



Economic Impact Study of the Downtown Columbia Plan

Submitted to:
Howard County Economic Development Authority

October 2009



October 6, 2009

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Mr. Peter J. Rogers, Jr., Vice-Chair
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Messrs. Galeone and Rogers:

We are pleased to submit this Final Economic Impact Analysis of the proposed Downtown Columbia Plan. The Final document incorporates comments and new information presented during the review process. It has been a pleasure working with you and we look forward to working together again in the future. If you have additional questions or concerns, please do not hesitate to contact us.

Sincerely,

A handwritten signature in cursive script that reads 'Nancy Fox'.

Nancy Fox, AICP
Vice President

A handwritten signature in cursive script that reads 'Sherry Rudnak'.

Sherry Rudnak, LEED AP
Senior Associate

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Executive Summary

The Howard County Economic Development Authority (HCEDA) hired Bay Area Economics (BAE) to conduct an economic impact analysis of the proposed plan for Downtown Columbia. Using a model called IMPLAN, BAE analyzed and compared:

- The proposed General Plan Amendment by phase and at buildout (“Downtown Plan”)
- The buildout of the remaining development potential under the existing zoning and current development intensity (“Status Quo Scenario”)

Table ES-1 shows the total development analyzed under the General Plan Amendment and Status Quo Scenario alternatives. For the purposes of the Status Quo Scenario, the remaining undeveloped parcels are presumed to achieve the development levels below, continuing the suburban, car-oriented development pattern that currently exists in Downtown Columbia. No redevelopment is assumed.

Table ES-1: Development Programs

<u>Land Use</u>	<u>Downtown Plan</u>	<u>Status Quo Scenario</u>
Office (square feet)	4,300,000	332,000
Retail (square feet)	1,250,000	250,000
Residential, (units)	5,500	424
Hotel (rooms)	640	0 (a)

Note:

(a) hotel uses are allowed under the current zoning.

Source: BAE, 2009.

This analysis uses construction and operating assumptions to estimate the direct (economic activity available to flow through the economy), indirect (business-to-business expenditures), induced (household expenditures), and total economic impacts of both the construction and operating phases on the County, regional, and state economies.

Construction Impacts

As Table ES-2 shows, the estimated \$3.3 billion construction budget to build the Downtown Plan and renovate Merriweather Post Pavilion would generate over **\$4.8 billion in total economic activity and 3,140 jobs in Howard County.**

Table ES-2: Total Construction Impacts

<u>Geography</u>	<u>Plan Buildout</u>		<u>Status Quo Scenario</u>	
	<u>Employment (millions \$)</u>	<u>Output (millions \$)</u>	<u>Employment (millions \$)</u>	<u>Output (millions \$)</u>
County	3,144	\$4,823.8	285	\$437.8
Region	3,423	\$5,209.1	310	\$472.9
State	3,500	\$5,297.5	317	\$480.7

Source: BAE, 2009.

Comparatively, if Downtown were to build out under the Status Quo Scenario, the construction phase would produce 2,860 fewer jobs and \$4.4 billion less economic activity. Regardless of whether the Downtown Plan is adopted or fully implemented, **one dollar of direct construction spent in the County will result in \$1.47 in Countywide impacts, \$1.59 in regional impacts, and \$1.62 in statewide impacts.**

Operating Impacts

Once open and fully leased, development under the Plan will supply commercial space for approximately 15,460 employees and residences for 5,500 new households. In addition, renovation of the Merriweather Post Pavilion would lead to an estimated 46,000 additional visitors per year and support approximately \$1.35 million annually in increased revenues and County visitor expenditures.

Table ES-3: Annual Operating Impacts

<u>Geography</u>	<u>Plan Buildout</u>		<u>Status Quo Scenario</u>	
	<u>Employment (millions \$)</u>	<u>Output (millions \$)</u>	<u>Employment (millions \$)</u>	<u>Output (millions \$)</u>
County	29,973	\$5,689.6	2,610	\$457.7
Region	34,115	\$6,291.1	2,930	\$506.0
State	34,829	\$6,341.6	2,990	\$510.3

Source: BAE, 2009.

As Table ES-3 shows, the ongoing operations under the Plan would generate, on an annual basis, **\$5.7 billion in total economic activity and approximately 29,970 jobs within Howard County.** Comparatively, the build out of Downtown under the Status Quo Scenario would produce 27,360 fewer jobs and \$5.2 billion less economic activity. If adopted and Downtown Columbia is fully built out, **one dollar of direct operation spending would result in \$1.43 in Countywide impacts, \$1.57 in regional impacts, and \$1.58 in statewide annual impacts.**

Introduction

Background

Beginning in October 2005, Columbia residents and Howard County planning staff engaged in a review and discussion of the future of Columbia's downtown core, focusing on Jim Rouse's original ideal of a self-sustaining community. In February 2006, Howard County presented a preliminary draft Master Plan that included plans to redevelop the downtown core into a more vibrant area with higher density, new residential units, office space, retail uses, and pedestrian improvements designed to encourage connectivity and reduce traffic. This initial plan generated significant dialogue and further refinement of the core goals and vision for the future of Columbia's downtown. In December 2007, the County released its vision for Columbia's downtown core in *Downtown Columbia: A Community Vision*, a framework document to guide the future development of Downtown Columbia.

General Growth Properties (GGP), the major Downtown land owner, initiated a collaborative process of its own involving citizens and other stakeholders to translate the County's framework document into a 30-year master plan for Downtown. This Downtown Plan, entitled *Many Voices, One Vision*, envisions a build out of 5,500 new housing units, 4.9 million square feet of new office space, one million square feet of retail space, and new hotels that would add 640 rooms to Columbia's hotel stock. In addition, the Downtown Plan calls for new infrastructure to improve pedestrian access and public spaces. Completed in September 2008, *Many Voices, One Vision* functions as a proposed amendment to the County's General Plan. A petition for a Zoning Regulation Amendment (ZRA), accompanied by a General Plan Amendment (GPA), is currently under consideration. Adoption of both the ZRA and GPA require review by the Planning Board and approval by the County Council.

To contribute factual data to the public discussion on the Downtown Plan to revitalize Downtown Columbia, and to facilitate informed decisions, the Howard County Economic Development Authority (HCEDA) engaged Bay Area Economics (BAE) to analyze the economic impacts of the proposed development on the County, regional, and state economies. This report presents the economic impact findings for both constructing and operating the proposed Downtown Plan.

Project Description

As Table 1 shows, the GPA presents three potential phasing scenarios for Downtown Columbia's development, where each phase is built over a 10-year period, for a total development period of 30 years.

- **Targeted** phasing spreads development relatively evenly between each of the three ten-year development phases.
- **Minimum** phasing has minimal development in the first phase and pushes the majority of development to Phase III.
- **Maximum** phasing has a more intense level of development in Phase I and Phase II so that there is relatively little construction in Phase III.

Table 1: Downtown Plan Development Program and Status Quo Scenario

Land Use	Downtown Plan			Status Quo Scenario
	Targeted	Minimum	Maximum	
Phase I				
Office (square feet)	944,654	377,862	1,322,515	332,000
Retail (square feet)	599,153	239,661	838,813	250,000
Residential, Condos (units)	1,640	656	2,296	424
Hotel (rooms)	250	100	350	0
Phase II				
Office (square feet)	1,719,838	687,936	2,407,774	0
Retail (square feet)	400,748	160,299	411,187	0
Residential, Condos (units)	1,966	786	3,204	0
Hotel (rooms)	250	100	290	0
Phase III				
Office (square feet)	1,635,508	3,234,203	569,711	0
Retail (square feet)	250,099	850,041	0	0
Residential, Condos (units)	1,894	4,058	0	0
Hotel (rooms)	140	440	0	0
Total				
Office (square feet)	4,300,000	4,300,000	4,300,000	332,000
Retail (square feet)	1,250,000	1,250,000	1,250,000	250,000
Residential, (units)	5,500	5,500	5,500	424
Hotel (rooms)	640	640	640	0

Sources: GGP; Howard County EDA; BAE, 2009.

The analysis of economic impacts by phase illustrates how three levels of development intensity each contribute to the overall economic impact.

In addition, the analysis measures potential economic impacts of the Downtown Plan implementation and the Merriweather Post Pavilion renovation against a scenario in which Downtown Columbia is built out continuing the suburban development pattern that currently exists, the “Status Quo Scenario alternative”.

Figure 1: Downtown Parcels Available for Development



Source: Howard County Economic Development Authority, 2009.

Under the Status Quo Scenario alternative, some development would occur on parcels even if the Downtown Plan was not adopted. According to the existing Preliminary Development Plan, there are 84.5 acres in Downtown Columbia that are available for development. Buildout of the

remaining Downtown acreage under the existing zoning and current development intensity could include 332,000 additional square feet of office space, 250,000 additional square feet of retail space already approved, and up to 424 new residential units. Unlike under the Downtown Plan, development under the Status Quo Scenario would continue to come online in more car-oriented patterns. Figure 1 shows the currently undeveloped Downtown parcels available for development.

Economic Impact Analysis

What Can Economic Impact Analysis Reveal?

Economic impact analysis is an exercise that seeks to quantify the total economic benefit that expenditures for a project (such as the construction of Downtown Columbia) or an activity (such as the ongoing operation of Downtown Columbia's housing, offices, hotels and retail) have on a local or regional economy. Money spent on the construction of a building or the purchase of a night's stay in a hotel room, as examples, creates a cascade of additional purchases; funds spent on roofing and windows, hotel staff salaries, and numerous other expenditures can create opportunities for recipients of those funds to use them to make additional consumer and business purchases. In the process, new jobs are created and the economy expands. Subsequent paragraphs of this chapter provide further explanation of how IMPLAN, the model used to undertake this analysis, works.

The analysis of economic impacts from the construction and operation of Downtown Columbia serves as a useful tool for planning and public policy, as it measures the anticipated economic benefits of the initial private investment required for the Downtown plan to come to fruition. It is a tool that works well for its intended purpose, but is not designed to answer other questions related to the development process. For instance, while the analysis examines the differential impacts of more or less development, it is not designed to predict how quickly or slowly planned development will happen. Economic impact analysis, on its own, also does not evaluate questions of market demand or financial viability of the development program modeled.

Furthermore, while it is an effective tool for understanding the contribution that a particular development plan can make to expand the local and regional economy, it is not useful for predicting what will happen if the plan is not implemented, or how the successful redevelopment of Downtown Columbia would impact development in other parts of Howard County. For example, if Downtown Columbia is not built, regional demand for new offices, residences and retail that could have been situated in Downtown may, or may not, be captured in other parts of the County. The successful redevelopment of Downtown may meet much of the County's demand for new commercial buildings and residential units, minimizing development pressure on other areas of the County – or its success may make Howard County an even more desirable location, positioning the County to capture more of the region's projected demand for housing and commercial space.

A final consideration pertains to the fiscal impact of new development. Economic impact analysis predicts spending on state and local taxes, but does not distinguish between them. To further illustrate the tax benefits associated with new development, the analysis prepared for this report supplements the IMPLAN calculations of aggregated state and local taxes paid with additional

calculations of likely government revenues from major sources such as property taxes, where sufficient information is available to gauge the likely County tax revenue impact. This information does not constitute a full fiscal impact analysis, as it does not calculate revenues net of the costs of additional government service costs likely to result from new development.

Assumptions

It is important to consider the strengths and limitations of economic impact analysis while reading this report's findings. As explained above, economic impact analysis does not consider or predict market conditions. Instead, the economic impact analysis described in this report relies on a series of assumptions about the market:

- **There is sufficient demand for the development components.** This analysis does not include a market study component and makes an assumption that there will be sufficient market demand over the projected construction time frame to support the amount and types of development envisioned.
- **Project development is financially feasible.** This analysis does not examine the feasibility of private development and must assume that market rents and prices are sufficient to support new development costs. Current economic conditions may constrain the financial viability of development, or the development of certain land uses, in the short term. Financial feasibility may change over time and could impact the timing of development, types of uses that can be built, and the need for public support for infrastructure improvements.
- **There is sufficient financing available to fund infrastructure improvements.** This analysis does not consider the required investment in offsite public infrastructure improvements.
- **There is sufficient demand to support office, retail, and residential uses in the absence of the hotel and/or Merriweather Post Pavilion components.** While this analysis provides a sensitivity analysis to determine the proposed project's economic impacts without the development of the hotel component or the Merriweather Post Pavilion renovation, it does not consider whether omitting either of these components would reduce demand for the other uses, or what effect the omission of either or both such components may have on the marketability of the office, retail and residential components of the Downtown Plan.

IMPLAN Input-Output Model

Regional and national input-output models have been used for years by economists as a tool to understand the extremely complex interactions among the various parts of an economy. There are

two basic types of models available to assess the economic impacts an activity including regional input-output models and customized dynamic econometric models. The economic model used in this analysis, IMPLAN (“IMpact analysis for PLANning”), is a PC-based computer software package that automates the process of developing input-output models for regions within the United States. The IMPLAN model is well respected as the industry standard for projecting economic impacts resulting from future “events.” In this study, the projected construction budget and operating employment levels make up the “events” in the IMPLAN model.

What is IMPLAN?

In 1976, the USDA Forest Service in conjunction with the University of Minnesota developed the IMPLAN model in response to the National Forest Management Act, which required the USDA Forest Service to create five-year management plans that estimated the local socio-economic impacts associated with various land use alternatives. In 1988, the University of Minnesota began offering the use of the IMPLAN model to non-Forest Service users. Finally, in 1993, through a technology transfer agreement, the Minnesota IMPLAN Group, a private enterprise, was formed with the purpose of maintaining and distributing the IMPLAN software and databases.

At the heart of the model is a national input-output dollar flow table called the Social Accounting Matrix (SAM). Unlike other static input-output models, which just measure the purchasing relationships between industry and household sectors, SAM also measures the economic relationships between government, industry, and household sectors, allowing IMPLAN to model transfer payments such as unemployment insurance. Thus, for the specified region, the input-output table accounts for all of the dollar flows between the different sectors within the economy.

National Industry Data

The model uses national production functions for 440 industries, including government and households, to determine how an industry spends its operating receipts to produce its commodities. Using construction as an example, IMPLAN uses a production function based on the average national construction firm to determine how a firm in the construction *industry*¹ spends “each dollar of outlay on goods and services to produce a dollar of output.”² The model also uses a national matrix to determine the *byproducts*³ that each industry generates. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts of the economic “event.”

¹ An industry consists of businesses that produce goods and services. The goods and services are known as commodities. IMPLAN Pro User’s Guide, 2000.

² IMPLAN Pro User’s Guide, 2000.

³ The byproducts refer to any secondary commodities that the industry creates.

County-Level Economic Data

In order to estimate county-level impacts, IMPLAN combines national industry production functions with county-level economic data. IMPLAN collects data from a variety of economic data sources to generate average output, employment, and productivity for each of the industries in a given county. It also collects data on average prices for all of the goods sold in the local economy. In the case of a county and a regional model, IMPLAN uses average county data to estimate the impacts to the county, and averages all of the economic data across the region's counties to estimate the impacts to the region. In addition, IMPLAN gathers data on the types and amount of output that each industry generates within the county. This allows the model to determine how much of each production input (i.e. wood, steel, labor, etc. for the construction industry) the firm can buy locally, within the county or region. In the case of labor, the model accounts for county and regional commute patterns, so as not to overestimate the impacts from labor spending its income in the local economy. Finally, the IMPLAN model uses county-level data on the prices of goods and household expenditures to determine the consumption functions of county households and local government, taking into account the availability of each commodity within the specified geography.

Multipliers

IMPLAN combines this data to generate a series of multipliers for the local economy. The multiplier measures the amount of total economic activity that results from an industry (or household) spending an additional dollar in the local economy. IMPLAN uses the national and county-level data to generate type-SAM multipliers, which include the direct, indirect, and induced impacts to the local economy.

Direct Impacts. Direct impacts refer to the dollar value of economic activity available to circulate through the economy. The direct impacts may equal the operating budget (or revenues) of an industry, or less, depending on several factors. The direct impacts do not include payments to capital, inventory, federal taxes, or state and local taxes.

Indirect Impacts. The indirect impacts refer to the "inter-industry impacts of the input-output analysis."⁴ In the construction example this would include payments for construction inputs such as wood, steel, office supplies, and any other non-labor payments that the construction firm would pay in the building process. Indirect impacts will vary between the county and region models based on the availability of goods within the two geographies. For example, if the construction firm buys some inputs from a firm in a different county within the region, those expenditures would be represented in the regional model, but not in the county model. As such, the indirect

⁴ IMPLAN Pro User's Guide, 2000.

impacts will always be larger for the larger geography (region) that includes the smaller geography (county).

Induced Impacts. The induced impacts refer to the impacts of household expenditures in the model.⁵ When households earn income, they spend part of that income on goods and services. The model treats households as an “industry” in determining their local expenditure patterns in the model, based on the availability of goods and services within the geography. In the construction example, the induced impacts include the expenditures of construction laborers’ incomes, as well as the expenditures of the incomes of persons who work in industries represented in the indirect impacts. First, the model accounts for local commute patterns in the geography. If 20 percent of construction workers who work in the county live outside of the county, the model will allocate 80 percent of labor’s disposable income into the model to generate induced impacts. In addition, as with industries, the analysis excludes payments to federal and state taxes and savings based on the geography’s average household local tax and savings rates. Only the disposable incomes from local workers’ households are included in the modeling of economic impacts.

Summarizing the Impacts

Once the model is run, IMPLAN generates a series of output tables to show the direct, indirect, and induced impacts. IMPLAN generates these tables for two types of impacts: output and employment.

- *Output* refers to the total economic value of the project in the local economy. This report presents all output impacts in constant 2009 dollars. Thus, there is no need to adjust the findings for inflation to compare the impacts between phases.
- *Employment* shows the number of employees needed to support the economic activity in the local economy. For annual impacts of ongoing operations, IMPLAN reports the total number of workers required to support the economic activity over the course of a year. In the case of a construction project, IMPLAN reports the number of workers needed to support the economic activity over the life of the project. Therefore, it is necessary to divide the total number of employees who would be required to support the project by the estimated duration of years that the project would last. Furthermore, IMPLAN reports the number of jobs based on average output per employee for a given industry within the geography. This is not the same as the number of full-time positions.

⁵ Ibid.

Construction Impacts

This section of the report analyzes the multiplier effects from constructing the Downtown Plan. This analysis uses the construction budget as a proxy for economic activity related to the construction phase. IMPLAN then translates the construction budget into direct output and jobs to estimate the indirect and induced impacts of the construction phase.

Key Assumptions

To estimate the construction impacts, the analysis makes a number of key assumptions that drive the results. Using the IMPLAN model to estimate the economic impacts from construction requires a construction budget for the Downtown Plan, which requires making assumptions about the types of buildings that would be constructed and estimating the costs of constructing those buildings.

Construction Costs Per Square Foot

Table 2 shows the estimated cost per square foot for constructing each of the various land uses proposed in the GPA. Cost estimates include hard costs, design and permitting fees, parking, tenant improvements, and soft costs, but do not include land costs.⁶ The analysis estimates construction costs for the various land uses using R.S. Means data, a third party data source, discussions with GGP staff and their consultants, and construction experience around the region.

Hotel and Residential Square Feet Estimates

To project total development costs, the analysis assumes that the hotel's total square footage will be 800 gross square feet per room, that each residential unit will average 1,000 gross square feet in size, and that there is no cost differential, per square foot, in constructing rental or affordable residential units versus market rate for sale condominium units.

Construction Period

Finally, the analysis assumes a 30-year construction period consisting of three phases, each with a 10-year duration. For discrete events, like construction, IMPLAN reports employment results as job-years, rather than jobs. For construction periods that last longer than one year, "job years" reports the total number of jobs required to support that level of construction in one year.

⁶ Because the value of land does not contribute to construction related employment, as the value of construction does, land costs are not included in economic impact analyses.

Table 2: Projected Construction Costs, Per Square Foot

Land Use	Hard Costs Per Sq. Ft.	Soft Costs as % of Hard Costs	Parking and Tenant Improvements (a)	Total Costs Per Sq. Ft. (f)
Office, Class A (a)	\$155.00	20%	\$145.00	\$331.00
Retail (b)	\$125.00	20%	\$225.00	\$375.00
Residential (c)	\$158.40	20%	\$30.00	\$220.08
Hotel (d)	\$200.00	20%	\$38.00	\$278.00

Notes:

- (a) Assumes a mix of mid-rise and high-rise steel frame and masonry/metal panel and glass skins.
- (b) Assumes concrete or steel frame, masonry skin 1 and 2 story at base of mixed-use.
- (c) Assumes a mix of mid-rise and high-rise. Mid-rise units below 75 feet would have light gauge metal frame with masonry and EIFS skins. High-rise would have concrete frame with masonry/panel skins.
- (d) Assumes 300 rooms at 800 gross square feet each, consisting of concrete frame and masonry skin.
- (e) Parking would be below grade for 20 percent of spaces, and 80 percent decked. The blended parking cost per space would be approximately \$30,000 per unit.
- (f) All costs provided by GGP and their consultants, except residential hard costs.

Source: GGP; RS Means; BAE, 2009.

Methodology

GGP provided the development schedule and non-residential construction cost estimates for the proposed Downtown Plan. In addition, the Merriweather Post Pavilion Feasibility Study provided renovation cost estimates to construct a new roof for the winged portions of the facility, raise the main stage roof, readjust grades as necessary, replace and reconfigure the seating base, construct new restrooms and concession stands, and upgrade utilities. These data served as the IMPLAN inputs that act as a proxy for construction economic activity.

Using the construction costs above, as well as information provided in the Merriweather Feasibility Analysis, this analysis projects the costs of total development for each phase. According to construction cost estimates provided by GGP and R.S. Means, development of the Downtown will cost approximately \$3.245 billion, with an additional \$26.3 million⁷ to renovate Merriweather Post Pavilion. Constructing the Status Quo Scenario alternative would cost approximately \$297.0 million. Table 3 shows the development costs.

⁷ Inflated from 2004 estimates of \$19.5 million.

Table 3: Projected Development Costs of Alternatives

Land Use	Construction Costs			Status Quo Scenario
	Downtown Plan			
	Targeted	Minimum	Maximum	
Phase I				
Office (square feet)	\$312,680,380	\$125,072,210	\$437,752,590	\$109,892,000
Retail (square feet)	\$224,682,304	\$89,872,736	\$314,555,040	\$93,750,000
Residential, Condos (unit (a))	\$144,372,480	\$57,748,992	\$202,121,472	\$37,325,568
Residential, Rental (units (a))	\$216,558,720	\$86,623,488	\$303,182,208	\$55,988,352
Hotel (rooms) (b)	\$55,600,000	\$22,240,000	\$77,840,000	\$0
Phase II				
Office (square feet)	\$569,266,509	\$227,706,719	\$796,973,229	\$0
Retail (square feet)	\$150,280,495	\$60,112,012	\$154,194,960	\$0
Residential, Condos (unit (a))	\$173,070,912	\$69,193,152	\$282,054,528	\$0
Residential, Rental (units (a))	\$259,606,368	\$103,789,728	\$423,081,792	\$0
Hotel (rooms) (b)	\$55,600,000	\$22,240,000	\$64,496,000	\$0
Phase III				
Office (square feet)	\$541,353,110	\$1,070,521,071	\$188,574,181	\$0
Retail (square feet)	\$93,787,201	\$318,765,252	\$0	\$0
Residential, Condos (unit (a))	\$166,732,608	\$357,233,856	\$0	\$0
Residential, Rental (units (a))	\$250,098,912	\$535,850,784	\$0	\$0
Hotel (rooms) (b)	\$31,136,000	\$97,856,000	\$0	\$0
Merriweather Post Pavilion (c)	\$26,278,000	\$26,278,000	\$26,278,000	\$0

Notes:

- (a) Assumes 1,000 gross square feet per unit. Assumes 40 percent of units are for sale.
- (b) Assumes 800 gross square feet per room.
- (c) Inflated from \$19.5 million in 2004 dollars.

Sources: GGP, 2009; Ziger/Snead Architects, 2005; Merriweather Post Pavilion Feasibility Report, 2005; BAE, 2009.

Findings

Table 4 shows the direct, indirect, and induced countywide, regional, and statewide impacts from development construction activity. As the table shows, the proposed targeted construction activity results in a countywide total economic impact of \$4.824 billion and 3,140 jobs, a regional economic impact of \$5.209 billion and 3,420 jobs, and a statewide economic impact of \$5.298 billion and 3,500 jobs. The Status Quo Scenario alternative results in a countywide total economic impact of \$437.8 million and 290 jobs, a regional impact of \$472.9 million and 310 jobs, and a statewide economic impact of \$480.7 million and 320 jobs.⁸ Thus, the construction phase of the targeted development would result in economic impacts that are more than 10 times higher than those anticipated under the Status Quo Scenario.

⁸ The Status Quo Scenario does not include the redevelopment of the Merriweather Post Pavilion.

As the “Minimum” and “Maximum” development scenarios only vary from the “Targeted” development scenario by phasing, and not by total development, Appendix A shows the economic impacts from the construction phase of these development scenarios.

Table 4: Construction Impacts

Development Alternative	Employment (a)				Output (c)			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
HOWARD COUNTY								
Phase I								
Targeted	562	171	170	904	\$953,894,000	\$242,842,000	\$209,535,000	\$1,406,271,000
Status Quo Scenario	180	51	54	285	\$296,956,000	\$74,456,000	\$66,344,000	\$437,756,000
Phase II								
Targeted	718	214	217	1,149	\$1,207,978,000	\$306,072,000	\$266,766,000	\$1,780,816,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Phase III								
Targeted	637	195	193	1,025	\$1,083,108,000	\$276,158,000	\$237,509,000	\$1,596,775,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Merriweather Post Pavilion (b)	46	8	12	66	\$26,278,000	\$6,483,000	\$7,146,000	\$39,907,000
GRAND TOTAL								
Targeted	1,963	588	593	3,144	\$3,271,258,000	\$831,555,000	\$720,956,000	\$4,823,769,000
Status Quo Scenario	180	51	54	285	\$296,956,000	\$74,456,000	\$66,344,000	\$437,756,000
DC-BALTIMORE REGION								
Phase I								
Targeted	562	195	226	984	\$953,894,000	\$276,103,000	\$288,434,000	\$1,518,431,000
Status Quo Scenario	180	59	72	310	\$296,956,000	\$84,658,000	\$91,242,000	\$472,856,000
Phase II								
Targeted	718	245	288	1,251	\$1,207,979,000	\$347,999,000	\$367,109,000	\$1,923,087,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Phase III								
Targeted	637	222	256	1,116	\$1,083,108,000	\$313,980,000	\$326,972,000	\$1,724,060,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Merriweather Post Pavilion (b)	46	10	16	72	\$26,278,000	\$7,485,000	\$9,804,000	\$43,567,000
GRAND TOTAL								
Targeted	1,963	673	786	3,423	\$3,271,259,000	\$945,567,000	\$992,319,000	\$5,209,145,000
Status Quo Scenario	180	59	72	310	\$296,956,000	\$84,658,000	\$91,242,000	\$472,856,000
STATE OF MARYLAND								
Phase I								
Targeted	562	206	238	1,007	\$953,894,000	\$291,240,000	\$299,103,000	\$1,544,237,000
Status Quo Scenario	180	62	75	317	\$296,956,000	\$89,183,000	\$94,574,000	\$480,713,000
Phase II								
Targeted	718	258	303	1,280	\$1,207,979,000	\$366,930,000	\$380,633,000	\$1,955,542,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Phase III								
Targeted	637	235	270	1,142	\$1,083,108,000	\$331,237,000	\$339,082,000	\$1,753,427,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Merriweather Post Pavilion (b)	46	10	16	72	\$26,278,000	\$7,894,000	\$10,150,000	\$44,322,000
GRAND TOTAL								
Targeted	1,963	709	828	3,500	\$3,271,259,000	\$997,301,000	\$1,028,968,000	\$5,297,528,000
Status Quo Scenario	180	62	75	317	\$296,956,000	\$89,183,000	\$94,574,000	\$480,713,000

Note:

(a) Assumes 10 years of construction per phase.

(b) Assumes a 5-year construction period.

(c) Output given in constant 2009 dollars.

Sources: IMPLAN; BAE, 2009.

Direct Impacts

Using the construction budgets as a proxy for economic activity, IMPLAN estimates that Downtown Plan construction activity accounts for approximately \$3.271 billion in economic activity, which supports approximately 1,960 jobs. Since the construction budget is the proxy for economic activity and construction physically occurs within Howard County, the direct impacts are the same in the County, region, and state. Under the Status Quo Scenario alternative, construction would generate economic impacts of approximately \$297.0 million and 180 jobs within the County, region, and state.

As Table 4 shows, the analysis assumes that Downtown construction would occur in three phases over the course of a 30-year period. Under the targeted development alternative, the impacts are spread relatively evenly between the three phases, which smooths the impacts over the entire 30-year period. Should market conditions change or unforeseen factors occur that would prevent full project buildout, the County, region, and state would not realize all of the projected direct impacts. Conversely, changes in market conditions that increase demand, such as those resulting from BRAC or other initiatives, could accelerate the Downtown Plan development period.

Indirect and Induced Impacts

The direct construction budgets act as inputs to the IMPLAN computerized input-output model to generate the indirect and induced impacts of construction activities within Howard County, the Maryland portion of the DC region, and the state of Maryland. The indirect impacts represent the inter-industry trade that construction businesses engage in with other businesses. In turn, the induced impacts represent the economic activity spawned by the household trade that occurs when construction employees act as consumers. The IMPLAN model generates estimates of these impacts through a series of relationships internal to the model using county-level average wages and prices. The model also accounts for commute patterns in calculating induced impacts, in particular, to assure that in-commuters into Howard County are properly accounted.

Again, the analysis assumes that Downtown construction would occur over the course of three 10-year phases, and that the Merriweather Post Pavilion renovation would occur over five years. Should market conditions change or unforeseen factors occur that would prevent full project buildout, the County, region, and state would not realize all of the projected direct impacts. Conversely, changes in market conditions that increase demand, such as those resulting from BRAC or other initiatives, could accelerate the Downtown Plan development period.

Indirect Impacts. According to IMPLAN, Downtown Plan construction activity would generate approximately \$831.6 million in countywide indirect activity, or business to business expenditures, and account for approximately 590 Howard County jobs. Within the region, construction activity would generate approximately \$945.6 million in indirect impacts and account for approximately

670 jobs, while the construction activity would result in statewide indirect impacts of approximately \$997.3 million and 710 jobs.

Under the Status Quo Scenario alternative the lower construction budget would result in substantially smaller economic impacts. Within Howard County, construction of the Status Quo Scenario alternative would result in indirect impacts of approximately \$74.5 million and 50 jobs, compared to \$84.7 million and 60 jobs regionally, and \$89.2 million and 60 jobs within the state.

Under each of the development alternatives, the greatest share of output occurs in the Architecture and Engineering, Wholesale Trade, and Real Estate sectors within all of the geographies, while the greatest share of employment occurs in the Architecture and Engineering, Wholesale Trade, Employment Services, and Retail sectors in all geographies.

Induced Impacts. According to IMPLAN, Downtown Plan construction activity would generate approximately \$721.0 million in countywide induced activity, or household expenditures, and account for approximately 590 Howard County jobs. Within the region, construction activity would generate approximately \$945.6 million in induced impacts and account for approximately 790 jobs, while the construction activity would result in statewide induced impacts of approximately \$1.029 billion and 830 jobs.

Under the Status Quo Scenario alternative the lower construction budget would result in substantially smaller economic impacts. Within Howard County, construction of the Status Quo Scenario would result in induced impacts of approximately \$66.3 million and 50 jobs, compared to \$91.2 million and 70 jobs regionally, and \$94.6 million and 80 jobs within the state.

Under each of the development alternatives, the greatest share of output occurs in the housing, restaurants, and wholesale trade sectors within Howard County, and occurs in the housing, doctors' offices, and private hospitals sectors within the region and state. The difference here comes from the availability of private hospitals and doctors offices within the County. As households typically spend the largest shares of their incomes on housing, healthcare, and food, high induced impacts in these sectors is logical. In addition, the greatest share of employment occurs in the restaurants, doctors' offices, hospitals, and retail sectors.

Multiplier Impacts

Dividing the countywide total impacts (\$4.824 billion) by the direct impacts (\$3.271 billion) yields a countywide economic multiplier of approximately 1.47. Thus, every dollar of Downtown Plan construction activity generates \$1.47 in total countywide economic activity. The same construction would generate \$1.59 within the Maryland portion of the DC region, and \$1.62 within the state.

Operating Impacts

This section of the report analyzes the multiplier effects from the proposed downtown development's operations. This analysis uses total commercial employment and new resident household income as a proxy for economic activity related to the operating phase. IMPLAN then translates employment into direct output to estimate the indirect and induced impacts of the operating phase.

Key Assumptions

To estimate the operating impacts, the analysis makes a number of key assumptions that drive the results. Certain assumptions pertain to commercial densities and the types of industries that will occupy commercial spaces. In addition, the analysis makes a series of assumptions about residential units, including the prices and household incomes required to purchase the residential units, the share of residential units that will be for sale versus rental, and the amount that will be marketed as affordable units. Below are the key assumptions this analysis makes to estimate the economic impacts of downtown operations.

Commercial Employment Densities

To project the impacts from ongoing operations, the analysis must estimate total employment using the proposed development schedules. The IMPLAN model uses the employment estimates as a proxy for economic activity to generate the economic impacts of operations. This analysis uses industry standards to assume that commercial office uses support one worker per 300 square feet of gross space, commercial retail spaces support one worker per 500 square feet of gross space, and hotel uses support 0.75 workers per room.⁹

Office and Retail Space Users

To choose the proper IMPLAN sectors, the analysis must estimate the types of users likely to occupy the proposed office and retail space.

Office Users

IMPLAN does not have an "office" sector, but uses sectors similar to NAICS¹⁰ sectors; therefore, the analysis must determine the types of users likely to occupy the space. It is assumed that all of

⁹ Hotel densities from PKF consulting, based on a full-service hotel.

¹⁰ The North American Industry Classification System, or NAICS, is a numerical industry classification system that organizes businesses into industries based on similar production processes when collecting data in order to make generalizations about the economic behaviors of industries.

the office space will be built as Class A space,¹¹ and Columbia will be able to attract the industries targeted in the 2006 Howard County Economic Development Authority's Strategic Plan. These industries include:

- Legal Services (NAICS 5411)
- Management of Companies (NAICS 55)
- Telecommunications (NAICS 517)
- Insurance Services (NAICS 5242)
- Management, Scientific, and Technical Consulting Services (NAICS 54161, 5613)
- All Other Professional, Scientific, and Technical Services (NAICS 54191, 54193, 54199)

While other types of users will likely occupy some of the office space, this analysis assumes that they will have similar consumption functions (industry-to-industry linkages and wage levels) to the types of firms included in the model.

Retail Users

Just as IMPLAN does not have an "office" sector, it also lacks a general retail sector. However, since the retail space is likely to include various users, which this analysis cannot predict, the analysis uses IMPLAN's Miscellaneous Retail and Eating and Dining Establishment categories, which includes specialty retail, restaurants, and food uses like those found in downtowns.

Residential Unit Types

According to GGP staff, all of the units will be multifamily units. GGP staff estimate that 40 percent of all units will be available for sale, while 60 percent will be rental units. In addition, Howard County Planning staff indicated that 15 percent of all units should be affordable to households earning between 60 percent and 80 percent of Howard County's area median income (AMI).¹² In conjunction with County and GGP staff, this analysis assumes that 40 percent of affordable units will be available for sale, while the other 60 percent will be available for rent.

For the Status Quo Scenario alternative, the analysis uses Howard County Planning staff assumptions that all units will be multifamily units with 40 percent of all units for sale, and 60 percent available for rent.

¹¹ Class A office space varies by location, but represents the office space with the best location and access, that attracts high quality tenants, and is professionally managed. Class A office space continues to compete with new construction office space long after it comes online.

¹² Although the Plan recommends 10 percent affordability, County Planning staff recommends 15 percent. In order to provide a conservative analysis, we use 15 percent in this analysis.

Residential Unit Prices, Rents, and Household Incomes

To use the IMPLAN model to estimate the economic impacts from new residential units, the analysis must project the household incomes of new resident households.

Household Incomes of Market Rate Unit Owners

This analysis assumes that households that buy new Downtown units, on average, will reflect the households currently living within the County, and will have a household income equal to the County's median household income. According to the Maryland Department of Planning, the 2008 Howard County median household income was approximately \$99,800. The Bureau of Economic Analysis (BEA) estimates that Maryland's personal income rose approximately 0.9 percent between 2008 and 2009. Using the BEA's 0.9 percent annual income appreciation rate, this analysis assumes that households buying market rate units will have an average household income of approximately \$100,670.¹³ Appendix B shows the market rate for sale unit assumption and household income calculations.

Household Incomes: Renters of Market Rate Apartments

This analysis estimates incomes of households residing in rental units based on the minimum income needed to afford the average unit.¹⁴ Data from Rent.com indicates that in the spring of 2009, an existing multifamily two-bedroom apartment unit in Columbia would rent for approximately \$1,500 per month. However, as new units command a premium, and new units in the Downtown would provide additional amenities, this analysis used rental estimates from other walkable communities within the region to estimate that the average apartment would rent for approximately \$2,000 per month. Using this rent price along with Howard County Department of Housing and Community Development Department utility allowance data, the analysis estimates that households would need to earn approximately \$74,910 per year to afford a new two-bedroom rental unit. Appendix C shows the rental market assumptions and household income calculations.

Household Incomes: Affordable Units

This analysis takes into account that the proposed development will have approximately 15 percent of its units set aside for households earning below Howard County's median income level: 550 units, or 7.5 percent of all new units, will be affordable to households earning 60 percent of the County's median income and 550 units, or 7.5 percent of all new units, will be affordable to households earning 80 percent of the County's median income. Because this analysis assumes an

¹³ Although new residential units under the Downtown Plan would likely command a premium over those developed under the Status Quo Scenario alternative, this analysis assumes the same household income for all residential unit buyers in order to remain conservative.

¹⁴ The analysis makes conservative assumptions wherever possible in order to avoid over estimating economic impacts.

equal number of units will be available to households earning 60 percent of the County's median income and 80 percent of the County's median income, it takes the mid point (70 percent of the County's median income) as the income level of the typical household residing in affordable units. Using the 2009 estimated median county household income of \$100,670 as the basis, a household earning 60 percent of the median has an annual household income of approximately \$60,400, while a household earning 80 percent of the County's median income has an annual household income of approximately \$80,540. Thus, this analysis assumes that a household purchasing an affordable for-sale unit has an annual household income of approximately \$70,470.

Long Term Vacancy Rates

This analysis estimates the ongoing economic impacts once Downtown development reaches a stable operating level. Since the report does not include a market study to determine demand for the proposed uses, it assumes that there is sufficient demand for all of the uses and that in the long term, all of the uses will be absorbed without causing increased vacancies in other space in Columbia, Howard County, the region, or the state. As such, the analysis assumes a stable long-term vacancy rate of 10 percent for both commercial and market rate residential uses. As there are generally long waiting periods for affordable housing units, the analysis assumes that affordable residential units have a zero long-term vacancy rate. Finally, as the proposed project includes two hotels, the analysis uses the Pricewaterhouse Coopers 25-year average occupancy rate of 65 percent to assume that on average, the hotels will be 65 percent occupied. Although local STR reports show that Howard County's hotel occupancy rate typically outperforms the national average, the analysis assumes a long-term hotel occupancy rate of 65 percent to provide a conservative estimate of economic impacts.

Methodology

Using the projected commercial employment, residential household income from development potential under the Downtown Plan, and information provided in the Merriweather Feasibility Analysis, this analysis projects the ongoing economic activity for each phase. Buildout of the Downtown Plan would create enough commercial space to support approximately 15,460 jobs, and enough residential units to support \$416.7 million in new resident household incomes annually. Under the Status Quo Scenario, buildout development could support approximately 1,450 jobs and \$32.5 million in annual household income. Table 5 shows the projected ongoing economic activity of the proposed Downtown Plan and Status Quo Scenario alternatives.

Table 5: Projected Economic Activity from Development Operations

Land Use (j)	Employment or Household Income			Status Quo Scenario
	Downtown Plan			
	Targeted	Minimum	Maximum	
Phase I				
Office (square feet)	2,834 (a)	1,134 (a)	3,968 (a)	996 (a)
Retail (square feet)	1,078 (b)	431 (b)	1,510 (b)	450 (b)
Residential, Condos (units)				
<i>Market Rate, For Sale</i>	\$50,520,883 (e)	\$20,208,353 (e)	\$70,729,236 (e)	\$15,366,467 (e)
<i>Market Rate, Rental</i>	\$56,392,478 (f)	\$22,556,991 (f)	\$78,949,469 (f)	\$17,152,375 (f)
<i>Affordable, For Sale</i>	\$6,934,239 (g)	\$2,773,696 (g)	\$9,707,934 (g)	\$0 (g)
<i>Affordable, Rental</i>	\$10,401,358 (h)	\$4,160,543 (h)	\$14,561,902 (h)	\$0 (h)
Hotel (rooms)	122 (i)	49 (i)	171 (i)	0 (i)
Phase II				
Office (square feet)	5,160 (a)	2,064 (a)	7,223 (a)	0 (a)
Retail (square feet)	721 (b)	289 (b)	740 (b)	0 (b)
Residential, Condos (units)				
<i>Market Rate, For Sale</i>	\$60,563,449 (e)	\$24,213,057 (e)	\$98,700,554 (e)	\$0 (e)
<i>Market Rate, Rental</i>	\$67,602,202 (f)	\$27,027,127 (f)	\$110,171,645 (f)	\$0 (f)
<i>Affordable, For Sale</i>	\$8,312,630 (g)	\$3,323,361 (g)	\$13,547,135 (g)	\$0 (g)
<i>Affordable, Rental</i>	\$12,468,945 (h)	\$4,985,041 (h)	\$20,320,702 (h)	\$0 (h)
Hotel (rooms)	122 (i)	49 (i)	141 (i)	0 (i)
Phase III				
Office (square feet)	4,907 (a)	9,703 (a)	1,709 (a)	0 (a)
Retail (square feet)	450 (b)	1,530 (b)	0 (b)	0 (b)
Residential, Condos (units)				
<i>Market Rate, For Sale</i>	\$58,345,459 (e)	\$125,008,380 (e)	\$0 (e)	\$0 (e)
<i>Market Rate, Rental</i>	\$65,126,435 (f)	\$139,536,997 (f)	\$0 (f)	\$0 (f)
<i>Affordable, For Sale</i>	\$8,008,200 (g)	\$17,158,013 (g)	\$0 (g)	\$0 (g)
<i>Affordable, Rental</i>	\$12,012,300 (h)	\$25,737,019 (h)	\$0 (h)	\$0 (h)
Hotel (rooms)	68 (i)	215 (i)	0 (i)	0 (i)

Notes:

- (a) Assumes one worker per 300 square feet.
Assumes office workers will work in the following sectors:
Legal Services; Management of Companies (including head, corporate, and regional offices); Telecommunications; Insurance Services; Management, Scientific and Technical Consulting Services; and Other Professional Services.
- (b) Assumes one worker per 500 square feet.
- (c) Assumes for sale units represent 40 percent of total units.
- (d) Assumes rental units represent 60 percent of total units.
- (e) Assumes market rate units represent 85 percent of total units.
- (f) Assumes affordable units represent 15 percent of total units.
- (g) Assumes an average household income of \$100,670 per market rate for sale unit.
- (h) Assumes an average household income of \$74,910 per market rate rental unit.
- (i) Assumes an average household income of \$70,470 per affordable for sale unit.
half affordable to households with incomes of 80% AMI and half affordable to households with income of 60% AMI.
- (j) Assumes an average household income of \$70,470 per affordable rental unit.
half affordable to households with incomes of 80% AMI and half affordable to households with income of 60% AMI.
- (i) Assumes 0.75 workers per room, and a 65 percent occupancy rate.
- (j) Assumes a ten percent long-term vacancy rate for office, retail, and market rate residential uses.

Sources: GGP; R.S. Means; DataQuick; Rent.com; PKF; Maryland Department of Planning; Bureau of Economic Analysis (BEA); Bay Area Economics (BAE), 2009.

The Merriweather Post Pavilion Feasibility Study provided estimates of current and future visitor numbers and revenue estimates that this analysis uses to determine the economic impacts of renovations. As Table 6 shows, renovations would bring 250,000 visitors per year to the pavilion, or approximately 46,000 more visitors, and would result in approximately \$2.7 million post-renovation revenues to Merriweather Post Pavilion. In addition, the 250,000 visitors would spend approximately \$5.4 million in Columbia. These post-renovation revenues and visitor expenditures represent the economic activity associated with renovating Merriweather Post Pavilion, and translate into approximately 20 new jobs, some of which would be located at Merriweather Post Pavilion.

Table 6: Merriweather Operations

Economic Activity	2009	2013
PAVILION OPERATIONS		
Pavilion Operations	\$2,391,968	\$2,748,721
VISITOR EXPENDITURES		
Total Number of Visitors	204,000	250,000
County Residents as a Share of Total Visitors	10%	10%
Regional Residents as a Share of Total Visitors	80%	80%
Non-Residents as a Share of Total Visitors	10%	10%
Expenditures per Regional Visitor		
Meals/Refreshments	\$10.77	\$10.77
Gifts/Souvenirs	\$3.32	\$3.32
Lodging	\$1.08	\$1.08
Child Care	\$0.34	\$0.34
Transportation	\$1.62	\$1.62
Other	\$2.40	\$2.40
Expenditures per Non-Resident Visitor		
Meals/Refreshments	\$16.35	\$16.35
Gifts/Souvenirs	\$4.78	\$4.78
Lodging	\$10.91	\$10.91
Child Care	\$0.33	\$0.33
Transportation	\$4.37	\$4.37
Other	\$3.45	\$3.45
Total Visitor Expenditures (a)		
Meals/Refreshments	\$2,310,912	\$2,832,000
Gifts/Souvenirs	\$707,064	\$866,500
Lodging	\$420,852	\$515,750
Child Care	\$69,156	\$84,750
Transportation	\$386,580	\$473,750
Other	\$511,020	\$626,250

Note:

(a) Includes local County resident expenditures

Sources: Webb Management Services, Inc., 2005; Americans for the Arts, 2009; IMPLAN, 2009
BAE, 2009.

Findings

Table 7 shows the annual direct, indirect, and induced countywide, regional, and statewide impacts from ongoing Downtown economic activity. As the table shows, the proposed targeted economic activity would result in a countywide total annual economic impact of \$5.690 billion and 29,970 jobs, a regional economic impact of \$6.291 billion and 34,120 jobs, and a statewide economic impact of \$6.342 billion and 34,830 jobs. The Status Quo Scenario results in a countywide total economic impact of \$457.7 million and 2,610 jobs, a regional impact of \$506.0 million and 2,930 jobs, and a statewide economic impact of \$510.3 million and 2,990 jobs.¹⁵

As the “Minimum” and “Maximum” development scenarios only vary from the “Targeted” development scenario by phasing, and not by total development, Appendix D shows the economic impacts from the ongoing operations of these development scenarios.

¹⁵ The Status Quo Scenario alternative does not include the redevelopment of the Merriweather Post Pavilion.

Table 7: Annual Operating Impacts

Development Alternative	Employment				Output (b)			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
HOWARD COUNTY								
Phase I								
Targeted	4,600	1,560	1,350	7,510	\$927,137,000	\$235,800,000	\$166,421,000	\$1,329,358,000
Status Quo Scenario	1,600	540	470	2,610	\$319,269,000	\$81,095,000	\$57,316,000	\$457,680,000
Phase II								
Targeted	6,690	2,650	2,260	11,600	\$1,565,328,000	\$398,427,000	\$278,163,000	\$2,241,918,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Phase III								
Targeted	6,080	2,490	2,120	10,690	\$1,470,660,000	\$374,591,000	\$260,730,000	\$2,105,981,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Merriweather Post Pavilion (a)	142	17	15	173	\$8,147,721	\$2,371,420	\$1,781,983	\$12,301,124
GRAND TOTAL								
Targeted	17,512	6,717	5,745	29,973	\$3,971,272,721	\$1,011,189,420	\$707,095,983	\$5,689,558,124
Status Quo Scenario	1,600	540	470	2,610	\$319,269,000	\$81,095,000	\$57,316,000	\$457,680,000
DC-BALTIMORE REGION								
Phase I								
Targeted	4,690	1,930	1,900	8,520	\$940,118,000	\$292,863,000	\$242,125,000	\$1,475,106,000
Status Quo Scenario	1,620	660	650	2,930	\$322,683,000	\$100,313,000	\$83,006,000	\$506,002,000
Phase II								
Targeted	6,790	3,260	3,160	13,210	\$1,580,889,000	\$492,515,000	\$402,717,000	\$2,476,121,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Phase III								
Targeted	6,180	3,060	2,960	12,200	\$1,485,651,000	\$462,834,000	\$377,609,000	\$2,326,094,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Merriweather Post Pavilion (a)	143	22	20	185	\$8,147,721	\$3,033,609	\$2,554,076	\$13,735,406
GRAND TOTAL								
Targeted	17,803	8,272	8,040	34,115	\$4,014,805,721	\$1,251,245,609	\$1,025,005,076	\$6,291,056,406
Status Quo Scenario	1,620	660	650	2,930	\$322,683,000	\$100,313,000	\$83,006,000	\$506,002,000
STATE OF MARYLAND								
Phase I								
Targeted	4,720	1,990	1,990	8,700	\$941,051,000	\$297,501,000	\$249,420,000	\$1,487,972,000
Status Quo Scenario	1,630	680	680	2,990	\$322,925,000	\$101,889,000	\$85,494,000	\$510,308,000
Phase II								
Targeted	6,820	3,350	3,310	13,480	\$1,582,007,000	\$498,779,000	\$414,753,000	\$2,495,539,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Phase III								
Targeted	6,210	3,150	3,100	12,460	\$1,486,728,000	\$468,519,000	\$388,893,000	\$2,344,140,000
Status Quo Scenario	0	0	0	0	\$0	\$0	\$0	\$0
Merriweather Post Pavilion (a)	145	23	21	189	\$8,147,721	\$3,145,403	\$2,629,425	\$13,922,549
GRAND TOTAL								
Targeted	17,895	8,513	8,421	34,829	\$4,017,933,721	\$1,267,944,403	\$1,055,695,425	\$6,341,573,549
Status Quo Scenario	1,630	680	680	2,990	\$322,925,000	\$101,889,000	\$85,494,000	\$510,308,000

Note:

(a) Based on improvements to the Merriweather Post Pavilion.

Totals may vary due to rounding.

(b) Output reported in constant 2009 dollars.

Sources: IMPLAN; BAE, 2009.

Direct Impacts

Using employment, household income, and post-renovation Merriweather Post Pavilion revenues and visitor expenditures as a proxy for economic activity, IMPLAN estimates that ongoing Downtown economic activity accounts for approximately \$3.971 billion in annual countywide economic activity, which supports approximately 17,510 jobs in the County. There is also a direct impact of \$4.015 billion in economic output and 17,800 jobs within the region, and \$4.018 billion in economic output and 17,900 jobs within the state. As the jobs and households would be physically located in Howard County, the majority of new jobs would be located in Howard County. Under the Status Quo Scenario alternative, ongoing operations would generate economic impacts of approximately \$319.3 million in the County, \$322.7 million within the region, and \$322.9 million within the state, and 1,600 Howard County jobs, 1,620 regional jobs, and 1,630 statewide jobs.

Although visitation to the existing mall may increase after development occurs, there are currently no measures that specify the increased expenditures from increased visitation. Since the mall is currently operating and no market analysis has been conducted to determine the potential increase in demand from redeveloping the Downtown per the Columbia Downtown Vision document, this analysis does not estimate the economic impacts from additional expenditures at the existing mall. However, to the extent that new Downtown residents and local workers purchase their retail goods (e.g., clothing, etc.) at the mall, the IMPLAN model accounts for this activity in its induced impacts projection.

Indirect and Induced Impacts

The IMPLAN computerized input-output model uses the direct impacts to generate the indirect and induced impacts of ongoing economic activities within Howard County, the Maryland portion of the DC region, and the state of Maryland. The indirect impacts represent the inter-industry trade that businesses engage in with other businesses. In turn, the induced impacts represent the economic activity spawned by the household trade that occurs when employees act as consumers and new households spend their incomes. The IMPLAN model generates estimates of these impacts through a series of relationships internal to the model using county-level average wages and prices. The model also accounts for commute patterns in calculating induced impacts, in particular, to assure that in-commuters into Howard County are properly accounted for.

Indirect Impacts. According to IMPLAN, ongoing Downtown economic activity would generate approximately \$1.011 billion in annual countywide indirect activity, or business to business expenditures, and accounts for approximately 6,720 Howard County jobs. Within the region, ongoing economic activity would generate approximately \$1.251 billion in indirect impacts and account for approximately 8,270 jobs, while the economic activity would result in statewide indirect impacts of approximately \$1.268 billion and 8,510 jobs.

Under the Status Quo Scenario alternative the lower ongoing economic activity would result in substantially smaller economic impacts. Within Howard County, the Status Quo Scenario alternative's ongoing operations would result in indirect impacts of approximately \$81.1 million and 540 jobs, compared to \$100.3 million and 660 jobs regionally, and \$101.9 million and 680 jobs within the state.

Under each of the development alternatives, the greatest shares of indirect output occur in the Real Estate, Telecommunications, Cable, Consulting, and Insurance sectors, within all of the geographies, while the greatest shares of employment occur in the Employment Services, Real Estate, Restaurant, Consulting, and Services to Buildings sectors in all geographies. As these generally represent office overhead charges (e.g., real estate, services to buildings, telecom, cable, and insurance), they are logically represented as the highest indirect impacts.

Induced Impacts. According to IMPLAN, ongoing Downtown economic activity would generate approximately \$707.1 million in annual countywide induced activity, or household expenditures, and accounts for approximately 5,750 Howard County jobs. Within the region, ongoing economic activity would generate approximately \$1.025 billion in annual induced impacts and account for approximately 8,040 jobs, while the ongoing activity would result in statewide annual induced impacts of approximately \$1.056 billion and 8,420 jobs.

Under the Status Quo Scenario alternative the lower ongoing economic activity would result in substantially smaller annual economic impacts. Within Howard County, the ongoing operations of the Status Quo Scenario alternative would result in annual induced impacts of approximately \$57.3 million and 470 jobs, compared to \$83.0 million and 650 jobs within the region, and \$85.5 million and 680 jobs within the state.

As with the induced construction impacts, the greatest share of indirect output under the ongoing scenarios occurs in the housing, restaurants, and wholesale trade sectors, within Howard County, and the housing, doctors' offices, and private hospitals sectors within the region and state. As households typically spend the largest shares of their incomes on housing, healthcare, and food, these sectors always receive the largest share of induced impacts. In addition, the greatest share of employment occurs in the restaurants, doctors' offices, hospitals, and retail sectors.

Multiplier Impacts

Dividing the countywide total impacts (\$5.690 billion) by the direct impacts (\$3.971 billion) yields a countywide economic multiplier of approximately 1.43. Thus, every dollar of ongoing annual Downtown economic activity generates \$1.43 in total countywide economic activity. The same

economic activity would generate \$1.57 within the Maryland portion of the DC region, and \$1.58 within the state.

Annual Tax Revenues

In addition to reporting the multiplier impacts of the proposed development, IMPLAN also projects the annual state and local tax revenues that would result from the proposed project's ongoing operations in a stable year. However, the IMPLAN tax revenues do not specify between state and local taxes. To estimate the tax revenues that would accrue to the state and County individually under the Downtown Plan and Status Quo Scenario alternatives, this analysis uses information about County real estate and income tax rates, as well as other revenue sources, to adjust IMPLAN revenue estimates to project tax revenues.

Because this analysis does not include a fiscal component that examines both the costs of providing municipal services to new development and the revenues that new development would generate for the County's budget, this analysis focuses on identifying the largest and most relevant County revenue sources. As real estate taxes, income taxes, and property transfer taxes would generate the largest share of revenues to the General Fund, this analysis projects both property and income taxes. In addition, because includes hotel components and renovations to the Merriweather Post Pavilion, the analysis projects County Hotel Motel taxes from the new hotels as well as increases to the Admission/Amusement taxes that would occur after renovation of the Merriweather Post Pavilion, even though neither of these revenue sources are very large. Finally, although Columbia Association Lien revenues do not accrue to the County General Fund, the analysis projects these revenue sources as well, but does not include these revenues in the total State and Local Taxes projections.

As Table 8 shows, in a stable operating year, the proposed Downtown development would generate approximately \$47.6 million in County revenues, an additional \$264.4 million in state revenues, and \$10.7 million in Columbia Association revenues, while the Status Quo Scenario alternative would generate approximately \$3.7 million in County revenues, an additional \$22.8 million in state revenues, and \$1.0 million in Columbia Association revenues.¹⁶

¹⁶ Revenue estimates in the analysis do not match the 2006 fiscal impact report because these revenues come from IMPLAN, do not include cost estimates, and use updated 2009 income and assessed value figures.

Table 8: Projected Howard County and State of Maryland Annual Tax Revenues

Geography/Tax Category	Downtown Plan Buildout	Status Quo Scenario
Annual State Tax Revenues (a)	\$264,445,969	\$22,818,783
Annual County Tax Revenues (b)		
<i>Indirect Bus Tax: Real Estate Taxes (c)</i>	\$23,840,860	\$2,443,411
<i>Individual Tax: Real Estate Taxes (c)</i>	\$8,171,078	\$628,544
<i>Individual Tax: Income Tax (d)</i>	\$12,000,631	\$442,554
<i>Hotel Motel Taxes (e)</i>	\$1,171,749	\$0
<i>Admission/Amusement Taxes (f)</i>	\$17,838	\$17,838
<i>Transfer Taxes (g)</i>	\$2,373,300	\$213,217
SUBTOTAL: Annual County Tax Revenues	\$47,575,457	\$3,745,564
Total State and Local Annual Tax Revenues, Combined (h)	\$312,021,426	\$26,564,348
Columbia Association Lien Revenues (i)	\$10,733,786	\$1,030,044

Notes:

- (a) State taxes equal IMPLAN state and local combined taxes minus County taxes.
(b) County taxes based on development program, market conditions, and Howard County budget.
(c) Based on Howard County real estate tax rate of \$1.014 per \$100 of assessed value.
Assessed value based on 100 percent of market value.
(d) Based on Howard County income tax rate of 3.20 percent of taxable income.
Assumes gross taxable income is 90 percent of total income.
(e) Hotel Motel Taxes are 5 percent of total hotel revenues from room rentals.
Assumes daily revenue per available room (REVPAR) of \$100.
(f) Admission/Amusement taxes are 7.5 percent of receipts for all amusements, except live performances,
which are 5 percent of receipts. This analysis measures the increment from renovating the Pavilion.
(g) Analysis assumes that annual County transfer tax revenues equal one percent of consideration or
market price, that property appreciates annually at the rate of two percent above inflation, that commercial
property turns over every 20 years, and residential property turns over every seven years.
(h) From IMPLAN.
(i) Based on Columbia Association Lien rate of \$0.68 per \$100 of 50 percent of assessed value.
Assessed value based on 100 percent of market value.

Sources: IMPLAN; Howard County Department of Finance; Howard County FY 2008 Budget; STR; BAE, 2009.

According to the Howard County FY 2008 budget, real estate taxes represent approximately 52 percent of the County's General Fund revenues, while income taxes represent approximately 37 percent of General Fund revenues. Thus, these two revenue sources account for 89 percent of total General Fund revenues. Applying the real estate tax rate to the construction costs of commercial and residential rental units generates the projected indirect business real estate tax revenues, or the real estate tax revenues that businesses pay. Applying the same rate to the projected condominium market values for market rate units (\$387,420 per unit) and affordable units (\$211,320 and \$281,760) generates the residential property tax revenues, the real estate tax revenues that households pay. Using this methodology, the proposed Downtown Plan would generate approximately \$32.0 million in County real estate tax revenues per year, while the Status Quo

Scenario alternative would generate approximately \$3.1 million in County real estate tax revenues per year.

When property is sold, the County receives an additional one percent of the sale price as a property transfer tax. Industry standard assumptions suggest that commercial property turns over once every 20 years, while residential owner-occupied units turn over once every seven years. Assuming that five percent of all commercial property and 14 percent of owner-occupied residential units turn over every year, the County would receive approximately \$2.4 million per year in transfer taxes under the Downtown Plan, or approximately \$213,200 per year under the Status Quo Scenario alternative. As this analysis focuses on projecting revenues in a stabilized operating year, this projection does not include the one-time injection of transfer tax revenues that the County would receive from the initial sale of residential units.

According to the Department of Finance, Howard County residents pay 3.20 percent of their total taxable incomes to the County in income taxes. Applying this rate to 90 percent of total new household income generated County income tax revenue estimates, the new households in the Downtown Plan would generate approximately \$12.0 million in annual personal income taxes, while the Status Quo Scenario alternative would generate approximately \$442,600 in additional personal income taxes.

The County would likely receive additional General Fund revenues from business tangible property tax, licenses, permits, fees, and other sources related to the buildout of the Downtown Plan that will be included in the 11 percent of the County's General Fund not paid through real estate and income taxes. The County's upcoming Fiscal Impact Analysis will provide a more detailed account of projected revenues and costs associated with the proposed development under the Downtown Plan.

The Case for Downtown Development

The General Plan Amendment (GPA) promotes Downtown Columbia as a center of activity, designed to serve as a destination that attracts people and reduces travel by offering residents and workers more of the things that they need in one location. The foregoing economic impact analysis illustrates the benefits that are anticipated to accrue with the construction and operation of a new mixed-use downtown in Columbia. However, economic impact modeling cannot distinguish between the development program allowed by the GPA and an identical development program spread out in a traditional suburban land use pattern, using the same assumptions.

Given the limitations of economic impact analysis, is there any qualitative analysis that can support the benefits of a denser downtown with a more diverse mix of uses? Those invested in the future of Columbia and its Downtown will debate the merits of the GPA, but emerging trends do provide support for the belief that a transformational shift in the real estate market is occurring, one that favors denser, pedestrian-scale development such as the vision for Downtown Columbia over the type of suburban development pattern that has been predominant for more than half a century. A recent article in *Urban Land Magazine*¹⁷ on the topic of retrofitting suburban development patterns argues that the current economic downturn has accelerated this shift. The shift is driven in part by demographic changes, such as the aging of the population and shrinking share of households that have children; other contributors include increasing gas prices, decreasing amounts of developable land, and government policies that have funded mass transit expansions and encourage smart growth land use patterns.

This trend has thus far been most apparent in the re-emergence and re-population of older downtown urban cores, as well as the “retrofitting” of suburban areas where rail transit is introduced. Dense, mixed use redevelopment also has been taking place on a smaller scale, in the transformation of ailing suburban shopping centers across the country into walkable environments with a synergistic mix of retail and non-retail uses. A discussion of these trends below frames the context in which downtowns have been re-imagined in the eyes of the public.

Columbia has not faced the challenging conditions that have often prompted reinvention and revitalization elsewhere, yet it is considering significant change in approving the GPA and Downtown Plan. As further testament to the innovation and uniqueness that characterizes Columbia’s beginnings, there are few well-known preceding examples of similarly prosperous, post-WWII suburban communities with newly created or retrofitted downtowns that provide a new center of gravity, new attractions and a mix of uses designed on a pedestrian scale. Two examples

¹⁷ Ellen Dunham-Jones and June Williamson. “Retrofitting Suburbia.” *Urban Land*, June 2009 (68:6).

are presented as case studies: one is familiar and nearby (Reston, VA) and the other is found across the country in Walnut Creek, CA. Both were developed and prospered during the same period of suburbanization as Columbia. The case studies describe the gradual development of their “new downtowns” and why they can be considered successful.

National Trends

Shifting Demographics of the United States

Households are changing. Married couples without children and single individuals now represent the majority of United States households. The 2005-2007 American Community Survey estimates that nationwide, single individuals comprise approximately 27 percent of households and approximately 28 percent of households consist of married couples without children.

This shift in household demographics is also evident in downtown household growth patterns. A 2005 report by Eugenie Birch for the Brookings Institution surveyed the characteristics of 45 downtowns, using U.S. Census data.¹⁸ Overall, the downtowns experienced a slight decline in household population between 1970 and 1990, but households grew by 13 percent between 1990 and 2000, leading to an eight percent increase in households from 1970 to 2000. There was a 27 percent decrease in families with children in these downtowns during the 30 year period, comprising only 10 percent of all downtown households in 2000 (compared to 36 percent of suburban households). Non-family households, including singles living alone and as roommates, comprised 71 percent of downtown households in 2000. Many downtowns are continuing to experience high rates of household growth. For example, it is estimated that between 2000 and 2005, Charlotte, North Carolina’s downtown population increased by 48 percent.¹⁹

Shifts in the types of occupations that are becoming more dominant in the US economy have led to new thinking about quality of life. Richard Florida describes the “Creative Class” as a group that has similar values of “creativity, individuality, difference, and merit.”²⁰ Individuals in the Creative Class may be of differing ages and professions, but they share similar ideals. Florida argues that the Creative Class has different demands for lifestyle and housing choices than previous groups. Members of the Creative Class prefer to live in an environment that is constantly full of vitality, an environment conducive to a vibrant downtown.

¹⁸ Eugenie L. Birch, *Who Lives Downtown?* The Brookings Institution, November 2005.

¹⁹ Jeffrey Spivak, “The State of Downtown Office Markets,” *Urban Land*, July 2008.

²⁰ Richard Florida, “The Rise of the Creative Class,” *Washington Monthly*. May 2002.

Changing Consumer Preferences

Recent consumer research provides further support for the trend towards urban residential development. A survey by Christopher Leinberger found that “between 30 percent and 50 percent of all households...want walkable urbanism.”²¹ Shifts in preferences can be identified with specific age groups that are a driving the demand for mixed use communities. Research conducted in 2001 by the University of Southern California School of Policy, Planning, and Development found that people 55 years of age or older were three times more likely than 25 to 34 year olds to consider a townhouse in a city setting to be the most desirable living situation. However, younger demographics now seem to be following that trend, as seen in more recent research. A 2007 survey conducted by Robert Charles Lesser & Co, LLC (RCLCO) Consumer Research found that nearly one in three consumers in “Generation Y” (born 1981 to 1999) are willing to pay more for living in an environment where they can easily walk to retail and employment centers. However, even households typically associated with suburban housing preferences are showing an interest in walkable, new urban development. In this same RCLCO study, one-third or more of families with young children reported that they are willing to trade lot size for walkable communities with more convenience. Respondents in this market segment reported that amenities such as libraries, restaurants and cafes, main street villages and fitness centers would increase their demand to live in higher density communities.

Mall Redevelopment Trends

With the growing popularity of downtowns, many national retailers traditionally found in suburban malls have placed branches in downtowns in recent years. Similarly, suburban malls are redefining themselves to meet the changing needs and interests of their shoppers. In order to be competitive with re-emerging urban retail districts and newer suburban retail centers, older suburban malls and shopping centers are beginning to be redeveloped in various ways. In further analyzing this trend, the Congress of New Urbanism (CNU) has identified five different models for the redevelopment of aging, underperforming malls, often called “greyfield” sites.²² The intensity of change found in these five models ranges from cosmetic changes to wholesale demolition and redevelopment:

- **Mall Plus-** The original mall and structure are retained, with an additional feature added, such as a hotel or movie theater.
- **Mixed-Use Town Center or Urban District-** This option requires full or partial demolition of the mall structure. It converts the area into a mixture of uses, including retail, office, open space, and residential.
- **Single-Use Development-** This option requires total demolition of the existing structure. The site is then turned into one specific use, such as an office building or an apartment complex.

²¹ Christopher B. Leinberger, *Turning Around Downtown: Twelve Steps to Revitalization*. The Brookings Institution, March 2005.

²² “Malls into Mainstreets”, Congress for New Urbanism, 2005.

- **Adaptive Reuse-** In this case, the existing structure would be preserved, and altered to suit a specific non-retail purpose.
- **Reinvested Mall-** Small improvements are made, such as improving the landscaping and signage. The mall owner can also change the tenant mix and renovate the building.

Mall retrofits and redevelopments, where retail uses are redesigned with a mix of office and multi-family housing, and surface parking lots give way to interconnected street grids and public spaces, are rapidly gaining momentum across the country. Such projects range from the redevelopment of small strip mall sites to large projects such as Santana Row in San Jose, CA and Belmar in the Denver suburb of Lakewood, CO. Belmar was a 100-acre mall that was 50 percent occupied when redevelopment began in 2002. Partially built out, it now contains a 700,000 sf shopping center, 1,300 residential units, and 182,000 sf (of a total of 800,00 sf at buildout) of office space on a new street grid pattern. “Internal” trips (in other words, trips that have an origin and destination within the development) typically account for 25 to 30 percent of all trips in this type of large scale, mixed use mall retrofit; in Belmar, the reduction of vehicle trips meant that no new traffic signals were required despite a tripling of density.²³

Case Study: Reston Town Center²⁴



Like Columbia, Reston, Virginia is a planned community, and one of the first “new towns” in the United States. In the early 1960s, the National Capital Planning Commission completed a report which estimated that an additional three million people would be added to the Washington, D.C. metro area by the Year 2000. Using a concept that originated in Europe, the NCPC recommended that the best growth strategy would be for new satellite towns to be constructed along the corridors that led into Washington, D.C. Reston originally served as a bedroom community for commuters into D.C., but as new development has expanded outward along the Dulles Toll Road and Reston Parkway, corporate offices relocated to Reston and its Town Center as well. The Town Center, the last piece of Reston to be planned and developed, has become more

²³ Ellen Dunham-Jones and June Williamson. “Retrofitting Suburbia.” *Urban Land*, June 2009 (68:6).

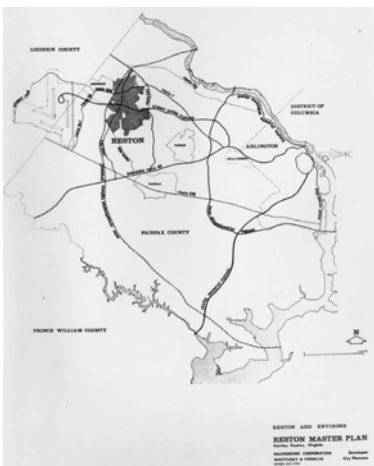
²⁴ Several sources were used primarily for this case study, including: Urban Land Institute Case Study, July-September 1991, “Reston Town Center”; “Reston Town Center: A Downtown for the 21st Century”. Alan Ward, 2006.; Reston Land Corporation, Reston Town Center Rezoning, November 1986; Fairfax County Department of Planning and Zoning staff; Historic Reston. Photographs were also obtained from many of these sources.

than a community draw; it attracts workers and shoppers from throughout the Northern Virginia region.

Background

Reston founder Robert E. Simon purchased approximately 7,000 acres in the 1960's with a vision to create a planned community with walkable destinations, something he felt was missing from the Long Island suburbs where he lived with his family. Simon created the original Master Plan for the entire community which included several elements:

- Five residential villages, each with its own village center, consisting of a mix of housing types but predominantly single family residences
- 460-acre Town Center District, with an 80-acre Urban Core that would serve as the center of the Reston community and have the highest densities
- 1,000-acre business corridor along what is now Reston Parkway



The planned community of Reston began with the development of the residential villages. The villages grew more slowly than planned, with weak demand initially for the new type of housing found in the villages. Simon's lack of success with Reston's original villages forced him to sell his remaining holdings. The land remained in the ownership of a single entity, the Reston Land Corporation. It was not until 1981 that Reston's villages had grown enough in size to accommodate the beginning of Town Center planning. Reston Land Corporation decided to remain the sole owner of the project, but brought in a co-developer with more experience in developing mixed-use projects.²⁵

Multiple drafts of the Town Center's design were produced. After its original plan was challenged, the architecture firm, RTKL Associates, Inc., brought forth a new development program which featured higher densities than their original program, as well as a hotel and a cultural/civic center. The Urban Core (the epicenter of the Town Center) was designed to make a pedestrian experience the ultimate goal. Once the development program was completed, rezoning of the Town Center took approximately three years. Development was to be implemented in phases, so that the current real estate market would always be taken into account.

A downturn in economic conditions in the early 1990's again slowed development. Phase 1 investment totaled \$185 million in the early 1990s, which included 530,000 square feet of office

²⁵ Urban Land Institute Case Study: Reston Town Center

space, located in two high-rise towers; 240,000 square feet of retail, restaurant, and entertainment space, including an 11-screen movie theater; and a 514-room Hyatt hotel.

Once the market recovered and development resumed, the focus for Phase 2 was to build residential units in the area of Town Center surrounding the Urban Core in order to support the high-density Urban Core. Phase 2 marked a departure from the master developer approach that had been used previously, with property bought and developed by multiple entities.

Reston Town Center Today

Remaining Development Buildout

The Reston Master Plan is currently undergoing review. One of the major guiding principles is that the updated Master Plan must follow Robert E. Simon's original principles for Reston²⁶, with additional focus on the Town Center. Currently, the Town Center has fewer than five vacant parcels available for development. Many people feel that there are existing developed sites that are not being utilized to their full potential and would like to see them redeveloped into higher-density projects. Most development in recent years has not been focused on retail space, but on office space and residential uses. Major residential projects are in the development pipeline, and there is discussion of redeveloping existing retail space on the outskirts of the Town Center.

Retail Space

Retail space in Town Center, built to serve a regional market, has been considered a success. Most of the retail in Reston Town Center is located in the Urban Core and is managed by a single entity. Fairfax County's eight-mile zoning restriction for regional retail centers has assisted with the success of the project.²⁷ The regional element of the Town Center, which has been successfully achieved, was the original intention of the Town Center, as there are neighborhood centers located in the various villages to serve residents' everyday needs.

Residential Uses

Residential units located in the Town Center, situated in small "neighborhoods," have also been well accepted by the market. Most of the units are condominiums, with some apartments and townhomes. There are no single-family lots remaining in the entire Reston community. According to developers of Reston Town Center, at the height of the housing market boom, residential units in Reston Town Center commanded a 15 to 35 percent premium to units in other Northern Virginia jurisdictions. Rents at The Metropolitan at Reston Town Center, the newest apartment complex, range from \$1,315 for a studio unit to \$3,810 for a two bedroom penthouse unit with a den. Condominiums located in Midtown and Midtown North range from \$450,000 to \$1.22 million.

²⁶ Fairfax County Planning and Zoning.

²⁷ *Reston Town Center: A Downtown for the 21st Century.*

Office Space

While Reston Town Center features many national tenants, including the headquarters of Sallie Mae, it has not been spared from the current economic downturn. CB Richard Ellis reports that for 1st Quarter 2009, the Reston/Herndon office market (which includes the Town Center) had a 17.4 percent vacancy rate, up from 11.8 percent in 2006. Overall, the Northern Virginia market had a slightly lower vacancy rate of 13.6 percent. Rents for office space in Reston Town Center range from \$20 per square foot to \$34 per square foot.²⁸

Commuting

A notable feature of Town Center's development was its lack of rail service as a catalyst. When Reston was conceived, there was no public transit available in the area. As a condition of zoning approval, the developers of Reston Town Center created a public transportation management association. Additional requirements included refinement of regional transit routing, educating the public on transportation alternatives, and advocating various demand-reduction alternatives.

The intensity of development, as well as the transportation requirements put forth by Fairfax County, has supported a high quality "rubber tire" transit system that brings residents and workers to the nearest Metro station, located approximately 20 minutes from Reston. Fairfax Connector buses travel from various points in Reston to the West Falls Church Metro station throughout the day. Demand supports extended hours of bus operation.

The development of the first office spaces in Town Center corresponds with a notable change in commuting pattern indicators since 1990. According to journey-to-work statistics from the 2000 U.S. Census, 27 percent of individuals who lived in the entire Reston community (identified as a "Census Designated Place" by the U.S. Census) also worked somewhere in Reston, up from 22 percent in 1990. With the addition of many office buildings, including corporate and regional headquarters, people commute both to and from Reston. Commute times have also lessened slightly, with 57 percent of residents commuting less than 30 minutes to work in 2000, up from 54 percent in 1990. The denser development pattern of Reston Town Center compared to the rest of Fairfax County also facilitates and supports effective Metrorail service to the area through the proposed Silver Line expansion.

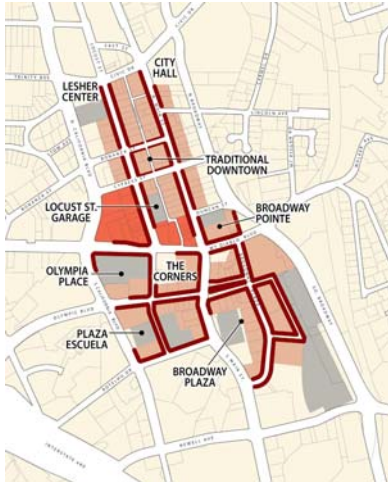
Case Study: Downtown Walnut Creek, California²⁹

²⁸ Based on a search of available properties from the CoStar Group on May 22, 2009.

²⁹ The City of Walnut Creek's website and staff were used as a major source for content information, as well as photographs.

Downtown Walnut Creek, located in the eastern portion of the San Francisco Bay Area of California (known as the East Bay), transformed its successful retail offerings to gain even greater success in attracting high end retailers and destination shoppers. Known for its retail shopping amenities, Downtown Walnut Creek was rated one of the Top 10 “Main Street” retail areas in the United States by the International Council of Shopping Centers.³⁰

Source: ROMA Design Group, 2009.



In contrast with Reston Town Center, development of downtown Walnut Creek has not been defined by a single development plan primarily carried out by a single development entity. In the case of Walnut Creek, development has been piecemeal, with several different influences contributing to the success of development. Through strategic planning efforts Walnut Creek was able to become what it is today.

In the early 1950’s, Walnut Creek planners opted to zone for a retail center location adjacent to its small, existing Downtown, rather than along a freeway corridor. At the same time, local planners also focused on retaining small retail and restaurant uses in the Downtown, allowing specialty retailers and national chains to locate within close proximity. However, it was not until four decades later, when the aging retail center redeveloped the into an updated outdoor shopping center, the two types of retail became an extension of each other, drawing more people from around the East Bay who may not have otherwise come to just visit the mall or the Downtown shops. Now home to some of the most high-end retailers in the country, as well as a large performing arts center, Downtown Walnut Creek has become a draw for both its residents and the region.

Background



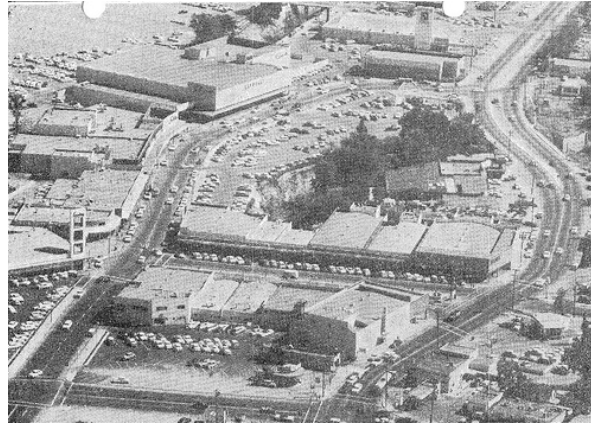
Over time Walnut Creek has transformed itself from an agricultural area, to a booming postwar suburb, to a more balanced mix of both commercial and residential space. Walnut Creek was incorporated as a City in 1914. Buildings located in the oldest part of Downtown, called the Traditional Downtown, were built between the late 1800’s and mid-1950’s, as the City became more populated. The City expanded rapidly in the second half of the twentieth century: the decade after World War II saw a quadrupling of the city’s population. Transportation improvements in the 1930’s made Walnut Creek within commuting distance of San Francisco, and

³⁰ From Colliers International, August 2009.

the construction of the BART station in the 1970's led to the growth of the City's stock of office space north of the Traditional Downtown. Walnut Creek's post war growth included an expansion retail space south of the Traditional Downtown, but it was not until the 1990's, with the construction of the Leshner Center and the re-positioning of a 1950's outdoor mall, that the Downtown emerged as a center of activity for the City and the surrounding region.

Development of Downtown

In the early 1950's, with the development of suburban communities, many small cities planned for indoor mall shopping centers that were often located along freeway corridors that diverted retail away from their downtowns. Other communities decided to support specialty retail in their downtowns, and opted against planning for a mall. At this time, Walnut Creek planners decided to both support specialty downtown retailers, and allow for a mall, provided that the mall was located adjacent to the downtown, so as not to divert shopping from its own downtown area. In 1951, the Broadway Shopping Center, shown in the above photograph, an outdoor shopping mall with traditional mall anchors, such as Sears, opened in Walnut Creek. The City's Taxable Sales increased from \$9 million in 1950 to \$20 million in 1955.³¹



In 1995, the aging Broadway Shopping Center (renamed Broadway Plaza after an ownership change) was renovated and became a modern, high-end retail center. The Plaza has almost 700,000 square feet of retail, with several anchor department stores. Once renovated, the new facility brought more shoppers in from around the region, which attracted high-end retailers such as Tiffany and Co. Downtown Walnut Creek is now an alternative for shoppers who do not want to go into San Francisco, and attracts shoppers from across the East Bay.

The Leshner Center for the Performing Arts, opened in 1990, replaced an existing facility in an attempt to bring more nightlife options to Walnut Creek and further bolster the downtown. The Center has become extremely successful, attracting people from around the San Francisco Bay Area. A study by Americans for the Arts estimated that in 2004, arts events in Walnut Creek generated over \$30 million in direct and event-related spending.

³¹ City of Walnut Creek.

While significant amounts of office space had been a component of the Downtown area since the 1970's, it was the repositioning of Broadway Plaza and the Lesher Center that have acted as catalysts for subsequent downtown development. Due to Broadway Plaza's success, new construction and rehabilitation are expanding outward along the streets between the major downtown corridors of Broadway and California Boulevard. Development completed in the early 2000s included The Corners (33,000 square feet of retail), Plaza Escuela (153,000 square feet of retail and restaurants), and Olympia Place (173,000 square feet of retail with an existing 28,000 square foot office building). These three developments are located on sites closest to Broadway Plaza. Many infill sites in the area have also experienced development.

Compared to Reston Town Center, where a private land development company was the initiator of development plans, local government played a much more active role in guiding and regulating development of the Downtown. The City of Walnut Creek has regulated and planned development in the Downtown and its surrounding areas through Master Plans and Specific Plans since the 1956. While the City has played a more active role, and has provided landscaping improvements and parking garages to assist with development of the Downtown, private developers were responsible for buying and redeveloping their Downtown sites.

With the success of the early retail sites surrounding Broadway Plaza, investors in the mid-2000s began purchasing Downtown parcels to be redeveloped. In May 2009, the Walnut Creek City Council approved plans for a Neiman Marcus to be constructed where a vacant department store exists in Broadway Plaza.

Downtown Walnut Creek Today

While the Southern portion of Downtown Walnut Creek has successfully created a regional retail destination for the City, the Traditional Downtown area still features vacant and underutilized sites. Current focus, with the proposed Locust Street/Mt. Diablo Boulevard Precise Plan, is to redevelop various infill sites in the Traditional Downtown, creating more of a retail destination in the area.

Retail Space

Retail has been the most successful component of Downtown Walnut Creek. In addition to those located at Broadway Plaza, many high-end national retailers, as well as local retailers are located throughout the area. In 2007, retailers hoping to locate in the Downtown area could expect to pay rents ranging from \$60-\$100 per square foot per year, which



are much higher than the San Francisco Bay Area region's average rent of approximately \$34 per square foot for retail space.³²

Residential Uses

Street activity is generated by workers and visitors from within and outside the city limits who shop and attend events. New residential construction has not been a significant component of Walnut Creek's new downtown, but existing residential within walking distance to Downtown commands a premium above other residential space in Walnut Creek.³³ Many homes for sale advertise themselves as "located close to downtown Walnut Creek and Broadway Plaza". Traditional rental apartments in the downtown area range from \$1,295 (one bedroom) to \$3,100 (three bedrooms). For-sale housing in Downtown has asking prices as high as \$1.2 million.

Office Space and Commuting

Downtown Walnut Creek has 4.6 million square feet of existing office space.³⁴ In the first quarter of 2009, office space users averaged a rent of \$2.62 per square foot. While the Downtown's vacancy has been increasing, up to 13.4 percent from 12 percent in 2008, it is still much lower than the larger market area's 17 percent vacancy rate.³⁵ As of the 2000 Census, 28.5 percent of Walnut Creek residents worked in the City, remaining consistent with 1990 Census statistics.

Direct Impacts of Downtown Development

Although creation of these successful "new downtowns" took time, they each can be considered a success in supporting thriving housing markets and creating high end retail amenities that serve both local and regional markets. Their retail and office space also supports jobs and economic activity. It is difficult to calculate economic impacts of the day to day operation of Reston and Walnut Creek's downtowns. Table 9 below summarizes the total development profiled in the two case studies, and estimates direct job impacts associated with the occupancy of their office and commercial space based on the same standard assumptions used for the proposed Downtown Columbia plan.³⁶ The planned buildout of Columbia's Downtown is also presented, allowing a comparison of the scale and direct impact of development. Columbia's total proposed buildout is much larger than what has been built to date in either Reston or Walnut Creek.

³² "Retail Research Market Update". Marcus & Millichap, 2nd Quarter 2009.

³³ George Avalos and Blanca Torres, "Upscale Urban Streetscape: Rising rents transform downtown Walnut Creek," *Contra Costa Times*, 8 July 2007.

³⁴ Colliers Parrish, "Walnut Creek Market Research," 1st Quarter, 2009.

³⁵ The market area is the I-680 Corridor in the San Francisco Bay area.

³⁶ Includes assumptions of 500 square feet per worker for retail space, 300 square feet per worker for office space, and 0.75 workers per room for hotel space. Office and retail space are assumed to be 90 percent occupied.

Table 9: Comparison of Downtown Development Impacts

Downtown	Period of Development Studied	Total Amount of Development Studied	Direct Ongoing Employment Estimate for Commercial Development
Reston	1980s to Present	959,478 sf retail; 5,462,172 sf office; 3,504 residential units; 663 room hotel	20,623 jobs
Walnut Creek	1970s to Present	359,000 sf new retail	720 jobs
Columbia	Future	1,250,000 sf retail; 4,300,000 sf office; 5,500 residential units; 640 room hotel in three phases	15,640 jobs

Source: BAE, 2009.

Appendix A: Economic Impacts of Construction, Minimum and Maximum Phase Alternatives

Appendix A: Construction Impacts

Development Alternative	Employment (a)				Output (c)			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
HOWARD COUNTY								
Phase I								
Minimum	225	68	68	362	\$381,557,000	\$97,137,000	\$83,814,000	\$562,508,000
Maximum	787	239	239	1,265	\$1,335,451,000	\$339,979,000	\$293,350,000	\$1,968,780,000
Phase II								
Minimum	287	86	87	459	\$483,041,000	\$122,385,000	\$106,679,000	\$712,105,000
Maximum	1,002	314	305	1,621	\$1,720,800,000	\$441,323,000	\$374,838,000	\$2,536,961,000
Phase III								
Minimum	1,405	426	426	2,257	\$2,380,226,000	\$605,505,000	\$523,289,000	\$3,509,020,000
Maximum	128	27	37	192	\$188,574,000	\$43,725,000	\$45,594,000	\$277,893,000
Merriweather Post Pavilion (b)	46	8	12	66	\$26,278,000	\$6,483,000	\$7,146,000	\$39,907,000
GRAND TOTAL								
Minimum	1,963	588	593	3,144	\$3,271,102,000	\$831,510,000	\$720,928,000	\$4,823,540,000
Maximum	1,963	588	593	3,144	\$3,271,103,000	\$831,510,000	\$720,928,000	\$4,823,541,000
DC-BALTIMORE REGION								
Phase I								
Minimum	225	78	90	394	\$381,557,000	\$110,441,000	\$115,374,000	\$607,372,000
Maximum	787	274	317	1,378	\$1,335,451,000	\$386,544,000	\$403,808,000	\$2,125,803,000
Phase II								
Minimum	287	98	115	500	\$483,042,000	\$139,150,000	\$146,805,000	\$768,997,000
Maximum	1,002	357	405	1,764	\$1,720,801,000	\$501,756,000	\$516,215,000	\$2,738,772,000
Phase III								
Minimum	1,405	487	565	2,457	\$2,380,227,000	\$688,440,000	\$720,297,000	\$3,788,964,000
Maximum	128	32	49	209	\$188,574,000	\$49,730,000	\$62,453,000	\$300,757,000
Merriweather Post Pavilion (b)	46	10	16	72	\$26,278,000	\$7,485,000	\$9,804,000	\$43,567,000
GRAND TOTAL								
Minimum	1,963	673	786	3,423	\$3,271,104,000	\$945,516,000	\$992,280,000	\$5,208,900,000
Maximum	1,963	673	786	3,423	\$3,271,104,000	\$945,515,000	\$992,280,000	\$5,208,899,000
STATE OF MARYLAND								
Phase I								
Minimum	225	82	95	403	\$381,557,000	\$116,496,000	\$119,641,000	\$617,694,000
Maximum	787	288	334	1,410	\$1,335,451,000	\$407,736,000	\$418,745,000	\$2,161,932,000
Phase II								
Minimum	287	103	121	512	\$483,042,000	\$146,719,000	\$152,213,000	\$781,974,000
Maximum	1,002	377	427	1,806	\$1,720,801,000	\$529,596,000	\$535,432,000	\$2,785,829,000
Phase III								
Minimum	1,405	513	595	2,514	\$2,380,227,000	\$726,138,000	\$746,923,000	\$3,853,288,000
Maximum	128	33	52	213	\$188,574,000	\$52,020,000	\$64,601,000	\$305,195,000
Merriweather Post Pavilion (b)	46	10	16	72	\$26,278,000	\$7,894,000	\$10,150,000	\$44,322,000
GRAND TOTAL								
Minimum	1,963	709	828	3,500	\$3,271,104,000	\$997,247,000	\$1,028,927,000	\$5,297,278,000
Maximum	1,963	709	828	3,500	\$3,271,104,000	\$997,246,000	\$1,028,928,000	\$5,297,278,000

Note:

(a) Assumes 10 years of construction per phase.

(b) Assumes a 5-year construction period.

(c) Output given in constant 2009 dollars.

Sources: IMPLAN; BAE, 2009.

Appendix B: Household Income Calculations, Market Rate For Sale Units

Appendix B: Household Income Calculations, Market Rate For Sale Units

<u>Unit Sales Price</u>	<u>Median Unit Price (b)</u>	<u>Down Payment</u>	<u>Annual Principal & Interest</u>	<u>Property Insurance</u>	<u>Property Taxes</u>	<u>Total Annual Payment</u>	<u>Minimum Annual Household Income Requirement (d)</u>
Median Condominium Home (a)	\$387,416	\$19,371	\$24,975	\$1,472	\$4,881	\$33,222	\$100,671

Notes:

(a) Based on new condominium units sold in and around Columbia between March 1, 2008 and March 31, 2009.

(b) Based upon the minimum unit price with the following ownership cost assumptions:

Percent of Income for Housing Costs (Principal, Interest, Taxes, and Insurance)	33%	of gross annual income
Mortgage Terms		
Down Payment	5%	of home value
Annual Interest Rate	5%	fixed
Loan Term	30	years
Annual Property Tax Rate	1.26%	of home value
Annual Hazard Insurance	0.4%	of home value (c)

(c) Hazard Insurance includes the basic premium for hazard insurance plus an additional payment for flood insurance.

(d) Based on Howard County Department of Finance 2009 four person household median income.

Sources: Maryland Department of Planning, 2009; M&T Bank, 2009; BAE, 2009.

Appendix C: Household Income Calculations, Market Rate Rental Units

Appendix C: Household Income Calculations, Market Rate Rental Units

<u>Unit Size</u>	<u>Average Monthly Rent</u>	<u>Utility Allowance (a)</u>	<u>Annual Household Income Requirement (b)</u>
Two Bedroom	\$2,000	\$185	\$74,914
Average Apartment Vacancy Rate	10%		

Notes:

- (a) Utility allowance figures assume apartments using natural gas for heating, cooking and hot water.
- (b) Annual household income requirement figures are based on the assumption that 35 percent of household income is spent on housing costs, including utilities.

Source: rent.com, 2009; GGP; Howard County Department of Housing and Community Development, 2009; BAE, 2009.

Appendix D: Economic Impacts of Ongoing Operations, Minimum and Maximum Phase Alternatives

Appendix D: Annual Operating Impacts

Development Alternative	Employment				Output (b)			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
HOWARD COUNTY								
Phase I								
Minimum	1,840	630	540	3,010	\$371,257,000	\$94,421,000	\$66,642,000	\$532,320,000
Maximum	6,440	2,190	1,900	10,530	\$1,298,394,000	\$330,221,000	\$233,063,000	\$1,861,678,000
Phase II								
Minimum	2,670	1,060	910	4,640	\$626,092,000	\$159,361,000	\$111,257,000	\$896,710,000
Maximum	9,220	3,710	3,160	16,090	\$2,190,518,000	\$558,134,000	\$388,725,000	\$3,137,377,000
Phase III								
Minimum	12,860	5,020	4,290	22,170	\$2,965,892,000	\$755,065,000	\$527,439,000	\$4,248,396,000
Maximum	1,710	810	680	3,200	\$474,213,000	\$120,463,000	\$83,526,000	\$678,202,000
Merriveather Post Pavilion (a)	142	17	15	173	\$8,147,721	\$2,371,420	\$1,781,983	\$12,301,124
GRAND TOTAL								
Minimum	17,512	6,727	5,755	29,993	\$3,971,388,721	\$1,011,218,420	\$707,119,983	\$5,689,727,124
Maximum	17,512	6,727	5,755	29,993	\$3,971,272,721	\$1,011,189,420	\$707,095,983	\$5,689,558,124
DC-BALTIMORE REGION								
Phase I								
Minimum	1,880	770	760	3,410	\$376,449,000	\$117,270,000	\$96,955,000	\$590,674,000
Maximum	6,560	2,700	2,660	11,920	\$1,316,567,000	\$410,134,000	\$339,080,000	\$2,065,781,000
Phase II								
Minimum	2,720	1,300	1,260	5,280	\$632,314,000	\$196,994,000	\$161,074,000	\$990,382,000
Maximum	9,390	4,570	4,420	18,380	\$2,215,878,000	\$690,542,000	\$563,999,000	\$3,470,419,000
Phase III								
Minimum	13,070	6,170	5,990	25,230	\$2,998,011,000	\$933,987,000	\$764,456,000	\$4,696,454,000
Maximum	1,710	980	940	3,630	\$474,213,000	\$147,537,000	\$119,372,000	\$741,122,000
Merriveather Post Pavilion (a)	143	22	20	185	\$8,147,721	\$3,033,609	\$2,554,076	\$13,735,406
GRAND TOTAL								
Minimum	17,813	8,262	8,030	34,105	\$4,014,921,721	\$1,251,284,609	\$1,025,039,076	\$6,291,245,406
Maximum	17,803	8,272	8,040	34,115	\$4,014,805,721	\$1,251,246,609	\$1,025,005,076	\$6,291,057,406
STATE OF MARYLAND								
Phase I								
Minimum	1,890	800	800	3,490	\$376,822,000	\$119,128,000	\$99,876,000	\$595,826,000
Maximum	6,610	2,780	2,780	12,170	\$1,317,873,000	\$416,628,000	\$349,296,000	\$2,083,797,000
Phase II								
Minimum	2,730	1,340	1,320	5,390	\$632,761,000	\$199,498,000	\$165,888,000	\$998,147,000
Maximum	9,430	4,700	4,630	18,760	\$2,217,701,000	\$699,324,000	\$580,892,000	\$3,497,917,000
Phase III								
Minimum	13,130	6,350	6,280	25,760	\$3,000,319,000	\$946,212,000	\$787,337,000	\$4,733,868,000
Maximum	1,710	1,010	980	3,700	\$474,213,000	\$148,846,000	\$122,877,000	\$745,936,000
Merriveather Post Pavilion (a)	145	23	21	189	\$8,147,721	\$3,145,403	\$2,629,425	\$13,922,549
GRAND TOTAL								
Minimum	17,895	8,513	8,421	34,829	\$4,018,049,721	\$1,267,983,403	\$1,055,730,425	\$6,341,763,549
Maximum	17,895	8,513	8,411	34,819	\$4,017,934,721	\$1,267,943,403	\$1,055,694,425	\$6,341,572,549

Note:

(a) Based on improvements to the Merriveather Post Pavilion.

Totals may vary due to rounding.

(b) Output reported in constant 2009 dollars.

Sources: IMPLAN; BAE, 2009.