

The Future of the Washington Metropolitan Area Economy: Alternative Growth Scenarios and Their Regional Implications

By

Stephen S. Fuller, Ph.D.
Dwight Schar Faculty Chair and University Professor
Director, Center for Regional Analysis
George Mason University
Fairfax, Virginia

April 2010

Prepared for The 2030 Group
www.The2030Group.org

The Future of the Washington Metropolitan Area Economy: Alternative Growth Scenarios and Their Regional Implications*)

The Washington metropolitan area (defined as the Washington metropolitan statistical area by the U.S. Census) is projected to experience substantial economic growth over the next two decades building on its base of national capital functions and its growing competitive position as a good place in which to do business locally, national and globally. An analysis of the Washington metropolitan area's growth potential going forward establishes the expected magnitude of this future growth. This forecast reflects an expansion of the Washington metropolitan area economy building from its federal government base and related core industries given their relative strengths in the national economy as these sectors are projected to grow over the next twenty years.

- The value of goods and services that the Washington area economy can generate over the 2010-2030 period is projected to grow 94.2 percent adjusted for inflation;
- This economic growth is projected to generate a total of 1.58 million net new jobs in the metropolitan area; and,
- Forecasts for population and household growth for this same period project the Washington area's population to increase by 1.67 million and its number of households to grow by 694,000.

An alternative forecast for this Washington metropolitan area economy was developed that incorporated these competitive advantages linked to the federal government and related national capital functions that targeted greater business-based growth. This alternative forecast incorporates selected high-value added, high salary sectors in which the Washington area economy already possesses relatively high concentrations of employment but which have been growing more slowly than in competitive metropolitan areas.

The analysis of the alternative economic futures for the Washington metropolitan area found that if the Washington metropolitan area economy achieved stronger than initially projected growth rates for just seven business-oriented sectors and strengthened its business base in parallel with its historic advantages in federal government and related national capital functions—emerging as a global business and government center—its economy would grow faster than initially forecast adding an additional \$47.5 billion (in 2010\$s) to its total gross regional product by 2030. The faster growth of these key business sectors would generate an additional \$35.1 billion in new personal earnings for workers in the metropolitan area and support 481,225 additional jobs by 2030. These forecasts—the standard forecast and the business-based forecast—are presented in the following table.

*The research findings reported in this paper derive from a series of four Technical Reports that are available on the 2030 Group website (www.The2030Group.org) and on the Center of Regional Analysis' website (www.cra-gmu.org).

Washington Metropolitan Area Economic Forecasts, 2010-2030
(in billions of 2010 dollars)

Distribution of Gross Regional Product	Base Estimate 2010	Forecasts for 2030	
		Standard	Alternative
Retained in metro area	\$423.4	\$783.6	\$826.9
Lost to non-resident workers	18.8	75.1	79.3
Totals	\$442.2	\$858.7	\$906.2

Source: GMU Center for Regional Analysis

The Washington Metropolitan Area Is Different

Analyses of the Washington metropolitan area economy and its alternative growth trends over the next two decades identified several uniquenesses that differentiate it from the economies of other large and dynamic metropolitan areas. In addition to having a sectoral structure composed of an above-average percentage of government jobs and therefore a smaller proportion of economic activities in the private sector, the Washington area also has a lower proportion of jobs in residentially based businesses; that is, businesses whose markets are comprised of local residents.

The Washington metropolitan area also has a significantly higher jobs-to-population ratio than its peer metropolitan areas with 7.3 jobs for every 10 residents compared to an average of 6 jobs to every 10 residents in other large metropolitan areas. This higher jobs ratio might at first appear as an advantage but other data suggest that this difference from other metropolitan areas reflects the consequences of a growing dependence on non-resident workers (commuters) to meet the job demands of the area's expanding economy. All large metropolitan areas have workers who choose to live beyond its boundaries and who commute in on a daily business to work and these commuting patterns have a variety of explanations. One principal explanation is that housing prices tend to be lower in locations further away from employment centers and that there is a shortage of affordable housing within the boundaries of the metropolitan area.

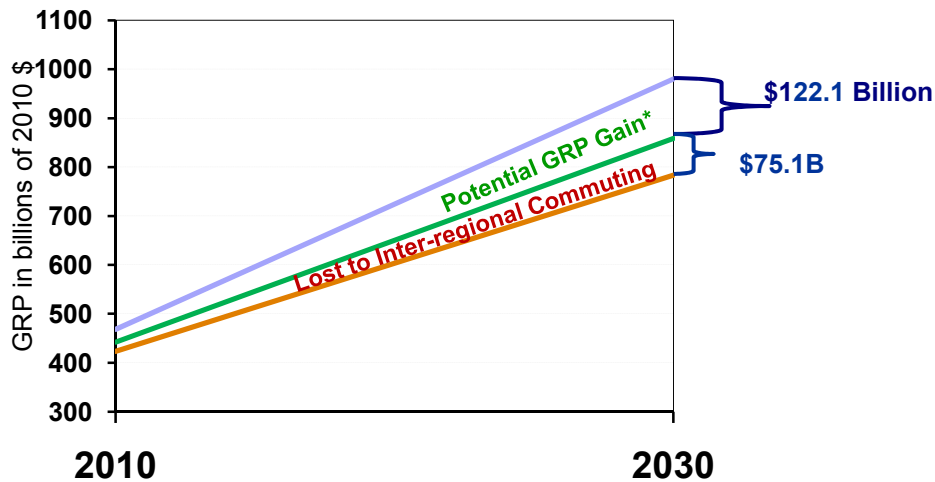
The consequences of these commuting patterns are important to the long-range viability of the metropolitan area economy. Where workers live is where they spend the majority of their income and pay their local taxes. Additionally, these long-distance commuters represent a significant demand for regional transportation services.

The magnitude of the Washington area's commuting problems is readily seen in the growing highway congestion on the major interstate routes connecting the Washington area to the places of residence of its non-resident workers. The daily transfer of wealth

from the Washington area economy to locations beyond its boundaries is less easily noticed. However, it can be measured on a net annual basis; that is, the total loss or gain of income by the Washington metropolitan area economy as a result of in and out commuting as shown in the above table and on the following chart.

In 2010, the Washington area economy is projected to lose 4.25 percent of its gross regional product (GRP) or \$18.8 billion (in 2010\$) as a result of its dependency on non-local workers. These wages and salaries that are being exported to external economies supporting retail and consumer service jobs and business activities in the hometowns of these out-of-the-metropolitan area commuters at the expense of jobs and business activities in the Washington metropolitan area. Had this income leakage been of similar magnitudes to other major metropolitan areas (1.1% of GRP), the Washington metropolitan area would have retained \$13.9 billion of this leakage and those funds would have added an additional \$12.0 billion as a result of the re-spending of these funds within the local economy for a total gain of \$25.9 billion.

Washington Metropolitan Area Economic Growth: Standard Forecast, 2010-2030



* Non-resident dependency equivalent to projected large metro area average

The loss of this direct and indirect spending within the Washington area economy and the businesses that would have been supported locally has significant fiscal implications, with the local jurisdictions in the Washington metropolitan areas being the poorer for this loss and jurisdictions located beyond the Washington area’s boundaries being the richer for it. The loss of these earnings, much of which would have been spent in local retail markets (and for other goods and services) explains why the proportion of residentially supported jobs in the Washington area is much smaller than in other metropolitan areas.

While this leakage of personal earnings and resultant loss of disposable income in 2010 represents a significant cost to Washington area jurisdictions, this dependency on non-

local workers (commuters from beyond the metropolitan area) is projected to grow over the coming two decades while these leakages in other large metropolitan areas are projected to moderate slightly. By 2030 the Washington metropolitan area's growing dependency on non-local residents to fill its increasing demand for labor is projected to cost its economy 8.75 percent of its gross regional product. This loss in 2030 would amount to \$75.1 billion valued in 2010 inflation adjusted dollars. If the Washington metropolitan area had a non-local worker dependency rate similar to other major metropolitan areas its GRP would be \$122.1 billion or 12.4 percent larger in 2030. This loss of value would be equivalent to losing the entire economy of Fairfax County from the Washington metropolitan area's gross regional product.

Developing The Future Workforce

The economic growth projected for the Washington metropolitan area over the next twenty years is not automatic. Its realization will depend on many independent and interdependent factors not the least of which is where the workers are going to come from to fill the projected 1.6 million in new jobs that the economy has the potential to generate. And, beyond these net new jobs that will need to be filled as a result of the economy's projected growth, the current workforce will need to be backfilled as workers retire or otherwise exit the workforce adding as many as 2 million more job vacancies to be filled by 2030. Further complicating the challenge of meeting the large workforce requirements of the Washington area economy is that the mix of jobs and their educational and skills requirements will be experiencing significant and accelerating change during the next twenty years.

There are only three sources for the new workers that the Washington area economy will require over the coming twenty years: graduates of local schools and universities, the resident population and existing workforce, and workers willing to move to the region. Developing the workforce for the future requires increased and continuing investment in the region's human resources. Historically, priority has been placed on improving the quality of educational opportunities available to children of all ages before they enter the labor force and this remains a critical need. However, continuing education beyond high school and throughout the work life of the area's population must be recognized as being equally important.

With as many as 50 percent of the workers currently employed in the Washington metropolitan area likely to retire or otherwise exit area's labor force over the coming twenty years, the remaining workers represent the foundation for the Washington area's future workforce. The large majority of these workers—the ones not retiring—are presently under the age of 45. While these workers may be well qualified for the jobs they now hold, as the economy evolves and grows and the mix of occupations and skills requirements changes over the next twenty years many of today's younger workers could benefit from or may even require further education and/or skills upgrading in order to remain productive throughout the second half of their careers.

Retaining older workers longer in the labor force and instituting more effective ways to deploy older workers to better utilize their experience and life-long knowledge will become an important strategy for addressing the area’s future labor shortage. The need for increased and on-going education and training to continually advance the quality of the existing work force becomes even more important as workers extend their working life beyond the traditional retirement age. Consequently, giving priority to and institutionalizing life-long learning and continuing investment in advancing the skills levels of mid-career and even older workers will be critical to meeting the future work force needs of the Washington metropolitan area. This will require a concerted and cooperative effort by local and state government agencies and the private sector.

Washington Metropolitan Area Employment Forecast, 2010-2030



Housing the Future Workforce

While some of the new workers filling the metropolitan area’s future job needs will have been born in the Washington metropolitan area or come to the area to attend college or universities located here, most future workers will have to move to the area from elsewhere in the nation and world after completing their educations. This has been the usual pattern underlying metropolitan area growth in the past but raises a critical question. If these new workers are going to move to the Washington metropolitan area to fill its new jobs, where are they going to live?

Current forecasts for the Washington metropolitan area for the 2010-2030 period show household growth at approximately 700,000. At 1.5 workers per household, this new household growth would yield 1.05 million new workers. This number (assuming none

of these workers work outside the Washington metropolitan area) falls 539,000 workers short of meeting the economy's projected job requirements over 2010-2030 period. At 1.5 workers per household, this shortage represents 359,300 households.

To fill the job growth demand of the Washington metropolitan area economy over the next twenty years will require the daily importation of as many as 770,000 long-distance commuters (231,000 that were in-commuting in 2010 plus the additional 539,000 that will be added over the subsequent 20 years) from beyond its borders. This growing dependence on non-residents to do the Washington metropolitan area's work has already been shown to represent a significant cost to the metropolitan area economy. The impact of adding another 539,000 daily commuters to the region's highway and public transportation system also will be dramatic.

While the current forecasts show that the Washington metropolitan area is only expected to house 66 percent of its future workforce, housing 700,000 new households raises additional challenges. In order to house these 700,000 new household will require constructing an average of 35,000 new housing units annually for twenty years. To date, the metropolitan area has never added this many housing units in a single year. And even if the metropolitan area does succeed in expanding its housing stock to accommodate two-thirds of its future work force, this achievement will not have addressed the new housing needed to house new workers coming to the area to back fill jobs being vacated by retiring workers, many of whom in their retirement will not have vacated their current house or apartment.

Washington Metropolitan Area
Housing Requirements, 2010-2030



Housing the future workforce will be a major challenge for the Washington metropolitan area. Under current housing policies the Washington metropolitan area it is unlikely that it will be able to achieve the level of housing construction needed to achieve the growth potential inherent in the region's economy. And, failure to satisfy these future housing requirements will have significant impact on the viability of local economies and their tax bases. It will also impact the future location of employers and even if they ultimately choose to locate and operate their businesses in the Washington area. The primary consequences of how successful the Washington metropolitan area is in housing its future workers and providing this housing in proximity to the area's major employment centers will be the seen in the region's quality of life being threatened by worsening transportation congestion and increasing times-of-commute.

There are fundamental interdependencies among the growth of the Washington metropolitan area economy over the coming two decades, its ability to house its future workforce, the quality of life that the region will be able to support for its current and future residents, and its fiscal capacity and ability to maintain and expand the infrastructure required to remain competitive among the nation's major metropolitan areas. Where the metropolitan area's workers will reside is key to whether the Washington metropolitan area will be able to achieve its substantial economic potential.

If the local housing supply falls short of demand it will become too expensive to be attractive to many potential workers considering relocation to the Washington area to fill its good jobs. And for many of those workers who do choose to move to the Washington area to fill its good jobs, they will be forced to commute long distances in order to secure affordable housing beyond the borders of the Washington metropolitan area. The growing percentage of the Washington area's new jobs that will be filled by workers commuting in to work from outside the area will result in their earnings being exported out of the metropolitan area economy to be spent elsewhere while at the same time these long-distance commuters will be further burdening the regional transportation system.

The Washington metropolitan area is unlikely to succeed in realizing its future economic potential without a sufficient housing capacity consisting of a mix of housing types and prices fitted to the emerging demand patterns of the region's future residents and located in proximity to major employment centers. Housing is one of the critical requirements for attracting the labor resources prerequisite to maintaining the quality of life that has been taken for granted by many of the area's current residents. Without a significant increase in the production of new housing, the economy will not be able to accommodate the workers it needs to both back fill the jobs being vacated by retiring workers and to fill the new jobs generated by an advancing economy. Without these new workers to fill the region's jobs, the economy that has been shown to be so full of promise will not be able to achieve its growth potential, a potential that may be lost forever to other metropolitan areas better prepared to accommodate growth.

The Challenges of Future Economic Growth

Filling the Washington area's substantial job requirements over the next twenty years will require regional solutions. Preparing the next generation of workers—the pre-school and K-12 school-age children—who already live in the Washington metropolitan area so that they can compete for the new jobs will require increased investment in new programs and facilities. Institutionalizing the continuing education and skills development of workers in the early and mid-stages of their work life so that they can move up the career ladder and increase their productivity and contribution to the region's future economy will require substantially different models for continuing education and life-long-learning than presently exist. Investing in the region's existing workforce and expanding its opportunities to remain active in the workforce well beyond typical retirement ages needs to be given priority at the local and state government levels as well as by business leaders.

However, all of these locally targeted efforts on investing in the metropolitan area's existing human resources will still leave the regional economy well short of its future labor requirements. In fact, the majority of the region's labor requirements will have to be filled by workers moving to the region. How and where these new workers will be housed will be a major challenge having region-wide implications, not only for the Washington metropolitan area but also for all the jurisdictions beyond its boundaries that will become bedroom communities for these new households coming to the region to fill the new jobs in the Washington metropolitan area.

In addition to the additional housing needed to accommodate the new workers moving to the Washington area to fill its new jobs, the region will need new infrastructure to support the population growth projected for the metropolitan area: the local and inter-jurisdictional transportation systems, the water and sewer capacity, the parks and recreation centers, the health clinics and hospitals, the public safety services and the cultural facilities. The full scope of these challenges have yet to be recognized by any of the local jurisdictions comprising the metropolitan area either individually or in concert or by any jurisdictions adjacent to the Washington metropolitan area where a growing number of the Washington area's future workers may had to live. The States of Maryland and Virginia and the District of Columbia have not joined together to better manage the Washington area's future economic growth or to respond to the demands it will place on the area's infrastructure.

The economic growth projected for the Washington metropolitan area over the next twenty years happens one day at a time and is cumulative year by year. Satisfying the work force, housing and infrastructure requirements of this future economic growth requires a comprehensive and long-term plan with a sequence of specific short-term actions towards its achievement. The impacts of the Washington metropolitan area's future economic growth and its infrastructure requirements will be regional and the planning and investment needed to realize the area's future potential must reflect regional solutions.