Federal Funding of Transportation Improvements in BRAC Cases

DETAILS

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TRB TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

June 14, 2010

The Honorable Tim Johnson
Chairman
Subcommittee on Military Construction, Veterans Affairs
and Related Agencies
Committee on Appropriations
U.S. Senate
Washington, D.C. 20510

Dear Mr. Chairman:

At the request of Congress, the Transportation Research Board of the National Academies has convened a committee to address the appropriate sources of funding for transportation improvements serving military bases where significant and rapid increases in personnel will occur as a result of Defense Base Closure and Realignment Commission (BRAC) recommendations. The committee members are experts in transportation budgeting and policy, military budgeting and policy, infrastructure planning, state and local infrastructure management, economics, and military facilities planning (see Appendix A). This committee will meet three or four times between April and December 2010 to address the requirements of the requested study. The committee will assemble and evaluate information related to BRAC transportation impacts and funding and make recommendations for changes in current policy. The committee's final report is due January 31, 2011. This letter constitutes the required interim report, due June 14, 2010. This interim report is based on materials presented and discussed at the committee's initial meeting on April 8–9, 2010, and subsequent correspondence among committee members; it provides background on the congressional request, communities affected by BRAC, existing sources of Department of Defense (DoD) and Department of Transportation (DOT) funding for transportation improvements, and the committee's preliminary observations about issues it will address in its final report.

BACKGROUND

The amendment to fiscal year 2010 defense appropriations by Senator Mark Warner mandated a study of federal funding of transportation improvements in BRAC cases. The amendment requires that the study cover the following tasks:

1. Examine case studies of congestion caused on metropolitan road and transit facilities when Defense Base Closure and Realignment Commission (BRAC) requirements cause shifts in personnel to occur faster than facilities can be improved through the usual State and local processes;
2. Review the criteria used by the Defense Access Roads (DAR) program for determining the eligibility of transportation projects and the appropriate DoD share of public highway and transit improvements in BRAC cases;

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3. Assess the adequacy of current Federal surface transportation and DoD programs that fund highway and transit improvements in BRAC cases to mitigate transportation impacts in urban areas with preexisting traffic congestion and saturated roads;
4. Identify promising approaches for funding road and transit improvements and streamlining transportation project approvals in BRAC cases; and
5. Provide recommendations for modifications of current policy for the DAR and Office of Economic Adjustment programs, including funding strategies, road capacity assessments, and eligibility criteria, and other government policies and programs the NAS may identify, to mitigate the impact of BRAC-related installation growth on preexisting urban congestion.

We hope the study will be useful to Congress and military and federal officials as they consider changes to federal law regarding federal funding for state and local transportation facilities adversely affected in BRAC cases.

THE ISSUES

The 2005 BRAC round will engender considerable personnel shifts to 18 facilities nationwide. They are distributed around the United States, with five in the greater Washington, D.C., area (Aberdeen Proving Ground, Maryland; Ft. Meade, Maryland; National Navy Medical Center, Maryland; Ft. Belvoir, Virginia; and Quantico, Virginia). Repositioning of personnel for military purposes other than BRAC in the Washington, D.C., area is expected to result in a concentration of at least 60,000 additional military and civilian personnel at these facilities by 2012. The roads, and in some cases transit systems, serving these facilities operated under congested conditions during peak periods before 2005; adding personnel to these facilities can be expected to further degrade the level of service. The 2005 BRAC realignments must be completed by 2011.

Federal law and regulation recognize the federal role in contributing to the cost of providing access to military bases and facilities. For circumstances that place sudden or unusual demand on existing roads, the DAR program, funded by appropriations to the military construction budget, provides a potential source of up to 100% DoD funding. In addition, surface transportation improvements to federal aid–eligible roads serving military-related traffic are eligible expenses under federal surface transportation legislation, which provides an 80% federal share. For sudden shifts in personnel caused by BRAC requirements, the DoD has an Office of Economic Adjustment (OEA), which provides planning grants and funds to communities affected by BRAC to pay for traffic studies and to carry out state and local planning procedures.

The DAR program funds projects relatively infrequently (15 projects over the last 10 years) in part because of the strict criteria used to approve projects and in part because of the competition for funds with other military construction projects. For example, projects are approved for access roads to new and old installations, for urgently needed improvements to avoid intolerable congestion resulting from a doubling of traffic due to military expansion or to avoid structural failure due to heavy equipment, and for replacement of roads closed by new or expanded military installations. If a project is approved, funding is not guaranteed; the projects must compete through the normal DoD military construction appropriations process.

Except in the case of the congestion caused by a doubling of traffic, DoD views the responsibility for addressing increasing traffic attributable to military expansion to be that of the state and local authorities. The problems for state and local jurisdictions in BRAC cases are attributable to the rapid pace of traffic growth on heavily used facilities, particularly those within urbanized areas that have limited options for expansion; the lengthy process for projects to be evaluated for environmental impact and included on state and regional transportation plans; the intense competition among state and local projects for available federal aid; and the general shortage of available state and local funds. Moreover, the normal process for developing highway and transit projects from required planning and environmental processes all the way through construction is at best nine years and usually takes 15 to 20 years.

MILITARY REALIGNMENT DECISIONS

BRAC 2005 was the fifth round of decisions designed to streamline the nation's defense infrastructure. Unlike past BRAC rounds, which generally focused on reducing excess physical infrastructure, this round also presents military growth challenges for DoD, states, and local governments. Its implementation will increase the numbers of on-base personnel, military families, and defense-related contractors at and near 18 military bases. Furthermore, because the BRAC realignments must, by law, be completed by September 15, 2011, these community changes will be rapid, as personnel will arrive quickly once the bases are readied. There are 18 bases where BRAC growth will affect neighboring communities, as shown in Figure 1 from a recent Government Accountability Office (GAO) report.[1] Other military growth communities exist, but their growth is not a result of BRAC.

While BRAC 2005 is taking place, other major initiatives will increase growth at and near some BRAC-affected bases. These areas include two major military reorganizations. First, the Global Defense Posture Realignment initiative will move about 70,000 military and civilian personnel from overseas to U.S. bases by 2011 to help support current strategies and address emerging threats. Second, the Army's force modularity effort will restructure the Army from a division-based force to a more readily deployable modular, brigade-based force. Some of these brigade units will relocate to existing bases. A third initiative, Grow the Force, is not reorganization but will increase the permanent strength of the military to enhance overall U.S. forces. This initiative will add about 74,000 soldiers and about 27,000 marines. Finally, troop draw downs from Iraq could increase personnel numbers at some BRAC-affected bases. These other military initiatives will be implemented over a longer timeframe than BRAC decisions, which are scheduled to be completed in 2011.

[1] U.S. Government Accountability Office. *Military Base Realignments and Closures—Transportation Impact of Personnel Increases Will Be Significant, But Long-Term Costs Are Uncertain and Direct Federal Support Is Limited*. Report to Congressional Committees. GAO-09-750. GAO, Washington, D.C., September 2009.

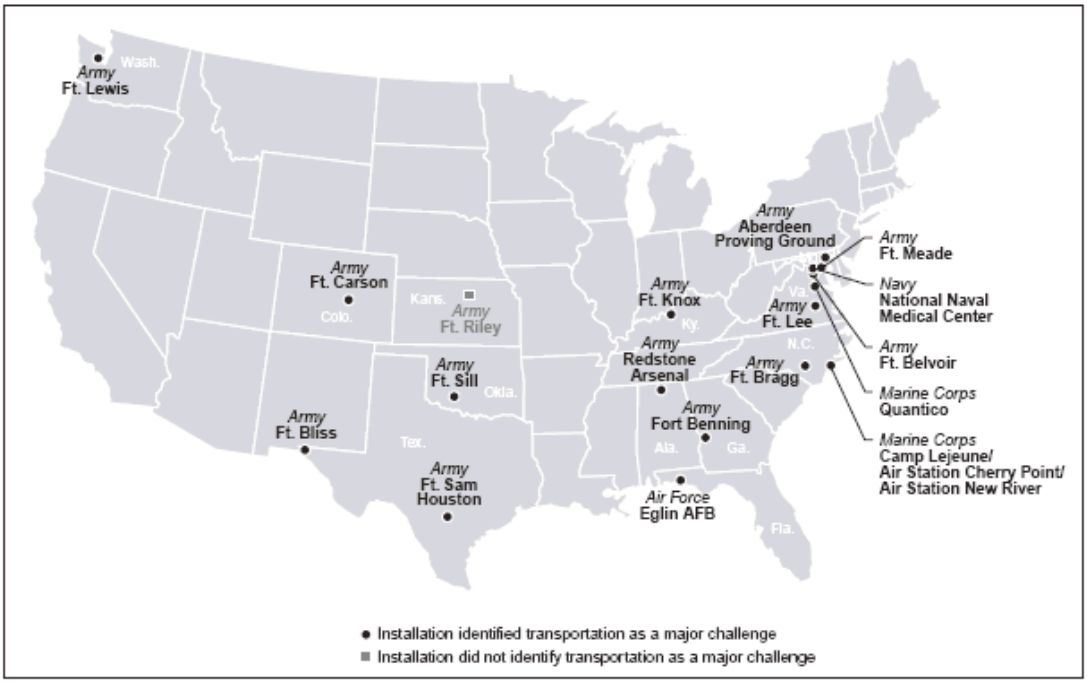

FIGURE 1 Military bases affected by BRAC growth.
Sources: U.S. Army, U.S. Marine Corps, U.S. Navy, U.S. Air Force, Office of Economic Adjustment, and Map Resources.

Also, DoD's enhanced use lease (EUL) activities will affect growth and development in military communities. EULs allow the military to lease its land to private developers to build offices and other facilities that generate operating income for the military. In some cases, growth from EUL activities may exceed BRAC-related growth. For example, the EUL at Fort Meade, which is planned to include up to 2 million square feet of office space, could house up to 10,000 additional workers by 2013. This EUL activity will generate more jobs in the Fort Meade area than the 6,600 additional military and civilian DoD personnel attributable to BRAC.

Because all these initiatives are taking place at the same time, the forces driving growth at military bases and the surrounding communities are more complex than they would be if they were the result of BRAC decisions alone. During fiscal years 2006 through 2012, the populations of the communities in the vicinity of the 18 BRAC bases are expected to increase by an estimated 181,800 military and civilian personnel, plus an estimated 173,200 dependents, for a total increase of about 355,000 persons as shown in Table 1. At two bases, Fort Bliss, Texas, and Fort Belvoir, Virginia, DoD has estimated that the on-base populations alone will more than double. In addition, defense-related contractors who follow and settle near the relocated commands will compound the growth and traffic near some bases, and the impact of these contractor relocations is not reflected in the military growth figures. For example, at Fort Meade, Maryland, DoD has estimated that an additional 10,000 contractor personnel may relocate near or on the base.

TABLE 1 Estimated Growth from All DoD Sources at and near BRAC-Affected Military Bases Fiscal Years 2006 Through 2012, as of March 2008 (GAO 2009)

Base	Total change in military and civilian DoD population	Total change in population of military and civilian DoD dependents	Total population increase	Current total regional population
Aberdeen Proving Ground, Md.	3,400	2,200	5,600	2,512,000
Bethesda National Naval Medical Center, Md.	2,500	Not available	2,500	4,331,000
Camp Lejeune, Cherry Point, and New River, N.C.	13,400	18,700	32,100	108,000
Eglin Air Force Base, Fla.	3,600	5,900	9,500	190,000
Fort Belvoir, Va.	24,100	12,700	36,800	4,331,000
Fort Benning, Ga.	12,700	6,100	18,800	247,000
Fort Bliss, Tex.	28,000	41,700	69,700	722,000
Fort Bragg, N.C.	18,900	17,100	36,000	301,000
Fort Carson, Colo.	10,400	14,400	24,800	514,000
Fort Knox, Ky.	(2,900)	4,500	1,600	117,000
Fort Lee, Va.	10,200	4,600	14,800	138,000
Fort Lewis, Wash.	13,500	17,400	30,900	3,422,000
Fort Meade, Md.	7,000	4,200	11,200	2,512,000
Fort Sam Houston, Tex.	10,900	6,100	17,000	1,416,000
Fort Sill, Okla.	3,700	(400)	3,300	81,000
Fort Riley, Kans.	10,900	15,000	25,900	109,000
Marine Corps Base, Quantico, Va.	3,600	1,000	4,600	202,000
Redstone Arsenal, Ala.	7,900	2,000	9,900	291,000
Total	**181,800**	**173,200**	**355,000**	

DoD PROGRAM ASSISTANCE

OEA provides the primary source of assistance for communities adversely affected by DoD program changes. OEA provides technical and financial assistance to help communities address adverse consequences of BRAC decisions. OEA has funded local coordinator positions to assist in coordinating local activities responding to BRAC, including transportation-related activities. For example, Harford County, Maryland, established a BRAC Planning Commission for Aberdeen Proving Ground. This commission, with OEA funding, helped establish the Chesapeake Science and Security Corridor Consortium, which includes eight jurisdictions in Delaware, Maryland, and Pennsylvania. With Harford County as the lead agency, the Chesapeake Science and Security Corridor Regional BRAC Office administers grants and coordinates regional BRAC responses.

OEA also has funded studies, such as traffic studies, which help states and local communities define the impact of military growth on transportation. For example, OEA has provided transportation planning grants to Maryland and Virginia. According to local officials, OEA also has funded transportation studies for communities near several of the bases GAO visited in its assessment, including those near Eglin Air Force Base, Florida, and Fort Knox,

Kentucky. These studies can provide communities with more detailed, precise information about the transportation impact of military growth than the initial environmental studies performed by DoD. We emphasize that the funds used in these studies cannot be used to build infrastructure.

Under the DAR program, administered by the military Surface Deployment and Distribution Command, DoD may pay for public highway improvements needed to address the impact on traffic of sudden or unusual defense-related actions. DAR enables DoD to help pay indirectly for improvements to highways DoD designates as important to the national defense. Under DAR, DoD can use funds provided in military construction appropriations to pay for all or part of the cost of constructing and maintaining roads designated as "defense access roads." However, proposals for funding these roads must compete with proposals for funding all other military construction projects, and projects must meet specific criteria. In addition, the DAR criteria do not specifically refer to transit-related improvements.

Statutory Basis for Defense Access Roads Criteria (Quotation from U.S. Department of Defense, *Defense Access Road Criteria*, October 2008)

The DAR Program has its basis in and is authorized by Title 23, United States Code, "Highways," Section 210:

23 USC 210a *The Secretary [of Transportation] is authorized, out of funds appropriated for defense access roads, to provide for the construction and maintenance of defense access roads (including bridges, tubes, and tunnels thereon) to military reservations, to defense industries and defense industry sites, and to the sources of raw materials when such roads are certified to the Secretary by the Secretary of Defense or such other official as the President may designate, and for replacing existing highways and highway connections that are shut off from the general public use by necessary closures or restrictions at military reservations and defense industry sites.*

Policy Basis for DAR Criteria (Quotation from U.S. Department of Defense, *Defense Access Road Criteria*, October 2008)

It is the responsibility of state and local highway agencies to provide and maintain adequate highways to serve public needs. These needs include those of DoD. The needs of defense were one of the original justifications for the Federal-aid Highway Program that includes the Dwight D. Eisenhower National System of Interstate and Defense Highways. Defense traffic generates the same road-user revenues for state roadways as does other traffic. Therefore, DoD expects state and local highway authorities to develop and maintain adequate highways to serve defense installations just as they do for other traffic generators. It is DoD policy to not provide funds for the maintenance of non-DoD roads (except for maintaining the structural section of county gravel roads that support the Department of the Air Force's Intercontinental Ballistic Missile Sites).

DoD recognizes that situations occur where defense traffic places an unexpected burden on state and local highway programs. These situations may include a dynamic increase in mission-related activities that result in a significant and sudden increase in defense traffic. The DAR program may then be able to be used to help fund highway improvements necessary to accommodate the sudden and unusual defense impacts.

(See following text box for DAR criteria for certifying eligibility for DAR funding on state and local road projects.)

The DAR program has not funded large numbers of defense access road projects. From 2000 to 2009, the program received applications to certify 27 projects. Seventeen of them have been certified and funded, six have been certified and are pursuing funding, three are being evaluated for certification, and one did not meet the funding criteria. Since 2005, the program has provided about $22 million annually for transportation improvements, including projects that are not BRAC related.

In October 2008, DoD reported to the Senate Committee on Armed Services addressing DAR criteria. The report concluded that the current DAR criteria provide flexibility for addressing communities' concerns about the impact of traffic. However, the report also recognized the difficulty in linking safety issues to the criteria and acknowledged that the impact of DoD growth on safety is a particular concern. Consequently, DoD was considering expanding or modifying the criteria to make projects eligible for DAR certification when population growth at a base increases traffic congestion to the point that it presents a public safety risk. DoD directed the Surface Deployment and Distribution Command to provide an independent study on the merits of specific criteria to address safety issues as well as congestion as they relate to growth.

Defense Access Road Funding Criteria[2]

Projects are eligible for DAR funding if they meet one of the following criteria:

1. The installation needs a new access road to accommodate a defense action,
2. A defense action causes traffic to double,
3. The installation needs a new or improved access road to accommodate a temporary surge in traffic to or from the installation due to a defense action,
4. The installation needs a new or improved access road to accommodate special military vehicles such as heavy equipment transport vehicles, or
5. The installation needs a road to replace one closed because of military necessity.

DOT PROGRAM ASSISTANCE

National security is an explicit goal of DOT; however, DOT does not have special programs to deal with military growth. Nevertheless, many federal transportation grant programs provide state and local governments with funding they can use to help address BRAC-related transportation challenges. The Federal-Aid Highway Act provisions allow for states to transfer funds between core programs and also to eligible transit projects. Federal capital transit programs include formula grants to transit agencies and states. Additionally, transit capital investment grants provide discretionary funds for the construction and extension of fixed guideway systems such as rail and bus rapid transit lines. Federal transportation programs also require states to set their own priorities for addressing transportation needs.

Federal Highway Administration Programs

The Federal Highway Administration (FHWA) has several programs that could provide funds for improvements to assist with access to military instillations. Most notably, the FHWA's Surface Transportation Program (STP) funds are apportioned to the states to be used for construction, reconstruction, rehabilitation, resurfacing, restoration, and operational improvements for highways and bridges, including any such construction or reconstruction necessary to accommodate other transportation modes. It can be used for capital costs for transit including vehicles and facilities, whether publicly or privately owned, that are used to provide intercity passenger service by bus. The funds can also be used for carpool projects, fringe and corridor parking facilities and programs, and bicycle transportation and pedestrian walkways as well as highway and transit safety infrastructure improvements and programs and hazard elimination. In addition, the funds can be used for the capital and operating costs for traffic monitoring, management, and control facilities and programs and surface transportation planning programs. STP was authorized at $32.5 billion for fiscal years 2005 through 2009. The federal funding share for most of these projects is up to 80%.

In addition, there are a number of federal highway programs that, under specific circumstances, could provide federal assistance for military base access, including the

[2] U.S. Government Accountability Office. *Military Base Realignments and Closures—Transportation Impact of Personnel Increases Will Be Significant, But Long-Term Costs Are Uncertain and Direct Federal Support Is Limited*. Report to Congressional Committees. GAO-09-750. September 2009.

Congestion Mitigation and Air Quality Improvement Program, the National Highway System Highway Program, the Safety Improvement Program, and the Interstate Maintenance Program.

Federal Transit Administration Programs
The Federal Transit Administration (FTA) has several programs that could provide funds for improvements to assist in access to military instillations.

Urbanized Area Formula Program
This program provides federal funds available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. Eligible purposes include planning, engineering design and evaluation of transit projects, and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems, including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

Nonurbanized Area Formula Program
This program provides formula funding to states for the purpose of supporting public transportation in areas with a population of less than 50,000. Funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, nonprofit organizations (including Indian tribes and groups), and operators of public transportation services. The state must use 15% of its annual apportionment to support intercity bus service, unless the governor certifies that these needs of the state are adequately met, after consultation with affected intercity bus providers. The maximum FTA share for operating assistance is 50% of net operating costs.

Capital Investment Program
This program provides capital assistance for three primary activities: new and replacement buses and facilities, modernization of existing rail systems, and new fixed guideway systems.

Bus and Bus-Related Projects—Eligible purposes are acquisition of buses for fleet and service expansion; bus maintenance and administrative facilities; transfer facilities; bus malls; transportation centers; intermodal terminals (including intercity bus facilities); park-and-ride stations; acquisition of replacement vehicles; bus rebuilds; bus preventive maintenance; passenger amenities such as passenger shelters and bus stop signs; accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers, and shop and garage equipment; and costs incurred in arranging innovative financing for eligible projects. Funds are allocated on a discretionary basis.

Fixed Guideway Modernization—Eligible purposes are capital projects to modernize or improve existing fixed guideway systems [including high-occupancy vehicle (HOV) lanes], including purchase and rehabilitation of rolling stock, track, line equipment, structures, signals and communications, power equipment and substations, passenger stations and terminals,

security equipment and systems, maintenance facilities and equipment, operational support equipment including computer hardware and software, system extensions, and preventive maintenance. Funds are allocated by a statutory formula to urbanized areas with fixed guideway systems that have been in operation for at least seven years.

New Starts—This discretionary grant program provides funds for construction of new fixed guideway systems or extensions to existing fixed guideway systems. Eligible purposes are light rail, rapid rail (heavy rail), commuter rail, monorail, automated fixed guideway systems (such as a "people mover"), a busway–HOV facility, or an extension of any of these systems. Projects become candidates for funding under this program by successfully completing the appropriate steps in the major capital investment planning and project development process. Projects must be based on the results of an alternatives analysis, justified against a set of statutory criteria, and supported by an adequate degree of local financial commitment. Competition for these New Starts funds is highly competitive. The pipeline of projects seeking funding is very long. Consequently, even though the federal matching share can be set as high as 80%, selected projects for funding are often set at a maximum of 50%.

All the DOT programs mentioned have specific planning and environmental requirements. All projects must be part of an approved long-range transportation plan and a shorter-term transportation improvement program developed by the responsible metropolitan planning organization (MPO). These long-range plans and shorter programs must meet the requirements of the National Environmental Policy Act and be consistent with the Clean Air Act amendments. Federal transportation funds are limited and projects to improve access to military installations must compete for funds with all other projects in a region to improve transportation service.

RESPONSE OF LOCAL COMMUNITIES

Planning for transportation improvements in metropolitan areas is the responsibility of the MPO for the region. In many regions that will be affected by BRAC decisions, the MPO has already begun to determine the transportation improvements that will be needed from the influx of military and civilian personnel. These organizations include the Transportation Planning Board of the Metropolitan Washington Council of Governments (for bases in the National Capital Region), the Pikes Peak Area Council of Governments (for Ft. Carson, Colorado), and the Radcliff–Elizabethtown Metropolitan Planning Organization (for Ft. Knox). The major types of improvements identified so far have been intersection improvements and some highway capacity increases.

In other instances, local and regional agencies are developing growth estimates for the influx of military and civilian personnel and indentifying where these people will choose to live. Taking into account these estimates, traffic demand forecasts will need to be made and needed transportation improvements identified. A particular concern is determining the timing of growth in the military bases that will affect the timing of the transportation improvements.

Once the needed transportation improvements have been determined, it is necessary to identify the source of funding to carry out these improvements. As many of the additional military base personnel will be arriving fairly quickly, the transportation improvements and needed funding must be in place soon. To address the increases in traffic to and from these military bases in the short term, communities will need to use transit improvements as well as noncapital measures such as carpooling and variable work hours. To implement longer-term

transportation capital improvements, there has been considerable progress in streamlining the project development process, which shortens the time to implement these projects.

INITIAL COMMITTEE MEETING

The committee first met on April 8 and 9, 2010, to hear presentations on the committee's charge, funding options for transportation improvements in BRAC cases, and transportation impacts of BRAC projects in the Washington, D.C., metropolitan area.

Committee Charge

The committee heard from Mark Brunner from Senator Warner's staff, who provided background that led to the request for the study of BRAC transportation impacts and explained that the Commonwealth of Virginia has been working on the problem of limited funding for BRAC-related transportation projects since the personnel relocations were announced. He indicated that the most important element of the committee's charge was to address the issue of the effectiveness of the DAR program in helping communities and the military address transportation access issues for military bases growing due to BRAC actions and explore other options to address concerns about community and military readiness.

DoD Deputy Under Secretary for Installations and Environment, Dorothy Robyn, described the committee's charge, which she characterized as being reduced to a question of whether DoD bears more responsibility for funding improvements when military relocations place unusual burdens on state and local governments. In this context, she asked the committee to consider whether the allocation of transportation funds based on total demand by users would make it possible for states to adequately address congestion problems in urbanized areas facing growth from concentrations of employment at military bases. She asked the committee to consider the geographic boundaries of the BRAC impacts and where DoD responsibility should end.

Options for Funding

Darryl Hampton, DoD manager for the DAR program, described the operation of the program, the criteria by which projects are certified for DAR funding, and the trends in BRAC projects over the life of the program. The transfer of DoD funds to a transportation project is good for only five years; at that point unused funds are rescinded. Current law precludes DoD from spending DAR funds directly on transit. The current DoD criteria have been in place since 1978 and any change would likely affect other military construction programs.

George Schoener, former DOT Deputy Assistant Secretary for Policy (and a member of this committee), described the transportation planning process that is required by the FHWA and the FTA as a condition for receiving federal funds for highway and transit projects (23 USC 134). BRAC-related transportation needs and funding intersect the process at a late stage of program implementation. He also discussed the environmental requirements that must be met by regionally developed transportation plans and projects funded through the Federal-Aid Highway and transit programs as well as the mandate that these plans and programs be financially realistic and feasible.

Washington, D.C., Metropolitan Area Case Study

The committee was then briefed on the transportation impacts of BRAC projects in the Washington, D.C., region, which is the first of the cases the committee will examine. Timothy

Canan, from the National Capital Region's Transportation Planning Board, the designated MPO for the region, described efforts to incorporate BRAC-related transportation needs into the transportation planning process.

Cord Sterling, representing the Virginia DOT, and Andrew Scott, representing the Maryland DOT, described their efforts in developing projects to address base transportation needs in their states and to find funding for these projects. They indicated that tight funding was a problem for all transportation needs in their states. This problem is compounded when BRAC-related growth results in off-base transportation needs as it is difficult for garrison commanders to advocate for redirecting funding from on-base to off-base projects. Mr. Sterling proposed considering a cost-sharing formula to address increased traffic congestion that would attribute a share of the cost to DoD based on the share of increased peak period traffic to and from expanded military bases. The committee was particularly concerned about reports of very large increases in personnel—many thousands—who will be commuting to Ft. Belvoir and Ft. Meade on corridors that are already saturated during peak traffic periods. The additional traffic will not come close to meeting the doubling criteria for DAR, but the traffic impacts will be substantial.

Mark Moffatt, Marissa Lara, and Joseph Marotta discussed the increases in personnel and their efforts to address transportation needs in the three areas included in Ft. Belvoir. Bert Rice similarly described the changes coming at Ft. Meade and efforts to address the transportation requirements. Finally, Jeffrey Miller reviewed the changes under way at the National Naval Medical Center in Bethesda, Maryland, and the strategy to meet the resulting transportation needs. Aggressive transit, parking, and workforce management alternatives as well as roadway improvements were incorporated at each of these bases. This emphasis on travel demand management is attributed in large measure to local agency requirements in the environmental impact statement. Parking management is limited in scope to parking supply because DoD policy forbids charging personnel for parking. The committee was impressed by the ambitious, but perhaps unrealistic, goals for managing the demand for peak-period single-occupant vehicle commutes.

The committee found these presentations helpful in understanding the nature and extent of the transportation problems resulting from increases in base personnel in the National Capital Region, options available, and the efforts under way to address them. Discussion of long lead times necessary to plan and implement transportation solutions and the limited funding available was also helpful in identifying the scope of the issues.

After being briefed about the relocations of civilian and military personnel in the Washington, D.C., region, the committee speculated about the impact these changes might have on military readiness and retention of key personnel (civilian and military). The Washington region has among the most congested traffic in the nation,[3] and the newly expanded facilities are accessed by some of the most congested roads and Interstates in the region. Moreover, some people being relocated are moving from facilities with good Metrorail and Metrobus access to locations without comparable transit service. Many one-way commutes are expected to be well over an hour, considerably longer than individuals' current commute times. In particular, the reported traffic difficulties for accessing the Mark Center in Alexandria, Virginia, and the spillover effects onto I-95, imply long commutes for workers headed to the Mark Center as well as longer commutes for others using Northern Virginia highways to get to and from their places

[3] Schrank, David, and Tim Lomax. *Urban Mobility Report*. Texas Transportation Institute, The Texas A&M University System, College Station, July 2009.

of employment. Some workers will shift their travel times and modes, and others will relocate to be closer to their employment (although for enlisted personnel and lower-wage civilian workers the committee questions whether housing costs will make such shifts possible). The committee wonders about the impact of especially long commutes on worker productivity and whether valued civilian staff will retire or change jobs to avoid long and unpleasant commutes.

PRELIMINARY CONSIDERATIONS

Taking into account the presentations, reports reviewed, and committee discussion, a number of issues have been identified for further consideration by the committee as it completes its assignment.

The increases in personnel in military bases due to BRAC considerations and other military decisions are occurring at a time when there have been major changes since the DAR criteria were promulgated in 1978. At that time, most road access projects were serving bases outside major metropolitan areas. Many of the increases in base personnel are now occurring in dense metropolitan areas with significant highway congestion and limited fiscal resources. In these situations, the first DAR criterion of a doubling of traffic is unlikely to occur to trigger potential DAR financial participation in addressing the access issue. Nevertheless, with these congestion levels in place, a traffic increase of only 5% or 10% could cause a highway facility to transition from relatively free-flow conditions to stop-and-go conditions. Adding several thousand new commuters to the few highways serving Ft. Belvoir during the peak period, for example, could well have this effect. The committee also observes that the DAR program is authorized only to fund road improvements, which makes sense in more rural settings. Metropolitan areas, however, depend on multiple modes to meet peak-period travel demand and reach Clean Air Act attainment.

Furthermore, expanding highway capacity in these congested areas is difficult because of the high cost of construction, lack of rights of way, environmental and energy concerns, and potential citizen opposition. Long lead times to plan and implement solutions may also imply that both transition and long-term options will need to be explored, particularly as the timing of BRAC relocations and the resultant impacts are not subject to the local planning processes, increasing the difficulty of effective coordination and response. Addressing rising levels of congestion requires a range of alternatives beyond expanding highway capacity. These alternatives include increased transit service, carpooling and vanpooling, bus shuttles, telecommuting, and flexible work hours and schedules. Reports from a number of military bases indicated that they are pursuing many of these alternatives, although the committee observes that their goals for non-single-occupant vehicle trips are outside the norm for the Washington, D.C., region away from the downtown area. Additional travel demand measures, such as parking and other pricing measures and expanded use of the transit benefit program could assist in reducing traffic congestion. It was reported to the committee that DoD has no formal program for supporting employee transit benefits, shuttles to and from bases to Metro stops, or expanded shuttle services within bases.

From what the committee was told at the first meeting, the BRAC decisions were made without careful consideration of the carrying capacity of local infrastructure or by consultation with the affected regional and local agencies. Little consideration apparently was given to the effects of increased numbers of base personnel on transportation needs, off-base housing, school requirements, and other public works requirements. If careful consideration was not given, then these regional and local agencies will need to address the impacts of these decisions after the fact

as best they can. Moreover, because of tight timing in implementation of the BRAC decisions, local agencies will need to act unusually quickly to ameliorate the impacts of the magnitude envisioned.

In all metropolitan areas with a population over 50,000 a transportation planning process is under way that is prescribed by federal law and regulation. This planning process is carried out by a legally constituted MPO, which is required as a condition to receive Federal-Aid Highway Program and transit funds. The planning is both long term (20 years) and shorter term (four or five years). The BRAC decisions are short term and, because of the magnitude of the personnel shifts and the speed with which they must occur, do not mesh well with the transportation planning in the affected areas. As a result of the MPO capital planning process, transportation projects had already been identified and financial resources already committed to these projects. The transportation requirements emanating from the BRAC decisions need to compete for funds with projects already identified by the MPO and local elected leaders. Moreover, the impacts of BRAC projects are occurring when state and local authorities are unusually strapped for funds. The revenues from fuel and other taxes that fund transportation improvements have significantly eroded over time,[4] and jurisdictions are feeling the effects of the financial crisis and the recession.

The situation of a sharp increase in base personnel being transferred to new or expanded facilities is somewhat analogous to an unanticipated new, large private development occurring within a metropolitan region. In such instances, the MPO may need to redo its long-range plan and shorter-term transportation improvement program. Typically, regional leaders negotiate with the developer and require that certain conditions be met to ameliorate the negative impacts of the development, and they often impose fees to offset any capital improvement needs as a result of the development. If the developers in such instances are unwilling to pay the impact fees, the local governments can refuse to allow the development. In contrast, in BRAC cases, state and local governments must accept the new and relocated personnel regardless of whether the impacts on transportation facilities and other public services are offset. The committee will be examining the private development model for potential application in cases in which rapid expansion occurs at bases within metropolitan areas.

Clearly, the consequences of large increases in base personnel could be addressed more easily if there were better coordination with the regional and local planning authorities. As military bases continue to expand, ongoing and improved coordination with local communities will reduce the problems of dealing with the impacts of these personnel increases. The committee will consider potential collaborative approaches for military and civilian authorities to help resolve problems such as those posed in BRAC cases. It is likely that the best approach will prove to be cooperative and collaborative.

The committee is aware that the current BRAC round is the final one authorized and that fiscal year 2011 will be the final year for which appropriations can be made to deal with the impacts of BRAC projects. The committee is also aware that most of the decisions about the fiscal year that will begin in October 2010 are made months in advance, well before the committee's final report will be issued. The DAR program is funded under separate authority

[4] *Paying Our Way—A New Framework for Transportation Finance. Final Report of the National Surface Transportation Infrastructure Financing Commission*. Washington, D.C., February 2009; and *Report of the National Surface Transportation Policy and Revenue Study Commission—Transportation for Tomorrow*. Washington, D.C., December 2007.

and is not about to expire, but OEA programs are being funded in part through BRAC. The committee raises for consideration whether extending BRAC for another fiscal year is warranted to address some of the adverse impacts of BRAC projects.

In summary, these issues will be further studied as the committee develops its findings:

- Modifications to DAR criteria to account for growth of personnel at bases in metropolitan areas;
- Potential sources of funds—including revenues from Enhanced Use Leasing on military property and expanded authority for the OEA program—for transit improvements and for travel demand measures, including transit benefits (subsidies to individuals to use transit) for bases in metropolitan areas;
- Whether parking pricing on military bases in metropolitan areas should be instituted to manage demand;
- Potential for modifying the Impact Fee Model that is used to fund transportation (and other) infrastructure requirements of an unanticipated new, large private development occurring within a metropolitan region to the DAR program;
- Potential options to accelerate improvements to the transportation system to accommodate BRAC base expansions; and
- Better coordinated planning between military bases and MPOs regarding potential expansion of personnel on bases.

As it addresses these issues, the committee will seek normative principles that might apply with regard to the share of costs various levels of government and government agencies should bear in situations such as those created by BRAC personnel realignments. In doing so, the committee will be mindful of the issue raised by Dr. Robyn concerning the share of transportation funds that urbanized areas currently receive as well as the many competing demands for the military construction budget.

Sincerely,

Joseph M. Sussman
Chairman, Committee for the Study on Federal Funding for Transportation Improvements in BRAC Cases

cc:
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Ranking Minority Member
Subcommittee on Military Construction, Veterans Affairs
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The Honorable Mark Warner
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FEDERAL FUNDING OF TRANSPORTATION IMPROVEMENTS IN BRAC CASES

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