COST - BENEFIT ANALYSIS ON THE CITY OF ALEXANDRIA

OF THE

U.S. DEPARTMENT OF DEFENSE

BRAC-133 OFFICE BUILDING PROJECT

SUMMARY: This economic and fiscal cost-benefit analysis of the BRAC-I33 office building is a complex, but narrowly focused, undertaking with many subjective variables. In weighing the overall direct and indirect benefits against the direct and lost opportunity costs, the conclusion this analysis reaches is that the economic and fiscal impact of the BRAC-133 project is overall fiscally and economically positive. This conclusion does not judge quality of life and other non-fiscal and non-economic variables. It also assumes that the transportation issues are satisfactorily resolved with the planned short, mid- and long-term improvements. If not, the resulting conclusion described below would likely be different.

INTRODUCTION: A cost-benefit analysis of the BRAC-133 office building project is a complex exercise to undertake given the difficulty of accurately and fairly measuring the costs and benefits of its impact. Many cost-benefit fiscal and economic analyses undertaken by consulting firms, even of a less difficult type than this, tend to use many subjective assumptions in the development of what appear to be precise mathematical economic development results.
An attempt at a formulaic quantified answer to the question of comparing the costs and benefits of the BRAC-133 project would likely lead to the use of debatable subjective inputs to produce what appear to be objective outputs. Such a result would not serve the discourse about this subject well. As a result, the following text seeks to discuss the various positive, as well as negative, economic and fiscal variables of the impact of the BRAC-I33 office building project. With many not factually able-to-be-known external business, economic and social variables influencing both sides of the cost-benefit analysis, it would be difficult to accurately reduce all of these subjective judgments to a mathematical outcome. Since this type of analysis involves making many subjective assumptions, if many of the key assumptions changed, one could reasonably reach a different conclusion. Also, if factors evolve over time differently from what is stated in this report, the results will vary from this report's conclusions.

ECONOMIC DEVELOPMENT THEORY OF OFFICE USERS: To help put this costbenefit analysis into context, it is useful to look at generally accepted economic development principles as a guide. It is a tenet of economic development that office development, with the new jobs such development brings, and the resultant tax base growth it produces, and the low impact it has on municipal service costs has a very positive net impact on the community. This is why states and localities around the country fiercely compete to have private firms (such as the recent D.C. area Northrop Grumman, and Hilton Hotels competition) and government agencies (such as the earlier U.S. Patent and Trademark Office competition or the upcoming National Science Foundation competition) locate within their borders. It should be noted that these cited four uses are examples where the organization will be paying local real property taxes either directly as a private sector owner, or indirectly as a public sector lessee of privately owned office space. Office use is considered both a clean and an environmentally low impact commercial activity compared to heavy or light industrial uses. Office uses also tend to produce higher paying jobs (which have greater buying power) than most other types of commercial land uses. Commercial uses also tend to produce more tax dollars (real estate, personal property, gross receipts, sales, etc.) per square foot than residential uses, as well as demand far less in municipal and school services than do residential uses. This is why the City has consistently compared its commercial and residential tax base sectors, and has sought to increase the commercial tax base sector. Because commercial uses tend to be net positive tax generators that use fewer services than residential uses, commercial uses through the direct taxes paid by those commercial users, and the spin-off indirect taxes they help generate, subsidize residential uses, and help keep a locality's tax rates lower than they would have otherwise been, or pay for services that otherwise could not be afforded.

Since its founding, Alexandria has sought to position itself as a City of commerce so as to provide a center of economic activity (i.e., more jobs, greater economic activity and lower taxes) for its residents and businesses. Over the last 50 years this has meant focusing on office-related users (such as professional and trade associations, professional firms, national non-profits, government contractors, government agencies, IT firms, etc.). Using economic development principles as one element of the planning process, such planning has typically meant making coordinated land use and infrastructure decisions to determine appropriate nodes to locate commercial and residential activity, finding the right balance between commercial and residential land uses, as well as determining what transportation systems and capacity is needed to serve those land uses.

Economic development theory and practice also focuses on the spin-off, indirect economic development, multiplier benefits of economic development. Spin-off benefits refer to new businesses which locate near the desired, targeted economic development use (such as a government contractor who will locate its offices near a government agency with whom it contracts with). This is often called a "contractor tail" because it follows the main body office user. A BRAC study by RCLCO for the Alexandria Economic Development Partnership undertaken in 2008 indicated that there was about 0.25 square feet of contractor space that would be lost for every 1.0 square foot of Department of Defense (DoD) space that was scheduled to leave the City due to the BRAC shifts of DoD jobs out of the City. City real estate assessment data confirms that a 0.25 factor contractor tail is about right. Conversely, one can apply this contractor tail principle to DoD moving BRAC-133 jobs into the City.

INDIRECT IMPACTS AND MULTIPLIER EFFECT: In addition to direct economic development impacts, there are indirect impacts of the increased spending of the new office workers on local goods and services, as well as on housing (if they or those who join the office building user's firm or government agency in later years choose to live in the jurisdiction where the office building user is located). A multiplier effect is another generally recognized economic development factor.[1] This multiplier effect is when dollars from a new firm and the firm's employees are spent and re-spent over and over in the community. In a closed local economy (where there is no leakage of economic benefits to adjacent jurisdictions) one rule of thumb often used is that for each dollar spent directly by the office building user or by their employees is respent in the community four to five times over. For example, this would mean that for each dollar of salary paid to an office worker that dollar is spent on housing which employed carpenters who built the housing who then spent their wages on housing, food, etc. However, Alexandria is not a closed economy and there is substantial leakage of multiplier dollars to other jurisdictions and vice-versa. This multiplier effect has less impact in the case of the BRAC-133 project, due to this regional leakage and sharing of the economic impact.

CROSS BORDER ISSUES: Alexandria is a small part of a much larger region where the BRAC-133 jobs moving to the City are not only already located in the region, but are primarily located in the adjacent jurisdiction of Arlington County. If the BRAC-133 Department of Defense (DoD) jobs and activities were moving de novo into the Northern Virginia region, or from suburban Maryland then an economic cost-benefit measurement would be less difficult to undertake. The fact that the BRAC-133 site is near the Fairfax County and Arlington borders means that the fiscal and economic costs and benefits will be shared.

COSTS: On the cost side of this economic development analysis, the main issue to be identified is the impact of this development on a locality's operating and capital costs. These would include direct costs, indirect costs and lost opportunity costs to a locality, both on the revenue and expenditure sides of the equation.

REAL ESTATE TAX REVENUE LOSS: Governmental ownership of the land and buildings impacts this cost-benefit analysis substantially, as the largest single direct tax impact of office buildings are the real estate taxes paid by office building property owners. With that not in the

1 United States Department of Commerce, Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II)

equation with the BRAC-133 office building project, the overwhelming net positive outcome usually associated with new office buildings becomes diluted as the primary direct tax source is not present.

The loss of real estate taxes is not a fatal loss, however, as can be seen by how nearly all localities and states have reacted to potential military base reductions and closures during the Department of Defense's periodic Base Realignment and Closure (BRAC) processes. This can be viewed as evidence that even with off-the-tax-rolls situations (such as the Navy Fleet Headquarters in Norfolk, the Naval Air Station in Virginia Beach, or the Army base at Fort Lee south of Richmond), the presence of DoD facilities represents a positive economic factor to state and local governments. This is why nearly all localities fight fiercely to keep their military bases and ports from moving and downsizing during the periodic BRAC decision making processes. It is also largely why the BRAC process, through the establishment of an independent commission whose recommendations could not be amended, was designed to be isolated, independent and largely free of political influence by Congress and the President of the United States.

DIRECT AND INDIRECT COSTS would include added costs for schools, transportation, police, fire, emergency medical, judicial system, recreation, parks, human service, public infrastructure and various other typical governmental costs. Some of these costs are direct (such as public school costs driven largely by per pupil generation) and can be generally projected (from experience) and taken into account at a time land use decision is made, but most of these costs are indirect and are not typically measured at the time land use decisions are made. Cost impacts, such as that seen with the 8,000 employee U.S. Patent and Trademark Office (PTO), can typically also be slightly incremental and absorbed within a locality's current budget resources (such as recreation services), or are material impacts and are not incremental and cannot be absorbed within current budget resources. Such new impacts can trigger the need for additional resources or new/expanded infrastructure (such as road improvements or the planned BRAC-133 related Police Department provided Gridlock Reduction Intervention Program (GRIP) intersection staffing plans).

TRANSPORTATION: The BRAC-133 project will have the most impact on the City's and the Commonwealth of Virginia's transportation systems. The addition of about 3,600 DoD employee cars each day to the road system required the road improvements the City mandated the developer (Mark Winkler Company's successor Duke Realty) to pay for in the 2004 land use reconfiguration of the previously planned Mark Center office park. Subsequent analyses after the 2008 DoD decision recognized that the 2004 required transportation improvements were not adequate to maintain a LOS (level of service) which would maintain the existing LOS. Therefore, the City and community developed additional transportation improvements. These subsequent analyses on how to mitigate the traffic impact of the BRAC-133 project resulted in (l) the proposal to construct a new high occupancy vehicle (HOV) transit ramp from the current HOV 1-395 lanes to the Seminary Road overpass ($80 million), (2) short and mid-term road improvements ($20 million), and (3) transit costs for enhanced DASH and WMATA bus service (cost over $1 million per year). To date, the Commonwealth of Virginia has agreed to pay for the HOV transit ramp, and DoD has agreed to pay for the enhanced DASH and WMA T A transit service, as well as the short and mid-term road improvements. The Alexandria City Public Schools may have increased costs for school bus transportation as a result of providing bus service through a more congested area. The City has concluded that it needs to staff key intersections near the BRAC-133 site during rush hour in order to reduce potential gridlock and to enhance traffic flow. Actual experience when BRAC is fully occupied will determine the long-term breadth of this planned intersection staffing program. After protracted discussions, DoD has concluded that it does not have the authority to pay for these traffic management personnel costs, but during the short and mid-term construction phases, DoD will fund substantial traffic management personnel costs. The City believes that DoD has the authority to pay for this intersection staffing, but has been unable to convince DoD to change its position. As a result the City is planning on shouldering the cost of up to $1 million per year for staffing key intersections (the "GRIP" program) during rush hour with police officers and/or parking enforcement officers. Once the City has actual BRAC-133 traffic experience, and then periodically before and after the short and long-term road improvements and HOV ramp are constructed, the City will be able to determine if, and to what degree, the GRIP program needs to remain in place for the long term.

To summarize transportation costs, the Commonwealth of Virginia and DoD will be providing $100 million ($80 million from the State and $20 million from DoD), as well as over $1.0 million per year for enhanced transit services (which will be available to the public to use). The City would be funding up to $1.0 million per year for the GRIP program, and the Schools may have higher school transportation costs.

PUBLIC SAFETY: The public safety cost impact of the BRAC-133 project is more difficult to quantify. Since the BRAC-133 site is being classified and managed by DoD as an Army military base, there will be little need for onsite City police services as DoD will handle most police-type issues themselves. For emergency medical service (EMS) calls, the City (as well as Arlington and Fairfax Counties based on closest due) will be providing emergency medical response services. DoD employees will be subject to the up to $675 non-resident charge that all nonresident transports are subject to in the City when transported by Alexandria or its neighboring jurisdictions EMS personnel. This covers a substantial portion of the costs, but the fee is not priced to cover full costs. A high percentage of these fees will be paid, as nearly all of the BRAC-133 site employees will have health insurance coverage which covers EMS transports. Calls which do not result in a transport are not charged.

The impact on fire suppression services is greater, but not because of the number of calls to the BRAC-133 site. The impact will be the negative impact service will have on response times because the BRAC-133 building is located in one of the busiest emergency call demand areas in

Northern Virginia. This area (including adjacent areas of Arlington and Fairfax Counties) has grown substantially over the last few decades and the number of fire stations and sited fire apparatus and personnel has not increased at the same proportion as the service demand has increased. Increased traffic incident related service calls on 1-395 have also added to demand. The BRAC-133 building with its 6,400 employees will further exacerbate that demand, by both adding to the demand for services as well as adding to the traffic which will slow response times.

While the City has planned and has funded a new fire station on the west end of Eisenhower Avenue which will improve fire and EMS services on the West End of the City (and tangentially benefit the Beauregard corridor), there is still a need for an additional fire station in the Beauregard corridor. This station would be needed even if the BRAC-133 building had not been built. The federal government might be willing to fund a portion of ongoing station staffing costs, but that remains to be seen if early discussions are able to be turned into reality. The cost of the station fully equipped has not been costed in detail, but it is likely to be approximately $12 million to $14 million. This station may be located on the JBG development site, and possibly its capital costs could be largely funded by developer as part of a development community benefit package. Active planning on site and design has been initiated. Fire would also provide urban rescue and hazmat response to the BRAC-133 site but would use existing resources to provide these services.

PUBLIC EDUCATION: Over time it is likely that some portion of the BRAC-133 employees will move to the City and impact public education costs. How many might move to the City and over what time period is an unknown. To the degree the BRAC-133 employees move into a house or apartment that already exists means that there may not be any net increase in student generation. To the degree that the BRAC-133 employees create a demand for new housing, then there will likely be new apartments constructed as well as new for sale condominiums and townhouses. **In** this case of new residential construction there maya change in student generation. The current data shows that townhouses, garden apartments and mid-rise buildings generate about .13 to .16 students per household. That translates into about one student for every seven of these types of households. One large mitigating factor in regard to student generation caused by the employees of the BRAC-133 project is the fact that much of the new housing likely to be constructed in the large JBG area would be replacement housing where there are likely to be more middle to higher income new housing units constructed which would replace lower income housing units. This relatively unique phenomenon in the Beauregard corridor may actually result in a lower school student generation ratio, which if that occurs would lower and not raise City public education costs.

OTHER CITY SERVICES: Other City services that would see a likely de minimus impact, would be community and human services, the judicial system, public schools, and parks and recreation services. The impact would largely be related to any increase in residential units constructed in the City as a result of increased BRAC-133 employee demand for housing in the

City. BRAC-133 would also result in an increase in water service, solid waste collection and disposal and sanitary sewer services, and DoD would pay 100% of the costs of these services through user fees. DoD also paid 100% of the cost of connecting the BRAC-133 site to the Arlington sanitary sewer shed and therefore not utilize the Holmes Run trunk sewer line or sanitary sewer capacity at the Alexandria Sanitation Authority (ASA) wastewater treatment facility.

OPPORTUNITY COST: In any cost analysis one needs to look not just at direct and indirect cost analysis, but also opportunity cost which was foregone by the BRAC-133 site being owned and developed by the federal government which took the property off the tax rolls. Based on the 2008 City assessment, which was prior to the vacant land sale to the federal government, the taking of this vacant land off the tax rolls is costing the City $0.3 million per year in foregone real property taxes. Not only is there the immediate foregone cost of existing real property tax revenues, but there is also a future foregone opportunity cost as the property will not now be able to be developed as a privately owned office building site and therefore those future potential increased revenues will no longer come to the City. To provide an order of magnitude analysis, private sector office buildings (assuming the Mark Center 2004 approved plan at full build out) would have had a tax assessment value of about $500 million (in 2008 dollars) when fully developed. This would have produced about $4 million in real property taxes annually at full build out at 2008 tax rates. It was this calculation which formed the basis of the City'S efforts in 2008 to get DoD to agree to make a payment-in-lieu of taxes (PILT) of up to $60 million as part of the DoD BRAC-133 construction budget. This amount was based on a 20-year period discounting the nominal result of lost real estate tax revenues back to 2008 dollars and then using 75% of the calculated amount (i.e., $4 million x 20 years = $80 million x .75 = $60 million).

This $60 million calculation also assumed as the starting point of discussions with DoD that all of the Mark Center lost tax base opportunity value due to new development occurred on day one early in the analysis, rather than being spaced out over a 10 to 20-year period. It would have been likely that the development of the Mark Center's original site plan would have taken a decade or more for office space market demand to build out based on market conditions. As a result, a more probable projection with this longer build out period would result in a far smaller foregone opportunity cost for real estate taxes.

Another factor which would have a major impact on the lost opportunity equation would be that there was no development market displacement assumption made in the calculation of the $60 million in foregone revenue. This displacement assumption would have recognized that it was likely that any private sector office market demand that would have occurred absent the BRAC133 building would not have simply disappeared, but would have looked at alternative sites in the City and elsewhere near the Mark Center. This coupled with the fact that the City has many potential office development sites means that the real estate taxes foregone due to the development of the BRAC-133 site as a non-taxable federal facility, would have possibly been displaced and generated by a site that otherwise would not have been developed absent the Mark Center development by DoD. Evidence of this market reaction was stated by the former regional development director for General Growth Properties who believed that the BRAC-133 site displacement of market demand increased the likely, future office demand on the Landmark Mall site, and therefore accelerated the likely timing, and probability of a Landmark Mall site redevelopment.

BENEFITS: On the benefit side of this economic development analysis, the main issue to be identified is the impact of this development on a locality's tax revenues and local economy.

JOBS: One of the most measurable impacts of the BRAC-133 is the creation of 6,400 direct jobs and some number of indirect jobs in the City. The 6,400 jobs represent about a 6% increase in the overall City employment base, which is a material increase. Jobs represent a proxy measure for the health of a local, state or national economy. These BRAC-133 jobs will tend to be professional and IT technical and therefore would be on the mid to upper end of the governmental pay scales, so that would mean an addition of disposable income earned inside the City limits. Assuming an estimated range of $75,000 to $100,000 salary per employee per year, the total BRAC payroll would be between $480 million and $640 million per year overall.

As noted previously, because of the spillover effect, the benefits of this income addition will be spread over the Washington, D.C. region as the BRAC-133 employees largely live outside the City (and even when some more move into the City, it is likely that most will become or remain residents of other Northern Virginia jurisdictions), and therefore will likely to spend most of their disposable income outside of the City. There will be increased spending on restaurants and retail by these employees, but that amount of increased spending is not likely to be substantial as government employees tend to spend less disposable income at lunch time near their place of employment than do non-governmental employees. The substantial security features of the BRAC-133 site, an on-site cafeteria and bank, and the fact that a minimum of40% ofBRAC-133 employees will not have cars at the site will also tend to negatively influence off site spending during the work day. It is likely that off-site spending will be the greatest in the late afternoons and evenings after BRAC-133 employees leave work.

There also will be indirect jobs created from the spending of the BRAC-133 employees, as well as from DoD spending. Whether it be suppliers to the BRAC-133 facility or service sector employees, there will be some number of new jobs created from DoD's and its employees' spending.

As stated previously, with any federal agency there is usually a contractor tail of government contractors who are required, or may choose to be near their client/customer. The RCLCO study had estimated a 0.25 to 1.0 ratio correlation between DoD agencies in Alexandria and the amount of contractor tail. This would mean that if applied to BRAC-133 there would be about 325,000 square feet of new office space eventually to be needed by, and constructed for the BRAC-133 contractor tail. This would mean a real estate tax base gain of about $100 million to the tax base and a real estate revenue tax gain of about $1.0 million annually to the City's revenues, plus other commercial tax revenues.

OFFICE SPACE DEMAND: Some contractors will be embedded in the BRAC-133 facility, and some will choose to lease office space in existing office buildings, or in the future office buildings yet to be constructed. Most all of the contractors will likely not choose to move near the BRAC-133 site immediately due to the remaining terms on their existing leases, and the fact that there is not a significant amount of vacant office space available in the immediate Mark Center. The Skyline office complex nearby in Fairfax County has, and will have in the future, vacant office space available (particularly after the Joint Medical Command moves to the Gallows Road/Route 50 area). The well-publicized negative traffic impacts of the BRAC-133 generated traffic may temper future office space short-term demand.

There will also be some office space lease churning, as some existing tenants look to leave the Mark Center office complex due to various reasons, which might include the negative impact of additional traffic and the resulting increase in employee and customer drive times. Experience to date shows that some entities may choose to leave Mark Center (CNA has been seeking to do so) and some have decided to stay (SPA has re-leased its space). In addition, with a no new current office space supply on the market in the Mark Center area, or under construction, it is likely that rents in the Mark Center area will increase in real terms. New construction of office space or an increase in real terms oflease income will result in an increase in the City's tax base and therefore annual real estate tax revenues. An increase in market demand will also result in upward pressure on all office space lease rates when leases expire in the Mark Center area. While the market factors all appear to be positive, the ultimate outcome will be determined by the actual transportation impact of the BRAC-133 project and whether it acts as a deterrent to the normal market reaction to a development of the order of magnitude of the BRAC-133 project. Any increase in market demand not only may cause additional office space to be constructed, but also may result in an increase in the office space rents achieved. This increase in office space rents will result in higher assessments for that office space and therefore higher real estate tax revenues for the City.

What has not been stated by DoD is that there is some strong likelihood that DoD will lease additional space in the future in the Mark Center area. From what the City understands, the demand for DoD agencies for the BRAC-133 space has already exceeded the available space in the building. As a result there will be internal future pressure for DoD to lease nearby office space. It may take a few years for this to happen, but as is the case with many governmental or private sector office space plans, the space planned turns out to be insufficient by the first day of occupancy. It is unlikely, short of another national BRAC base closure process that DoD would be able to obtain military construction monies and Congressional approval to purchase additional office space (and thereby take anything purchased off the tax rolls and out of local land use control). However, it is far more likely that DoD agencies leasing office lease in the Mark Center area will be the likely outcome. This also assumes that DoD budget reductions do not materially reduce the staffing of those DoD agencies to be located at the BRAC-133 site.

HOTEL DEMAND: The BRAC-133 project will also increase the demand for hotel rooms in the Mark Center area. This will result in a change in the market demand which will increase the supply and to construct more hotel rooms, as well as will increase the revenue earned per room (REVP AR) of existing hotels. This increase in market demand is evidenced by the recent sale of the Hilton Mark Center for an all-in price of $121 million or $234,931 per room. This was a substantial increase from the $93.2 million 2006 purchase price. Persons familiar with the 2010 sale indicated that the BRAC-133 project and its influence on future hotel revenues was a factor that positively influenced the hotel's sale price. The Hilton Mark Center will shift from a tertiary hotel (meaning one whose demand and room pricing is driven by primary hotels in the D.C.! Arlington! Alexandria core area) to a primary hotel (meaning a demand generator for its hotel rooms is nearby). The impact on the City of such an increased economic activity from hotel room rentals will be an increase in the in subsequent property tax assessments, as well as an increase in the hotel sales taxes and transient occupancy taxes paid to the City. It will probably also displace from the Mark Center Hilton government business with a D.C. core focus into North Old Town hotels. The construction of additional hotel rooms is also likely, but not for a few years.

RETAIL DEMAND will also increase as a result of 6,400 more DoD workers and the workers created by the contractor tail and related spin off. The BRAC-133 site is also one the factors leading JBG to decide to proceed at this time with the re-planning, expansion and redevelopment of their current retail site on Beauregard. If that retail redevelopment occurs, then the City's tax base and real estate tax revenues would increase. If redevelopment does not occur, it is likely that the values of the existing retail space will increase, resulting in increased assessments and therefore City property tax revenues. Landmark Mall (and its planned redevelopment) will also benefit from increased retail demand driven by these new DoD BRAC-133 workers. Increased sales tax, business tangible taxes, gross receipts taxes, and business tangible taxes are also a likely outcome of increased retail sales activity.

RESIDENTIAL DEMAND: The BRAC-133 site will also positively influence residential real estate values and redevelopment in the Beauregard corridor. This is in large part due to the planned DoD increase of 6,400 new workers at the BRAC-133 site. Increased DoD workers will result in increased demand for rental apartments, as well for owner-occupied townhouse, condominium and single family residential units. This will tend to increase property values and tax revenues deriving from the Beauregard corridor, as well as increase the pressure for redevelopment (or at a minimum upgrading) of older apartment rental stock such as the HOME properties, Southern Towers, and the JBG rental portfolio on Beauregard. With strong interest expressed by all three of these apartment rental property owners in redevelopment, and in some cases updating of existing rental units in the near term, it appears that the BRAC-I33 influence on the residential market has already started to occur. Also, some real estate agents are beginning to market residences for sale in the Beauregard area as "near BRAC" as a positive marketing tool.

To calculate how much the BRAC-B3 project will positively influence the tax base would be highly speculative. To put in perspective, for each 1 % change in the current 2011 $3.4 billion property tax base in the Beauregard corridor, the tax base would increase by $34 million and the annual City tax real estate tax revenues would increase by $0.3 million per year. In the case of new development, if 10% of the added 6.9 million square feet of proposed net new development (using the number of by-right square feet plus additional square feet requested by the property owners but not judging whether that level of approval would occur) is caused or materially accelerated by BRAC, then the resultant increase in the tax base would be about $200 million and would produce a gross new real estate tax revenue to the City of about $2 million per year.

CONCLUSION: As stated in the beginning of this analysis, making a cost-benefit conclusion about BRAC-I33 is complex and requires the making of many subjective judgments. As a result, it is not possible to calculate and to conclude with a simple bottom line and state a specific numerical outcome. However, one can make reasonable conclusions based on economic development theory and practice, local market knowledge, and professional judgment.

The conclusion reached is that the overall economic impact of BRAC-133 will be positive over the long-term, provided that the needed Commonwealth of Virginia and DoD paid road and transit improvements as proposed are made. This conclusion is contingent upon the planned transportation improvements being implemented, and assumes that any future development approvals (if any) in the Beauregard corridor are accompanied by sufficient transportation improvements. In the short term without these transportation improvements in place, the fiscal costs of the BRAC-I33 project may outweigh the fiscal benefits.

It can also be concluded that if the BRAC-I33 building had been a lease (as was the U.S. Patent and Trademark Office), or if DoD had agreed to a payment in lieu of taxes, then it would have been clear by a wide margin that the BRAC-133 office building would have had a materially positive economic benefit. However, without the BRAC-B3 office building on the City's tax rolls, the economic and fiscal benefits are far less, and as a result the costs and benefits get much closer. If key factors evolve materially differently from what is stated in this report, then the end conclusions would likely also vary materially.

This conclusion of a net positive BRAC-I33 economic impact is based on the following:

- BRAC-133's 6,400 new jobs will positively impact the City in regard to economic demand for goods, services and housing.

- DoD's presence will attract a DoD contractor tail and increase office space demand, and hence office space supply via new construction.

- BRAC-133 will increase hotel, retail and residential demand and, thereby, increase local tax revenues.

- BRAC-133 will accelerate the redevelopment of the JBG, HOME and Southern Towers sites, as well as help trigger the development of the Hekemian site. Such redevelopment may eventually add (depending on the development plans approved) up to several billion to the City's tax base, and therefore up to tens of millions annually to the City's tax coffers. While much of this would occur without the BRAC-133 project, it will be accelerated by the BRAC-133 project.

- The incremental costs of providing City services to the BRAC-133 site beyond the GRIP traffic control $1 million per year are not material.

- $100 million in needed road improvements will be provided as promised by the Commonwealth of Virginia and DoD.

City of Alexandria
July 14,2011