The Impact of Metrorail on Loudoun County's Economic Future

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Executive Summary

Loudoun County has two distinct economic futures. One based on the extension of Metrorail service to Route 772 and Ryan Road with a station also at Route 606 and the Dulles Greenway and an alterative economic future without Metrorail service into the County. The extension of Metrorail service into Loudoun County as currently planned will endow the County with a competitive advantage over the Washington metropolitan area's other major jurisdictions enabling its economy to develop a strong export-based business platform for its future growth.

This connectivity provided by the Metrorail extension to the Washington metropolitan area's workforce, markets, and supporting regional amenities will differentiate Loudoun County from competing locations for national and global business investment. In the absence of this connectivity provided by Metrorail service to Dulles International Airport and to the Washington area's other major employment centers, Loudoun County's economy will follow a development path similar to its current pattern and be oriented primarily to residentially supported commercial development and airport-oriented business functions. The choice is between an export-based economy and a suburban-based economy.

Economic forecasts for Loudoun County with Metrorail service as currently planned would generate an economy whose dollar value of output—gross county product (GCP)—would grow by a factor of 10 between 2010 and 2040. This growth would yield a broad mix of job growth led by large gains in professional and business services and management occupations with concomitant gains in personal income and generate a real estate tax base composed of an increasing share of non-residential revenues.

In the absence of Metrorail service to Loudoun County as currently planned, the County's economy will grow more slowly, driven by gains in lower value added employment and imported income earned by residents commuting to jobs located outside of the County. This slower growth trajectory will cost the County's economy foregone economic activity each year: $11.2 billion in foregone economic activity in 2030 and $25.6 billion less gross county product in 2040 than had Metrorail been extended into the County as planned. As these losses recur and accumulate year-

by-year, their total over time will be significantly larger than for any one year. For the decade of 2020-2030, the accumulated difference between the Loudoun County with Metrorail and without Metrorail would total $72.2 billion. These comparisons are summarized in the following table.

The Impact of Metrorail on the Loudoun County Economy: 2020, 2030, 2040
(in billions of current year dollars)

Scenario	2012	2020	2030	2040
With Metrorail as planned	$21.2	$51.0	$115.4	$230.4
Without Metrorail	$21.2	$47.8	$104.2	$204.8
Economic Opportunity Cost	0.0	$3.2	$11.2	$25.6

Source: GMU Center for Regional Analysis

Loudoun County is at an economic cross roads. The long-term economic difference is significant between (1) an economy built on a platform of high value added, high growth professional and business services and management occupations that are attracted to high quality, high-density, mixed-use, multi-modal employment centers and require regional connectivity or (2) an economy that is dominated by residential-serving commercial business activities and airport-oriented and transportation-related services. The opportunity cost of not extending Metrorail into Loudoun County can be measured in billions of dollars not earned, a perpetually weaker economic base, lower salaries, and higher tax burdens for Loudoun County residents.

The Regional Context for Future Economic Growth

Loudoun County has been one of the fastest growing counties in the nation over the past several decades and in the span of thirty years has evolved from a rural-based, exurban economy to a diversified suburban-based economy. The County's population and related economic growth have been linked directly to: (1) its location adjacent to Fairfax County with its dynamic economy and growing demand for workers to fill its knowledge-based and technology intensive jobs and (2) the economic activity and potentials generated by Dulles International Airport on the County's eastern border with Fairfax County.

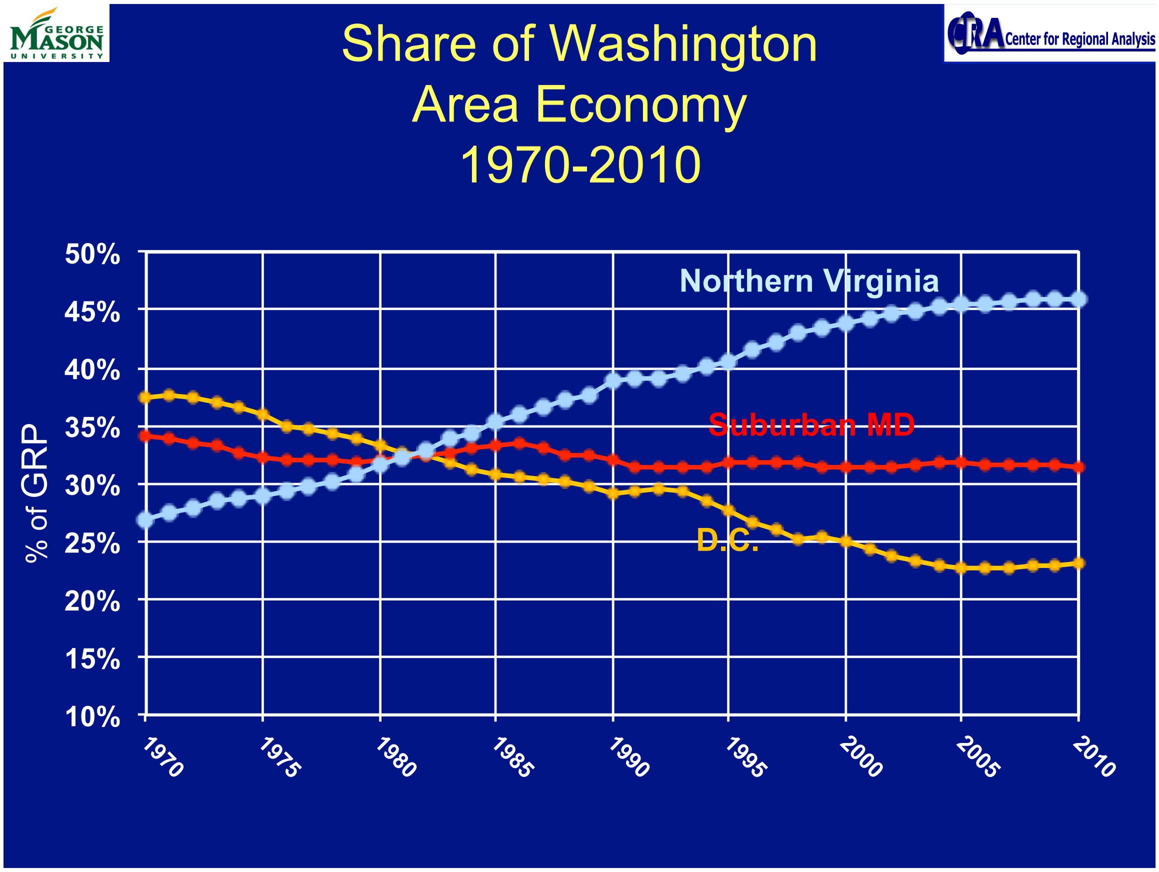
These locational assets have enabled Loudoun County's economy to transform from rural and diversified suburban status faster than any other jurisdiction in the Washington metropolitan area. And to support this transformation, the County has had to install a suburban infrastructure and transportation system that could accommodate its rapid growth and increasing demand for high quality public services. The ability of the County to capture the full benefits of its fortuitous location—adjacency to Dulles Airport and Fairfax County—has depended on its connectivity to the Washington region's employment centers and centers of culture and urban-level retail, consumer and business services, entertainment, education, and health services.

This connectivity has been achieved through the enhancement of Loudoun County's existing arterial highway network and the development of new highways connecting into Fairfax County's primary highway system and linking Loudoun County's resident workforce east to existing and emerging urban employment centers extending to the District of Columbia and into Suburban Maryland. In the absence of these east-west routes—the Greenway and Dulles Toll Road, U.S. Route 50, and Route 7—Loudoun County's development would have been substantially truncated to that supportable by its residents' purchasing power and this would have been substantially limited by the limited access to employment opportunities that could support the cost of new housing and related commercial development. Had the County's highway network not been expanded during the 1980-2000 period to accommodate its suburban growth and growing wealth (Loudoun County ranks number 1 or 2 in the nation each year by its median household income level), its economy would not have evolved as it has and its employment base in eastern Loudoun would look more like the employment base that characterizes western Loudoun today.

Loudoun County's economic future is linked closely with the economic future of Northern Virginia and the Washington metropolitan area. The County does not have its own economy other than that which serves the retail and consumer service requirements of its residents and its agricultural-base that generates income though agritourism or sale of farm products outside of the local economy. To a significant extent the County's local-serving residentially based economy is dependent on incomes earned outside the County by its residents commuting daily to work elsewhere in the regional economy.

Being part of the Washington metropolitan area economy has enabled Loudoun County to draw on a growing and advancing economy to the benefit of its own local advancement. And, because Northern Virginia's economy was expanding at double the rate of the metropolitan economy over the 1980 to 2010 period increasing its share of the region's gross regional product from 31 percent to 46 percent, Loudoun County's economy was able to achieve its rapid economic growth more easily than if it had been linked to a slower growing portion of the region.

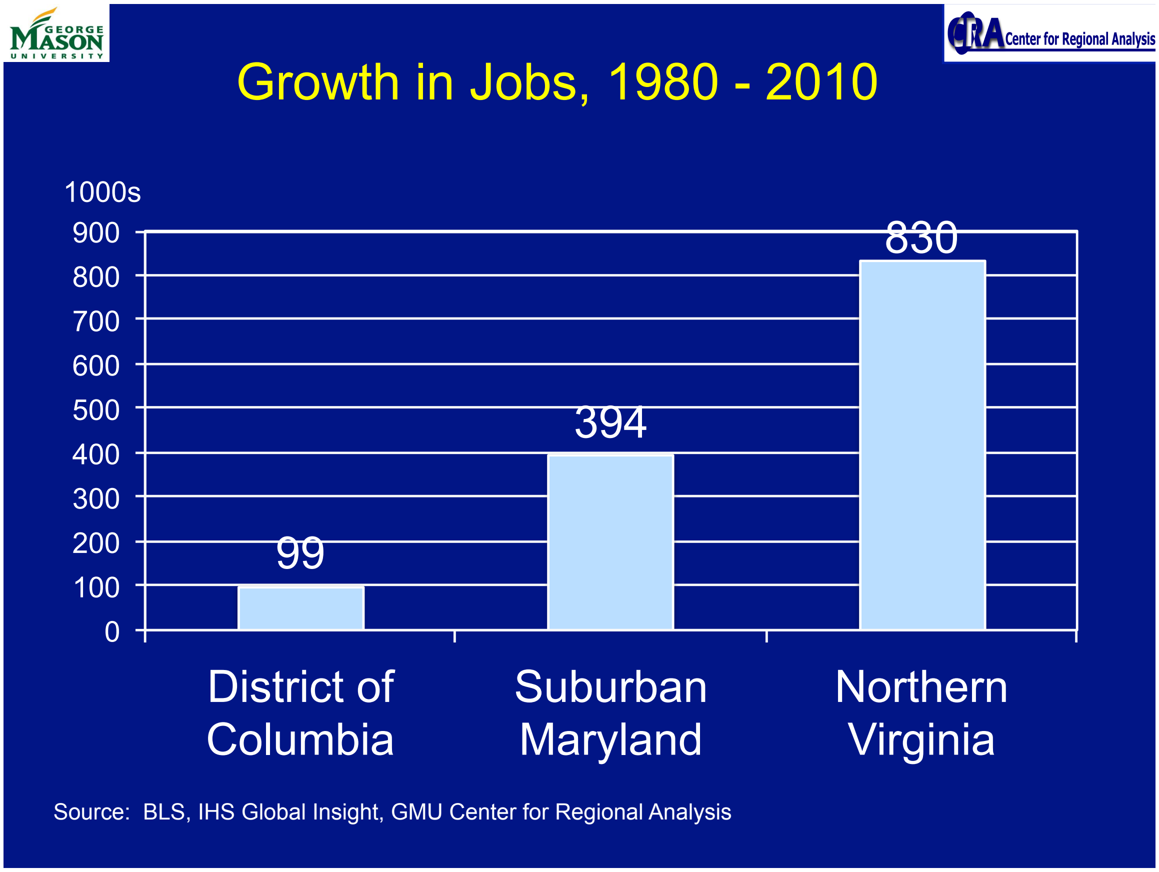
Forecasts for the Washington region's economic growth and for Northern Virginia's share of this future growth over the next two or three decades show the regional economy continuing to expand even as federal spending declines as a percentage of the economy's overall output. The Washington metropolitan area, with its large and diverse economy—it is the fourth largest in the U.S. among metropolitan areas—and as the nation's capital and world power, is projected to transform from its government base to a national and global business base. The building blocks are already in place for this transformation and there is significant evidence that this transformation is well underway.



Northern Virginia remains well positioned to drive the region's economic transformation with its large and well educated workforce, lower business costs, superior transportation network soon to be enhanced by (1) the opening of the express lanes on the Beltway that will increase its carrying capacity by 50 percent and (2) the extension of Metrorail to Reston and ultimately to Dulles Airport and into central Loudoun County. Northern Virginia's historic competitive advantages explain the 830,000 net new jobs it added over the past thirty years outpacing Suburban Maryland by more than 2 to 1. These jobs in Northern Virginia also had a higher wage base and greater value added to the local economy than the new jobs added elsewhere in the Washington region.

Northern Virginia's quality of life and entrepreneurial climate reinforce its competitive position within the metropolitan area. No other portion of the Washington area will be able to present as attractive locational conditions or investment climate as will be found in Northern Virginia.

As the Washington area economy grows over the next twenty years, 60 percent of the net new jobs added regionwide will be located in Northern Virginia assuming it adds the infrastructure and transportation required to support this scale of growth and can supply the workforce—in number and education/skills mix—needed to fill more than 500,000 net new jobs and backfill as many as 600,000 job vacancies from retirements and normal workforce turnover.



The potentials for economic vitality—sustained income growth and upward mobility—are greater in Northern Virginia than elsewhere in the Washington metropolitan area. The jurisdictions that are prepared for growth and positioned to accommodate business locations and expansions, that require connectivity to the region's labor markets and customer base in combination with national and global access, will succeed in capturing the new high-value added businesses seeking locations in the Washington metropolitan area while supporting and local serving businesses will spread out to secondary locations and residential communities. Fairfax County is located in the epicenter of this new economy and its western quadrant is particularly well positioned to capture a significant portion of this new growth as it did during the 1990-2010 period when approximately one-third of the region's gross regional product was generated in this section of Northern Virginia.

As this new economy develops—its outline is already in evidence along the Dulles corridor and Route 28 between Routes 7 and 50—it will extend westward locating where high-density, multi-modal transportation, mixed-use centers have been planned. These urban-centered locations will distinguish the export-based business centers, with their supporting business and residential development located on the Silver Line Metrorail extension through Tysons Corner, Reston, Herndon and into Loudoun County beyond Dulles Airport to the Ashburn area (Route 606 and the Dulles Greenway and Route 772 and Ryan Road), from residential and local-serving commercial development located linearly along highway corridors and at major intersections. The economy fostered by the multi-modal transportation services, high-density, mixed-use will be dramatically different in its employment structure and contribution to the County's gross county product than the economy that evolves from the support of residential retail and consumer service demand and local business services.

Loudoun County's Projected Economy, 2010-2040

Loudoun County is at an economic crossroads. Today, its economy reflects many of the similarities of other suburban-based economies with the difference that over the past three decades it has hooked a ride with the largest and fastest growing economy—Fairfax County—in the Washington metropolitan area and with one of the largest economies as measured by gross county product ($97.8 billion in 2010) in the U.S. For Loudoun County, its economic growth has largely depended upon the growth of businesses that are supported by the spending of local residents and this demand has been generated by the growth of households in Loudoun County and workers importing their earnings, as commuters from jobs outside of the County, back home to spend on retail and consumer services.

Beyond this typical suburban economy, Loudoun County has benefited from the growing importance of Dulles International Airport as an economic hub within the broader region. Still, the number of jobs per capita in Loudoun County in 2010 was 0.43, a level typical of suburban economies; Frederick County, MD had a jobs/population ratio of 0.42 while Prince William County, VA had a jobs/population ratio of 0.3 but Fairfax County, with its urban employment centers, had a jobs/population ratio of 0.57 and Arlington's ratio was 0.74. While the jobs per population ratio is a simple indicator of the structure and scale of a local economy, there is a strong correlation between higher ratios and larger levels of gross county product, higher wages, and lower real estate tax rates.

The forecast for Loudoun County's economy for the next ten, twenty, and thirty years builds from: (1) the economic base that has evolved over the past several decades, the projected growth rates and evolving economic structure of the metropolitan area economy; (2) Northern Virginia's share of this changing economy; and (3) assumptions regarding Loudoun County's development over the forecast period. These developmental assumptions specify conditions that will affect the County's capacity to accommodate economic growth, principally transportation and infrastructure availability and capacity, and labor force availability and quality. These capacity assumptions and the constraints they might impose on the forecast will have different effects on each of the major sectors driving Loudoun County's competitive position within the Northern Virginia economy.

The Washington metropolitan area economy is projected to grow in current year dollars from $429.4 billion GRP in 2010 to $763.5 billion by 2020 to $1.14 billion by 2030 to $1.8 billion by 2040. The share of this economic growth that will be captured by Loudoun County's economy will be determined by its ability to compete with the Washington metropolitan area's other counties for this growth. Loudoun County's projected share of the region's economic growth is presented in Table 1.

Table 1

Gross Regional Product Trends
in the Washington Metropolitan Area 1990-2040
(in billions of current year dollars)

Year	Washington Metro Area-MSA	Fairfax County GCP*	Fairfax County % MSA	Loudoun County GCP*	Loudoun County % MSA
1990	$137.5	$26.1	19.0	$2.4	1.7
2010	429.4	97.8	22.8	21.2	5.0
2020	763.5	150.2	19.7	51.0	6.7
2030	1,138.5	228.2	20.0	115.4	10.1
2040	$1,848.9	$367.1	19.8	$230.4	12.5

Sources: IHS Global Insight (March 2011), GMU Center For Regional Analysis
*gross county product—the value of goods and services produced in the county

Loudoun County's economic growth has been projected based on the following assumptions: (1) the County will have sufficient infrastructure capacity to support its future growth; (2) it will have access to sufficient labor resources to satisfy the demand for workers either as residents or as in-commuters from other jurisdictions; and (3) it will have a competitive transportation system including arterial highways and transit connecting the County into the regional network and to Dulles International Airport that will continue to expand its global services. Simply stated, Loudoun County will have a competitive edge over the Washington metropolitan area's other jurisdictions in terms of the business environment it offers secured by its connectivity to a regional workforce and to national and global business markets while maintaining a competitive quality of life for its residents relative to the region's other jurisdictions.

The economic forecast for Loudoun County shows its gross county product (GCP), the values of goods and services produced within the County's economy, to have increased dramatically between 1990 and 2010, a gain of $18.8 billion or 783 percent. This twenty-year increase in GCP accounted for 6.4 percent of the Washington metropolitan area's economic growth during this period, increasing Loudoun County's share of the regional economy from 1.7 percent to 5.0 percent. In effect, the Loudoun County economic grew from a very small rural base to a suburban economy during this period.

While the County's economy is projected to grow rapidly between 2010 and 2020, more than doubling in size, it will be undergoing a shift in economic drivers during this period that will provide the basis for its future gains. The County's maturation over the 2020 and 2030 and 2040 periods is seen in the narrowing of the gap between it and the Fairfax County economy. In 2010, the Fairfax County economy was four and one-half times larger than the Loudoun County economy. By 2030, the Loudoun County economy is projected to have closed this gap to 2.9 times and by 2040, the gap has narrowed to 1.6 times. While Loudoun County's economy is increasing its share of the regional economy from 5.0 percent to 12.5 percent over the 2010 to 2040 period, Fairfax County's share of the region's economy is projected to slip by several percentage points.

What is projected to happen here underscores Loudoun County's competitive advantages; Loudoun County is projected to capture economic growth—business investment—at the expense of Fairfax County. The basis for this accelerating growth is the expansion of the non-local serving businesses; that is, the export-based services that have been accommodated in Loudoun County at high-density, mixed-use, multi-modal transportation centers in convenient proximity to Dulles International Airport with connectivity to the Washington area' regional workforce (reverse commuters) and region- and nation-serving markets.

What kind of economy is projected for Loudoun County? The 2010 sectoral structure and its changing job mix are projected for 2020, 2030, and 2040 as presented on Table 2.

The forecast for Loudoun County's economy, assuming it achieves and maintains its regional competitive advantages as outlined above, is for it to evolve from a suburban-based economy with a substantially introverted business orientation to one that is characterized by a growing percentage of export services and a more extroverted business orientation. This structural shift is seen in the declining share of the County's employment base that is accounted for by predominantly local-servicing sectors: construction, wholesale trade, retail trade, other services, and state and local government and the increased share accounted for by professional and business services. The respective growth in share projected for the education and health sector reflects a combination of demographic change and increasing export services (serving non-resident clients) and the declining share of the hospitality sector's share likely reflects a trend away from labor-intensive leisure and hospitality services.

It should be noted that even though a major shift is projected in the mix of towards export-based employment, all sectors are projected to experience substantial growth. This difference in projected growth is illustrated by the relatively moderate growth of the retail sector (230%) over the 2010-2040 period compared to the growth projected for the professional and business services sector (678%) relative to the overall employment growth for the County (323%) over this period.

Table 2

Sectoral Structure of the Loudoun County Economy, 2010-2040
(percent job distribution)

Sector	2010	2020	2030	2040
Construction	9.3	9.1	7.4	6.2
Manufacturing	2.7	2.5	1.9	1.5
Transportation	7.4	6.1	5.5	5.2
Wholesale Trade	3.4	3.1	2.7	2.1
Retail Trade	12.0	11.0	10.3	9.6
Information Services	5.4	5.2	5.1	5.3
Financial Services	3.2	3.0	3.0	3.0
Prof. & Bus. Services	18.5	24.5	29.9	35.3
Education & Health	8.7	9.4	9.8	9.6
Hospitality	9.9	9.2	8.6	8.2
Other Services	4.0	3.6	3.6	3.3
Government	15.5	13.1	12.0	10.7
Federal	3.2	2.6	2.4	2.0
State & Local	12.3	10.5	9.7	8.7

Sources: EMSI, Inc., GMU Center for Regional Analysis

The economic impact of these differential growth rates can be measured by the contribution of each sector (and their workers) to the County's gross county product (GCP). As shown below in Table 3, a retail job on average contributed $70,116 to the County's GCP in 2010 while professional and business service jobs contributed $239,389. The County's shift towards higher-value added jobs over the next several decades explains its rapid economic growth with GCP doubling every decade.

The mix of Loudoun County's future jobs and related economic activities will determine the total output value of its future economy, the per capita and household income levels of its residents, the structure of its local tax base (residential versus non-residential land uses), and the quality of County-provided public services and facilities. The forecasts for Loudoun County show it to becoming a major source of regional economic growth in the Washington metropolitan area, increasing its share of the regional economy from 5 percent in 2010 to 12.5 percent by 2040. This increasing share of the metropolitan area economy contrasts with Fairfax County that will experience a small decline in share of the metropolitan area economy.

Loudoun County's future economic growth is tied inextricably to its connectivity to the regional economy—its labor resources, its markets, its amenities.

Table 3

Gross County Product Contribution Per Employee by Private Sector in Loudoun County, 2010-2040 (in current year dollars)

Sector	2010	2020	2030	2040
P & BS*	$239,389	$321,140	$449,435	$639,995
Retail	70,116	94,061	131,638	187,453
Hospitality	58,464	78,429	109,761	156,300
Construction	90,497	121,402	169,902	241,940
Education & Health	80,954	108,600	151,986	216,428
Transportation	87,763	117,734	164,769	234,631
Other Services	92,603	124,227	173,856	237,570
Financial Services	283,980	380,959	533,012	759,009
Manufacturing	195,827	262,702	367,651	523,535
Average All Jobs	$151,794	$203,628	$284,975	$405,804

Sources: U.S. Bureau of Economic Analysis, GMU Center for Regional Analysis
*professional and business services; also includes management occupations

Without a competitive level of connectivity, Loudoun County's economy will not achieve the projected growth levels for its export-based businesses that will opt to locate elsewhere in the region with connectivity, most likely along the Silver Line east of Dulles International Airport or chose not to invest and locate in the Washington metropolitan area in favor of an alternative competing business center.

Loudoun County's Economy in the Absence of Metrorail

In the absence of achieving and maintaining a competitive advantage relative to multi-modal transportation access, what would Loudoun County's economic structure look like? The regional pattern of economic activity described above and the pattern of economic growth projected for Loudoun County between 2020 and 2030 and beyond, assuming the provision of Metrorail service, provide the basis for measuring the contribution of these Metrorail dependent jobs and their associated economic activities in the absence of Metrorail service as planned to eastern Loudoun connecting Dulles International Airport to planned employment centers developed integrally with Metrorail stations at Route 606 and the Dulles Greenway and Route 702 and Ryan Road.

These Metrorail-centered mixed-use development zones have a projected build out over the next twenty-five years that could accommodate more than 40,000 professional and business service and related jobs that would reflect Loudoun County's emerging export base. This concentration of high-density, high-rise office functions would also support local retail and hospitality activities within these employment centers given their easy access to Dulles International Airport.

These export-based business activities would also attract other supporting businesses to Loudoun County, businesses that will do business with the export-based businesses as suppliers, sub-contractors, or competitors. These agglomeration effects could result in co-location but, due to different operating cost structures and space requirements, these suppliers and sub-contractors may also chose locations that are less expense and where Metrorail access and higher density development is not as beneficial. The degree to which of these related business activities would chose to locate in Loudoun County in the absence of their prime contractors locating in Loudoun County is difficult to project, however it should be assumed these smaller businesses will follow their primary business base to other jurisdictions if these businesses do not locate in Loudoun County due to the absence of multi-modal transportation served urban employment centers.

Loudoun County's economy will be different in the absence of Metrorail as planned. The loss of the competitive development capacity to capture business investment seeking high-density, mixed-use, urban-scale locations with multi-modal transportation access will deprive the economy of its primary driver beginning as soon as the decision is made to forego Metrorail service into the County and these losses and their economic impacts will accumulate over time. The result will be a different mix of jobs that would have otherwise been attracted to Loudoun County with this changing employment structure and growth rate accelerating through 2030 and 2040. The results of this alternative economy are shown in Table 4.

As the growth sectors that will be driving the County's economy in the absence of Metrorail have lower per worker value added characteristics than the sectors and jobs (see Table 3) lost to other jurisdictions having multi-modal transportation services and regional connectivity, the lost dollar value of economic activity will be much larger than the number of lost jobs. Furthermore, this loss of commercial land development will have a major impact of the percentage of real estate tax revenues that will be generated thereby shifting the burden to residential uses in comparison to the projected economy linked to Metrorail and its related export-based growth.

The key difference between these two Loudoun County economies—one with Metrorail and one without Metrorail—is the mix of export and residential employment activities. The greatest differences are seen between the retail trade and professional and business services sectors as shown in Table 5. While both sectors would add jobs over the forecast period, the number of professional and business service sector jobs added between 2010 and 2040 would be 40,000 fewer in the absence of Metrorail.

Table 4

Loudoun County's Economic Structure in the Absence of Metrorail
(percent job distribution)

Sector	2010	2020	2030	2040
Construction	9.3	9.2	8.0	6.7
Manufacturing	2.7	2.6	2.1	1.6
Transportation	7.4	6.2	5.9	5.7
Wholesale Trade	3.4	3.3	3.0	2.6
Retail Trade	12.0	12.2	12.0	11.5
Information Services	5.4	5.3	5.2	5.4
Financial Services	3.2	3.1	3.1	3.0
Prof. & Bus. Services	18.5	21.7	24.3	29.4
Education & Health	8.7	9.7	10.2	10.3
Hospitality	9.9	9.4	9.3	8.8
Other Services	4.0	3.8	3.9	3.5
Government	15.5	13.5	13.0	11.5
Federal	3.2	2.7	2.5	2.2
State & Local	12.3	10.8	10.5	9.3

Sources: EMSI, Inc., GMU Center for Regional Analysis

In contrast, the increase in the number of retail trade jobs would not be significantly different in the absence of Metrorail as these are driven by household growth and growth in household income. Because the total number of jobs in the County would be smaller in 2020, 2030 and 2040 in the absence of Metrorail than with Metrorail, the percentage shares of sectors projected to grow faster than the overall average for all sectors would increase while the percentage shares of the slower growing sectors—construction, manufacturing, transportation, wholesale trade and government—would decrease over time.

The opportunity costs of not extending Metrorail service into Loudoun County as currently planned are shown in Table 6 as measured by the gross county product (GCP) forecasts with Metrorail and without Metrorail. With Metrorail, as reported in Table 1, the Loudoun County economy is projected to grow from $21.2 billion in 2010 to $230.4 billion in 2040, for a gain of 986.8 percent. In the absence of Metrorail, Loudoun County's economy would lose the value added of the jobs tied to Metrorail access that would not locate in Loudoun County if such direct access was not provided but rather would opt to locate elsewhere in the Washington metropolitan area at a Metrorail location or be choose not to locate in the metropolitan area altogether.

Table 5

Key Differences in Job Mix: Loudoun County Economy
With and Without Metrorail, 2010-2040
(percent job distribution)

Sector	2010	2020	2030	2040
Retail Trade: With	12.0	11.0	10.3	9.6
Retail Trade: W/O	12.0	12.2	12.0	11.5
P & BS*: With	18.5	24.5	29.9	35.3
P & BS*: W/O	18.5	21.7	24.3	29.4

Sources: GMU Center for Regional Analysis and EMSI; * professional and business services and management occupations

As the economic effects of the jobs not gained would accumulate over the forecast period, the sum of these losses will increase each year. By 2020, the Loudoun County would have foregone $9.021 billion in GCP due to these job losses over the 2015-2020 period with the one-year economic loss in 2020 totaling $3.2 billion. In 2030, the one-year GCP loss would total $ 11.2 billion. In 2040, the one-year GCP loss would total $ 25.6 billion.

As these losses recur annually, the cumulative GCP losses over a decade would be much larger. For the full 2020-2030 period, these ten years of GCP losses would accumulate to a total of $72.2 billion. For the 2030-2040 period, these accumulated GCP losses would total $191.4 billion.

Table 6

The Impact of Metrorail on the Loudoun County Economy: 2020, 2030, 2040
(in billions of current year dollars)

Scenario	2010	2020	2030	2040
With Metrorail as planned	$21.2	$51.0	$115.4	$230.4
Without Metrorail	$21.2	$47.8	$104.2	$204.8
Economic Impact	0.0	$3.2	$11.2	$25.6

Source: GMU Center for Regional Analysis

These costs only reflect the lost economic activity associated with the loss of professional and business services (including management occupations) from within the development areas encompassing the two proposed Metrorail stations as planned in Loudoun County—at Route 606/Greenway and at Route 702/Ryan Road. Not quantified in this economic impact assessment are the potential job losses associated with supporting businesses and sub-contractors that would have been attracted to Loudoun County by the prime businesses that would have located at the Metrorail stations or adjacent commercial centers had Metrorail been extended into the County. These support businesses would span a broader range of sectors and would not necessarily seek locations convenient to Metrorail.

Conclusions

The Loudoun County economy of the future will be irrevocably shaped by the extension of Metrorail service. As planned, Metrorail service into Loudoun County will support a very different economic outcome than would occur in the absence of Metrorail service. With Metrorail service, the County's economic future will be driven by expansion and concentration of high-value added professional and business services and management occupations. This export-based economy will generate significant levels of economic growth with the County's gross county product accelerating from $21.2 billion in 2010 to a projected $230.4 billion by 2040 increasing its share of the Washington metropolitan area's economy from 5 percent to 12.5 percent and exceeding the growth rate of any other jurisdiction is the metropolitan area over this period.

In the absence of Metrorail serving the County as currently planned, the long-term driver of economic growth will be spending by County residents for retail and consumer services and transportation-related and warehousing/distribution services tied directly to Dulles International Airport. This economy will be a slower growing economy than the economy driven by the differential growth of professional and business service employment supported by multi-modal transportation assess to the Washington area labor markets and metropolitan-scaled business and government services base.

The true cost of not extending Metrorail service into Loudoun County is seen in an economy that will be 9.7 percent smaller by 2030 and 11.1 percent smaller in 2040 than would have been realized by the planned extension of Metrorail service into Loudoun County. The collateral consequences of this smaller and slower growing economy on Loudoun County and its residents will be seen in a less diverse economy with a lower wage structure and a local tax base that is more dependent on residential land uses and less dependent on commercial land uses for its tax revenues. The return-on-investment in Metrorail for Loudoun County is substantial and can be measured and compared by these very different economic outcomes.