federal Actions to State or Federal Implementation Plans*, 7-1-08 Edition.

Environmental Protection Agency and Federal Highway Administration. *Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas*, March 29, 2006.

Federal Highway Administration. *Clarification to the 2006 Joint EPA/FHWA Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas*, June 12, 2009.