

**The Economic Impacts of the Proposed  
Washington Adventist Hospital at White Oak  
And Renovation of the Existing Takoma Park Campus**

**Prepared for**

**Adventist HealthCare**

**By**

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## **Executive Summary**

The relocation of Adventist HealthCare Washington Adventist Hospital (WAH) to a new campus in White Oak will generate significant economic benefits to the surrounding Montgomery and Prince George's Counties. These economic benefits will include those generated during the construction phase and with the annually recurring economic benefits resulting from WAH's operating outlays. Beyond these construction and post-construction impacts will be additional local economic benefits resulting from the renovation of Adventist HealthCare's Takoma Park campus including the provision of new outpatient services

The economic impacts associated with construction and operation of the proposed WAH at White Oak and related spending at the Takoma Park campus are presented in Table 1 and summarized as follows:

- Construction outlays totaling \$434.9 million will contribute a total of \$721.6 million and \$845.6 million respectively to the region's (Montgomery and Prince George's Counties) and Maryland's economies during the construction period.
- These construction outlays will generate a total of \$183.3 million in new personal earnings that will accrue to workers residing within Montgomery and Prince George's Counties and earnings totaling \$272.7 million for workers residing within the State of Maryland supporting 3,896 and 5,695 total jobs of which 70 percent and 78 percent respectively are estimated to be held by residents of the region and state.
- The regional impacts of post-construction spending in 2019 of \$214.8 million by Adventist HealthCare (AHC) to operate WAH at White Oak and its outpatient services at Takoma Park will generate a total contribution to the regional economy totaling \$307.9 million. It will also support a total of 1,901

jobs, of which an estimated 1,184 or 62 percent would be held by local residents with personal earnings totaling \$79.5 million.

- The statewide economic impacts of post-construction operating outlays by AHC in 2019 would contribute a total of \$359.5 million to the state’s economy and would support a total of 2,638 jobs. An estimated 1,643 or 62 percent of these jobs would be held by state residents with annual earnings totaling \$101.4 million.

Table 1

Summary of Economic Impacts of Proposed Construction and Operating Outlays by Adventist HealthCare at White Oak and Takoma Park Campuses on the Surrounding Region and the State of Maryland (dollars in millions)

Location And Type	Direct Outlays <sup>1</sup>	Total Output <sup>2</sup>	Personal Earnings <sup>3</sup>	Jobs Supported <sup>4</sup>
Initial Construction <sup>5</sup>				
Regional	\$434.9	\$721.6	\$183.3	3,896
State	\$434.9	\$845.6	\$272.7	5,695
Full Build-out Construction <sup>6</sup>				
Regional	\$640.9	\$1,083.9	\$286.8	5,775
State	\$640.9	\$1,247.9	\$393.9	8,141
Operations <sup>7</sup>				
Regional	\$214.9	\$307.9	\$79.5	1,901
State	\$214.9	\$359.5	\$101.4	2,638

Sources: Adventist HealthCare; GMU Center for Regional Analysis

<sup>1</sup>direct outlays by Adventist HealthCare; <sup>2</sup>the total value of goods and services generated directly and indirectly as a result of the initial construction and annual operating outlays; <sup>3</sup>the additional earnings generated within the region and the State of Maryland from the new economic activities supported by the construction and operating outlays; <sup>4</sup>the additional new local and non-local jobs supported by the spending and re-spending of the new construction and operating expenditures; <sup>5</sup>initial construction for 170 beds, a structured parking deck, a medical office building and supporting infrastructure and facilities including capital equipment and fixtures and furniture and renovation outlays at White Oak; <sup>6</sup>total economic impacts inclusive of future development program including two medical office buildings, a cancer center and a parking garage; <sup>7</sup>these outlays and impacts recur annually beginning in 2019.

The build-out of the AHC facilities at White Oak as currently envisioned will increase the economic impacts generated by the proposed hospital and its supporting

facilities as reported above and detailed in Table 3. With the addition of two medical office buildings and a cancer center to be served by a second parking garage, the White Oak campus will represent a total projected construction expenditure of \$640.9 million. This direct construction spending—soft and hard costs, furniture, fixtures, and equipment and technology—would contribute a total of \$1.08 billion to the economies of Montgomery and Prince George’s Counties over the construction period and would contribute \$1.25 billion to the state’s economy. These total direct outlays would support an estimated 4,270 full-time, year-round equivalent jobs within the local labor market and 6,383 jobs across the state generating personal earnings of \$286.8 million and \$393.9 million that would accrue respectively to these local- and state-resident workers.

WAH’s economic importance as a catalyst for further economic development within the White Oak Science Gateway Master Plan area, centered on the FDA White Oak Campus, will also generate significant and continuing economic benefits to the local and state economies. The location of WAH at White Oak has the potential of rationalizing and magnifying the economic and market forces that can be focused within the immediate area. This project will also contribute to a development process that ultimately will represent new private investment totaling more than \$5 billion, provide work space for more than 8,000 workers beyond those employed on the FDA Campus and create a live-work community housing 7,500 workers.

The economic futures of Montgomery and Prince George’s Counties are closely tied to their success in attracting and accommodating a growing science and technology-intensive business base. Forecasts for these counties’ economic growth during the 2015-2030 period have identified the growth of professional and business services and educational and health services as accounting for 68 percent of future job growth in these two counties. In order to achieve this economic potential, local and state officials need to recognize the synergies and resulting economic benefits that can be achieved by concentrating and linking the health sciences and supporting professional and business services with a high-quality living and working environment.

These synergies can be achieved within the White Oak Science Gateway Master Plan area centered on White Oak. With the proposed campus of WAH at White Oak anchoring the future development of the East County Center for Science and Technology and the LifeSci Village, the potential for enlarging and extending the impacts from FDA’s White Oak Campus to the benefit of the surrounding economy will be greatly improved. This concentration of interdependent health sciences, professional and business services, research facilities, with supporting residential and retail services and amenities, will result in the creation of a vital and growing health sciences-based economic center that will enlarge the economies of both Montgomery and Prince George’s Counties’ and strengthen the state’s competitive position in the national economy.

## **The Economic Impacts of the Proposed Washington Adventist Hospital at White Oak And Renovation of the Existing Takoma Park Campus**

AHC's construction and operation of the proposed hospital at White Oak will have immediate, as well as continuing, economic benefits within its surrounding region, composed of Montgomery and Prince George's Counties and at the state level. This will be a result of the new construction expenditures and operating outlays associated with the White Oak campus cycling through these economies adding value to their total output—their gross regional and state products. These construction and operating expenditures would generate new personal income for workers residing locally as well as across the state and support a wide range of jobs across these economies in response to this new payroll and non-payroll spending.

These economic impacts that would be generated by the development and operation of WAH's White Oak campus can also serve as a catalyst within the surrounding White Oak Science Gateway Master Plan area for future business investment to build on the assets and opportunities that constitute this area's competitive position within the Washington, D.C. region. Accelerating the growth of the region's non-federally dependent sectors has taken on new urgency as the Washington region adjusts to its recently changed economic circumstances precipitated by substantial and continuing reductions in federal contract spending in the region and on-going reductions in the federal workforce. The life sciences in Montgomery and Prince George's Counties have been identified as having substantial economic growth potentials as reflected in the recently adopted White Oak Science Gateway Master Plan.

The magnitudes of the economic impacts that would be generated by the construction and operation of the proposed hospital and supporting medical services are identified and quantified in the following report. These economic impacts establish the importance of WAH to advancing the economic vitality of the immediate region as well as the State of Maryland as they rebuild their foundations for future economic growth.

### **The Local Economy's Economic Outlook**

Both Montgomery and Prince George's Counties are projected to experience moderate continuing economic expansion during the next 15 years as their economies adjust to reduced federal spending, a trend that has been underway since 2011. As these counties' economies re-position themselves for growth within their emerging economic order, the growth of their non-federally related assets has taken on new importance. Understanding these opportunities for future growth underscores the importance of Adventist HealthCare's proposed new campus at White Oak.

The current forecast for the bi-county area shows that its expected growth over the 2015-2030 period has the potential to generate new jobs and higher incomes as the mix of its economic activities continues to shift to activities involving a higher proportion of knowledge-based and technology-intensive workers that builds on the region's local and national competitive advantages. These forecasts confirm that the region's new growth will be concentrated in professional and business services and in education and health services with these two sectors accounting for 68 percent of all job growth during this 15-year period, as presented below in Table 2

Table 2

Employment Outlook for Montgomery and Prince George's Counties, 2015-2030

County	Total Job Change	Professional & Business Services	Education & Health Services	Federal Gov't
Montgomery	69,579	45,598	7,112	-2,485
Prince George's	39,068	18,821	2,338	- 1,675
Totals	108,647	64,419	9,450	-4,160
% Change	13.4	41.5	9.1	- 6.0

Source: IHS Economics, Inc., October 2014.

The projected 13.4 percent increase in total net job gain is being driven by substantial growth in professional and business services and in educational and health services. The employment base of these two sectors is projected to increase by 28.6 percent. In contrast, the two counties' federal employment base is projected to decline by 6.0 percent.

In comparison to this projected job growth, the combined gross county product (GCP) of these two counties, that is the value of goods and services produced within their economies, is projected to grow by 46.8 percent in inflation adjusted dollars. That GCP is growing substantially faster than job growth reflects the continuing shift in the counties' employment bases to higher value added occupations and business activities as reflected in the strong growth projected for professional and business services and educational and health services.

These economic forecasts for Montgomery and Prince George's Counties, while different in magnitude, describe a growth potential that will challenge the local and state governments' capacities to accommodate this potential growth and to achieve the economic benefits that this growth potential offers. These growth potentials point to the need for providing the supporting facilities and infrastructure prerequisite to attracting the private investment to generate the jobs and income growth associated with these development potentials.

The economic forecast for Montgomery County indicates that its economy has the potential to generate a total of 69,579 net new jobs during the current decade, or approximately 4,640 jobs annually for the next 15 years. With an estimated 65 percent of these new jobs requiring office-type space, the new office space capacity that would be required to house these new jobs would total approximately 8.6 million square feet. Currently, Montgomery County does not have an adequate supply of new office space in development to meet this demand. While this office space demand will be fulfilled in many employment centers throughout the county, no one center has this magnitude of available capacity that could be brought on line this decade. However, the White Oak Science Gateway Master Plan with its proposed LifeSci Village and East County Center for Science and Technology has the planned capacity to accommodate a substantial portion of this commercial space requirement.

The projected 7,112 new education and health services jobs that could be achieved in Montgomery County over the 2015-2030 period represent another major requirement for new building capacity. These new jobs do not include positions in the federal government (i.e., NIH and FDA). These are net new jobs in the private and non-profit sectors. While some of these new jobs include those being proposed by WAH, many of these jobs may look like office jobs as the County attracts a growing number of bioscience and pharmaceutical companies with administrative functions complementing their research and manufacturing operations as targeted in the county's economic development strategies.

Where will these new workers and their employers be housed? Some will find the White Oak Science Gateway area attractive due to its adjacency with the FDA Campus and the combination of supporting professional and business services located within a mixed-use, high-amenity residential community. The demand for this new space presently exceeds Montgomery County's approved development capacity. Unless this capacity comes online over the coming 15 years, the county's growth potential in one of its most competitively advantageous sectors—health sciences—will be constrained and will not be fully realized.

The growth potentials projected for Montgomery County and Prince George's County over the 2015-2030 period illustrate the magnitudes of the challenges facing local officials and economic development professionals going forward. The regional economy has significant growth potential, but this potential is in danger of being lost to other jurisdictions within the Washington metropolitan area or to competitors elsewhere in the U.S. due to the shortage of available development capacity. This private investment and the future employers associated with the forecasted job growth potential are not guaranteed. Success in competing for this new investment requires:

- the presence of economic generators;

- the capacity to accommodate growth in a high-quality work-live environment;
- ready access to an educated workforce;
- the presence of amenities and multi-modal transportation access; and,
- a supportive business environment.

### **Proposed Washington Adventist Hospital At White Oak**

AHC's proposed WAH at White Oak would be located on a 48-acre parcel that it already owns. The proposed hospital is planned as a seven-story structure including its basement level with a gross area of 427,662 square feet offering 170 private inpatient beds. Also included in the initial phase of construction is: a medical office building (180,000 square feet), a 600-space parking garage, a central utility plant, faith center, and necessary on- and off-site infrastructure improvements, site preparation and landscaping. The site has capacity for additional supporting facilities. Build-out is envisioned currently to include: two medical office buildings (144,000 sf and 96,000 sf), a 650-space parking garage, and a cancer center (81,600 sf). The total cost—construction, furniture, fixtures and technology—for the hospital and supporting facilities is \$434.9 million, with the future development projected to cost an additional \$206.0 million. With the completion of the new hospital at White Oak, the Takoma Park campus would be renovated for non-acute health care services, walk-in services, and medical office uses. The renovation of the Takoma Park campus is projected to cost \$18.1 million.

### **Washington Adventist Hospital as a Source of Economic Growth**

The relocation of WAH to a new campus in White Oak will generate a range of positive impacts on the surrounding Montgomery and Prince George's Counties' economies. These will include economic impacts generated during the construction phase followed by increased operating outlays that will generate economic benefits on an annually recurring basis. Beyond these construction and post-construction impacts on the surrounding economies will be additional local economic benefits resulting from the renovation and repositioning of AHC Takoma Park campus including the provision of new outpatient service.

These economic impacts—both flowing from construction and renovation spending within the local economies and subsequently involving operating outlays associated with providing healthcare and related services on an on-going basis—will directly generate and support new jobs and continuing employment, as well as generate business opportunities for locally based vendors. These expenditures by AHC will also generate and support local job and income growth as the direct outlays, either in the form of payroll or purchases of services from local vendors, are recycled and re-spent within the regional and statewide economies in support of a broad range of consumer goods and services. These indirect and induced benefits will be a multiple of the initial outlays and extend these benefits across the breadth of both the



regional and statewide economies. The magnitudes of these extra benefits are calculated using multipliers prepared by the U.S. Bureau of Economic Analysis (RIMS II) for Montgomery and Prince George's Counties and the State of Maryland.

Additional economic benefits will flow to the local economy once WAH is fully operational and the outpatient and supporting health services are in place on the Takoma Park campus. These will come in the form of spending by patients and visitors that would not have occurred in the absence of the initial AHC expenditures to build the proposed White Oak hospital and renovate and expand the outpatient health services located at the Takoma Park campus.

There are important direct and indirect economic benefits that would flow to the Montgomery and Prince George's Counties' economies and beyond to the State of Maryland's economy from the construction outlays of AHC for new health facilities at White Oak and expanded outpatient services at Takoma Park. In addition, these new facilities will generate another level of economic benefits—agglomeration impacts—that will be more important in the long run. These collateral benefits will be the result of the potential interdependencies that can be achieved by the adjacency of multiple reinforcing investments at the White Oak campus, as recognized in the recently adopted White Oak Science Gateway master Plan.

These economic benefits will accrue from the increased efficiencies and competitive advantages that can be achieved from:

- co-location of complementary activities;
- the enlarged market potential that may be generated by the massing of complementary land uses in proximity to other services and directly or indirectly related business activities;
- the market and locational identity and credibility that may result from the massing of similar types of activities resulting in “place making” and value creation; and,
- capacity building—the creation of a competitive location that can attract and accommodate investment (private sector growth) that otherwise would have been lost to the local or regional economies. These same principles can be applied to the White Oak Science Gateway area centered on the Federal Research Center at White Oak with FDA as its principal tenant in combination with complementary and reinforcing investments on contiguous parcels designed to achieve the area's development potentials to the benefit of the surrounding local, regional and state economies.

The full measure of the economic impacts that may flow to the local, regional and state economies that can be realized with the construction of the proposed hospital at White Oak starts with the construction outlays for the new hospital and supporting on-campus facilities and the outlays associated with renovating the facilities on the Takoma Park campus. It then extends to the recurring operating benefits that will accrue annually to the local economies following the completion of

construction. The agglomeration impacts that can be realized within the White Oak Science Gateway Master Plan area with its accumulation of investments and the location and interaction of complementary activities will extend and magnify the economic benefits of individual uses.

This concentration of interdependent economic activity will result in a total benefit with a value substantially greater than the sum of the values of each component part. The establishment of this economic synergy, building on the presence of FDA at White Oak and extending and magnifying the individual economic benefits that can be achieved at this location, will be a major economic achievement making it possible for the regional economy to achieve its projected potentials and realize the benefits of its competitive advantages. These economic impacts will be analyzed in the following sections.

### **The Economic Benefits of Construction of the Proposed Washington Adventist Hospital At White Oak**

The construction of the proposed hospital at White Oak will generate significant impacts on the regional and statewide economies that can be measured in terms of the total contribution to the respective economies (their gross regional product and gross state product), the generation of new personal earnings to be captured by workers residing within the region and/or the state and the number of jobs supported by the construction expenditures directly and indirectly locally and in the state and national economies.

The magnitudes of these economic impacts are governed by the total value of construction expenditures and the geographic scale of the analysis. A larger geographic scale is more inclusive of the workforce, suppliers of materials, and the markets for the re-spending of payroll and supplier earnings and, therefore, has a larger economic impact. The duration of these construction benefits is limited to the period of construction.

The analysis of economic impacts presented in Table 3 reflects the construction of WAH's proposed 170-bed hospital, a proposed medical office building, a parking garage, a faith center, central utility plant and site improvements all at White Oak, plus the costs of renovating existing facilities at Takoma Park for outpatient services. These construction outlays will total \$434.9 million over a three-year period.

As shown in Table 3, the economic impacts resulting from the expenditure of \$434.9 million for construction and related activities at White Oak and Takoma Park would contribute a total of \$721.6 million to the economies of Montgomery and Prince George's (the regional economy) reflecting an aggregate multiplier of 1.66; that is, for each \$1 of AHC's construction outlays at White Oak and Takoma Park, the regional economy would benefit by a total of \$1.66.

Table 3

The Economic Impact of Initial Construction Outlays\*  
by Adventist HealthCare at White Oak and Takoma Park Campuses  
on the Surrounding Region and the State of Maryland  
(dollars in millions)

Location And Type	Direct Outlays <sup>1</sup>	Total Output <sup>2</sup>	Personal Earnings <sup>3</sup>	Jobs Supported <sup>4</sup>
<b>Regional</b>				
Hospital	\$223.7	\$368.8	\$90.2	1,939
Central Utility Plant	18.5	30.8	8.1	174
Garage South	24.0	40.0	10.5	226
Medical Office Bldg A	82.2	137.6	36.6	758
Faith Center	20.0	33.7	9.2	192
Site Improvements	10.5	17.5	4.6	99
Escalation/Contingency	37.9	63.0	16.1	341
Total White Oak*	\$416.8	\$691.4	\$175.3	3,729
Takoma Park**	18.1	30.2	8.0	167
Totals	\$434.9	\$721.6	\$183.3	3,896
<b>State of Maryland</b>				
Hospital	\$223.7	\$431.6	\$137.2	2,894
Central Utility Plant	18.5	36.5	11.9	259
Garage South	24.0	47.3	15.4	252
Medical Office Bldg A	82.2	160.8	52.8	1,114
Faith Center	20.0	39.5	13.2	280
Site Improvements	10.5	20.7	6.8	147
Escalation/Contingency	37.9	73.7	23.8	505
Total White Oak*	\$416.8	\$810.1	\$261.1	5,451
Takoma Park**	18.1	35.5	11.6	244
Totals	\$434.9	\$845.6	\$272.7	5,695

Sources: Adventist HealthCare; GMU Center for Regional Analysis

<sup>1</sup>direct outlays by Adventist Health Care; <sup>2</sup>the total value of goods and services generated directly and indirectly as a result of the initial construction and annual operating outlays; <sup>3</sup>the additional earnings generated within the region and the State of Maryland from the new economic activities supported by the construction and operating outlays; <sup>4</sup>the additional new local and non-local jobs supported by the spending and re-spending of the new construction and operating expenditures. \*initial construction for 170 beds, one structured parking deck and supporting infrastructure and facilities; includes capital equipment and fixtures and furniture. \*\*renovation outlays

This spending would also generate a total of \$183.3 million in new personal earnings—wages and salaries—that would accrue to workers residing in Montgomery or Prince George’s Counties. This new personal earnings would support 2,729 full-time, year-round equivalent jobs over the construction period held by residents of these two counties. This will account for approximately 70 percent of the total jobs this spending will generate directly and indirectly across the regional economy and elsewhere based on its regional impacts.

This construction spending will also benefit the Maryland economy beyond these benefits captured in the regional economy. As the state’s economy is larger and more complex than the regional economy of Montgomery and Prince George’s Counties, its multipliers are larger reflecting the scale of the statewide workforce and the range of businesses that may benefit directly and indirectly from AHC’s construction outlays to build the hospital and related medical facilities.

With an aggregate multiplier of 1.94, the state’s economy will gain a total of \$845.6 million in economic impacts from AHC’s \$434.9 million in total construction spending. This spending will generate total personal earnings of \$272.7 million to the benefit of workers residing within the state and support a total of 5,695 jobs over the construction period of which an estimated 4,419 or 78 percent would be held by state-resident workers. These state-level benefits—contribution to the state’s economy, generation of personal earnings (wages and salaries) and jobs supported—include the economic benefits captured within the regional economy. These differences, as can be seen in Table 3, reflect the added economic benefits that can be captured elsewhere in the state that were not retained within the regional economy from AHC’s initial construction spending.

With the potential for further expansion on AHC’s White Oak campus, additional economic impacts from construction spending would increase AHC’s total contributions to the regional and statewide economies well into the future. These additional economic impacts are presented in Table 4 and totaled for the build-out of the White Oak campus. An additional \$206.0 million in construction spending is projected to include two medical office buildings, a cancer center and a second parking garage.

These additional construction expenditures at White Oak would generate additional economic benefits, new personal earnings to the benefit of the resident workforce, and support jobs regionally and throughout the state. These economic impacts are presented in Table 4 for this future building program. Table 4 also presents the total economic impacts resulting from full development of the proposed WAH White Oak campus at both the regional and statewide scales. With total construction at White Oak, and including renovations outlays at the Takoma Park campus, a total of \$640.9 in construction outlays are projected. These construction expenditures would contribute a total of \$1.08 billion and \$1.25 billion respectively to the regional and Maryland economies over the full construction period.

Table 4

The Economic Impact of Build-Out Construction Outlays\*  
by Adventist HealthCare at White Oak and Takoma Park Campuses  
on the Surrounding Region and the State of Maryland  
(dollars in millions)

Location And Type	Direct Outlays <sup>1</sup>	Total Output <sup>2</sup>	Personal Earnings <sup>3</sup>	Jobs Supported <sup>4</sup>
<b>Regional</b>				
Cancer Center	\$47.1	\$78.2	\$20.3	416
Garage North	29.2	48.7	12.9	275
Medical Office Bldg N.	66.2	129.4	42.4	609
Medical Office Bldg S.	44.8	74.9	19.9	410
Escalation/Contingency	18.7	31.1	8.0	169
White Oak*	\$206.0	\$362.3	\$103.5	1,879
White Oak**	\$416.8	\$691.4	\$175.3	3,729
Total White Oak	\$622.8	\$1,053.7	\$278.8	5,608
Takoma Park***	18.1	30.2	8.0	167
Totals	\$640.9	\$1,083.9	\$286.8	5,775
<b>State of Maryland</b>				
Cancer Center	\$47.1	\$91.2	\$19.6	422
Garage North	29.2	57.8	18.8	275
Medical Office Bldg N.	66.2	129.4	42.4	895
Medical Office Bldg S.	44.8	87.5	28.6	640
Escalation/Contingency	18.7	36.4	11.8	250
White Oak*	\$187.3	\$402.3	\$121.2	2,446
White Oak**	\$416.8	\$810.1	\$261.1	5,451
Total White Oak	\$622.8	\$1,212.4	\$382.3	7,897
Takoma Park***	18.1	35.5	11.6	244
Totals	\$640.9	\$1,247.9	\$393.9	8,141

Sources: Adventist HealthCare; GMU Center for Regional Analysis

<sup>1</sup>direct outlays by Adventist Health Care; <sup>2</sup>the total value of goods and services generated directly and indirectly as a result of the initial construction and annual operating outlays; <sup>3</sup>the additional earnings generated within the region and the State of Maryland from the new economic activities supported by the construction and operating outlays; <sup>4</sup>the additional new local and non-local jobs supported by the spending and re-spending of the new construction and operating expenditures; \* future development program as currently envisioned. \*\*initial construction for 170 beds and supporting facilities (see Table 3); \*\*\*renovation outlays (see Table 3).

The economic impacts of \$640.9 million in direct expenditures would also generate new personal earnings and support jobs in the region and state. At the regional scale, these expenditures would generate \$286.8 million in new personal earnings that would accrue to workers residing in Montgomery and Prince George's Counties. The level of new wages and salaries would support an estimated equivalent of 4,270 full-time, year-round jobs within Montgomery and Prince George's Counties and a total of 6,383 full-time, year-round jobs statewide over the construction period required for AHC to implement this development program.

### **The Economic Benefits of Adventist HealthCare's Operating Outlays for the Proposed Washington Adventist Hospital At White Oak**

WAH will also generate post-construction benefits as a result of the payroll and non-payroll operating expenditures that will be paid out annually by AHC. These outlays will support workers directly employed by AHC, employees of contractors and suppliers to AHC and workers supported by the spending of the direct payments made by AHC to its employees and vendors.

The post-construction benefits reported in Table 5 reflect projected operating expenditures for the new hospital at White Oak and the continuing medical services provided at the Takoma Park campus. These operating outlays would increase with any further development on the WAH's White Oak campus.

The proposed operating budget reflects the expected opening of the new hospital at White Oak in 2019. Of the \$214.9 million annual operating expenditures, \$104.0 million are for payroll including benefits, supporting 1,254 jobs (995 FTEs) in the hospital excluding physicians, and the remaining \$110.9 million for a wide range of non-payroll expenditures that includes contract labor and purchases of services that also include labor income. These payroll and labor income expenditures are largely re-spent within the economies of the places-of-residence of these workers and are largely retained and re-circulated within the regional economy. These contract services include local vendors and suppliers and as such they directly support the local business base of Montgomery and Prince George's Counties.

This direct spending by AHC, totaling \$214.9 million projected by 2019, would contribute \$359.5 million to the Maryland economy including \$307.9 million that would be captured to the benefit of the regional economy. These annual expenditures would generate \$101.4 million in new personal earnings to the benefit of workers residing within the state with \$79.5 million of these new wages and salaries accruing to workers who reside within Montgomery and Prince George's Counties.

This level of new labor income would equate respectively to 1,643 and 1,184 full-time, year-round jobs statewide and locally. These jobs would occur across the breadth of the economy largely reflecting the pattern of household spending and

vendors and suppliers impacted by the re-spending of budgeted payroll dollars. These economic impacts are one-year impacts and recur annually changing in each subsequent year with changes to AHC's scale of operations and related operating budget.

Table 5

The Economic Impact of Projected Operating Outlays\*  
by Adventist HealthCare at White Oak and Takoma Park Campuses  
on the Surrounding Region and the State of Maryland  
(dollars in millions)

Location And Type	Direct Outlays <sup>1</sup>	Total Output <sup>2</sup>	Personal Earnings <sup>3</sup>	Jobs Supported <sup>4</sup>
<b>Regional</b>				
Payroll & Benefits	\$104.0	\$101.7	\$23.3	678
Non-Payroll	110.9	206.2	56.2	1,223
Totals	\$214.9	\$307.9	\$79.5	1,901
<b>State</b>				
Payroll & Benefits	\$104.0	\$125.5	\$34.9	971
Non-Payroll	110.9	234.0	75.5	1,667
Totals	\$214.9	\$359.5	\$101.4	2,638

Sources: Adventist HealthCare; GMU Center for Regional Analysis

<sup>1</sup>direct outlays by Adventist Health Care; <sup>2</sup>the total value of goods and services generated directly and indirectly as a result of the initial construction and annual operating outlays; <sup>3</sup>the additional earnings generated within the region and the State of Maryland from the new economic activities supported by the construction and operating outlays; <sup>4</sup>the additional new local and non-local jobs supported by the spending and re-spending of the new construction and operating expenditures. \*These outlays and impacts recur annually beginning in 2019.

### Summary of Washington Adventist Hospital's Economic Impacts

The economic impacts associated with construction and operation of the proposed WAH at White Oak and renovation expenditures at the Takoma Park campus can be summarized as follows:

- Construction outlays totaling \$434.9 million will contribute a total of \$721.6 million and \$845.6 million respectively to the regional and state economies during the construction period.

- These construction outlays will generate a total of \$183.3 million in new personal earnings that will accrue to workers residing within Montgomery and Prince George's Counties and earnings totaling \$272.7 million for workers residing within the State of Maryland. These outlays will also support a total of 3,896 and 5,695 jobs of which approximately 75 percent are estimated to be residents of the region and/or state.
- The regional impacts of post-construction spending by AHC to operate WAH at White Oak and its outpatient services at Takoma Park will involve \$214.9 million annual expenditures in 2019, generating an overall contribution to the regional economy totaling \$307.9 million. These outlays will also support a total of 1,901 jobs, of which an estimated 1,185 would be held by local residents with personal earnings totaling \$79.5 million.
- The statewide economic impacts of post-construction operating outlays by AHC would contribute a total of \$359.5 million to the state's economy in 2019 and would support a total of 2,638 jobs, of which an estimated 1,643 would be held by state residents with annual earnings totaling \$101.4 million.
- Full build-out of the AHC's White Oak campus, as currently envisioned and including the economic impacts generated initially by construction and operation of WAH, would bring its total contribution to the regional and Maryland economies respectively to \$1.08 billion and \$1.25 billion with commensurate job and income growth to the benefit of these respective economies.

These project-specific economic impacts have been shown to generate substantial benefits within the regional and state economies. Yet these stand-alone economic impacts do not represent the full range of benefits that would accrue to the region and state when the WAH White Oak campus is built out and its Takoma Park campus is repositioned to offer outpatient and services to the residents of its service area.

Additionally, beyond these directly related benefits that will accrue to the local, regional and statewide economies, there is a more strategic opportunity that the location of WAH at White Oak can further, that if realized, will result in strengthening the region's competitive position and economic outlook over its long-term future. Realizing this economic future for Montgomery and Prince George's Counties and the State of Maryland is fully consistent with local and state policies and plans that have framed the future economic directions for this region, but have not as yet succeeded in realizing the anticipated potentials inherent in the White Oak Science Gateway Master Plan area.



## **Capturing the Region's Growth Potentials**

The White Oak Science Gateway Master Plan area centered on the FDA at White Oak offers the opportunity to establish the conditions favorable to attract significant economic activity to the benefit of the surrounding region. The FDA at White Oak, with its projected 10,000 employees and \$1.5 billion investment in new laboratory and office facilities, represents a unique asset to the local economy but it has yet to fulfill its economic development promise.

The presence of the FDA Campus, like so many other federal enclaves (e.g., National Institute of Standards and Technology, NOAA, Census, NASA Goddard Space Flight Center, the National Agricultural Research Center, Nuclear Regulatory Commission, the National Institutes of Health, and the Bethesda Naval Medical Center) does not automatically generate the co-location and concentrated growth of complementary private sector investments. These federal employment centers remain isolated within their local economies for a variety of good reasons: they occupy large land parcels in self-contained and often remote locations, their security requirements restrict access, and they are introverted in their operational behavior.

In order to extend the economic benefits of the FDA Campus to its surrounding region, the functions that FDA perform must be connected to suppliers, partners, and customers. FDA is not likely to reach out and establish these functional and operational linkages on its own initiative. Additionally, proximity to FDA can represent an important locational consideration for some organizations or businesses that may not benefit from direct contact but are attracted by the indirect benefits (real and imaginary) of adjacency.

The FDA Campus is largely complete but has generated little related investment in the immediate area. However, the adjacency of the proposed East County Center for Science and Technology, LifeSci Village, and Washington Adventist Hospital offers to create a place and capacity to accommodate the location of complementary health and other related professional and business service functions, supporting office space, residential and retail uses, and locations for vendors and other supporting functions. These will increase the agglomeration economies that can be realized within the surrounding region that is currently underutilized and underachieving its future economic potential. This potential for locating complementary and interdependent combination of land uses is recognized and provided for in the White Oak Science Gateway Master Plan that was adopted by the Montgomery County Council July 29, 2014.

Extending the economic benefits represented by the presence of the FDA Campus at White Oak and capturing these benefits within the surrounding regional economy will be achieved only with the complementary development of compatible land uses in proximity to the Federal Research Center site. The building blocks for a successful science/biomedical research center and supporting residential and commercial community include location, land availability, infrastructure, amenities, sense of

place and image, and the presence of interdependent economic and non-economic functions. Plans are in place to develop 5,000 housing units and 4 million square feet of office and retail space at the LifeSci Village and East County Center for Science and Technology. This development would draw its market potential from its adjacency to the FDA Campus to the south and from employment centers to the west and north. The early development of WAH would help to jump start the realization of these interdependent development opportunities to the benefit of the surrounding region and state, both of which are seeking to re-position and diversify their economies to reduce their long-standing dependencies on federal spending.

### **Washington Adventist Hospital as the Linchpin for Regional Economic Development**

The location of WAH adjacent to and north of East County Center for Science and Technology and LifeSci Village will establish a major employment center, as well as a major economic magnet at the northern side of the White Oak Science Gateway area. This strategic position will establish WAH as the primary anchor for adjacent commercial and residential investment. The presence of WAH in its role as a major employer and service provider will help define and focus the commercial and residential markets that to date have not been evident in this portion of Montgomery County or Prince George's County.

The presence of WAH at White Oak has the potential to reverse the surrounding area's economic trends, not just because of the 1,254 jobs (995 FTEs) excluding physicians that will be employed at WAH and its \$215 million annual operating budget, but because of what else will result from its presence at that location: the investor confidence it will generate within the surrounding area; the market demand that its employees and visitors will generate to the benefit of local businesses; the residential market benefits that WAH will bring to the community; and, the sense of place that its presence will create.

Beyond these ancillary benefits from co-location that will accrue to adjacent property owners and businesses will be the opportunities that exist between WAH and FDA (as defined in their existing MOUs) to extend the locational presence of FDA outside its enclave to its immediate surroundings. Due to its isolation and disconnection from the immediate economy, the presence of the FDA Campus has not had any appreciable local economic impact. However, as the linkages and interactions between FDA and WAH increase, as FDA's on-campus space limits push it to expand into privately owned, conveniently located office space, as FDA and WAH employees opt to reside closer to their places of employment, and as the retail and business base in the surrounding area grows in quality and becomes more diversified, organizations doing business with FDA and with each other will find co-locating in proximity to the FDA Campus will become increasingly attractive. The East County Center for Science and Technology will become a preferred location, as will office space and the residential communities planned as part of the LifeSci Village. These benefits will extend north and south throughout the surrounding area.

While WAH at White Oak is just one building block in this complex mix of interdependent activities whose co-location will contribute to positioning the surrounding region for significant future economic growth, the hospital is the critical next component in creating the necessary conditions within the White Oak Science Gateway area to achieve its full development potential. WAH's position in this development sequence is unique:

- WAH can help extend FDA's economic benefits from its activities housed at White Oak into the local economy;
- WAH can be a major economic generator unto itself that will strengthen the surrounding markets for supporting land uses;
- WAH can generate investors' confidence within the Life Sciences/FDA Village Center that to date has not materialized in spite of the presence of the large FDA investment at White Oak;
- WAH can be a place maker enhancing the name and business reputation of White Oak Science Gateway; and
- WAH can stimulate significant new investment on adjacent properties.

#### **Summary of Washington Adventist Hospital's Economic Impacts**

WAH's economic impacts are important as a stand-alone institution with its large job base and annual payroll exceeding \$100 million (2019). Its overall post-construction annual economic impacts have been shown to exceed \$300 million and \$350 million respectively within the Montgomery County and Prince George's County region and statewide. Additionally, WAH's economic importance as a catalyst for further economic development within the White Oak Science Gateway area centered on FDA's White Oak Campus can generate significant and continuing economic benefits to the local and state economies.

The location of WAH at White Oak has the potential of rationalizing and magnifying the economic and market forces that can be focused within the White Oak Science Gateway Master Plan area, thereby starting a development process that ultimately will represent new private investment estimated to total more than \$5 billion, providing work space for more than 8,000 workers beyond those employed on the FDA campus and creating a live-work community housing 7,500 residents. These developmental benefits will enhance the economic base and quality-of-life for the residents and businesses within the surrounding region, an area that has long underperformed its growth potential.

The construction and operation of WAH at White Oak and the ultimate buildout of its campus will solidify the development forces that will shape the future of the

White Oak Science Gateway area and significantly contribute to the region's economic vitality. It is unlikely that an alternative economic force with the same qualities and connectivity could be found to fill this function within the future development of this portion of Montgomery County. WAH's established relationship with FDA, its role as service provider and catalyst within the community, its employment and economic impacts, and impacts as a market maker are relatively unique to a single organization.

In the absence of the hospital at White Oak, the promise of the White Oak Science Gateway area is likely to be diminished and delayed. As a consequence, the economic potentials that might have been captured to the benefit of the surrounding region with their employment and income implications could be lost to other more competitive jurisdictions that have invested in the preconditions necessary to capitalize on their inherent growth potentials. Once lost, regaining this competitive position will be unlikely. It is important to note that there is an urgency to open the hospital and actualize these substantial, but unrealized, assets to accelerate the economic recovery of the region and state in the face of their declining economic performance due to continuing reductions in federal spending. This reinforces the importance of early action on this proposal.

The economic futures of both Montgomery County and Prince George's County are closely tied to their success in attracting and accommodating a growing science and technology-intensive business base. Forecasts for these counties' economic growth over the coming 15 years identify the professional and business services and educational and health services as the principal sources of future job growth. In order to achieve this economic potential, local and state government and economic development officials need to recognize the synergies and resulting economic benefits that can be achieved by concentrating and linking the health sciences and supporting professional and business services with a high-quality living and working environment.

These synergies can be achieved within the White Oak Science Gateway area. With the proposed campus of WAH at White Oak anchoring the future development of the East County Center for Science and Technology and the LifeSci Village, the potential for enlarging and extending the impacts from FDA's White Oak Campus to the benefit of the surrounding economy will be greatly improved. This concentration of interdependent health sciences, professional and business services, and research facilities with supporting residential and retail services and amenities, will result in the creation of a vital and growing health sciences-based development center that will enlarge the economies of both Montgomery County and Prince George's County. It will also strengthen the state's competitive position within the national economy as it forges a new direction to carry it into a future.