

# BRAC Impacts & Opportunities for Construction in Northern VA

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Center for  
Regional  
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Competitiveness



**CRA** Center for Regional Analysis

George Mason University School of Public Policy

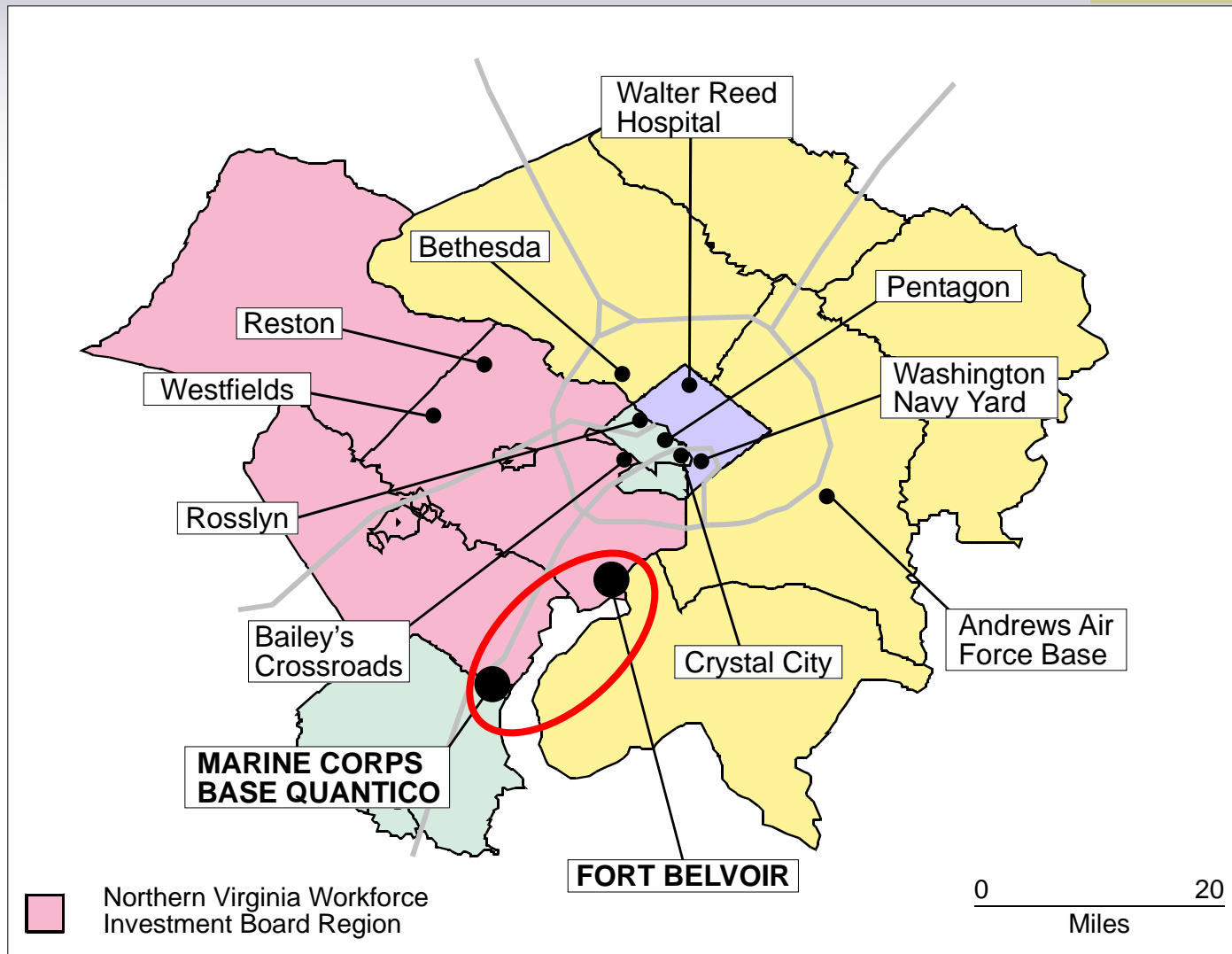
# Key BRAC Actions: Overview

## Total Inbound & Outbound

BRAC Recommendations – Impacted Areas in the No. Virginia WIB Region	Personnel Affected
<b>MOVING IN</b>	
QUANTICO	2,658
FORT BELVOIR	23,470
BAILEY'S CROSSROADS	0
<b>MOVING OUT</b>	
QUANTICO	-56
FORT BELVOIR	-2,851
BAILEY'S CROSSROADS	-1,684
<b>NET INBOUND</b>	<b>21,537</b>

*\*Data based on information available as of June 15, 2007*

# Key BRAC-related Job Sites Affecting the NoVA WIB Region



# Construction Impacts

7 million square feet of new office space  
\$663 million in new road improvements  
15,862 structured & at-grade parking spaces

*\*Data based on information available as of June 15, 2007*

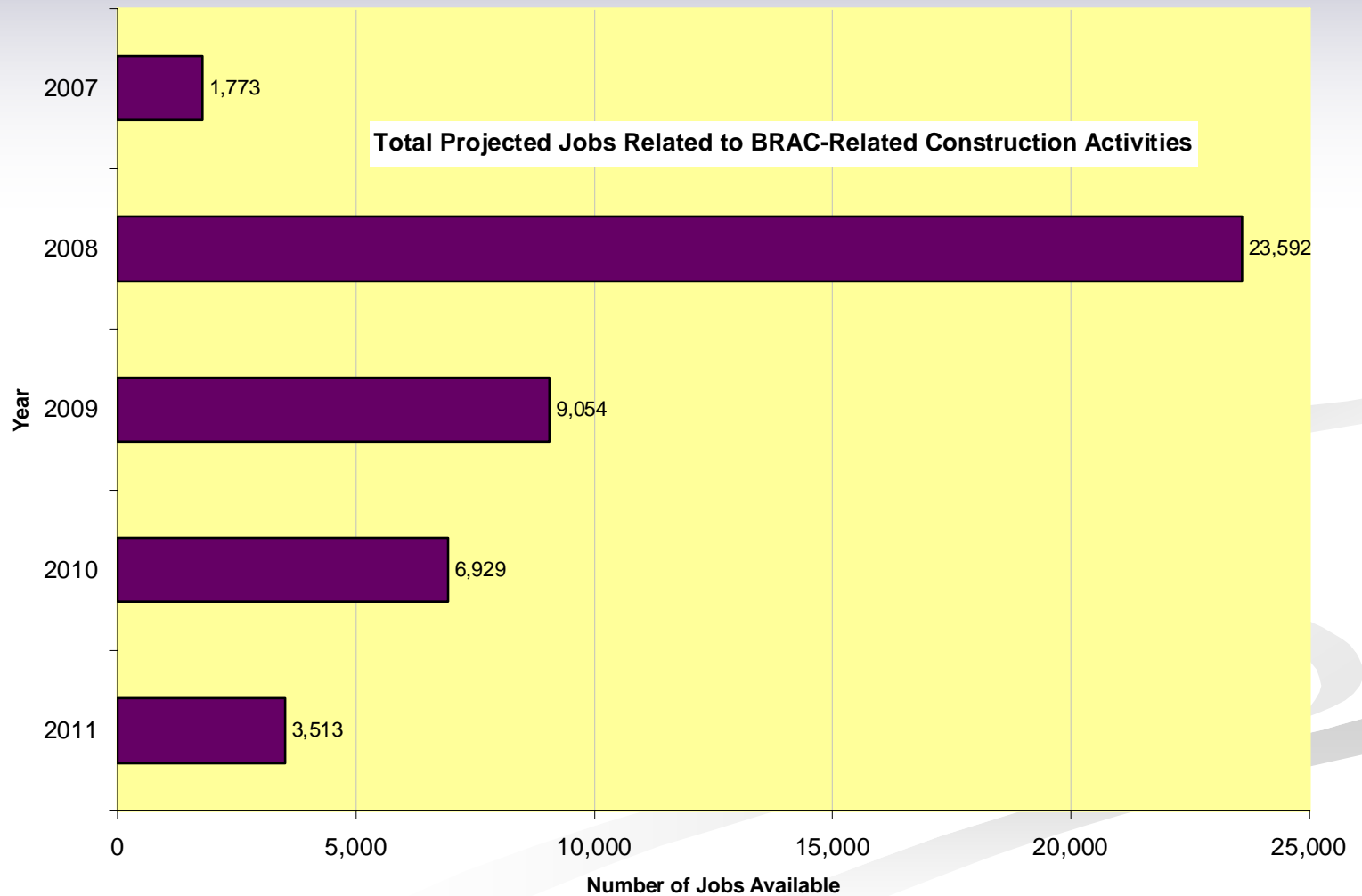
# Construction Impacts – Expected Timing of Impacts

Fort Belvoir & Quantico BRAC Construction (\$000,000)	2007	2008	2009	2010	2011	Total
Estimated Total BRAC Construction Costs	\$161.3	\$2,146.7	\$820.4	\$629.5	\$318.3	\$4,076.3
Estimated Total Ft. Belvoir Non-BRAC Construction Costs	\$21.3	\$282.0	\$86.6	\$76.5	\$33.6	\$500.0
Estimated Total Employment Impacts <i>for BRAC Activities only</i>						
ALL No VA	1,810	24,089	9,207	7,063	3,571	45,740
<i>NOVA WIB Region Only</i>	<i>1,778</i>	<i>23,654</i>	<i>9,041</i>	<i>6,937</i>	<i>3,508</i>	<i>44,918</i>

# Top Industries Impacted by *BRAC-Related Construction* at Fort Belvoir and Quantico, 2007 - 2011

Industry	Jobs Impacted 2007-2011
Construction	30,871
Commercial Construction	22,072
Residential Construction	440
Heavy Construction	8,359
Retail trade	3,983
Administration and support services	1,063
Local Government—all levels	1,049
Food services and drinking places	946
Wholesale trade	709
All others	6,297
<b>TOTAL</b>	<b>44,918</b>

# Annual Impact of BRAC-related Construction Activities



# Key Construction Occupations: Workers Required for BRAC Projects Ramp-up, 2007-2008

Most In-Demand Construction Occupations	Number of Jobs by Year		% of Current Workforce Needed in 2008
	2007	2008	
Construction Laborers	236	3,119	32%
Carpenters	208	2,746	23%
First-Line Supervisors/Construction Trades	122	1,620	18%
Operating Engineers & Other Construction Equipment Operators	69	913	25%
Construction Managers	60	795	19%
Cement Masons and Concrete Finishers	36	482	13%
Truck Drivers, Heavy and Tractor-Trailer	34	445	6%
Cost Estimators	30	394	16%

# Citizenship Status of Workers in the Construction Trades, 2000

Construction Trades Occupations with Greater than 20% Non-US Citizens	Total	% Non-US Citizens
First-line supervisors/managers of construction trades & extraction workers	5,786	22.4
Brick masons, block masons, & stonemasons	1,094	53.8
Carpenters	9,016	50.0
Cement masons, concrete finishers & terrazzo workers	946	78.4
Construction laborers	9,213	63.6
Paving, surfacing & tamping equipment operators	171	42.9
Pipelayers, plumbers, pipefitters, & steamfitters	2,414	23.9
Structural iron & steel workers	349	37.5
Maintenance & repair workers, general	1,850	20.5
Driver/sales workers & truck drivers	11,221	20.1
Laborers & freight, stock, & material movers	5,843	24.4

*Prepared by Decision Demographics, based on 5% sample of 2000 US Census*

# Preliminary Identified Construction Trades Skill Gaps

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- Apprenticeships for carpenters
- Equipment operators
- Managers and supervisory training/education

# Related Education & Training Resources

Training Providers	Construction-related
<b>Northern Virginia Community College</b>	Associates: Engineering Technology Construction Management Technology
	Certificates: Construction Supervision Basic Welding Techniques
	Continuing education programs include: Advanced Contractor Licensing, Building Code Basics
<b>George Mason University</b>	Civil engineering Infrastructure Planning & Mgt
	Construction Systems and Management
<b>Virginia Tech University</b>	Graduate courses in: Civil & Electrical Engineering, Engineering Management Environmental and Industrial System Engineering



# Thank you

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