MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue Silver Spring, Maryland 20910-3760 301-495-4500, www.mncppc.org

MCPB ITEM NO. 10 4-27-06

April 13, 2006

MEMORANDUM

TO:

Montgomery County Planning Board

VIA:

Jeffrey Zyontz. Chief

Countywide Planning Division

Richard C. Hawthorne, Chief Transportation Planning

Glenn Kreger, Team Leader

Color Ck

Community-Based Planning

FROM:

Larry Cole: 301-495-4528, for the Park and Planning Department $\angle C$

PROJECT:

New Hampshire Avenue (MD 650)/Holton Lane to Merrimac Drive and

University Boulevard (MD 193)/Lebanon Street to 14th Avenue and

Takoma/Langley Park Transit Center

Contract No. MO 3335184

REVIEW TYPE:

Mandatory Referral No. 04817-SHA-1

APPLICANT:

Maryland State Highway Administration

APPLYING FOR:

Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: Silver Spring/Takoma Park

RECOMMENDATION: Approval with comments to the State Highway Administration (SHA).

Staff recommends that the Board approve the proposed project (see Attachment 1: Location Map) with the following comments to SHA:

- 1. We support the construction of the Takoma/Langley Park Transit Center as an important component in the transportation system of Montgomery and Prince George's Counties.
- 2. We support the construction of four-foot-high ornamental fences in the medians of New Hampshire Avenue and University Boulevard to guide pedestrians to safe crossing locations.
- 3. The bus stops within the transit center site should be under one roof or should be connected in a way that creates an identifiable local landmark. The landscaping used for the transit center should be extended along both State highways to connect the commercial area to the transit center visually and to connect both counties seamlessly at this important intersection.
- 4. The curblines that are constructed as part of this project should provide on-road bicycle accommodation along MD 650 and MD 193 wherever possible. Consider shifting the footprint of the transit center to the northwest to provide the necessary additional space in the roadway right-of-way along the frontage of both State highways.
- 5. Provide median pedestrian refuges where possible within the project limits by bulbing out the median where necessary.
- 6. Provide a striped crosswalk with a wide pedestrian refuge on the east leg of MD 193 at Lebanon Street. Bump out the curb on the south side of University Boulevard between Lebanon Street and Anne Street, and do not construct the proposed westbound left turn bay at this intersection.
- 7. Move utility poles as needed to meet the requirements of the Americans for Disabilities Act (ADA) for a Pedestrian Accessible Route along sidewalks within the project limits.
- 8. Provide ten-foot-wide, shared-use paths wherever practicable within the limits of this project, including along the south side of MD193 west of the MD 650 intersection, and along the west side of MD 650, south of the intersection. Provide street trees between the relocated/widened sidewalks and the curb where possible.
- 9. At the remaining Langley Park Center frontage along MD 193, widen the sidewalk to eight feet and provide a two-foot-wide brick panel between the sidewalk and the curb. Provide additional pedestrian storage area on the west side of the transit center driveway on MD 193 by removing one additional parking space. Construct the proposed sidewalks behind the handicap ramps.
- 10. Provide eight-foot-wide handicap ramps along MD 650 and MD 193 to accommodate off-road bike traffic.
- 11. Plant additional street trees along both sides of MD 193 between Edwards Place and 14th Avenue, and along the MD 650 frontage of Langley Park Plaza.

- 12. Provide a fourteen-foot-wide, shared-use path between the retaining wall and the curb at the free-right lane in the southwest quadrant of the MD 650/MD 193 intersection.
- 13. Provide lighting at the levels recommended by the Illuminating Engineering Society of North America (IESNA) to ensure that all sidewalks, bikeways, crosswalks, and the transit center are sufficiently lighted to ensure safety.
- 14. Provide landscaping, bi-lingual informational signage, and way-finding signage on the perimeter of the proposed transit center to reduce pedestrian traffic passing through the site to other destinations.
- 15. Construct the proposed sidewalk in the northwest quadrant of the MD 650/MD 193 intersection behind the proposed handicap ramp and provide plant material between the sidewalk and curb.
- 16. Provide plant materials where possible on the three largest traffic islands at the MD 650/MD 193 intersections, in the landscape panels along the frontage of Langley Park Plaza, and at the back of the sidewalk in the southeast quadrant of the intersection to buffer the sidewalk from the adjacent parking lot. Other opportunities to provide additional landscaping in the right-of-way should be considered.
- 17. Reconsider the location of the easternmost bus stop on MD 193 at the transit center. If constructed as designed, monitor the stop to ensure that it operates well, and safely.
- 18. Provide ten bike racks on the transit center site in a visible, secure location.

PREVIOUS BOARD ACTION AND BACKGROUND:

This project began with the proposed median fencing at the intersection of MD 650 and MD 193. Due to disagreements about the original design, and changes in the funding and length of the project, it was placed on hold for more than a year.

The resurfacing of MD 193 between the western project limit of the subject site and Piney Branch Road (MD 320) was broken out as a separate project and was approved administratively on February 28, 2006. That project is scheduled to begin construction May 1, 2006. As a follow-up to addressing staff concerns, SHA has subsequently performed a study of pedestrian safety and ADA-accessibility issues in regard to pedestrian crossings of University Boulevard to and from bus stops and at tee intersections, including the intersection of MD 193 and Lebanon Street. Although neither of the above projects has been presented as a follow-up to SHA's International Corridor Streetscape Study, which was intended to greatly improve the pedestrian environment and which the Planning Board reviewed on July 18, 2000, they are both within the limits of that study.

The Takoma Park Master Plan (December 2000) calls for a transit center at the Hampshire Langley Shopping Center in the southwest quadrant of the MD 650/MD 193 intersection. The construction of a transit center at this location was studied by Montgomery County Department of Public Works and Transportation, and the Board reviewed and approved this location several years ago, but the effort was abandoned after negotiations on property acquisition fell through. Staff provided an update on the current transit center proposal at the Langley Park Center in the northwest quadrant of the MD 650/MD 193 intersection, in a memo to the Planning Board in October 2005. The Montgomery County Executive has included \$2.5 million (50% of the local match – the balance allocated to Prince George's County) of the \$12.31 million project total cost in the FY07–12 CIP. The Council's Transportation and Environment Committee, in their meeting held on February 13, 2006, concurred with the Executive's recommendation for funding.

The Takoma/Langley Park Transit Center was added to the project late last year with a very quick time frame to start construction. The project is now scheduled to be advertised for construction in June 2006. During the final preparation of this memo, staff learned that the owner of the Langley Park Center has come to an agreement with SHA to discuss a possible redesign of the transit center on this site. The shopping center owners have hired a design team and will meet with SHA's staff at least three times over the next few weeks to see if a design that is more mutually agreeable can be achieved. The Board's guidance will be useful in guiding either design since the transit center's functional program would not be changed.

The Takoma Park Master Plan states, "Inter-jurisdictional coordination is needed to help insure long-range transit serviceability." Community Based Planning staff continue to coordinate with their counterparts in Prince George's County through the Bi-County Planning Group. A joint Takoma/Langley Sector Plan effort with Prince George's County is expected to begin "preplanning" in 2006.

The Takoma Park City Council has approved a resolution supporting the project, which is shown as Attachment 2.

PROJECT DESCRIPTION

The project limits are along New Hampshire Avenue (MD 650) from Holton Lane to Merrimac Drive and along University Boulevard (MD 193) from Lebanon Street to 14th Avenue. The transit center would be located in the northwest quadrant of the MD 650/MD 193 intersection. The Prince George's County Line runs along the centerline of University Boulevard. The entire Montgomery County portion of the project (south of the centerline of MD 193) lies within the City of Takoma Park.

Roadway Work

A second left-turn lane from northbound New Hampshire Avenue to westbound University Boulevard would be constructed.

The existing easternmost driveway of the Langley Park Center on University Boulevard would be closed to shopping center traffic and would become the transit center driveway (see Attachment 3). Shopping center traffic to and from westbound University Boulevard would be right-in/right-out at the westernmost driveway. Traffic from eastbound University Boulevard to the shopping center would be via a new left turn bay in the median. Left turns from the shopping center to eastbound University Boulevard would not be accommodated directly, but access to eastbound University Boulevard would be accommodated via U-turns in a new left-turn bay in the median at Lebanon Street.

The medians of University Boulevard and New Hampshire Avenue would be rebuilt as monolithic concrete medians topped with four-foot-high decorative metal fences for a distance of about 800 to 1,000 feet in each quadrant of the intersection.

Existing sidewalks in disrepair would generally be replaced in-kind, including those that are five-feet-wide adjacent to the curb. About 350 feet of five-foot-wide new sidewalk would be constructed along the south side of University Boulevard just east of the MD 193/MD 650 intersection where none now exist. The existing sidewalks around the immediate perimeter of the transit center site would be replaced with ten-foot-wide sidewalks, with additional space at bus stops.

Most of the roadway curb within the project limits would be replaced and the roadway would be resurfaced.

Transit Center

The Takoma/Langley Park Transit Center would consolidate eight existing bus stops in the immediate vicinity of the MD 650/MD 193 intersection and would consist of the following features:

- Seven covered bus bays within the transit center site in the northwest quadrant of the MD 650/MD 193 intersection;
- Three on-street bus bays along the transit center frontage on westbound University Boulevard (MD 193);
- Two on-street bus bays along the transit center frontage on southbound New Hampshire Avenue (MD 650);
- One-way (counter-clockwise) bus circulation within the site passenger boarding and alighting area;
- Bus access and egress from both University Boulevard and New Hampshire Avenue.
- The layout would accommodate an Operator/Supervisor office and restroom facilities for bus drivers that would be constructed under a separate contract administered by the Mass Transit Administration.

SCOPE OF REVIEW

The staff analysis below does not include New Hampshire Avenue north of the Langley Park Center driveway, which will be used as one of the two transit center entrances, since this segment is in Prince George's County and does not have a direct Montgomery County interest. While the proposed transit center location is also in Prince George's County, Montgomery County is expected to contribute \$2.5 million to its construction and its potential impact on the City of Takoma Park would be significant. Prince George's County Planning staff have told SHA that they will not be reviewing this project as a Mandatory Referral. All other portions of the project are included in this staff analysis.

STAFF ANALYSIS

Staff believes that this project is underscoped as it is currently proposed. The project began as an effort to reduce the high number of uncontrolled mid-block crossings by pedestrians to improve safety in this busy commercial area by means of installing fences in the medians. A large proportion of the County's pedestrian fatalities in the last several years have occurred in the Takoma/Langley Crossroads area, specifically along the two major State highways, University Boulevard (MD 193) and New Hampshire Avenue (MD 650). The transit center was a later addition to the project.

Staff's view is that the proposed project as a whole would remake the MD193/MD650 intersection and its immediate surroundings, but does not do very much to improve the environment for pedestrians or bicyclists. Staff supports the provision of median barriers as the best way to deter potentially hazardous mid-block pedestrian crossings in this area, but we disagree with the idea that stopping errant pedestrian movements is all that is necessary. We also need to improve the safety and comfort of pedestrians and bicyclists while they are behaving appropriately on both MD 650 and MD 193.

Since most of the roadway curbs would be replaced by this project, it is very unlikely that SHA is going to come back with a major project any time in the near future to change them. That will likely only occur if the Bi-County Transitway is built. Staff believes therefore that it is very important that this project accomplishes whatever we can reasonably do now to improve the pedestrian and bicyclist environment.

Roadway Project

Pedestrian Accommodation

General Sidewalk Improvements

The proposed transit center would make transfers between bus routes more convenient. However, only minimal improvements would be provided along the sidewalks leading to the transit center, even though some of the bus stops in the area would be moved from their current locations to the transit center. As a result, some transit patrons who are not transferring between buses would have to walk a longer distance to get to the transit center along sidewalks that are marginal at best.

The Takoma Park Master Plan calls for both on-road and off-road bike accommodation (via eight- to ten-foot-wide shared-use paths) along MD193 and along MD 650 (see Attachment 4). SHA's International Corridor study report also calls for both on-road and off-road bike accommodation along MD193. While the intent of the recommendation to provide wider sidewalks was to provide a facility that could be used for pedestrians and bicyclists along the length of MD 193 and MD 650, the wider sidewalk is especially needed in the first couple of blocks around the intersection because of the high level of pedestrian activity alone. SHA has not presented this project as a follow-up to the International Corridor Study, but staff believes that it should implement that study's recommendations, as well as those of the Master Plan.

SHA currently has a draft set of Bicycle and Pedestrian Design Guidelines under review. These guidelines call for a minimum sidewalk width of ten feet separated from the curb by a landscape panel of eight to ten feet where the average daily traffic (ADT) is greater than 15,000 vehicles per day. The ADT on both MD 650 and MD 193 is between 35,000 and 40,000 vehicles per day. SHA's draft guidelines are consistent with the Master Plan recommendations and staff believes that this project should implement those recommendations wherever possible.

The proposed project would confine pedestrians to cross only at signalized intersections, but those intersections would not be improved for pedestrians and one marked crosswalk may be eliminated.

Another staff concern is that SHA wants to eliminate pedestrian refuges that are only four feet wide (less than the preferred six-foot width) because they cannot easily fit an adult pushing a stroller and therefore one or the other would stick out into the roadway. While staff agrees that a six-foot-wide median is better than one that is four feet wide, staff questions whether having no refuge at all is the better choice. As the plans now stand, the existing pedestrian refuge at the proposed transit center driveway on MD 193 would be eliminated because it is only four feet wide. Staff believes that the great concentration of pedestrians at this location requires better accommodation. Staff recommends that four-foot-wide medians be "bulbed out" at the intersections so that pedestrian refuges can be provided where feasible, minimally narrowing the adjacent roadway.

Since all of the sidewalks along MD 650 and MD 193 are intended to accommodate bike traffic, staff recommends that the handicap ramps installed under this project be eight feet wide.

At University Boulevard and Lebanon Street

A well-used, marked mid-block crosswalk with a wide pedestrian refuge on the west leg of MD193 between two shopping centers would be removed and replaced by a left-turn bay for eastbound MD 193 traffic to the Langley Park Center. Pedestrians would be directed to an existing signalized crosswalk 250 feet to the east, where the new transit center would be located, but the median refuge at the latter would also be removed. No crosswalk would be provided at Lebanon Street, an important neighborhood connector. This would leave a one-third-mile distance between the transit center crosswalk and the nearest marked crosswalk to the west at the Carroll Avenue intersection, since there are no marked crosswalks at the unsignalized Merrimac Drive intersection, a quarter-mile away. The general rule-of-thumb however, is that pedestrians will not walk more than 300 feet out of their way to get to a crosswalk.

SHA has demonstrated their concern about pedestrian safety by initiating this project to construct the proposed median fences and by the many other pedestrian safety improvements already implemented nearby, but staff believes that not enough is being done at unsignalized intersections where pedestrians are legally allowed to, and supposed to cross.

Staff believes that the unmarked crosswalk at Lebanon Street needs to be marked and improved. SHA has proposed that the wide median on the east leg of the intersection, which would be the best place for pedestrians to cross, be modified to include a left-turn bay to allow U-turns for traffic from the Langley Park Center whose direct left-turn access directly onto eastbound University Boulevard would be removed because of the new transit center driveway. This traffic does have the option however, of using the New Hampshire Avenue driveway to continue east on University if that is their destination. Drivers also have the option of making this turn at Merrimac Drive, a longer route but one that is much easier for drivers than for pedestrians to traverse.

Staff recommends that the curb on the south side of University Boulevard between Lebanon Street and Anne Street be bumped out and that the proposed median narrowing not be done so that a wide pedestrian refuge can be provided (see Attachment 5). The narrow median separating the service road from the mainline of MD 193 would have to be pulled back to accommodate the bumpout.

Along University Boulevard Between Lebanon Street and New Hampshire Avenue

South Side

The frontage of the Hampshire Langley Shopping Center on the south side of MD 193 has thirty feet of space between the roadway curb and the parking lot curb (see Attachment 6). While the existing sidewalk is actually better than many in the area since it has a narrow greenspace separating it from the roadway curb, it is only four feet wide. Staff believes that this project should take advantage of the opportunity to provide the ten-foot-wide, shared-use path, landscape panel with street trees, and on-road bike accommodation called for in the Master Plan. As only eight feet of this thirty-foot space is currently public right-of-way, additional right-of-way would need to be purchased or a right-of-entry or access agreement would be needed to construct these improvements. It would be a wasted opportunity not to provide the ultimate improvement at this time, since the curb along the whole frontage of this property is proposed to be replaced; the utility poles are behind the sidewalk and should not need to be moved to provide space for bikes in the roadway; and no change to the adjacent parking lot would be needed.

North Side

On the north side of MD 193 in this segment, the western edge of the proposed transit center driveway would have a very cramped pedestrian access. Pedestrians crossing MD 193 would have to use the handicap ramp on the north side without a level landing space at the top and then make a 90-degree turn to get to the ramp to cross the driveway and enter the transit center. (see Attachment 6). While the proposed ten-foot-wide sidewalk would be the widest in this area, staff believes that more room is needed to facilitate pedestrian movements and to allow room for people to wait for the signal to cross the driveway. Staff recommends that one additional parking space be removed and that the sidewalk be expanded into this area. Also, the

sidewalk leading to the handicap ramps across the transit center driveway should be constructed behind the ramps, rather than through them. The recommended treatment would not only meet ADA Best Practices but would better control pedestrian movement across the driveway.

The Langley Park Center would be heavily impacted by the proposed construction of the transit center, both in the land that would be taken and in the elimination of access to eastbound MD 193. The existing sidewalk is four feet wide and is separated from the curb by a six-foot-wide greenspace. Four- to six-inch diameter trees exist at the back of the sidewalk. Since there is so little landscaping in this area, staff is reluctant to recommend removing the trees to get a wider sidewalk. We recommend instead that the sidewalk be widened to eight feet toward the curb, and that a two-foot-wide brick panel be installed at the curbline to provide a visual separation from the roadway in an area that is already very busy with pedestrian shoppers and will become more so with the advent of the transit center. The ultimate improvement, a wide sidewalk with a landscape panel with street trees and a landscaped buffer at the back of sidewalk, will most likely have to wait for a redevelopment of the shopping center.

At the University Boulevard/New Hampshire Avenue Intersection

The free-right-turn lane from eastbound MD 193 to southbound MD 650 would be modified to force vehicles to make a sharper turn as they enter MD 650, thereby forcing slower operating speeds. While the traffic island is very large, the sidewalk adjacent to the retaining wall at the Hampshire Langley Shopping Center is very narrow (only four feet at its narrowest point), making for an awkward transition for pedestrians going between the stairs to the shopping center and the handicap ramp to cross to the island. Staff recommends that the free-right lane be shifted or re-oriented to accommodate a wide shared-use path between the retaining wall and the curb (see Attachment 7). A fourteen-foot-wide, shared-use path would meet the Master Plan recommendation, as well as meet the American Association of State Highway and Transportation Officials' guidance to have an additional two feet width of sidewalk wherever it is constrained by being adjacent to a curb or retaining wall.

An additional northbound left-turn lane is proposed on the south leg of MD 650 at MD193. The width of the roadway would not increase but instead the lanes would be narrowed. Narrower-than-usual lane widths are being used at this intersection because of a desire to minimize impacts on adjacent property. While twelve feet is normally used as the standard travel lane width, eleven feet is being used much more frequently in urban areas such as this. At this intersection, the proposed lane widths are generally between ten and eleven feet, but also are as narrow as nine feet.

In the southeast quadrant of the intersection, the eastbound roadway of MD 193 would be narrowed by six feet to widen the sidewalk immediately at the intersection, and to provide a 350-foot length of sidewalk where none now exists. Pedestrians in this area currently walk through the shopping center parking lot and along the storefronts because of the lack of pedestrian facilities along the roadway. *This will provide a significant pedestrian benefit at this location*.

In the northwest quadrant of the intersection, adjacent to the transit center, staff recommends that the sidewalk be pulled back from the curb so that it is behind the proposed

handicap ramp. The staff-recommended location would help encourage pedestrians to cross only at the marked crosswalk and would provide an additional location for landscaping closer to the roadway.

Along New Hampshire Avenue South of the University Boulevard Intersection

West Side

Along most of the frontage of the Hampshire Langley Shopping Center on the west side of MD 650, there is sufficient space to construct a ten-foot-wide, shared-use path, landscape panel with street trees, and on-road bike accommodation as recommended in the Master Plan without impacting the parking lot. Additional right-of-way or an easement would be required, as with the shopping center's MD 193 frontage, and several utility pole relocations would also be required. In addition to the high cost of relocating the poles, it is highly unlikely that the design work needed to accomplish this could be done without greatly impacting the project schedule. Therefore, staff recommends that a ten-foot-wide, shared-use path be constructed with street trees in a landscape panel that is wide enough to accept a future relocation of the curb that would accommodate on-road bicycling without adversely impacting the trees.

East Side

The sidewalk along the east side of MD 650 would be eight feet wide, bordered on one side by the roadway curb and on the other by the parking lot curb, presenting a somewhat uncomfortable environment for pedestrians. It appears however, that the ultimate recommended accommodation could only be provided by either an expensive follow-up to this project that would require the taking of right-of-way and many parking spaces at the Takoma Langley Crossroads Center, or by redevelopment of the commercial properties. The proposed design is likely the best that can be done right now, but there are several utility poles that are in the sidewalk that obstruct the pedestrian space. Staff recommends that SHA check to ensure that the requirements of the Americans for Disabilities Act are being met and that poles be moved if necessary.

Bicyclist Accommodation

Neither off-road (as noted above) nor on-road bike accommodation would be provided as recommended in the Takoma Park Master Plan and the Countywide Bikeways Functional Master Plan (see Attachments 8 and 9). SHA's own bicycle guidelines call for four-foot-wide, on-road bike lanes on every State highway even in the absence of Master Plan guidance but no accommodation would be provided.

There is little existing space for on-road bicyclists in many areas along MD 193. Immediately west of the project limit at Lebanon and Anne Streets however, there are frontage roads along both sides of the road that can be used by bicyclists. The frontage road on the south side extends to Merrimac Drive and the frontage road on the north side extends to Carroll Avenue. On-road bike accommodation was provided in the Carroll Avenue project south of MD 193 that SHA constructed recently.

The Takoma Park Master Plan also recommends that Anne Street be used as an on-road neighborhood bikeway route. Anne Street intersects Carroll Avenue just north of Long Branch Trail, a park facility. Therefore, on-road bike accommodation that is constructed as part of this project along the State highways would directly connect to other portions of the existing bikeway network in Montgomery County and would facilitate bike mobility between these areas and the transit center.

Staff recommends that the proposed curbs along the State highways be built at a location that will accommodate on-road bicyclists as part of this project where possible.

Lighting

Adequate pedestrian lighting of the crosswalks is a critically important safety feature. SHA has not completed the lighting plans for this project yet, but staff recommends that SHA provide lighting that satisfies the recommendations of the IESNA to ensure that all sidewalks, bikeways and crosswalks are as sufficiently and safely lighted as the roadways.

Landscaping/Streetscaping

The only streetscape element along the roadways would be the proposed four-foot-high median fences to prevent mid-block crossings. The fences would be mounted on monolithic concrete medians on all four legs of the MD 193/MD 650 intersection. The width of the median on the east leg of University Boulevard would be six feet. The other three medians would be four feet wide. The top of the proposed fences would be five feet above the curb. All of the monolithic concrete medians would have stamped, colored panels that resemble brick (see Attachment 10).

An earlier design would have had the top of the median ten to twelve inches above the curb, which, in combination with the previously proposed six-foot-high fence, would have made it impossible for anyone on the sidewalks to have an unobstructed view across the street. Staff supports the current median fence design, although we believe that the top of the fence should probably be slightly lower than is now proposed. The design is consistent with the fence installed by the Langley Park Plaza around their parking lot a few years ago. Outside the transit center site, no other landscaping is proposed. While landscaped medians along both major roads are called for in the Master Plan, the medians at the MD 650/MD 193 are too narrow to be landscaped and the provision of fences would pre-empt this possibility. Staff believes that the fencing concept is the right one, but that additional landscaping is greatly needed in an area consisting mostly of large expanses of pavement.

Along both sides of MD 193, between Edwards Place and 14th Avenue, there is a six-foot-wide landscape panel between the sidewalk and curb. Only one street tree exists on the north side of the road. There is also a six-foot-wide landscape panel adjacent along the MD 650 frontage of the Langley Park Plaza. Most of these landscape panels currently consist of bare compacted earth with little or no vegetation and are often nearly indistinguishable from the adjacent concrete sidewalk. Given that the proposed median fences will prevent all or virtually

all mid-block pedestrian crossings and that therefore there will be no reason to cross (and damage) the landscape panels, it will be much easier to retain any material that is planted. Staff recommends that additional street trees and plant materials be planted in these areas. The more pleasant environment that would be created would also encourage pedestrians to stay on the sidewalks.

In addition to planting street trees between the relocated/widened sidewalks and the curb as noted above, plant materials should be provided where possible on the three largest traffic islands at the MD 650/MD 193 intersection. Another potential location would be at the back of the sidewalk in the southeast quadrant of the intersection to buffer the sidewalk from the adjacent parking lot.

Transit Center

The Takoma/Langley Park Transit Center would provide more efficient bus operation in a transit-dependent area of the region by consolidating eight existing bus stops in the immediate vicinity of the intersection, implementing an important goal of the Takoma Park Master Plan. The area is served by 61 buses operating over eleven bus routes (the majority being either Washington Metropolitan Area Transit Authority or Ride-On routes) during weekday peak travel periods.

The project team is working to avoid the introduction of design elements that would conflict with the eventual location of a station (either Light Rail or Bus Rapid Transit) on the Purple Line Transitway alignment at, or near, the intersection. The Bi-County Transitway study currently includes the subject site in the northwest quadrant as the potential transit center site. There is a general acknowledgement among team members, however, that the eventual configuration of a rail station could differ significantly from the layout of a bus terminal designed to meet the existing needs. The focus of the current work is by necessity on how to make the transit center work in the near-term on a site with a limited area and unique shape.

The transit center would be located in Prince George's County in the northwest quadrant of the intersection of University Boulevard and New Hampshire Avenue on a site currently occupied by a Taco Bell restaurant, part of the Langley Park Center. The site is triangular in shape and consists of approximately 50,000 square feet. Staff believes the Maryland Transit Administration (MTA) and its consultant have done an outstanding job of developing a good design for a very challenging parcel. The shape and limited area of the parcel presented a significant constraint and, when combined with the project objective and scope, presented the project team with a limited number of options.

Initially, the MTA and its consultant presented three different conceptual site and circulation plans. The project team ultimately reduced the number to two overall plans. The final plan (see Attachment 3) satisfactorily addresses important aspects of the Transit Center operation and design raised by staff and other members of the project team. Specifically, the design provides for the following:

- Counter-clockwise bus circulation with the bus facing the majority of the pedestrian flow both internal and perimeter.
- Enough bus bays to provide for some expansion of service and to help make the project more cost-effective.
- On-street bus bays to accommodate WMATA regional routes operating in lanes adjacent to the Transit Center.
- Reasonable separation of bus and auto movements at the Transit Center access and egress points.
- Ability to serve with relatively little modification as a planned station in a possible Bus Rapid Transit mode in the eventual implementation of the Bi-County Transitway.

Shelter Options

Three options for patron shelters have been identified:

- Option 1: Individual shelters at each bus stop.
- Option 2: Continuous shelters for each row of bus stops and a shelter for the crosswalk connecting the stops within the transit center site, and the provision of individual shelters for the bus stops that are along MD 650 and MD 193.
- Option 3: One roof for all the bus stops, the operator/supervisor office and restroom facilities for bus drivers within the transit center site, and the provision of individual shelters for the bus stops that are along MD 650 and MD 193.

Option 1 would be the least expensive option, but staff believes that it would not create a facility that is instantly identifiable as a transit center. Given the chaotic jumble of traffic, shopping center signage on all four corners of the intersection, and the skewed intersection itself, staff believes that the transit center needs to be a strong, visible, unifying element and a local landmark that could spur investment in this area. While Option 3 would meet this goal the best, it is also likely to be the most expensive option. Staff recommends that either Option 2 or Option 3 be selected.

Other items to be resolved

There are remaining issues that staff would recommend be addressed as part of the project implementation. These include:

1. In order to provide the recommended off-road bikeways, median pedestrian refuges, and on-road bikeway accommodation on both State highways, it may be necessary to shift the footprint of the transit center to the northwest to allow the roadway right-of-way to be expanded.

- 2. Bi-lingual informational and way-finding signage providing route bus bay locations should be placed on the site perimeter to encourage pedestrian flow around (instead of through) the site. The proposed landscaping should also encourage pedestrian flow around the site perimeter.
- 3. Transit Center lighting that meets all applicable standards is needed.
- 4. It is unclear as to what party or agency will be responsible for the maintenance of the Transit Center. This issue needs to be resolved, and in doing so, be based upon a reasonable allocation of the Transit Center utilization (e.g., bus platform hours or trips and ridership).
- 5. There are three bus stops or loading areas adjacent to the site on westbound University Boulevard. The bus operation at the easternmost location in this lane may need to be reconsidered. The proximity of this stop to the Transit Center entrance could create too much of a conflict with traffic entering and exiting the site. If the decision is to go ahead and build this stop, it should be monitored closely to ensure safety and good operation.
- 6. Ten bike racks should be provided on the transit center site in a visible, secured location.

ENVIRONMENTAL

This project is not within a Special Protection Area or a Primary Management Area. The limits of disturbance do not encroach on wetlands, a floodplain, or a stream valley buffer. There are no steep slopes or erodable soils of concern. There are no forest resources, or significant specimen trees present. Any potential soil contamination from relocated uses should be remediated in accordance with applicable regulations prior to construction.

Stormwater Management

Water quality treatment for approximately 1.09 acres of impervious surface would be provided at the Transit Center by means of a sand filter. Water quality treatment for any additional impervious surface in the roadway would be debited from the Water Quality Bank SHA has established under agreement with the Maryland Department of the Environment.

Forest Conservation

This project is exempt from Forest Conservation because it is a State Government project reviewed for forest conservation by the State Department of Natural Resources under the Code of Maryland Regulations.