Request For Qualifications: The Central Avenue Rapid Transit Project

Category Engineering Services:

Preliminary Design with an option for Detailed design for a Bus Rapid Transit (BRT) System for the Central Avenue Corridor in Westchester County, New York. The BRT design effort shall be focused on four specific components: 1) Transit Signal Priority (TSP); 2) Queue Jumps; 3) Bus Lanes; and, 4) Left Turn Lanes, where appropriate along the corridor, as indicated in previous studies.

Description:

Notice is hereby given that the County of Westchester is seeking to retain a multi-disciplinary engineering firm to provide preliminary design services (Phase P) with an option for detailed design services (Phase D) for a federally funded project to design and implement a Bus Rapid Transit (BRT) System, incorporating Transit Signal Priority, Queue Jumps, Bus Lanes and Left Turn lanes along the Central Avenue Corridor in Westchester County.

Introduction

In 2009, the Westchester County Department of Transportation completed a study to determine the feasibility of Bus Rapid Transit (BRT) in the Central Avenue Corridor. A copy of the study may be found at: http://www.westchestergov.com/dpw/pdfs/other09/CentralAvenueBRTFinalReport.pdf

Several components of BRT were analyzed and it was determined that as part of an integrated set of improvements, each of them would contribute to achieving the County’s objectives of reducing travel times, attracting new riders, improving corridor mobility and creating an integrated and customer-friendly transit service.

Three components of BRT that were analyzed included 1) transit signal priority (TSP), which is a strategy that provides preferential signal timing to buses once a bus is detected approaching an intersection; and 2) bus lanes and 3) queue jumps. Left turn lanes were also recommended in the corridor at two locations in order to improve traffic flow.

Background

Central Avenue is one of Westchester County’s most prominent commercial corridors, running through the City of White Plains, the Town of Greenburgh and the City of Yonkers. The Central Avenue bus corridor extends approximately 14 miles from South Main Street/Broadway in downtown White Plains, to the Bedford Park Boulevard subway station in the Bronx, where connections can be made to the MTA New York City Transit (NYCT) #4, B and D subway routes. Three Bee-Line routes currently serve the corridor – the local 20 service, 21 express (operates northbound morning peak and southbound evening peak), and BxM4C, an express coach service to New York City.

Central Avenue is one of the most heavily traveled bus corridors in Westchester County, with approximately 12,000 daily weekday riders. Between 2003 and 2007, ridership increased by 23% on the Route 20 and 11% on the Route 21. This was largely due to the introduction of MetroCard as a fare payment option for the Bee-Line system and its associated fare discounts and free transfers, the expansion of the Cross County Shopping Center, new development in White Plains and new entertainment destinations such as Empire City at Yonkers Raceway. As a result of growing ridership demand, bus travel times in the corridor have increased.

Increasing ridership demand and longer bus travel times led Westchester County to explore the potential for Bus Rapid Transit in the Central Avenue Corridor.
Transit Signal Priority

There are approximately 64 intersections from Water Street and North Lexington Avenue in White Plains, to McLean Avenue in Yonkers. Signals in the Bronx are under the jurisdiction of the New York City Department of Transportation and are not part of this effort, though TSP capability would benefit Bee-Line service in the Bronx. Transit signal priority is recommended at most intersections, though at some the benefits would be limited due to cross street traffic demands or split north/south phasing. A table, “Summary of Potential BRT Preferential Treatments,” which may be found at: [http://www.westchestergov.com/dpw/pdfs/other09/CentralAvenueBRTSummaryofApplicationofPotentialBRTPreferentialTreatments.pdf](http://www.westchestergov.com/dpw/pdfs/other09/CentralAvenueBRTSummaryofApplicationofPotentialBRTPreferentialTreatments.pdf) summarizes the preferred BRT treatment at each location, and indicates whether the BRT stop is near side or far side.

The recommendation from the Central Avenue BRT study is to have a radio based wireless lan system that leverages off the ACS AVL communication system installed on the Bee-Line fleet. However, a simpler Opticom system or approach using similar technology could be considered, understanding that it might not be possible to accommodate all of the TSP elements listed below. The system must integrate with the three separate signaling jurisdictions using different controller and central systems software. The ease of implementation must also be considered. It would be undesirable to have a system which would require extensive changes to the signal systems used by any of the signal jurisdictions.

Proposers should detail how the TSP system could incorporate the following elements:

- Accommodate schedule and headway based dispatching
- Accommodate near sided stops
- Consider cross street traffic (or limit the length of green extension/early green)
- Check in/check out capability
- Accommodate queue jumps
- Function corridor wide (White Plains, Greenburgh, Yonkers)

Dedicated Bus Lanes

The major section of the corridor where a dedicated lane is recommended is a two mile segment from the Yonkers/Greenburgh border (Fountain Lane), south to Sadore Lane. Based on an analysis of parking impacts, implementation would begin in the northernmost section of the segment, closest to the Greenburgh town line. An additional segment between Cowles and Clark Streets on the southbound side of Central Avenue was also identified as a potential bus lane. In White Plains, a bus lane was recommended on Martine Avenue from South Broadway Court Street.

A parking utilization survey was performed in June 2008 at locations throughout the corridor where parking removal was proposed to accommodate either a bus lane or queue jumps. Further parking analysis was performed for the Yonkers bus lane segments in April 2010. The “Central Park Avenue BRT Study Parking Utilization Survey” and “Yonkers BRT Parking Impact Analysis” may be found at:


Queue Jumps

The Central Avenue BRT Assessment Study recommended queue jumps at five intersections [Harvard Drive, Hartsdale Avenue, Ardsley Road (southbound only) Clark Street (northbound only) and McLean Avenue (southbound only)]. It is anticipated that only one of the identified locations (Ardsley Road southbound) would require property acquisition.

Left Turn Lanes

Left turn lanes are recommended northbound at Marion Avenue and at the Hartsdale Post Office to improve traffic flow.
Preliminary design will include but not be limited to preparation of the design approval document (identifying, assessing, and selecting feasible design alternative and describing its associated impacts), environmental documentation as may be required for NEPA and SEQR, public outreach and community involvement, topographic and right-of-way survey and mapping, and evaluation of cost and environmental factors, preliminary plans as well as preparation, attendance and participation at public informational meetings. It is anticipated that the completion of a “full” Design report will be required.

Detailed design shall include but not be limited to preparing final plans and specifications, final cost estimates and Maintenance and Protection of Traffic plans. The selected consultant shall act as the County’s agent in connection with the County’s responsibility for complying with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity and prepare any related documentation as required and be responsible for obtaining all other necessary permits from regulatory agencies. The design shall be in accordance with all Federal, State, County and local codes and regulations.

In addition to all the other requirements, the Consultant recognizes and understands that it is an essential element of the work that the Consultant ensures that any work it does, including but not limited to any plans, specifications, drawings, designs, management and advice, complies with the County’s policy of Best Management Practices for Water Quality Protection. Therefore, the Consultant shall, at a minimum, incorporate the New York State Department of Environmental Conservation (hereinafter “NYSDEC”) technical standards for erosion and sediment control contained in the document, New York Standards and Specifications for Erosion and Sediment Control, as the same may be amended from time to time. In addition, the Consultant shall incorporate for the design of water quality and water quality controls (post-construction stormwater control practices), the NYSDEC standards detailed in the New York State Stormwater Management Design Manual, as the same may be amended from time to time. Both documents should be obtained from the NYSDEC website to ensure that the Consultant has the latest versions of such documents. In addition, the Consultant shall apply these standards to ALL work done for the County, regardless of the size of the project. For example, if the State standards applies only to projects of 1 acre or greater and the County’s project is less than one acre, then the Consultant shall utilize the State standard for the larger project. To the extent that there is any conflict between the County standards and the standards required by any other regulatory agency, the Consultant shall utilize the stricter standard. The Consultant shall determine if the project shall require any permits from regulatory agencies, including, but not limited to, permits that concern stormwater management. To the extent that the services rendered by the Consultant involve design of the project and to the extent that any permits are required for the project, the Consultant shall complete the permit application and prepare the necessary information required by the permitting agency, including, but not limited to, the preparation of a Stormwater Pollution Prevention Plan.

Site Visit

Proposers are free to examine the project site during normal working hours prior to the proposal due date.

Consultant Selection

Firms are invited to prepare a detailed their approach to TSP, bus lanes, queue jumps and left turn lanes. The approach should include an order of magnitude cost estimate of implementing the system. The County of Westchester will select the most highly qualified firm according with the following criteria, listed in order of decreasing importance:

1. Demonstrated understanding of the project
2. Approach, schedule and ease of implementation
3. Experience with similar kinds of projects and/or work
4. Quality of staff for work to be done
5. Familiarity with the procedures for Federal Aid Projects
6. Logistics and familiarity with the project area.
Interested firms should submit eight copies of their Expression-of-Interest (EOI) to the address below, no later than 4:00 pm on **Thursday May 20, 2010**. An EOI shall be composed of an (SF) 330 for the prime and all proposed sub-consultants. Instructions provided for completing the form must be followed.

Special Project Requirements: The selection and retention of a consultant will be contingent upon the availability of the proposed key staff, unless substitutes are approved by the County during negotiations. The top ranked firms may be requested to prepare and give oral presentations before the County selection committee.

Disadvantage Business Enterprises (DBE) are encouraged to submit proposals in response to this solicitation. Other proposers are encouraged to submit DBE sub-consultants where appropriate.

Designated firms must submit proof of authority to practice engineering/land surveying in NYS immediately upon designation.

Subconsultants, Subcontracting and/or joint ventures are permitted.

Minority Sub-Contracting Goal: 3%
Women Owned Sub-Contracting Goal: NA%

Proposal Due: 5/20/2010 4:00 PM
Contract Term: 7/2010 to 7/2011

Location: Westchester County, New York

Contact 1: Naomi Klein
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Submit to: Anthony LaCroce, PE
Director of Capital Projects
County of Westchester
Department of Public Works
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