

USACE/WHS RESPONSES TO CITY OF ALEXANDRIA STAFF COMMENTS ON BRAC-133 DRAFT TMP

This document summarizes USACE/WHS responses to the City of Alexandria Staff comments addressing the BRAC-133 Draft Transportation Management Plan dated 6/2/10. All comments from the City were reviewed with the City of Alexandria in order to develop coordinated responses from USACE/WHS. The responses below reflect many changes that will be addressed in the final version of the BRAC 133 TMP.

General Comments

1. The US Army did not include many of the transit improvements and TDM strategies recommended by City of Alexandria staff.

- USACE/WHS included transit improvements that were deemed the most feasible and cost-efficient in the short term (see Section 3.3.2, Table 3-2). However, due to recent discussions with the City of Alexandria and the Ad Hoc BRAC Committee, many of the improvements in Section 3.3.2, Table 3-2 are currently being planned. The final TMP will be changed to include the improvements currently being planned.
- The only TDM strategy not included is parking pricing.
- WHS will continue discussions with DASH and WMATA concerning possible route enhancements to support BRAC-133.

2. There are several elements of the TMP which are not as complete as they should be. For example, the section on proposed shuttle routes is preliminary. While City staff understands the shuttle bus plan will need to be revised periodically, a final draft plan should have been included in the TMP.

- The shuttle plan details were not included in the draft TMP due to City and Fairfax County staff requests to discuss the feasibility of service to Van Dorn and Franconia-Springfield Metro Stations.
- The shuttle plan will be included in the final version of the TMP. The details that will be included are:
 - System Service Capacity
 - Number of Buses
 - Headways
 - Routes and Shuttle Destinations (including a Franconia/Springfield Route)
 - Estimated Passengers

3. The TMP does not provide adequate information to feel confident that the proposed TMP will result in 40% reduction in single occupancy vehicle trips.

- Upon discussion with the City, it was determined that lack of confidence in the TMP rested predominantly on the lack of inclusion of the final shuttle plan and transit improvements.
- As the final shuttle plan will be included in the final TMP, as well as some of the agreed upon transit improvements being worked out with the Ad Hoc Committee and the City, USACE/WHS believe these additions will enhance confidence in the TMP.
- USACE/WHS are confident in the abilities of WHS to meet the goals of the TMP due to the DoD shuttle system which will provide robust service with capacity for 40% of the building population, combined with the limited parking availability, and the TDM strategies to be implemented.

4. The TMP will need to be revised if the appropriations bill including the language added by Representative Moran is approved. The language limits the number of parking spaces that could initially be used to 1,000.

- The final TMP will not include language or strategies to address the proposed legislation as it defines a specific set of conditions including 3,747 parking spaces.
- The Army will include language in the transmittal forwarding the TMP that if legislation is passed an interim TMP must and will be developed and that the final TMP will be set aside until the full number of parking spaces is restored.

5. The BRAC TDM does not provide any indication of how people who are not counted in the 6,500 count will get to work. Does this count include contractors? Are people who do building maintenance, food service, or other functions included? If not, how will these people get there? Since these people may not be coming at peak times, we have to figure out how they will get there in order to minimize parking disruptions in neighbor communities. Will these people be able to use DoD shuttles or have the opportunity to obtain a parking permit? Good public transit options for these additional numbers are needed.

- Thirty-one per cent of the building population of 6,409 represents contractor staff; these staff have been included in the analyses presented in the TMP.
- In addition to the 6,409 professional staff, there will be 150 other federal and non-federal employees at BRAC-133 providing a range of support functions, including security, IT, building management, and other service functions.
- Each tenant organization is responsible for their non-federal employees, and all non-federal employees will be expected to follow the same protocol as federal employees. The TMP strategies will also apply to these employees. Each tenant organization will determine whether their contract employees will be eligible for parking permits. These employees will be able to utilize the DoD shuttle, as the system has sufficient capacity to support these employees, even in the off-peak.
- A description clarifying the aforementioned description will be provided in the final TMP.
- Tables and figures will be adjusted to include a discussion of the additional 150 support personnel.

Mode Splits

1. 23% Metro assumption is higher than the assumption used in other studies. The BRAC building is not within walking distance of any Metro Station. City staff believes that the 23% Metro use will not be achieved.

- The TMP does not assume 23% Metrorail ridership – it assumes 23% rail transit ridership (including VRE).
- It should be noted that prior studies assumed 20% Metrorail ridership, so the TMP projects a number which is only 3% higher than previous studies. The key reason for this higher assumption is the extensive shuttle system which will provide capacity for transporting up to 40% of the building population between the building and mass transit centers during peak periods. Prior studies were not aware of the details of the shuttle plan. This extensive shuttle system supports higher rail ridership. In fact, 23% is believed to be conservative given the shuttle system and the current commuting patterns of employees.
- Upon discussions with the City, a major driver behind their assumption that 23% is too high is that studies have indicated that the further a worksite is from rail transit, the lower rail ridership is. However, those studies do not account for extensive connection services (like the DoD shuttle) that provide a link from distant rail transit to the worksite. Again, as the shuttle system will be able to serve 40% of the building population from both Metrorail and VRE, we believe that rail ridership will at a minimum be 23%.

2. The 5% bus transit assumption may not be achievable. The bus transit percentage was estimated assuming that routes providing service within one mile of the BRAC building could be considered as providing transit service to the site. One mile is not the proper standard. One-quarter mile or at most one-half mile should have been used for estimating bus transit usage. Most transit related studies show that 1000 feet (.19 miles) to 2000 feet (.38 miles) is an average distance people are willing to walk to a bus stop. Within the TMP under Pedestrian Access & Facilities, page 27, it states, "the existing pedestrian walkway system adjacent to the Mark Center site is in a poor condition with substandard effective sidewalk widths (4 feet or less) and pavement conditions, discouraging pedestrian mode of travel and posing a threat to pedestrian safety, especially to the disabled pedestrians." With such pedestrian conditions in getting to the site, it would be difficult to assume the 5%.

- The TMP only considered service that serves within ½ mile of BRAC-133. The reason for this confusion lies in Figure 3-5 which displays existing bus routes within 1 mile of the BRAC-133 facility. The final version of the TMP will be modified to only reflect those routes within ½ mile of the site.
- Regarding assumptions about how far commuters will be willing to walk to a bus stop, many studies, including studies from MWCOC show that commuters are willing to walk up to 1 mile, so the assumption that employees would walk less than a ½ mile is a reasonable. Current bus stops on Beauregard and Mark Center Drive, as well as those at Southern Towers, are less than 2000 feet from the BRAC 133 building.
- The Army and the City of Alexandria, continue to discuss implementation of Table 3-2 improvements to bring public transit to the transportation center. The final TMP will be adjusted to include all transit improvements agreed to, which will lessen the walking distance for pedestrians.
- Regarding the pedestrian walkway system on page 27, note that the paragraph that follows these statements describes the proposed sidewalk and pedestrian circulation improvement plan that is being implemented by DoD as part of the off-site roadway improvements, which will improve the conditions of the current walkways (see Figure 3-4).

3. Explain the percentage of those using VRE and the percentage of those using Metrorail to assist in understanding where additional transit links/resources would be helpful.

- Currently only 3% of employees use VRE and 9% use Metrorail as their primary mode of transportation. An additional 3.5% use VRE and 21% use Metrorail on occasion, or in combination with other modes of transportation, as shown in Table 2-3.

4. On page 14, there is a table showing the anticipated mode split based on employee surveys. The anticipated percentages in this table are very different than the anticipated mode splits found on pages ES-2, 13, 17, and 18. Why such a variance / how was the survey on page 14 factored into the mode splits found on ES-2, 13, 17, and 18?

- The word "anticipated" was incorrectly used in the Executive Summary and will be corrected in the final version. The intention throughout the document was to use the term "anticipated" to refer to the survey results, thereby reflecting what employees thought they would do in the future at the new building. The term "projected" was to refer to the projected actual mode split. As discussed in Section 2.3, the projected mode split (shown in pages ES-2, 13, 17, and 18) was determined based on a variety of factors, only one of which is the "anticipated" mode split that employees indicated on the survey. Employee perceptions of expected mode split are not believed to be entirely accurate as many employees were not yet familiar with all modes of access to the site when responding to that early survey. Other inputs used to develop mode split and trip generation were as follows:
 - Employee origin zip codes
 - Modes based on what was viable or feasible for employees based on where they live
 - Regional commute patterns from various sources

- Current mode use of employees and anticipated mode use in the future (WHS 2009 employee survey)
- Sense of how “open” employees were to alternate modes of travel (WHS 2009 employee survey comments)
- Insight into which bus routes and rail lines employees use (WHS 2009 employee survey)

5. How does the general commute pattern as referred to in the Executive Summary compare with the surveyed commute pattern of WHS shown in Table 2-3?

- The statement in the Executive Summary indicating that the mode split was compared against general commute patterns in the region is perhaps too strong. The intent of this statement was to explain that commute patterns in the region were used to help inform the assumptions of mode split.
- The Executive Summary will be revised to clarify this point.

Transit

1. The TMP states that 45% of employees use some form of transit. The large proportion of transit users is primarily related to the proximity of their place of work to Metro stations. Since BRAC is not near a Metro station, the percentage of transit users will be significantly lower.

- The TMP incorrectly states 45% - this number will be changed to “over 58%” to correctly reflect the survey data. Please note that this statistic illustrates the number of employees who **currently** use either Metrorail, VRE, or bus transit for some part of their commute, not necessarily as their primary mode or on a regular basis. This statistic was determined by adding the Metrorail (30.53%), VRE (6.65%), and Bus (21.29%) mode utilization rates in Table 2-1.
- Specifics indicating that the 58% is a combination of transit modes will be included in the final TMP.
- Note that in contrast to the 58% survey results, the mode split as projected for the Mark Center facility is only 28% (23% rail transit/5% local bus transit) as illustrated in Table 2-4.

2. The discussion of local bus transit needs to be more comprehensive.

- We believe that the transit discussion meets the needs of the TMP since the 5% projected ridership should be able to be accommodated via existing local transit service.
- Recent discussions between the Army and the City of Alexandria are intended to implement the recommendations contained in Table 3-2. The final TMP will be adjusted to include all transit improvements agreed to, which will lessen the walking distance for pedestrians.
- WHS will continue discussions with DASH and WMATA concerning possible route enhancements to support BRAC-133.

3. The nearest bus stop for DASH AT1 and AT2 needs to be identified in the section on DASH service.

- Adjustments will be made to the final TMP to show the nearest bus stops. The AT1 and AT2 routes serve Mark Center with a stop along N. Beauregard Street near the intersection of Mark Center Drive. The bus stop on the southbound side of the N. Beauregard and Mark Center Drive intersection is 0.29 miles from BRAC-133 while the bus stop on the northbound side of the N. Beauregard and Mark Center intersection is 0.25 miles from BRAC-133. The other nearby stop is at Southern Towers which is 0.26 miles from BRAC-133.

4. The description of Metrobus service seems to indicate that they are providing direct service to the Mark Center. They are not now, and would require additional subsidy to make local bus service viable. The exact location of the bus stops needs to be clarified.

- The locations of these bus stops will be clarified in the final TMP. Metrobus routes 7A and 7F provide service to Mark Center at a stop on Mark Center Drive near the intersection of Mark Center Drive and Seminary Rd, which is less than 2000 feet from the BRAC 133 towers. Metrobus route 7X (as well as 7A and 7F) also provide direct service to Mark Center with a stop along N. Beauregard Street near the intersection of Mark Center Drive. The bus stop on the southbound side of the N. Beauregard and Mark Center Drive intersection is 0.29 miles from BRAC-133 while the bus stop on the northbound side of the N. Beauregard and Mark Center intersection is 0.25 miles from BRAC-133. Other Metrobus routes (all 7's, 25B, 28A, 28G) serve Southern Towers, which although not directly at Mark Center, is 0.26 miles from BRAC-133.

5. Southern Towers does not equal Mark Center. Under the local transit section, please change the language from "serve Mark Center" to something along the lines as "stops near Mark Center", etc. The only public transit routes that 'serve Mark Center' are WMATA's 7A & 7F routes.

- Adjustment will be made to the final TMP to accommodate the suggested language.

6. Fix Figure 3.5 to add missing bus routes. WMATA service needs to be updated to reflect correct current routes.

- Adjustment will be made to the final TMP to accommodate these routes.
- The transit routes will be verified with the City of Alexandria before inclusion into the final TMP.

7. Discussion in 3.3.2 about using public transit services to serve BRAC is encouraging.

- Thank you.

8. How do they address whether a transit route is diverted into BRAC? How do they address potentially turning deadhead trips into live trips?

- The TMP assumes that the 5% projected ridership can be accommodated via existing local transit service without any changes.
- USACE/WHS are currently in discussions with the City of Alexandria to plan for modifications to routes in the vicinity of the Mark Center to include the new Transportation center, including the conversion of current deadhead trips into revenue trips. Actual details of route changes and procedures will be the responsibility of transit agencies to coordinate.
- WHS will continue discussions with DASH and WMATA concerning possible route enhancements.

9. Will WMATA and DASH buses be extended to BRAC?

- USACE/WHS are currently in discussions with the City of Alexandria and the Ad Hoc BRAC Committee to plan for the route diversions to the transportation center and the reversal of deadhead trips.

10. Map on page A-5 showing bus systems and routes within 1 mile of BRAC-13 facility is incorrect.

- The map was created based on GIS data files provided by both WMATA and the City.
- Adjustments will be made to show correct routes. The transit routes will be verified with the City of Alexandria before inclusion into the final TMP.

11. All of the transit improvements included in Table 3.2 should be included as part of this TMP plan.

- The possible transit improvements listed in Table 3-2 are dependent on WMATA and jurisdictional action; so the TMP cannot rely on all of these potential improvements. The TMP primarily relies on the robust DoD shuttle system as described in Section 3.5.2 that provides frequent service to a number of Metrorail stations.
- Recent discussions between the Army and the City of Alexandria are intended to implement the recommendations contained in Table 3-2. The final TMP will be adjusted to include all transit improvements agreed to. WHS will continue discussions with DASH and WMATA concerning possible route enhancements.

12. The transit program should include:

a. Provide a transit store at the Mark Center Transportation Center

- Currently there is no planned space for a permanent transit store at the Transportation Center. There will be a mobile commuter store present at the facility twice a week (and more often during the first three months of the building being open). The provision of a transit store is a long-term strategy that can be implemented if sufficient demand is demonstrated as stated in Section 5.5.4.

b. Provide funding to DASH and WMATA to increase the frequency of bus routes from King Street and Van Dorn Metro station.

- DoD is evaluating the potential for local and regional service providers to provide part or all of the DoD Mark Center shuttle service. Decisions will be based on efficiency and cost effectiveness. As the result of previous discussion with the City, Van Dorn is not being considered as a shuttle destination. The existing frequency of the Van Dorn Metro Station DASH routes are considered adequate for the projected demand.

c. Provide funding to WMATA and DASH to make modifications to existing routes that currently serve the area within one mile of BRAC-133 to serve the Transportation Center.

- Recent discussions between the Army and the City of Alexandria are intended to implement the recommendations contained in Table 3-2. The final TMP will be adjusted to include all transit improvements agreed to. WHS will continue discussions with DASH and WMATA concerning possible route enhancements. Decisions will be made based on whether efficiency and effectiveness gains can be achieved.

d. Expand the Mark Center Transportation Center to include additional bus bays to accommodate the enhancements listed above.

- As discussed in Section 5.5.4, expanding the Transportation Center is something that will be considered in the future if needed. The capacity of the bus bays are sufficient as according to TCRP Report 100: Transit Capacity and Quality of Service Manual. The current five bus bays also have excess capacity to support additional service.

13. On page 29, it shows a bus stop on Mark Center Drive (south - closer to IDA). Transit is unaware of a bus stop being installed at this location. Is this a private bus stop to be used by IDA shuttles? A bus stop at this location does not make too much sense as buses coming from that direction will access the transit center, which is just a few feet to the north/east of the shown stop. Also, there is an existing bus stop on westbound Mark Center Drive at Highview Lane.

- There are currently no plans for this to be a bus stop. The bus stop location will be removed from the figure in the final TMP.

14. There is only one bus stop across the street from the Transit Center, not two as stated in the TMP.

- There is enough space for two buses to queue, but as it is currently approved by the City, these will be curb-side stops. Adjustment will be made to clarify this in the final TMP.

15. Page 38, will Duke & IDA continue to run shuttles after BRAC 133 opens? If so, will these shuttles use bus bays within the transit center?

- Yes, Duke and IDA currently plan to continue their shuttles after BRAC 133 opens. However, these shuttles will not utilize the Transportation Center.

16. The TMP should include something on paratransit services available for employees and visitors with disabilities.

- Paratransit services are available to employees and visitors through WMATA and DASH. The final TMP will include a reference to this available service.

17. Include something on average commute times via transit - bus, Metrorail, VRE to – to the Mark Center from various points in the region such as from Quantico, Woodbridge, Lorton, Fairfax City, Centreville, Chantilly, Dulles, Leesburg, Bethesda, Rockville, Silver Spring, DC, Greenbelt, Largo, Suitland, Annapolis, Waldorf, and etc...

- The employee Transportation Coordinator will be responsible for personalized commute assistance which can include aiding employees in determining transit options and transit commute times from their point of origin.
- These transit commute time details, however, will not be provided in the TMP.

Shuttle Routes

1. The section on proposed shuttle routes is preliminary. While City staff understands the shuttle bus plan will need to be revised periodically, a final draft plan should have been included in the TMP.

- The shuttle plan details were not included in the draft TMP as they were not final at that time.
- The plan will be finalized before the TMP is finalized. Therefore the details of the shuttle plan will be included in the final version of the TMP. The details that will be included are:
 - System Service Capacity
 - Number of Buses
 - Headways
 - Routes and Shuttle Destinations (including a Franconia/Springfield Route)
 - Estimated Passengers

2. Arranging a meeting with private companies to assess provision of transit connections from areas to the south (page 36) is not sufficient. Instead, the Army should initially provide shuttle service to Lorton/Quantico, Woodbridge and Fredericksburg. Successful service to these locations will help entice the private operators to provide the transit service from these locations.

- The TMP relies on existing mass transit from the South including VRE, and bus service that typically runs to the Pentagon, along with alternative modes such as carpool, vanpool, and slugging to achieve the projected the non-SOV mode split.
- The DoD shuttle system described in Section 3.5.2 will provide the final leg of the trip for rail transit riders.
- WHS will continue to work with private transit providers to establish more direct service to Mark Center. It is important to note that the one service currently operating to Mark Center does so via the Pentagon. Within six months of the relocation, WHS will administer results of their surveys to private companies in order to engage them in onboard surveys to determine

if there is a high enough demand to provide direct transit service before relocation (see Section 3.3.2)

3. The shuttle bus plan does not include service to Springfield Metro or Van Dorn Metro. Frequent shuttle service should be provided to these two Metro stations.

- There will be service to Franconia-Springfield and this will be noted in the final TMP. As the result of previous discussion with the City, Van Dorn is not being considered as a shuttle destination. As discussed elsewhere, the existing frequency of the Van Dorn Metro Station DASH routes are adequate for the projected demand.

4. Include trip times for shuttle runs via various routes.

- The shuttle schedules are not finalized at this time. Once the schedules are finalized, they will be made available to City staff.

Carpool

1. Explain in more detail how the number for carpool (2.3 passengers per vehicle) is obtained and how this number ties in to the HOV-3 required on I-395.

- The 2.3 passengers per vehicle is a statistic that was obtained from a number of WMATA studies. While HOV does require a 3-person minimum in carpools, HOV also permits solo drivers in hybrids as well as motorcycles, (with I-66 requiring a 2-person minimum) which drops the average from 3 to 2.3 ppv. A citation in text will be made in the final TMP to explain the source of the number and how it was developed.

Vanpool

1. Page 111, short distance vanpooling will be very difficult to do/organized and is not cost effective to those that use it. What is considered "short distance?"

- The Team has engaged in a number of discussions with vanpool service providers and employees who believe that short distance vanpooling could be viable due to the parking restrictions at BRAC-133 and the clustering of zip codes. For employees who live within 10 miles of the site, but who live too far from transit (i.e., zip code 22212), it may be viable to consider using a vanpool as a type of "personalized self-driven shuttle service", providing the only other door-to-door solution aside from carpooling. While carpooling can be simpler for communities with lower densities, many employees live in clusters within the same zip code, making vanpool more efficient than usual.

2. Under vanpooling, the TMP mentions that there should be outreach done to get employees that live in Maryland to use vanpools; however, the TMP fails to mention park and ride facilities in Maryland. In most cases, vanpool pickups are at park and ride facilities. This TMP should include both NOVA and Maryland park and ride facilities and their respective capacities.

- The TMP discusses park and rides from around the region in Section 3.3.2 and in Appendix D, and both sections make mention of park and rides in Maryland. Utilization information for park and rides was not available for all areas.
- The City of Alexandria has agreed to coordinate with other agencies to determine if additional Maryland park and ride utilization information is available. If the information is available, the City will provide this data for inclusion in the final TMP.

Bicycling

1. The TMP discusses a bike station on page 118, which is an interesting idea. Has this been explored with the City?

- This is a long term solution that will not be discussed with the City until it is deemed viable, as per the stipulations detailed in Section 5.9.4. If there is a dramatic increase in mode share and a business case for a bike station, the idea will be examined at that time.

2. In Section 5.9.4, “Recommended Improvements”, WHS should include consideration of whether TMP funds may be directed to transportation demand management measures including participation in regional bicycle sharing programs.

- WHS will closely monitor the use of bicycles as one of its transportation demand management strategies and if the demand demonstrates a business case for participation in regional bike sharing programs, it will examine whether appropriated funds can be legally used for this purpose.

3. Procedures, rules and regulations for bike locker usage should be developed.

- Bike racks, not lockers, will be provided for employees, as stated in Section 5.9.2. The reference to lockers in the TMP refers to shower and gym lockers for personal possessions, which will be open for use by cyclists.
- The Transportation Coordinator(s) will develop terms of use for all transportation-related facilities, including lockers, to be included under “Codes of Conduct” in the Orientation Handbook described in Section 5.3.2.

4. The Transportation Coordinator should also act as biking coordinator to help serve as an advocate and point of contact for the biking community.

- The TMP currently states that the Transportation Coordinator(s) will manage the bicycle and walk program as well as be the point of contact for bicycle advocacy and community groups (see Section 5.9.3).

5. A thorough biking safety examination of bike ways in and out of the site and around the garage should be conducted with the Biking and Pedestrian Coordinator and the TDM Coordinator to help avoid future issues.

- This is a separate exercise outside of the TMP that will be conducted with the WHS Transportation Coordinator(s).
- The TMP will not include details or language on the safety examination.

6. Does the site plan to host its own Bike to Work Day event separate from the Council of Governments regional bike to work day event?

- The Bike to Work Day event will be the regional event sponsored by MWCOC. Section 5.9.3 discusses WHS’s planned involvement in the regional event.

7. Periodic Confident Cycling Classes that are coordinated by the Washington Area Bicycle Association should be conducted on site for prospective bike commuters.

- The TMP states that bicycle training and safety classes will be conducted on-site for bicycle commuters (Section 5.9.3). The exact classes will be determined by WHS at a later date and could very well include WABA classes.

8. Each of the proposed “Bicycle Safe Routes” in Appendix E contains text encouraging potential bicycle commuters to travel on “sidewalks” or “bicycle-designated sidewalks.” In

Alexandria, city code Sec. 10-7-4 says that “no bicycle shall be operated on any sidewalk in city, except such sidewalks or portions thereof which city council shall by resolution designate as bicycle routes.” For this reason, bicyclists should not be directed to ride on sidewalks in the City. In Virginia, a bicycle is considered a vehicle when ridden on roads and streets and Sec. 46.2-904 allows localities to prohibit bicycles from using sidewalks, although this must be done with conspicuously posted signs. The City completed a Bicycle Level of Service analysis for the existing on-street bikeway network which grades roadways (A-F) for bicycle use. A map of current Bicycle Level of Service in Alexandria is online here >>

http://alexandriava.gov/uploadedFiles/localmotion/info/gettingaround/Fig15Bicycle_Level_Of_Service.pdf

- Adjustments will be made to remove any instances of the word “safe” and to remove language referring to the use of sidewalks by bicycles.

Pedestrian

1. In Section 3.2.4 “Pedestrian Access Facilities” , any references to off-site improvements that are not currently proposed for improvement as part of the site planning should be coordinated with proposed pedestrian improvements in the City’s 2008 Pedestrian and Bicycle Mobility Plan

>> <http://alexandriava.gov/localmotion/info/default.aspx?id=11418>

- Any off-site improvements included in this diagram are those that have already been approved by the City. The sidewalk plans for the offsite road improvements (along Seminary, Beauregard, and Mark Center Drive) were part of an offsite road package submitted to the City, and therefore were reviewed extensively by City staff prior to City signoff of the plans. On-site sidewalks (the walks around the north parking garage and round-a-bout), were not subject to formal City review; however, the entire site, landscape, and pedestrian circulation plan was reviewed with City Planning staff as part of BRAC 133 design coordination.

Telecommuting

1. The Draft TMP includes almost no discussion about telecommuting. More thorough treatment is needed.

- Section 5.8.3 of the TMP presents a 1-page discussion on telecommuting at BRAC-133.
- The City has indicated they will provide additional steps for ensuring telecommute goals that will be provided to the BRAC 133 Team for inclusion in the TMP. USACE/WHs will review these procedures for compliance with DoD protocol and determine which steps (if any) are applicable and can be included in the final TMP.

2. For mid day trips, include something on video conference meetings via a conference room, laptop, notebook, smartphone, etc. to reduce the number of trips needed during the mid day (if feasible).

- Adjustments will be made to the final TMP to accommodate this language.

Slugging

1. Need more specifics regarding how slugging will occur. How will they deal with no HOV off ramp at Seminary and I-395?

- Slugging is an informal commute mode and is therefore difficult to predict. How slugging is expected to occur is discussed in Section 2.3 under “Slug” and in Section 3.4.

2. The 3% for slug in the anticipated mode split is high for several reasons: there is only 140' of dedicated space for slugs; the nearest HOV entrance going southbound is 2.5 miles away, and the nearest HOV exit going northbound is at Franconia Springfield and the Pentagon; individuals in Fairfax, Burke, West Springfield, Springfield areas working at BRAC 133 using I-495 to access I-395 will have little incentive to slug as they will not be able to take advantage of the HOV unless they plan to drive to the Pentagon and turn around. Is it safe to assume that traffic going southbound on I-395 in the AM peak will increase as more people will be traveling to places such as BRAC 133, Fort Belvoir, the EPG, Springfield, etc. Also, one must have a permit to park in order to slug from BRAC 133.

- See response to comment #1 above.

3. On page 15, the TMP mentions The Native Slugs of Northern Virginia study shows that 65 percent of sluggers travel to work anywhere from 10 minutes to greater than 30 minutes beyond the slugging drop-off point. Once dropped off, sluggers then either walk, bike, or take transit to get to their employment destination. Is this a correct assumption or is the assumption that people that are taking slugs will then drive 10 to 30 minutes more to their place of employment? Also within that particular study, the change of employment location was one of the main reasons why people decided to make a change to another mode other than slugging. Was this factored into the 3% for slug?

- It has been verified that the above assumption is correct. As discussed on page 26 of that report, 65% of sluggers do travel an additional 10-30+ minutes from their slugging drop off point, be it via rail or bus, or even driving as 1/3 of the respondents to that survey represented drivers.
- Yes, this study found that change of employment location was a reason for changing to a different mode, but this was a hypothetical question and likely most respondents answered the question with the thinking that a change in work location could involve a variety of complex changes such as taking a job that was not in the region, that was too far from the slugging drop off point, or that does not have transit connections. This will not be the case at BRAC 133 as shuttle service will be available to a major slugging drop off point, the Pentagon.

4. Employees with parking permits that drive slugs to the Pentagon or other drop off points would still require a parking permit at the Mark Center and would still impact the local roads and community. These should be included as part of the percentage of SOV trips, as they have the same impact as SOVs.

- Slug trips are included in the traffic analysis of total trips to the site, but the slug drivers were not considered as part of the SOV commuters since slugging is a recognized alternate commute mode.

5. Slugs that arrive at the Pentagon and then take the DoD shuttle should be included in the transit percentages, not in the slug percentages.

- Slugs who ride to the Pentagon and then take the DoD shuttle should be reflected in both the slug numbers and in the shuttle numbers. The final version of the TMP will be updated to reflect the final shuttle plan and will include these slugs who ride the shuttle. To be conservative it will be assumed that no slugs get a ride directly to Mark Center so all have to ride the DoD shuttle.

6. If employees are able to arrive by slugging, the vehicle they arrive in for drop-off (if not a BRAC permitted vehicle) eliminates the need for parking, but still impacts the local road system and community.

- See response to comment #4 above.

7. The location of the dedicated slug lanes / off peak taxi stand adjacent to the transit center / parking garage may cause issues with traffic leaving the garage, those making right hand turns onto Mark Center Drive, and with buses making right turns to access the transit center.

- Usage of the slug area is difficult to predict at this time and will likely change over time. WHS will observe operations over time in and around the Transportation Center and the slug area and they may choose in the future to alter shuttle routes or move the slug area to a different location.

Taxis

1. Under Slug Lines & Taxis, nothing is mentioned about taxis.

- An adjustment will be made to correct this in the TMP.

2. The TMP needs to expand on the plan to integrate taxi service at the facility.

- Section 5.7 describes the plan to integrate taxi service during the off-peak. An adjustment will be made to describe this earlier in the final TMP.

TDM Plan

1. The branding of the WHS TMP should be strongly linked and subsidiary to Local Motion.

- As discussed in the TMP, the Transportation Coordinator(s) will liaise with the City of Alexandria, VA's Employer Services Outreach Specialist in order to become familiar with the City's "Local Motion" program and its associated employer commuter services, both prior to the building opening and quarterly thereafter to maintain coordination with the City and receive updated information on City and community transportation programs (see Section 5.2.2). The program will be branded as the WHS Transportation Management Program and will therefore not be linked as a subsidiary of the Local Motion Program.

2. All employees should be enrolled in the WHS TMP.

- The intent is to have all BRAC-133 employees enrolled in the program.

3. The employee orientation materials and handbook should include information on Local Motion and bicycle maps.

- As described in Section 5.2.1, the WHS Transportation Management Program Office will house various materials including information on transportation programs in the region and bicycle maps.

4. There appears to be no mention of ongoing and/or regularly distributed forms or marketing and promotion, i.e. a webpage or website, newsletter, etc.

- Every subsection within Section 5 of the TMP includes mention of ongoing marketing and web updates.

5. A contractor should be hired to assist with marketing, outreach, and promotional events

- This is part of the responsibilities of the Transportation Coordinator (see Section 5.2.2).

6. The Site should reach out to the Patent and Trademark Office in Alexandria and the EPA buildings located in Arlington Potomac Yard to glean information on TMP/TDM best practices, successes, and failures.

- In developing the TMP the team has gleaned information from multiple City and other agency TMPs. WHS will liaise with other agency Transportation Coordinators moving forward.

7. Relationships should be created and maintained with the following organizations:

- VPSI (area's largest vanpool provider for federal agencies),
- Commuter Connections
- the Virginia Department of Rail and Public Transportation (VA's TDM agency),
- Bike/Walk Alexandria,
- WABA,
- www.slug-lines.com,
- Telework!VA
- Association for Commuter Transportation
 - WHS has existing and ongoing relationships with most of the organizations listed above. The Transportation Coordinator(s) will have the responsibility for liaising with any and all regional transportation resources as necessary to manage a successful program.

8. There should be some sort of cash-out option for those that use alternative modes of transportation other than transit, including a provision for a mix and match program option for those that use multiple types of alternate modes.

- The only Federal benefit for alternative modes of travel is the Federal transit subsidy. It's believed that restrictions on its use are well-defined and understood.

Transportation Coordinator

1. Local Motion is the City's TDM Program, so it should be explicitly stated that a close relationship between the Transportation Coordinator and the program will be essential.

- Section 5.2.2 of the TMP currently states that the Transportation Coordinator will liaise with the City's Local Motion Program.

2. The Transportation Coordinator (TC) should be required to become a member of the Association for Commuter Transportation (ACT). ACT is the TDM industry's largest trade association and it supports individual mobility management professionals and organizational members in their efforts to reduce traffic congestion, conserve energy and improve air quality.

- WHS will consider requiring their Transportation Coordinator to join ACT.

3. The TC should be required to attend any employee orientations that the tenants have to discuss the all TDM programs and services and transportation alternatives to driving alone.

- The TMP currently states that the Transportation Coordinator(s) will enroll new employees into the WHS Transportation Management Program and assist them through educational orientation materials in making a decision on the most feasible commute for them (see Section 5.2.2).
- The TMP also states throughout Section 5 that the Transportation Coordinator is in charge of organizing all employee orientations and that these orientations will be run specifically to discuss transportation options and TDM programs.

4. The TC should be required to regularly attend the regional Commuter Connection and Council of City Government planning meetings and trainings.

- WHS will continue to attend and actively participate in regional transportation forums.
- This language will be included in the final TMP.

Commuter Store

1. The site needs to have a staffed permanent transportation center/transit store.
 - Currently there is no planned space for a permanent transit store at the Transportation Center although there will be a mobile commuter store present at the facility twice a week (and more often if possible during the first several months of the building being open). The provision of a transit store is a long-term strategy that will be implemented if there is a rise in transit use and/or use of the Transportation Center whereby expansion will be necessary, as stated in Section 5.5.4.
2. It will be very difficult to secure the Mobile Commuter Store twice a month let alone twice a week due to both price and capacity. Further definitive discussions with the Mobile Commuter Store need to occur and the inclusion of the Mobile Commuter Store in the TMP should be adjusted accordingly.
 - WHS has been and will continue having discussions regarding this topic. The intent is to have the Mobile Commuter Store present at Mark Center twice a week.

Transit Subsidy

1. Are Metro Fare Cards in the denominations of \$1, \$5, \$10, and \$30 available as indicated in 5.5.1(ii)a? The WMATA site seems to only list \$10 and \$20.
 - Yes, Metro fare cards are in denominations of \$1, \$5, \$10, and \$30 as indicated in the TMP.
2. With the SmartBenefits program and the IRS mandate that begins on 1/1/2010, will Metro farecards still be distributed? Does DoD need to comply with the IRS mandate for SmartBenefits / the federal transit subsidy program? If so, the language on the distribution of farecards should be changed.
 - Additional information including appropriate regulatory references are needed to respond.
 - DoD programs comply with appropriate laws.

Ridematching

1. In response to purchasing ridematching software, Commuter Connections, a regional network of transportation organizations coordinated by the Metropolitan Washington Council of Governments, has a very comprehensive ridematching database that can be accessed online and used by BRAC-133 commuters.
 - The Team agrees and is aware of this option-however, due to the nature of work and to protect the identity and privacy of employees, an internal ridematching software is still preferred and will be made available in addition to regional ridematching programs. Part of the Transportation Coordinator(s)' responsibilities is to make all regional and local ridematching programs known to employees, as stated in Section 5.6.1, item iii; however, it is up to the employee to decide which ridematching database to utilize.

Carsharing

1. The City's carshare incentive program, Carshare Alexandria program needs to be mentioned here to help incentivize employees to use the lone Zipcar in the immediate area.
 - An adjustment will be made to the final TMP to include this incentive.

2. Hertz Connect, a new Carsharing company in the area should be contacted about the possibility of adding a car on site.

- Section 5.7.1 of the TMP states that there will be a demand analysis done for obtaining additional car-sharing vehicles. The vendor would be determined at that time.

Parking

1. Information on how many ADA parking spaces will be provided in each garage should be provided.

- All 48 employee ADA parking spaces will be located in the South Garage in order to be located within shortest walking distance to building entry.
- Three additional visitor parking spaces will be ADA spaces in the North Garage.
- Adjustment will be made to the TMP to indicate the location of the spaces

2. Information on how many carpool and vanpool parking spaces will be provided in the north parking garage should be provided.

- The TMP states that all 320 carpool and vanpool parking spaces will be provided in the North Garage (see Section 5.4.2).

3. Carpool and Vanpool parking spaces should be provided in their South parking garage.

- With the primary security checkpoint being located in the South Garage, it is more favorable for carpools and vanpools that are carrying multiple employees to save time by parking in the North Garage where security checkpoint queuing can be avoided, as stated in Section 5.4.2. It should also be noted that the North Parking Garage meets LEED Gold requirements for proximity to building entrances.

4. What is the definition of “preferential” when referring to parking for car and vanpools?

- “Preferential Parking” is a TDM term synonymous to “priority parking”. “Preferential Parking” indicates spaces that give specific parking privileges to carpool/vanpool permit holders (i.e., guaranteed parking space, parking close to the entrance of the worksite, parking near the “fastest way in and out”, etc.).

5. It should be noted that spots for electric cars at the EPA Arlington/Potomac Yard building have not been utilized once since the building was constructed 4 years ago.

- Noted.

6. Signatures of the primary driver’s supervisor should be required for carpool and vanpool priority parking applications.

- PFPA PMB is the supervisory organization that manages and distributes carpool/vanpool spaces (as stated in Section 5.4.2). Upon PFPA PMB review of the application, PFPA PMB will authorize priority parking applications.

7. The discussion/comparison of flex-time parking between the 2003 Mark Center TMP and the BRAC-133 TMP is confusing and should be further explained. For example, explain why “the BRAC 133 TMP is not able to guarantee flex-time parking for employees” and the impact of that practice on the parking.

- Currently over 40% of employees work a flexible work schedule and the TMP has goals to increase this participation rate by an additional 25%, which would mean that 65% of

employees would be guaranteed a parking space. Guaranteeing parking for flex-time employees may result in an increase in SOV mode of travel.

- Additionally, this TMP strategy only works if there is not a one-to-one permit process in place, as the flex-time parking in the 2003 TMP was only temporary and was lifted after 10am. Not having a one-to-one permit process would result in spillover parking.
- Language will be included in the final TMP to explain this.

8. Address how BRAC-133 is going to address overflow parking in public and private areas. The TMP should make provisions for providing gates for lots, etc when an overflow parking problem occurs due to BRAC employee parking.

- The BRAC 133 TMP and its managing entities will not be responsible for managing overflow parking outside of BRAC 133 property and garages. As stated in Section 5.4.3, it will be the responsibility of neighboring properties to mitigate overflow. This section of the TMP notes strategies that are currently in place or that are in the works, and suggests strategies that neighboring properties can implement in order to mitigate the effects of spillover parking.

9. The TDM plan calls for 48 disabled parking spaces in the parking facilities. What is the plan if more than 48 employees qualify for a disabled spot? Will the disabled employee be required to have a state-issued disabled license plate or placard?

- 48 spaces were provided per ADA requirements. As is the legal requirement for all disabled parking spaces, a disabled license plate and/or placard must be displayed to parking in a disabled parking space.
- In the event more than 48 employees require reasonable accommodation in the form of a disabled parking space, WHS will comply with the law and make adjustments to the parking plan as required.

10. Will the government vehicle parking include on-site vehicles as well as employees with take-home government vehicles? What is the number of take-home government vehicles among the combined tenant organizations?

- It is not known at this time how many government vehicles will be take-home vehicles, but it is not expected to be significant.

11. Section 3.6.2 states that the many park and ride lots have excess capacity. Which of the park and ride lots are underutilized? How will this information be distributed to the commuting population?

- Appendix D indicates capacity and utilization for a number of Northern Virginia park and ride lots. Capacity and utilization information was not available for all park and ride lots. This information will be distributed in the Orientation Handbook described in Section 5.3.2

12. A reference is made to free parking. The Army needs to provide the proper legislation that negates Circular No. A-118, dated August 13, 1979, in which the Executive Office of the President, Office of Management and Budget (OMB) announced the establishment of a Government-wide policy dealing with Federal parking facilities. According to OMB, a basis for charging for the use of parking facilities needed to be established which was equitable among employees and consistent with related policies regarding air quality, energy conservation and reduced traffic congestion.

- As a matter of policy, DoD will not be charging employees for parking and has discussed this with the City of Alexandria. The limited parking availability at BRAC-133 along with the extensive TDM program will provide significant incentive for employees to use non-SOV modes of travel to the site.

13. Section 4.5.2 mitigation effort number 8 states that some government vehicles may be made available for mid-day travel to off-site meetings. This language should be strengthened to say government vehicles will be provided, so that SOV trips due to midday off-sites will be discouraged.

- Not all government vehicles will be available for employee travel use so the suggested change is not valid. It should be noted that DoD is planning on shuttle service throughout the work day for official travel.

14. Criteria for issuance of a parking permit should be established and consistent throughout tenant organizations.

- Criteria for issuance of a parking permit will be up to the operating procedures and parking policies of each individual tenant organization. PFPA will not control these policies and procedures.

Traffic Impact Analysis

1. The findings and recommendations included in the traffic analysis section are not reliable as the traffic micro-simulation models were not properly calibrated.

- Document is being revised to include model verification details that replicate existing AM and PM peak field conditions. The volume throughputs and representative queue data that were used to verify the existing AM and PM peak hour models will be provided.
- The document will also be edited to clarify that these existing models were used in the development of the 2011 models and CORSIM default value assumptions.
- The calibration data will be appended to the final TMP.

2. What do the recommendations from the TIA add to a TMP? Is the analysis and suggestion of recommendations appropriate for this type of document?

- Recommendations based on the TIA were not required; however, this section was added to accommodate all feasible recommendations made by the BRAC Advisory Group. In this section the team also took the liberty of adding additional recommendations based on the results of the analysis which should inform ongoing analysis of future transportation improvements under consideration.
- The title of this section (Section 4.4.9 Recommended Solutions) will be adjusted to have softer language and will remove the term recommendations and will take on a title such as "Suggestions that require further consideration/study". Emphatic language will be added indicating that these solutions require additional analysis and resources.
- Adjustments will be made to the final TMP to clarify this.

3. The CORSIM study area used for the analysis was very limited. The limitations in the study area reduce the validity of the transportation analysis.

- The traffic study included as part of the TMP is a Traffic Impact Analysis (TIA) for the proposed development and therefore includes the roadway network only within the proposed development and in the surrounding area that is immediately affected by the development within the City of Alexandria. This study area is also consistent with other traffic reports developed for the Mark Center site.
- This TIA study is not similar in nature to VDOT Interchange Justification Report (IJR) which focuses on the I-395 corridor and the adjacent interchanges within the region, and hence should not be compared to the BRAC 133 TMP. The IJR was developed for FHWA to justify the improvements to the interchanges on I-395. Therefore, the study area used is appropriate for the type of traffic analysis that was performed for the BRAC 133 site. It conforms to methodologies recommended by the Institute of Transportation Engineers (ITE) and industry standards.

- The results of the traffic impact analysis are valid for the key internal roadway intersections.
4. Other On-Going Study Improvements (page 92): VDOT is also doing a detailed operational assessment of short-term improvements.
 - Adjustment will be made to the final TMP to accommodate this language.
 5. Page 22 refers to the HOV lanes in I-395 serving Seminary Road. Clarification is needed on whether there an exit or entrance from northbound or southbound HOV lanes, and if not, where the closest access would be for entry to or exit from the HOV lanes.
 - Adjustment will be made to the final TMP to accommodate this language.
 6. Section 3.2.1 refers to providing a “concrete barrier obstruction”. This needs to be replaced with “physical barrier.”
 - Adjustment will be made to the final TMP to accommodate this language.
 7. The study conclusion in Section 4.1.9 discusses the effect of turn lane improvements on the PM peak hour, but did not address the AM peak hour.
 - Adjustment will be made to the final TMP to accommodate this language.
 8. Section 4.4.8 needs to specify locations where the short distance merges are projected to cause traffic operational problems as referenced under “Other Concerns”.
 - Adjustment will be made to the final TMP to accommodate this language.
 9. The recommended roadway improvement number 4 in Section 4.4.9, “Provide a direct HOV access ramp from I-395 south to Seminary Road” is already in existence.
 - DoD is aware that this recommendation for constructing a direct HOV access ramp is being examined by VDOT and the City of Alexandria.
 - An adjustment will be made to the final the TMP that will clarify that this is an existing recommendation that is currently being examined; however, it is an improvement that needs to be not just studied, but implemented.
 10. Include analysis for Recommended Intersection Improvement No. 1 in section 4.4.9.
 - A figure representing the proposed improvement has been appended to the report. This is a suggested recommendation with spot analysis only. Additional corridor wide analysis is required to validate this solution.
 - Language will also be adjusted to indicate that this improvement is not a recommendation but a solution for further consideration.
 11. The Recommended Traffic Control Improvements No.1 in section 4.4.9 has been completed.
 - Adjustment will be made to the final TMP to accommodate this language.
 12. Signage on private streets as suggested in Recommended Internal Circulation Improvements in section 4.4.9 should be coordinated with property owners.
 - Proposed signage is only along Seminary Road at I-395 ramp traffic merge and diverge locations and internally within the Mark Center site. No signage has been proposed along private streets. Adjustment will be made.

13. Section 4.5.1 should include in its list of improvements being made by the Army the increase in number of buses on King Street to King Street Station.

- The City of Alexandria has instructed USACE/WHS not to respond this comment.

Reporting

1. In order that the City and the DOD can continue to be partners in adjusting the TMP to minimize the impact of BRAC-133 on adjoining neighborhoods, a regular method of reporting information to the City, which the DOD is promising to collect, should be established in the TMP document.

- As stated in Section 6.2, copies of evaluation reports will be provided to the City as they are available.
- Language on reporting frequency will be added to the final TMP.

2. The State of the Commute Report needs to be shared with the City of Alexandria. The TMP should state such within the document.

- The "State of the Commute Report" is the same as the Evaluation Report described in Section 6.2 whereby the City does receive a copy of the report. Adjustment will be made to the TMP to clarify this discrepancy.

3. On page 120, indicate that an Evaluation Report will be submitted to the City of Alexandria every six months.

- The City will be provided an evaluation report twice in the first year, and annually thereafter.
- An adjustment will be made to the final TMP to clarify this.

4. The TMP should address what steps will be taken if goals are not met. The TMP should also address what the reserve plan is if the goals are not met.

- We are confident in the abilities of WHS to meet the goals of the TMP given that the DoD shuttle system will provide such extensive service with capacity for 40% of the building population, combined with the fact that the building will have such limited parking available, and finally given that WHS will be implementing a variety of other comprehensive TDM strategies. WHS will be evaluating achievement of goals over time (and formally with each Evaluation Report), and will be setting new goals over time based on findings.
- The final TMP will include language that will demonstrate examples of how goals will be assessed and rectified if not met, (i.e., if transit ridership goals are not met, WHS will reexamine the DoD shuttle plan and make changes to increase ridership, etc.)

Funding

1. Provide information on funding for implementation of TDM strategies. For example, amount available for implementation, annual monies available for operations, etc.

- The TMP will include language that DoD is programming for funding to fully support TDM strategies, including the robust shuttle system described therein.