COG / TPB Regional Analysis: Impacts of the U.S. Department of Defense (DoD) Base Realignment and Closure (BRAC) Recommendations For the Metropolitan Washington Region

DRAFT July 6, 2005

Department of Human Services, Planning and Public Safety
Department of Transportation Planning
Metropolitan Washington Council of Governments



Background and Purpose

On May 13, 2005, U.S. Department of Defense (DoD) Secretary Donald H. Rumsfeld forwarded the Department's recommendations concerning the closure, realignment or expansion of military and other defense-related facilities to the Base Realignment and Closure (BRAC) Commission.

Included in Secretary Rumsfeld's recommendations are a number of proposed changes to DoD facilities located in the District of Columbia, Maryland and Virginia. In addition to the base-specific BRAC recommendations, DoD has also recommended not renewing leases for buildings that do not meet the Department's Unified Facilities Criteria (UFC) Minimum Antiterrorism Standards for design and security. These workers may be relocated to facilities in other parts of metropolitan Washington, or to locations outside of the region.

The opportunities and challenges associated with these two linked issues were discussed at the COG Board of Directors meeting on Wednesday, May 11 and during a conference call with COG Board members on Thursday, May 19. During their conference call, Board members directed COG staff to compile information on the BRAC proposed changes and outline a proposed work program for assessing the potential land use, transportation and air quality impacts of the BRAC and UFC changes. The National Capital Region Transportation Planning Board (TPB) also discussed this issue during its' May 18 meeting and directed TPB staff to undertake similar analyses.

Method of Analysis

The analyses in the report focus on two time periods:

- 2010 a forecast year for which DoD workers currently in leased office space must be in facilities that meet the UFC security requirements, and by which much of the proposed BRAC base and facility changes would have occurred or be underway
- 2020 a forecast year by which all of the BRAC DoD base realignments would be complete, and when absorption of space or redevelopment would have largely occurred for leased facilities which would be vacated in 2010 for failure to meet the UFC standards

BRAC and Department of Defense security-related employment changes have been estimated based upon information as of June 27, 2005. Utilizing this information, the Center for Regional Analysis (CRA) of George Mason University recommended modifications to the adopted Round 6.4A Cooperative Forecasts of population, households and employment for 2010 and 2020 by traffic analysis zone (TAZ). CRA staff also made assumptions concerning the number of DoD contractors likely to re-locate to areas adjacent to the DoD facilities. Specific data files used by CRA and COG staff to develop the modified TAZ forecasts include the "BRAC 2005 Base Closure and Realignment by State" list published by the Department of Defense; the Northern Virginia Regional Commission's (NVRC) database of DoD leased facilities; and the

National Capital Planning Commission's (NCPC) federal facility assigned employment data file.

Following development of the adjustments to the TAZ forecasts, the COG/TPB staff utilized travel demand forecasting models to prepare 2010 and 2020 summaries of regional transit and vehicle trips, vehicle miles traveled (VMT) and nitrogen oxide (NO $_{\rm X}$) and volatile organic compound (VOC) emissions. Results of those models are published in Section III.

Next Steps in the BRAC Process

The BRAC Commission has scheduled a public hearing for the proposed BRAC changes for the District of Columbia and the Commonwealth of Virginia for July 7, 2005, and a hearing for changes impacting Maryland on July 8. The BRAC Commission will forward its report on recommendations for base realignments or closures to the President by September 8, 2005, and the President will have until September 23, 2005, to accept or reject the recommendations in their entirety. If accepted, Congress will have 45 legislative days to reject the recommendations in their entirety or they become binding on the Department of Defense.

Findings

July 6, 2005

The impacts of BRAC and Department of Defense security-related employment changes have been estimated based upon information as of June 27, 2005.

Compared to the adopted Round 6.4A Cooperative Forecasts for 2010:

BRAC Employment/Household Impacts

- Total projected employment for the Washington metropolitan region would be reduced by approximately -15,000 jobs. Due to anticipated net increases in 2010 employment for jurisdictions adjacent to the Washington region (primarily, Anne Arundel County) employment would be reduced by approximately -10,800 jobs for the TPB modeled region.
- Several jurisdictions would see a reduction in projected employment, including Arlington County (-19,321 jobs), the City of Alexandria (-7,539 jobs) and the District of Columbia (-6,508 jobs).
- Several jurisdictions would see an increase in projected employment, including Fairfax County (+14,506 additional jobs), followed by Anne Arundel County, Maryland (+4,450 jobs), Prince William County (+2,500 jobs) and Prince George's County (+1,496 jobs)
- No changes in the projected number of households in the region are anticipated.

BRAC Impacts on Regional Activity Centers

- The total number of jobs projected to be located in regional activity center clusters would change from 2.32 million to 2.29 million a reduction of -28, 731 jobs or -1.2 percent.
- Several regional activity center clusters would see a reduction in projected employment including Pentagon/Reagan Airport/Alexandria Area (-16,318 jobs), the Rosslyn/Ballston Corridor (-8,886 jobs), the Baileys Crossroads Area (-5,021), and Silver Spring/Takoma Park/Wheaton (-4,673 jobs).
- The I-95-/Springfield Area would see an increase in forecast employment (7,375 jobs) followed by Bethesda/Friendship Heights (1,968 jobs).
- Employment at Fort Belvoir a designated "Government Special Attractor" would increase by approximately 15,000 jobs.

BRAC Transportation/Air Quality Impacts

- Total transit trips would decrease by -18,528 (-1.84%)
- Total vehicle trips would increase by 26,790 (+0.12%)
- Vehicle miles traveled would increase by 73,829 (+0.04%)
- VOC emissions would increase by 0.03 tons per day (+0.05%) while NO_X would increase 0.02 tons per day (+0.01%).

Compared to the adopted Round 6.4A Cooperative Forecasts for 2020:

BRAC Employment/Household Impacts

- Total projected employment for the Washington metropolitan region would increase by approximately 13,700 jobs. Total 2010 forecast employment for the larger, TPB modeled region in 2020 would increase 18,728 jobs
- Projected employment in Fairfax County would increase by approximately 21,400 jobs, followed by Anne Arundel County (+5,361 jobs), Prince William County (+3,013 jobs), and Prince George's County (+1,557 jobs).
- Projected employment in Arlington County would total approximately 6,600 fewer jobs, followed by the District of Columbia (-4,511 jobs) and the City of Alexandria (-2,400 jobs).
- Approximately 8,500 additional households would be added to the region with increases anticipated in Prince William (+3,000 households), Fairfax (+2,000 households) Stafford (+1,500 households) and Montgomery (+1,000) counties, and the District of Columbia (+1,000).

BRAC Impacts on Regional Activity Centers

- The total number of jobs projected to be located in Regional Activity Center Clusters would change from 2.63 million to 2.62 million – a reduction of 1, 617 jobs or 0.1 percent.
- Several regional activity center clusters would see a reduction in projected employment, including the Pentagon/Reagan Airport/Alexandria Area (-5,034 jobs), the Rosslyn/Ballston Corridor (-2,800 jobs), the Silver Spring/Takoma Park/Wheaton (-2,300 jobs), and Downtown Washington (-1,812 jobs).
- The I-95-/Springfield Area would see an increase in forecast employment (9,000 jobs) followed by Bethesda/Friendship Heights (2,289 jobs).
- Employment at the Fort Belvoir "Government Special Attractor" would also increase by approximately 16,000 jobs.
- The total number of households projected to be located in Regional Activity Center Clusters would change from 872,018 to 875,018 an increase of 3,000 households or 0.3 percent.
- Approximately 3,000 additional households would be added to the regional activity center clusters with increases in the Potomac Mills Area (+1,200 households), the Silver Spring/Takoma Park/Wheaton (+1,000 households) and the I-95-/Springfield Area (+800 households).

BRAC Transportation/Air Quality Impacts

- Total transit trips would decrease by -6,097 (-0.52%)
- Total vehicle trips would increase by 84,932 (+0.34%)
- Total vehicle miles traveled would increase by 133,435 (+0.07%).
- VOC emissions would increase by 0.08 tons per day (+0.22%) while NO_X would increase 0.03 tons per day (+0.07%).

• VOC emissions would increase by 0.08 tons per day (\pm 0.22%) while NO_X would increase 0.03 tons per day (\pm 0.07%).

Section I - 2010 Forecast Changes

Table I-1 Comparison of Round 6.4A 2010 and BRAC-Related 2010 Employment by Jurisdiction

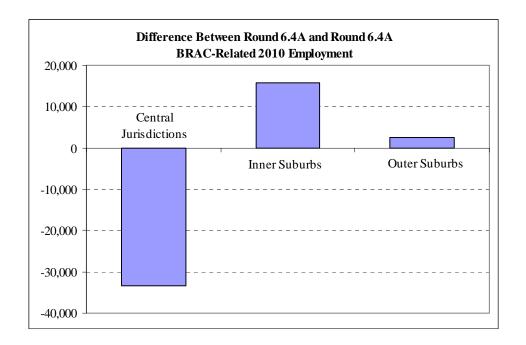
| | Round 6.4A | Round 6.4A BRAC- Related | Round Round 6. | ce between 6.4A and 4A BRAC- lated |
|------------------------------|---------------|--------------------------------|-------------------|---|
| JURISDICTION | 2010 | 2010 | Number | % Change |
| District of Columbia | 752,016 | 745,508 | -6,508 | -0.9% |
| Arlington County | 217,834 | 198,513 | -19,321 | -8.9% |
| City of Alexandria | 114,881 | 107,342 | -7,539 | -6.6% |
| Central Jurisdictions | 1,084,731 | 1,051,363 | -33,368 | -3.1% |
| Montgomery County | 565,000 | 564,854 | -146 | 0.0% |
| Rockville | 91,400 | 91,400 | 0 | 0.0% |
| Prince George's County | 402,500 | 403,996 | 1,496 | 0.4% |
| Fairfax County | 653,171 | 667,677 | 14,506 | 2.2% |
| City of Fairfax | 31,464 | 31,464 | 0 | 0.0% |
| City of Falls Church | 10,000 | 10,000 | 0 | 0.0% |
| Inner Suburbs | 1,662,135 | 1,677,991 | 15,856 | 1.0% |
| Loudoun County | 141,644 | 141,644 | 0 | 0.0% |
| Prince William County | 122,449 | 124,949 | 2,500 | 2.0% |
| City of Manassas | 23,025 | 23,025 | 0 | 0.0% |
| City of Manassas Park | 4,723 | 4,723 | 0 | 0.0% |
| Calvert County | 32,897 | 32,897 | 0 | 0.0% |
| Charles County | 62,888 | 62,809 | -79 | -0.1% |
| Frederick County | 120,700 | 120,768 | 68 | 0.1% |
| Stafford County | 38,344 | 38,344 | 0 | 0.0% |
| Outer Suburbs | 546,670 | 549,159 | 2,489 | 0.5% |
| Northern Virginia | 1,357,535 | 1,347,681 | -9,854 | -0.7% |
| Suburban Maryland | 1,183,985 | 1,185,324 | 1,339 | 0.1% |
| MSA REGIONAL TOTAL | 3,293,536 | 3,278,513 | -15,023 | -0.5% |
| TPB MODEL REGION TOTAL | 4,095,367 | 4,084,531 | -10,836 | -0.3% |

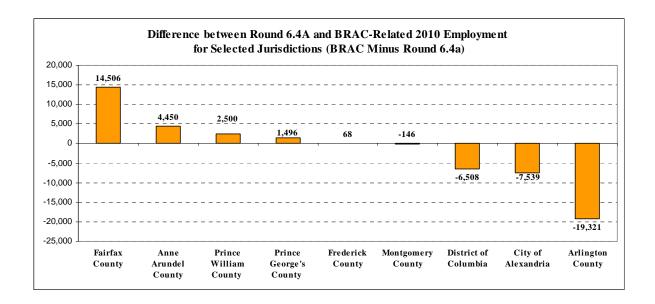
Table I-1 compares the 2010 Round 6.4A Cooperative Forecasts of Employment by jurisdiction with 2010 employment modified to reflect the proposed BRAC changes.

No changes in the projected number of households in the region in 2010 are anticipated due to BRAC activities.

As can be seen in the table, compared to the Round 6.4A Cooperative Forecasts, total forecast employment for the Washington metropolitan region would be reduced by a net of approximately -15,000 jobs. Due to net gains in employment anticipated in jurisdictions adjacent to the COG region such as Anne Arundel County, total employment for the larger TPB modeled region in 2010 would be approximately -10,800 jobs less than Round 6.4A

Assuming the BRAC-related changes, employment in the region's Central Jurisdictions would be approximately 33,400 jobs lower than the Round 6.4A projections; employment in the Inner Suburbs would be nearly 15,900 jobs higher than Round 6.4A, and employment in the region's Outer Suburbs would be approximately 2,500 jobs higher.





Jurisdictions that would see a reduction in projected 2010 employment due to the BRAC changes when compared to the Round 6.4A Forecasts include Arlington County (-19,321 jobs), the City of Alexandria (-7,539 jobs) and the District of Columbia (-6,508 jobs).

Compared to Round 6.4A, Fairfax County would see an increase in forecast employment due to BRAC-related changes in 2010 (+14,506 additional jobs) followed by Anne Arundel County (+4,450 jobs), Prince William County (+2,500 jobs) and Prince George's County (+1,496 jobs).

DRAFT Frederick Co. Montgomery Co. Loudoun Co. **Fairfax** Prince Map Legend Wap Legent
Change in 2010 Employment
-20001 to -10001
-10000 to -5000
-4999 to -1
No change
1 to 4999
5000 to 9999
10000 + Prince William Co. DoD Installations

Other DoD Facilities

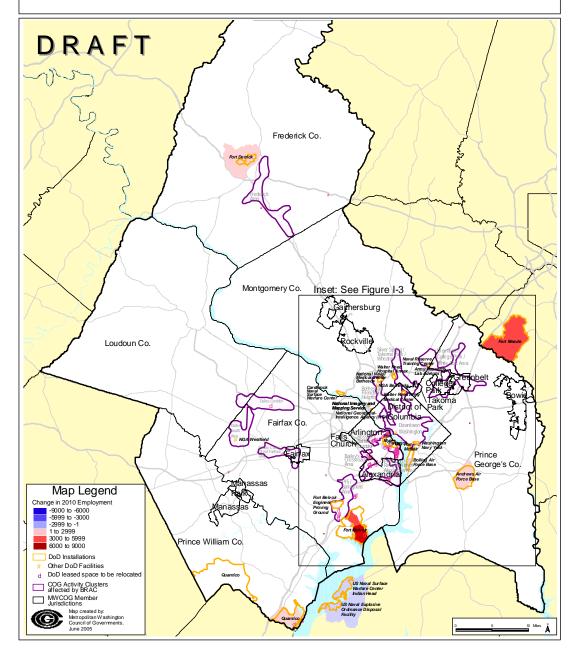
d DoD leased space to be relocate

MVCOG Member

Jurisdictions

Figure I-1: BRAC-Related Change in 2010 Employment

Figure I-2: BRAC-Related Change in 2010 Employment



Region DRAFT Montgomery Co. Rockville 2 Fort Meade reenbelt / Silver Sping / Takoma Park College Park / Naval Reserve Training Center Army Research Lab Adelphi Walter Reed Hospital Annex Medical Center Bethesda White Oak Area Greenbelt NGA Bethesda Takoma Park Carderock Naval Surface Warfare Center -riena Walter Reed Army Medical Center National Imagery and Mapping Agency National Geospatial-Intelligence Agency (NGA) District of Columbia Ros **loto**ma<mark>c</mark> Ballsto Falls Church An<mark>ne</mark>x Prince George's Co. Washington Fort McNair Arlington Navy Yard Fairfax Co. Bailey's Crossroads Area Bolling Air Force Base Andrews Air Alexandria Force Base 1-95/ Springfield Fort Belvoir Area Enginee Proving Map Legend
Change in 2010 Employment
-9000 to -6000
-5999 to -3000
-2999 to -1
1 to 2999 Ground Fort Belvoit 3000 to 5999 6000 to 9000 DoD Installations Other DoD Facilities DoD leased space to be relocated COG Activity Clusters affected by BRAC
MWCOG Member
Jurisdictions Map created by:
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Council of Governments.

Figure I-3: BRAC-Related Change in 2010 Employment

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Table I-2
Comparison of Round 6.4A 2010 and BRAC-Related 2010 Employment by
Regional Activity Clusters

| | Round 6.4A | Round 6.4A BRAC- Related | Round Round 6 | ce between 6.4A and .4A BRAC- clated |
|--|---------------|--------------------------------|------------------|---|
| REGIONAL ACTIVITY CLUSTERS | 2010 | 2010 | Number | % Change |
| Downtown Washington | 649,804 | 648,300 | -1,504 | -0.2% |
| Pentagon/Reagan Airport/ Alexandria Area | 159,275 | 142,957 | -16,318 | -10.2% |
| Rockville/North Bethesda | 169,159 | 169,159 | 0 | 0.0% |
| Dulles Corridor | 121,117 | 119,617 | -1,500 | -1.2% |
| Tysons Corner | 125,242 | 125,242 | 0 | 0.0% |
| Greenbelt/College Park/White Oak Area | 113,506 | 113,456 | -50 | 0.0% |
| Rosslyn/Ballston Corridor | 98,533 | 89,647 | -8,886 | -9.0% |
| Bethesda/Friendship Heights | 101,414 | 103,382 | 1,968 | 1.9% |
| Gaithersburg/Life Sciences Center | 75,662 | 75,662 | 0 | 0.0% |
| Dulles North Area | 47,123 | 47,123 | 0 | 0.0% |
| Fairfax Center/City of Fairfax/GMU | 82,916 | 82,894 | -22 | 0.0% |
| Silver Spring/Takoma Park/Wheaton | 70,505 | 65,832 | -4,673 | -6.6% |
| I-95/Springfield Area | 60,086 | 67,461 | 7,375 | 12.3% |
| Dulles South Area | 59,244 | 59,144 | -100 | -0.2% |
| Frederick Area | 75,629 | 75,629 | 0 | 0.0% |
| Manassas Area | 45,950 | 45,950 | 0 | 0.0% |
| Merrifield/Dunn Loring | 48,689 | 48,689 | 0 | 0.0% |
| Bailey's Crossroads Area | 57,901 | 52,880 | -5,021 | -8.7% |
| New Carrollton/Largo Area | 42,600 | 42,600 | 0 | 0.0% |
| Germantown/Clarksburg | 31,751 | 31,751 | 0 | 0.0% |
| Potomac Mills Area | 30,238 | 30,238 | 0 | 0.0% |
| Waldorf Commercial | 30,997 | 30,997 | 0 | 0.0% |
| Leesburg Area | 17,701 | 17,701 | 0 | 0.0% |
| National Harbor | 7,663 | 7,663 | 0 | 0.0% |
| Regional Activity Clusters Total | 2,322,705 | 2,293,974 | -28,731 | -1.2% |

The map(s) in Figures I-1, I-2 and I-3 show, respectively, Round 6.4A 2010 employment and change in projected employment in 2010 reflecting the proposed BRAC realignments. Table I-3 shows the estimated change in 2010 employment summarized for the Regional Activity Center Clusters. As can be seen in the maps and table, projected employment in 2010 due to the proposed BRAC changes would be lower than the Round 6.4A Forecasts for the Pentagon/Reagan Airport/Alexandria Area (-16,318 jobs), Silver Spring/Takoma Park/Wheaton (-4,673 jobs) Dulles Corridor (-1,500), and Downtown Washington (-1,504) Regional Activity Center Clusters. Projected 2010 employment in the I-95 / Springfield Area (+7,375 jobs) and Bethesda / Friendship Heights (+1,968 jobs) Activity Center Clusters would increase due to BRAC changes. Employment at Fort Belvoir – a designated "Government Special Attractor" would increase by approximately 15,000 jobs.

Section II - 2020 Forecast Changes

Table II-1 Comparison of Round 6.4A 2020 and BRAC-Related 2020 Employment by Jurisdiction

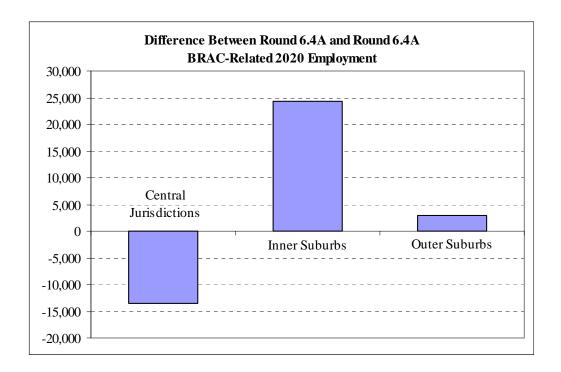
| | Round 6.4A | Round 6.4A BRAC- Related | Round Round 6. | ce between 6.4A and 4A BRAC- lated |
|------------------------------|---------------|--------------------------------|-------------------|---|
| JURISDICTION | 2020 | 2020 | Number | % Change |
| District of Columbia | 805,507 | 800,996 | -4,511 | -0.6% |
| Arlington County | 254,416 | 247,782 | -6,634 | -2.6% |
| City of Alexandria | 129,803 | 127,403 | -2,400 | -1.8% |
| Central Jurisdictions | 1,189,726 | 1,176,181 | -13,545 | -1.1% |
| Montgomery County | 635,000 | 636,272 | 1,272 | 0.2% |
| Rockville | 102,500 | 102,500 | 0 | 0.0% |
| Prince George's County | 485,500 | 487,057 | 1,557 | 0.3% |
| Fairfax County | 708,484 | 729,884 | 21,400 | 3.0% |
| City of Fairfax | 31,424 | 31,424 | 0 | 0.0% |
| City of Falls Church | 10,500 | 10,500 | 0 | 0.0% |
| Inner Suburbs | 1,870,908 | 1,895,137 | 24,229 | 1.3% |
| Loudoun County | 199,878 | 199,878 | 0 | 0.0% |
| Prince William County | 153,632 | 156,645 | 3,013 | 2.0% |
| City of Manassas | 24,118 | 24,118 | 0 | 0.0% |
| City of Manassas Park | 5,117 | 5,117 | 0 | 0.0% |
| Calvert County | 34,498 | 34,498 | 0 | 0.0% |
| Charles County | 66,797 | 66,702 | -95 | -0.1% |
| Frederick County | 148,500 | 148,582 | 82 | 0.1% |
| Stafford County | 49,201 | 49,201 | 0 | 0.0% |
| Outer Suburbs | 681,741 | 684,741 | 3,000 | 0.4% |
| Northern Virginia | 1,566,573 | 1,581,952 | 15,379 | 1.0% |
| Suburban Maryland | 1,370,295 | 1,373,111 | 2,816 | 0.2% |
| MSA REGIONAL TOTAL | 3,742,375 | 3,756,059 | 13,684 | 0.4% |
| TPB MODEL REGION TOTAL | 4,652,964 | 4,671,692 | 18,728 | 0.4% |

Table II-1 compares the 2020 Round 6.4A Cooperative Forecasts of Employment by jurisdiction with 2020 employment modified to reflect the proposed BRAC changes.

Compared to the Round 6.4A Cooperative Forecasts, total forecast employment for the Washington metropolitan area would increase by nearly 13,700 jobs. When employment

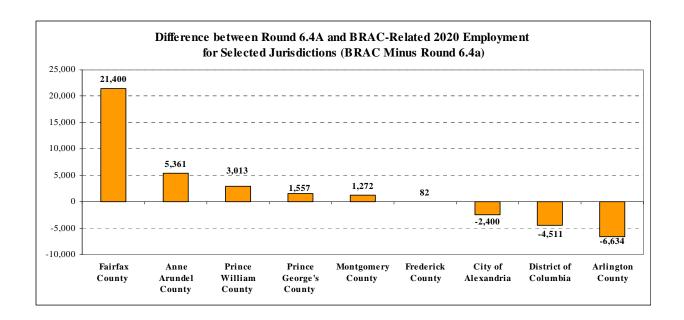
increases in adjacent jurisdictions are included, employment for the larger TPB modeled region in 2010 would be approximately 18,700 higher than Round 6.4A.

Employment in the region's Central Jurisdictions in 2020 would be nearly -13,500 jobs lower than the Round 6.4A projections; employment in the Inner Suburbs would be more than 24,200 jobs higher than Round 6.4A, and employment in the region's Outer Suburbs in 2020 due to BRAC would be approximately 3,000 jobs higher.



Jurisdictions that would see a reduction in projected 2020 employment due to the proposed BRAC changes include Arlington County (-6,634 jobs), the District of Columbia (-4,511 jobs), and the City of Alexandria (-2,400 jobs).

15



Fairfax County would see an increase in forecast 2020 employment due to BRAC-related changes (+21,400 additional jobs) followed by Anne Arundel County (+5,361) Prince William County (+3,000 jobs), Prince George's County (+1,557 jobs), and Montgomery County (+1,272 jobs).

Figure II-1: BRAC-Related Change in 2020 Employment DRAFT Frederick Co. Montgomery Co. Loudoun Co. District of Columbia Fairfax Prince Map Legend Wap Legent
Change in 2020 Employment
-20001 to -10001
-10000 to -5000
-4999 to -1
No change
1 to 4999
5000 to 9999
10000 + Prince William Co. DoD Installations

Other DoD Facilities

d DoD leased space to be relocate

MVCOG Member

Jurisdictions

Figure II-2: BRAC-Related Change in 2020 Employmen

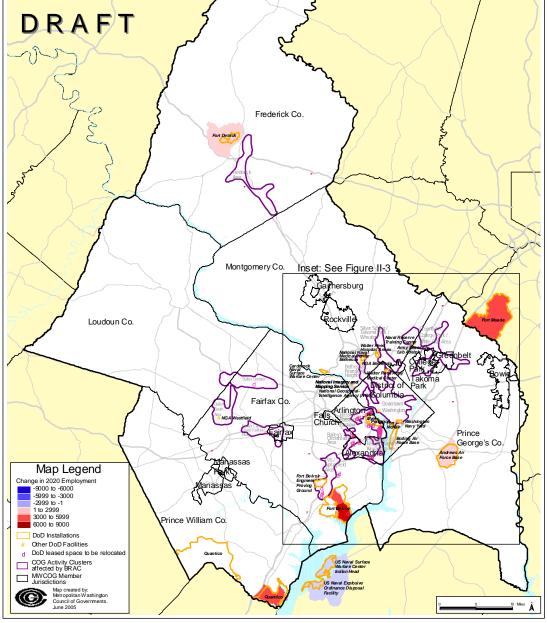


Figure II-3: BRAC-Related Change in 2020 Employment

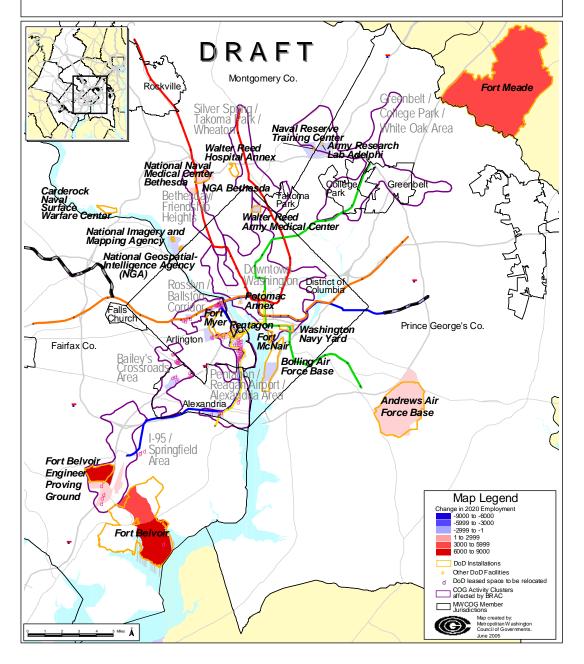


Table II-2 Comparison of Round 6.4A 2020 and BRAC-Related 2020 Employment by Regional Activity Clusters

| 8 | • | Round | Differen | ce between |
|--|-----------|--------------|----------|------------|
| | Round | 6.4A | Round | 6.4A and |
| | 6.4A | BRAC- | Round 6. | 4A BRAC- |
| | | Related | Re | lated |
| | | | | % |
| REGIONAL ACTIVITY CLUSTERS | 2020 | 2020 | Number | Change |
| Downtown Washington | 701,915 | 700,103 | -1,812 | -0.3% |
| Pentagon/Reagan Airport/ Alexandria Area | 186,653 | 181,619 | -5,034 | -2.7% |
| Rockville/North Bethesda | 190,196 | 190,196 | 0 | 0.0% |
| Dulles Corridor | 138,886 | 138,886 | 0 | 0.0% |
| Tysons Corner | 130,811 | 130,811 | 0 | 0.0% |
| Greenbelt/College Park/White Oak Area | 131,339 | 131,279 | -60 | 0.0% |
| Rosslyn/Ballston Corridor | 113,029 | 110,229 | -2,800 | -2.5% |
| Bethesda/Friendship Heights | 105,842 | 108,131 | 2,289 | 2.2% |
| Gaithersburg/Life Sciences Center | 86,397 | 86,397 | 0 | 0.0% |
| Dulles North Area | 64,546 | 64,546 | 0 | 0.0% |
| Fairfax Center/City of Fairfax/GMU | 88,883 | 88,883 | 0 | 0.0% |
| Silver Spring/Takoma Park/Wheaton | 74,280 | 71,980 | -2,300 | -3.1% |
| I-95/Springfield Area | 68,364 | 77,364 | 9,000 | 13.2% |
| Dulles South Area | 68,601 | 68,601 | 0 | 0.0% |
| Frederick Area | 93,733 | 93,733 | 0 | 0.0% |
| Manassas Area | 57,793 | 57,793 | 0 | 0.0% |
| Merrifield/Dunn Loring | 54,359 | 54,359 | 0 | 0.0% |
| Bailey's Crossroads Area | 62,047 | 61,147 | -900 | -1.5% |
| New Carrollton/Largo Area | 49,558 | 49,558 | 0 | 0.0% |
| Germantown/Clarksburg | 49,367 | 49,367 | 0 | 0.0% |
| Potomac Mills Area | 37,703 | 37,703 | 0 | 0.0% |
| Waldorf Commercial | 32,935 | 32,935 | 0 | 0.0% |
| Leesburg Area | 23,894 | 23,894 | 0 | 0.0% |
| National Harbor | 14,544 | 14,544 | 0 | 0.0% |
| Regional Activity Clusters Total | 2,625,675 | 2,624,058 | -1,617 | -0.1% |
| regional retitity Ciasters rotal | _,0_0,070 | 2,021,000 | 1,017 | U.1 /U |

Figures II-1, II-2 and II-3 show, respectively, Round 6.4A 2020 employment, and changes in projected employment in 2020 reflecting the proposed BRAC realignments. The figures and Table II-2 show that the 2020 employment forecast which reflects the proposed BRAC changes would be lower than the Round 6.4A Forecasts for the Pentagon/Reagan Airport/Alexandria Area (-5,034 jobs), Rosslyn-Ballston Corridor (-2,800 jobs), Silver Spring/Takoma Park/Wheaton (-2,300), Downtown Washington (-1,812) Regional Activity Center Clusters, while projected 2020 employment in the I-95 / Springfield Area (+9,000 jobs) and Bethesda/Friendship Heights (+2,289 jobs) Activity Center Clusters would increase due to BRAC changes. Employment at Fort Belvoir – a designated "Government Special Attractor" would increase by approximately 16,000 jobs.

Table II-3 Comparison of Round 6.4A 2020 and BRAC-Related 2020 Households by Jurisdiction

| HUDISDICTION | Round 6.4A | Round 6.4A BRAC- Related | Round Round 6. Re | ce between 6.4A and .4A BRAC- lated |
|------------------------------|---------------|--------------------------------|-------------------------|--|
| JURISDICTION | 2020 | 2020 | Number | % Change |
| District of Columbia | 298,244 | 299,244 | 1,000 | 0.3% |
| Arlington County | 111,455 | 111,455 | 0 | 0.0% |
| City of Alexandria | 72,957 | 72,957 | 0 | 0.0% |
| Central Jurisdictions | 482,656 | 483,656 | 1,000 | 0.2% |
| Montgomery County | 405,000 | 406,000 | 1,000 | 0.2% |
| Rockville | 24,200 | 24,200 | 0 | 0.0% |
| Prince George's County | 346,700 | 346,700 | 0 | 0.0% |
| Fairfax County | 430,500 | 432,500 | 2,000 | 0.5% |
| City of Fairfax | 9,100 | 9,100 | 0 | 0.0% |
| City of Falls Church | 5,200 | 5,200 | 0 | 0.0% |
| Inner Suburbs | 1,196,500 | 1,199,500 | 3,000 | 0.3% |
| Loudoun County | 148,084 | 148,084 | 0 | 0.0% |
| Prince William County | 153,122 | 156,122 | 3,000 | 2.0% |
| City of Manassas | 13,227 | 13,227 | 0 | 0.0% |
| City of Manassas Park | 4,300 | 4,300 | 0 | 0.0% |
| Calvert County | 34,331 | 34,331 | 0 | 0.0% |
| Charles County | 66,405 | 66,405 | 0 | 0.0% |
| Frederick County | 102,013 | 102,013 | 0 | 0.0% |
| Stafford County | 52,442 | 53,942 | 1,500 | 2.9% |
| Outer Suburbs | 573,924 | 578,424 | 4,500 | 0.8% |
| Northern Virginia | 1,000,387 | 1,006,887 | 6,500 | 0.6% |
| Suburban Maryland | 954,449 | 955,449 | 1,000 | 0.1% |
| MSA REGIONAL TOTAL | 2,253,080 | 2,261,580 | 8,500 | 0.4% |
| TPB MODEL REGION TOTAL | 2,836,145 | 2,844,645 | 8,500 | 0.3% |

Table II-2 compares 2020 household projections from the adopted Round 6.4A Cooperative Forecasts and to 2020 households due to the proposed BRAC-related changes. The total number of households in 2020 would increase by an estimated 8,500 households, with the largest increases foreseen in Prince William County (3,000), Fairfax (2,000) and Stafford (1,500) counties. The District of Columbia and Montgomery County would each add 1,000 additional households.

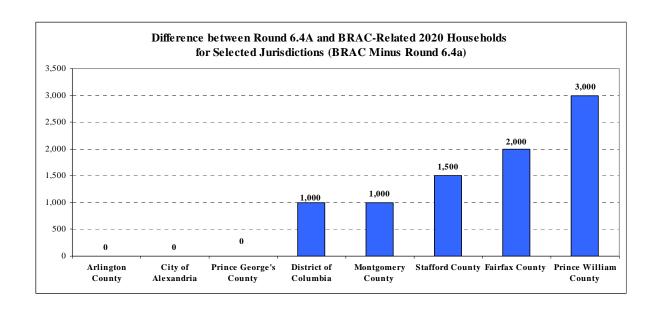
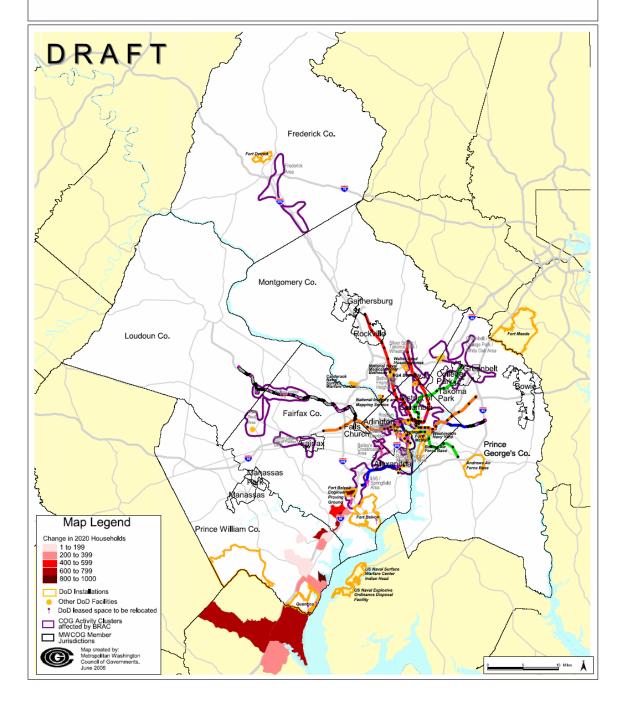


Table II-3 Comparison of Round 6.4A 2020 and BRAC-Related 2020 Households by Regional Activity Clusters

| Ttogroimi 120 | Round 6.4A | Round 6.4A BRAC- Related | Difference between Round 6.4A and Round 6.4A BRAC- Related | | |
|--|---------------|-----------------------------------|---|--------|--|
| REGIONAL ACTIVITY CLUSTERS | 2020 | 2020 | Number | Change | |
| Downtown Washington | 182,939 | 182,939 | 0 | 0.0% | |
| Pentagon/Reagan Airport/ Alexandria Area | 56,291 | 56,291 | 0 | 0.0% | |
| Rockville/North Bethesda | 36,568 | 36,568 | 0 | 0.0% | |
| Dulles Corridor | 29,977 | 29,977 | 0 | 0.0% | |
| Tysons Corner | 23,988 | 23,988 | 0 | 0.0% | |
| Greenbelt/College Park/White Oak Area | 46,897 | 46,897 | 0 | 0.0% | |
| Rosslyn/Ballston Corridor | 42,353 | 42,353 | 0 | 0.0% | |
| Bethesda/Friendship Heights | 32,744 | 32,744 | 0 | 0.0% | |
| Gaithersburg/Life Sciences Center | 33,317 | 33,317 | 0 | 0.0% | |
| Dulles North Area | 13,718 | 13,718 | 0 | 0.0% | |
| Fairfax Center/City of Fairfax/GMU | 35,619 | 35,619 | 0 | 0.0% | |
| Silver Spring/Takoma Park/Wheaton | 47,066 | 48,066 | 1,000 | 2.1% | |
| I-95/Springfield Area | 19,843 | 20,643 | 800 | 4.0% | |
| Dulles South Area | 9,733 | 9,733 | 0 | 0.0% | |
| Frederick Area | 34,060 | 34,060 | 0 | 0.0% | |
| Manassas Area | 25,562 | 25,562 | 0 | 0.0% | |
| Merrifield/Dunn Loring | 19,544 | 19,544 | 0 | 0.0% | |
| Bailey's Crossroads Area | 57,180 | 57,180 | 0 | 0.0% | |
| New Carrollton/Largo Area | 22,499 | 22,499 | 0 | 0.0% | |
| Germantown/Clarksburg | 24,863 | 24,863 | 0 | 0.0% | |
| Potomac Mills Area | 26,077 | 27,277 | 1,200 | 4.6% | |
| Waldorf Commercial | 24,777 | 24,777 | 0 | 0.0% | |
| Leesburg Area | 21,501 | 21,501 | 0 | 0.0% | |
| National Harbor | 4,902 | 4,902 | 0 | 0.0% | |
| Regional Activity Clusters Total | 872,018 | 875,018 | 3,000 | 0.3% | |

Table II-3 shows that approximately 3,000 additional households would be added to the regional activity center clusters with increases in the Potomac Mills Area (+1,200 households), the Silver Spring/Takoma Park/Wheaton (+1,000 households) and the I-95-/Springfield Area (+800 households).

Figure II-4: BRAC-Related Change in 2020 Households



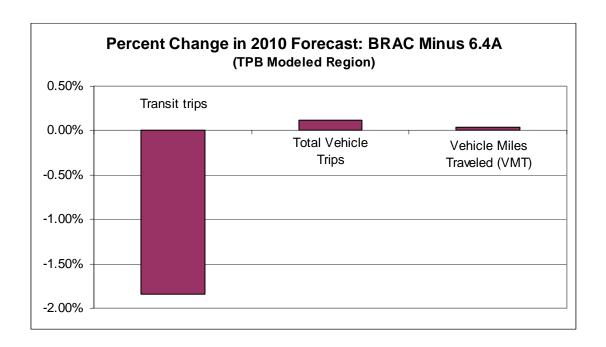
Section III –Transportation and Air Quality Impacts Forecast Year 2010

Change in 2010 Forecast: BRAC Minus 6.4A

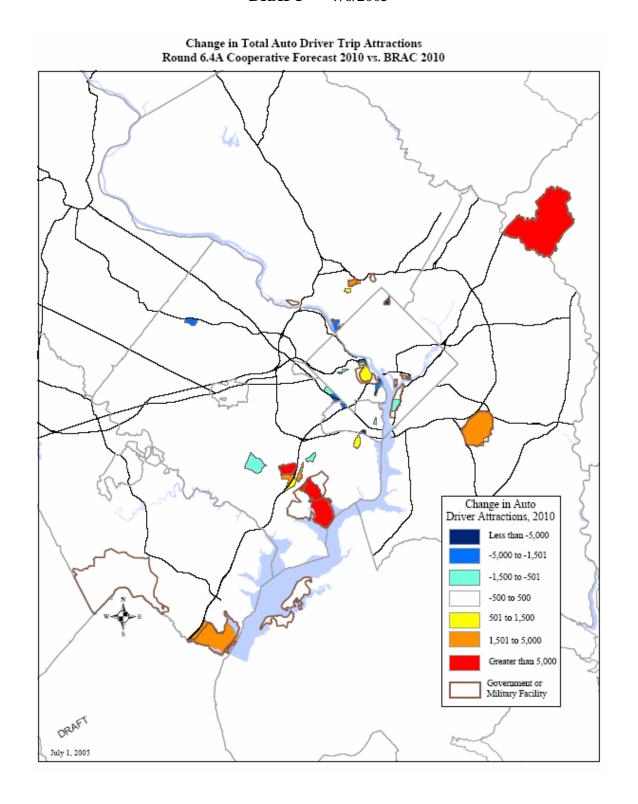
| | D 1644 | DD A C | DICTO WIII | us 0.111 |
|------------------------------|------------------|--------------|---------------|----------|
| Transportation Measures | Rnd 6.4A 2010 | BRAC 2010 | <u>Number</u> | Percent |
| Transit trips | 1,004,747 | 986,219 | -18,528 | -1.84% |
| Total Vehicle Trips | 22,234,574 | 22,261,364 | 26,790 | 0.12% |
| Vehicle Miles Traveled (VMT) | 168,482,758 | 168,556,587 | 73,829 | 0.04% |

Table III-1 compares the differences between forecast 2010 transportation measures for the adopted Round 6.4A Cooperative Forecasts and the BRAC-related 2010 forecasts for the TPB modeled region.

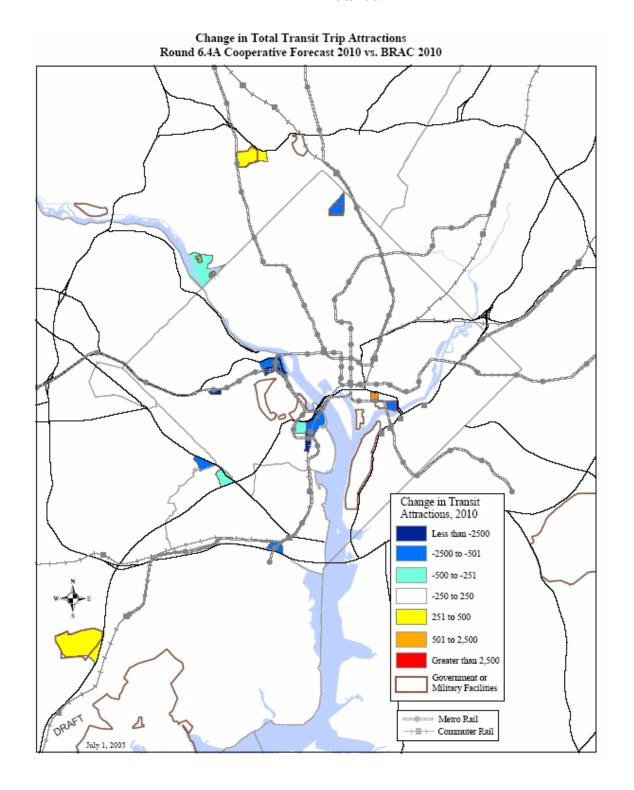
The table shows that regional transit trips in 2010 would be reduced by approximately -18,528 trips or a decrease of approximately -1.84 percent. Total regional vehicle trips would increase by more than 26,800 trips or approximately 0.12 percent, and total regional vehicle miles traveled would increase by more than 73,800 or 0.04 percent.



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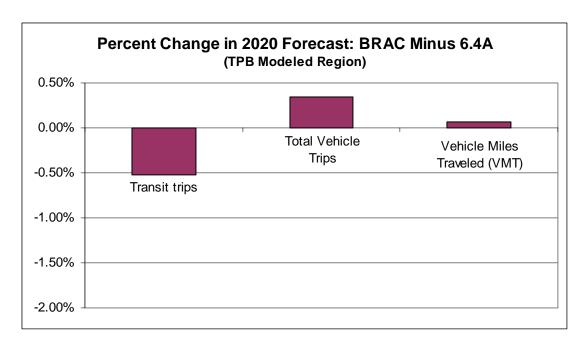
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Change in 2020 Forecast: BRAC Minus 6.4A

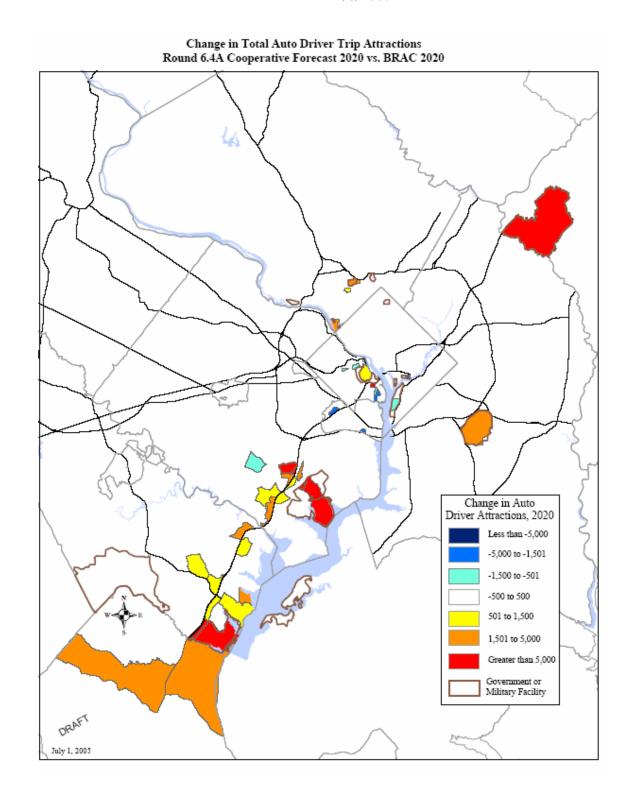
| Transportation Measure | Rnd 6.4A 2020 | BRAC 2020 | <u>Number</u> | <u>Percent</u> |
|------------------------------|------------------|--------------|---------------|----------------|
| Transit trips | 1,164,685 | 1,158,588 | -6,097 | -0.52% |
| Total Vehicle Trips | 24,728,463 | 24,813,395 | 84,932 | 0.34% |
| Vehicle Miles Traveled (VMT) | 193,083,406 | 193,216,841 | 133,435 | 0.07% |

Table III-1 compares forecast 2020 transportation measures for the adopted Round 6.4A Cooperative Forecasts and the BRAC-related 2020 forecasts for the TPB modeled region.

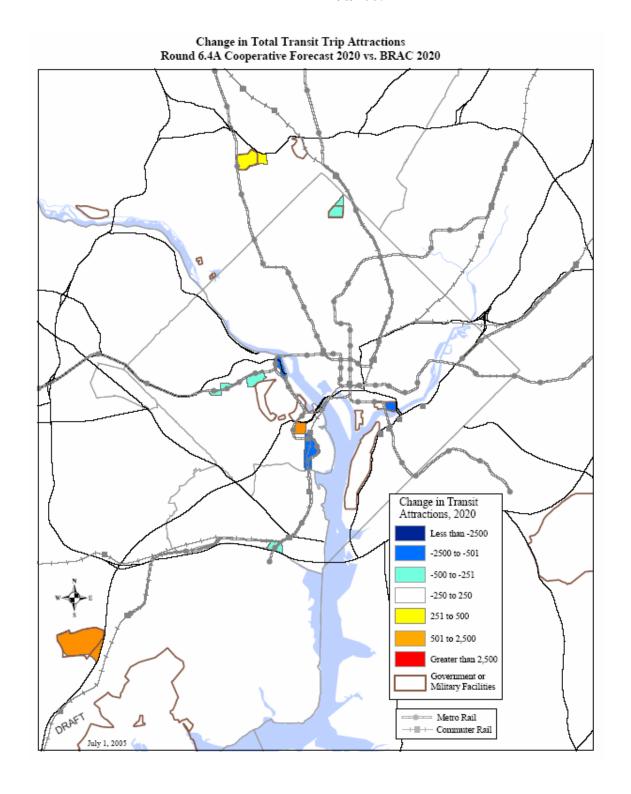
The table shows that regional transit trips in 2020 would be reduced by approximately -6,100 trips or a decrease of approximately -0.52 percent. Total regional vehicle trips would increase by more than 84,900 trips or approximately 0.34 percent, and total regional vehicle miles traveled would increase by more than 133,400 or 0.07 percent.



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CLRP and BRAC Comparison Summary Table - MSA Mobile Emissions Inventories

VOC (Tons/Day)

| | 2010 CLRP | 2010 BRAC | Diff. | % Diff. | 2020 CLRP | 2020 BRAC | Diff. | % Diff. |
|----------------|-----------|-----------|-------|---------|-----------|-----------|-------|---------|
| | VOC | VOC | | | VOC | VOC | | |
| I Network | | | | | | | | |
| Start | 11.07 | 11.09 | 0.01 | 0.12 | 6.92 | 6.94 | 0.03 | 0.40 |
| Running | 26.66 | 26.67 | 0.01 | 0.03 | 18.53 | 18.56 | 0.03 | 0.18 |
| Soak | 9.56 | 9.57 | 0.01 | 0.09 | 4.68 | 4.70 | 0.02 | 0.41 |
| II Off-Network | | | | | | | | |
| Diurnal | 2.06 | 2.06 | 0.00 | 0.00 | 1.02 | 1.02 | 0.00 | 0.00 |
| Resting Loss | 7.97 | 7.97 | 0.00 | 0.00 | 3.20 | 3.20 | 0.00 | 0.00 |
| Local Roads | 4.48 | 4.48 | 0.00 | 0.00 | 2.98 | 2.98 | 0.00 | 0.07 |
| School Buses | 0.28 | 0.28 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.00 |
| Transit Buses | 0.12 | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | 0.00 | 0.00 |
| Auto Access | 0.67 | 0.67 | 0.00 | 0.00 | 0.46 | 0.46 | 0.00 | 0.00 |
| Total | 62.86 | 62.89 | 0.03 | 0.05 | 38.07 | 38.16 | 0.08 | 0.22 |

Nox (Tons/Day)

| | 2010 CLRP | 2010 BRAC | Diff. | % Diff. | 2020 CLRP | 2020 BRAC | Diff. | % Diff. |
|----------------|-----------|-----------|-------|---------|-----------|-----------|-------|---------|
| | NOx | NOx | | | NOx | NOx | | |
| I Network | | | | | | | | |
| Start | 6.89 | 6.90 | 0.01 | 0.12 | 3.10 | 3.11 | 0.01 | 0.42 |
| Running | 109.77 | 109.78 | 0.01 | 0.01 | 38.23 | 38.25 | 0.02 | 0.05 |
| Soak | | | | | | | | |
| II Off-Network | | | | | | | | |
| Diurnal | | | | | | | | |
| Resting Loss | | | | | | | | |
| Local Roads | 5.63 | 5.63 | 0.00 | 0.00 | 2.41 | 2.42 | 0.00 | 0.08 |
| School Buses | 3.76 | 3.76 | 0.00 | 0.00 | 0.70 | 0.70 | 0.00 | 0.00 |
| Transit Buses | 3.86 | 3.86 | 0.00 | 0.00 | 0.92 | 0.92 | 0.00 | 0.00 |
| Auto Access | 0.85 | 0.85 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.00 |
| Total | 130.76 | 130.77 | 0.02 | 0.01 | 45.78 | 45.81 | 0.03 | 0.07 |

Section IV Interagency Security Committee (ISC) and U.S. Department of Defense (DoD) Building Security Standards and Guidelines

In addition to the base and facility-specific recommendations of the Base Realignment and Closure Commission (BRAC), DoD and federal civilian agencies in the metropolitan Washington region must also adhere to policy guidelines concerning design and security. While the safety and security of building occupants is the most important requirement of both ISC and DoD, each

Interagency Security Committee (ISC)

Following the bombing of the Alfred P. Murrah Federal Building in Oklahoma City, the General Services Administration (GSA) was directed by President Clinton through Executive Order 12977 to establish construction and security standards for federal buildings. The result of this effort was the Interagency Security Committee (ISC) *ISC Security Design Criteria for New Federal Office Buildings and Major Modernization Projects* (ISC, 2001). The design and security criteria apply to new construction or major renovation for office buildings and courthouses occupied by non-Department of Defense employees in the United States. The terrorist attacks on the World Trade Center and Pentagon in September 2001 renewed concerns about the vulnerability of federal buildings, and in 2003, chairmanship of the ISC was transferred to the Department of Homeland Security (DHS). In July 2004, ISC began reviewing federal agencies' security and design plans and in September 2004, the ISC released its updated *Security Design Criteria* which contains performance-based guidelines for federal non-DoD facilities.

Unified Facilities Criteria of the U.S. Department of Defense

In July 2002, the Department of Defense (DoD) published the Unified Facilities Criteria (UFC) *DoD Minimum Antiterrorism Standards for Buildings* which "provides planning, design, construction, operations, and maintenance criteria, and applies to all DoD commands. UFC will be used for all service projects and work for other customers where appropriate." The UFC system contains 22 specific design and security standards which must be met for DoD owned and leased facilities by 2009. A copy of the complete UFC standards is included in Appendix B.

Additional materials concerning security standards

Included in the appendices of this report are several key documents pertaining to the ISC and DoD standards. Appendix C contains the National Capital Planning Commission's adopted Urban Design and Security Policies and Objectives concerning federal facilities in the National Capital Region. Appendix E contains a summary of the November 2004 NCPC / COG / Greater Washington Board of Trade "Surviving Security" conference during which representatives from the Department of Defense, GSA and the private sector discussed the implications of the two standards. Finally, the National Association of Industrial and Office Parks (NAIOP) recently published an article comparing and

contrasting the two standards from a development perspective. NAIOP notes, for example, that:

"...The basis of both standards involve three key terms: Design Basis Threat; Level of Protection; and Layers of Defense. While both the ISC and DoD standards focus on manmade threats, and use the design Basis Threat as the initial step and Layers of Defense (or zones) as the protection strategy, they approach the protection requirement with different perspectives and in different formats. The ISC standards are defined by the tenant mission, size of the building and number of employees. A building can have multiple Levels of Protection based on the risk by tenant or location; the DoD standards are based on the Level of Protection to be provided for a given building...."

A complete copy of this article is contained in Appendix F.