

Economic Impact of the Hotel Roanoke and Conference Center



Prepared by the



April 2015

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Executive Summary

The Roanoke Valley-Alleghany Regional Commission examined the economic impact of the Hotel Roanoke and Conference Center from its renovation and re-opening in 1995 through 2014. An additional component of the study was to document changes in downtown Roanoke for the same period. The downtown has undergone revitalization through modest growth and investment, and the Hotel Roanoke and Conference Center has been a visible indicator and component of this growth over the past 20 years.

- The total impact of the Hotel Roanoke and Conference Center was estimated to be about \$616 million over the past 19 years, including:
 - \$78 million from initial renovation and construction
 - \$30.5 million from capital improvements to the Hotel and Conference Center
 - \$351 million from Hotel sales
 - \$86 million from Conference Center sales
 - \$61 million from visitation
- Direct spending by the Hotel, Conference Center and visitors equates to over \$395 million of regional impact, while indirect and induced spending by vendors, employees and households adds an additional \$220 million.
- In 2014, the estimated impact of the Hotel and Conference Center was \$40 million.
- Over \$36 million of the 19 year impact has been in the form of taxes paid by the Hotel and Conference Center.
- The Hotel Roanoke and Conference Center has directly employed between 250 and 300 people each year over the past twenty years. In 2014, the Hotel and Conference Center had payroll and benefits of nearly \$9 million.
- The Hotel and Conference Center has helped support about 77 additional jobs through indirect and induced spending each year since its reopening in 1995.
- It is estimated that visitors drawn by conferences and the Hotel have generated over \$61 million in regional impact since 1995. These visitors have helped support about 40 jobs per year in the regional economy.

Downtown Roanoke has seen similar positive growth for the same period. New restaurants, employment growth and downtown residential growth have occurred as a result of investment in downtown. It is estimated that the entire impact of revitalization in the downtown area has likely exceeded \$750 million over the past two decades.

Introduction

In 2013, the Hotel Roanoke Conference Center Commission requested that the staff of the Roanoke Valley – Alleghany Regional Commission determine the economic contribution of the Hotel Roanoke and Conference Center to the region from the renovation in 1995 through 2014.

There are several aspects of this study which measure the impact of the daily Hotel and Conference Center operations, the renovation and capital improvements to facilities, as well as the impact of visitors to the region that utilize the hotel and conference facilities.

The Hotel and Conference Center is an important part of the downtown Roanoke economy and growth in Downtown can be quantified over the last 20 years by examining various metrics.

Methodology

The study area for this analysis is the Roanoke Metropolitan Statistical Area (MSA) which includes the Counties of Botetourt, Craig, Franklin and Roanoke and the Cities of Roanoke and Salem. While the Hotel and Conference Center has a wider impact, the focus of this study was the metropolitan area.

Staff of the Roanoke Valley – Alleghany Regional Commission (RVARC) obtained detailed financial information from the Hotel management on the operations, capital expenditures, and revenues of the facility. In some cases, data for early years was estimated based on revenues.

In a separate analysis, staff utilized various publically available data to document the growth of downtown Roanoke over the last 20 years. These data included, building permits, Virginia Employment Commission records, INFOSYS Inc. databases, US Census data, primary sources, and newspaper and magazine articles.

Staff utilized specialized software called IMPLAN which was developed by IMPLAN Group LLC. This software is designed to model complex economic interactions to measure the financial impact of specified activities or events. The impact estimates should be considered conservative since the economic model was designed to account for competing hotel business, which is often not considered in these types of studies.

Additional details and on the methodology and assumptions are mentioned in each sub-section.

How does IMPLAN Work?

At the heart of the IMPLAN 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.

The model uses actual economic and employment data to model 440 industries to determine how industry dollars are spent to produce commodities. National level and county level production data sets are then combined to produce a series of multipliers.

Multipliers measure the amount of total economic activity that results from an industry or household spending money in the local economy. IMPLAN uses the national and county-level data multipliers to estimate economic impacts of various activities. Once all input data has been entered into the model, IMPLAN then generates a series of summary output tables to show the direct, indirect, and induced economic impacts.

- **Direct impacts** are those that result from the direct infusion of money in the economy as a result of an economic event. These impacts consist of permanent jobs, wages, and output of economic events.
- **Indirect impacts** are the jobs, wages, and output created by businesses, which provide goods and services essential to an economic activity (construction, tourism, etc.). Indirect impacts represent a cumulative total of several cycles of spending that work their way through the local economic supply chain until all remaining money from the initial stimulus leaks from the study area economy. For example, a series of restaurants making purchases of goods from local suppliers as a result of participant spending on meals would be an example of a portion of indirect impacts as defined in this analysis.
- **Induced impacts** are those impacts that result from household spending by those impacted by the direct and indirect phases of economic activities. The spending of wages earned by employees working for industries impacted by economic events represents the largest portion of induced impacts. This spending creates induced employment, especially in the service sectors.

The summary output tables also show the direct, indirect, and induced effects of labor income, value added, and output.

- **Labor income** equals employee compensation plus proprietor income. Employee compensation in the IMPLAN model is the total payroll cost of the employees paid by the employer. This includes wage and salary, all benefits, and employers paid payroll taxes (social security, unemployment, etc.) Proprietor Income consists of payments received by self-employed individuals and unincorporated business owners.

- **Value added** is defined as the difference between an industry's total output and the cost of any intermediate inputs. Value added is the total income generated by the event in the local economy. Value added includes employee compensation, taxes, and operating surplus. Value added is best understood as the contribution made to gross domestic product or, more simply, as new wealth in the region.
- **Output** can generally be understood as regional sales activity. Output is more precisely defined as the value of industry production.
- **Employment** is estimated by the model as all jobs, including part-time and seasonal workers. Employment numbers can be changed to full-time equivalency (FTE), but the ratio varies by industry sector.

What Can IMPLAN Analyses Reveal

An IMPLAN analysis seeks to quantify the economic benefit that expenditures for a project (construction) or an activity (general tourism or special events) have on a local or regional economy. For example, expenditures spent on the construction of a building or the purchase of items on a trip such as lodging and gasoline create additional purchases in various sectors of the economy. Money spent on landscaping for a newly constructed building or the purchase of hotel furniture both create numerous opportunities for those receiving the money to make additional consumer and business purchases. This process creates jobs and expands the economy. Typically, the total economic impact should measure the increase or decrease of an activity when new money is injected into an economy or a business closes. The economic impact is not a measure of the relative size of particular sector or business within the local economy, but rather a measure of the impact that business has on increasing or decreasing funds circulating in the local economy.

Economic Impact of the Hotel Roanoke and Conference Center

Financial data were obtained from the Hotel Roanoke and Conference Center which provided great detail on revenues and expenditures. Because of this detail, this report also has a breakdown of Hotel and Conference Center impacts as separate entities. As previously indicated, some data on room nights and expenditures from 1995-2000 was estimated based on revenues because of incomplete records.

Economic impacts can be measured based on revenues or expenditures in the IMPLAN modelling software. The impact of Hotel and Conference Center operations and sales used in this report is based on revenues. Rather than measuring the full market share of the Hotel Roanoke and Conference Center sales, an attempt was made to measure the added value of the facility to the regional economy. All impacts stated are for the Roanoke Metropolitan Statistical Area (MSA).

Initial Renovation and Conference Center Construction

The Hotel Roanoke and Conference Center was renovated and opened in 1995 with an initial \$40 million investment, which is equal to about \$62 million today, when adjusted for inflation. It is important to note the sources for this funding. A measurable impact occurs when money from outside the region is injected into the local economy. According to the Hotel Roanoke, the initial renovation of the Hotel included money from the following sources:

\$6 million Federal HUD 108 loan

\$7 million Virginia Tech Real Estate Foundation

\$1.3 million loan from Doubletree Hotels

\$6.5 million loan from a bank consortium

\$6 million from local donations and sources

\$13 million City of Roanoke financing for Conference Center

According to the Hotel, approximately 75 percent of the original work was awarded to local firms. Thus, \$62 million was used at a 75 local purchasing percentage to model the initial renovation of the Hotel and the construction of the Conference Center. The entire investment, including local funds, was included in the IMPLAN analysis at the request of the client.



In current dollars, the total regional impact of this \$62 million renovation was estimated to be \$78 million. Employment related to the renovation did not add “new” jobs to the economy, but helped support existing construction jobs during the renovation work.

Hotel Renovation and Conference Center Construction

| Impact Type | Employment | Labor Income | Total Value Added | Output |
|-----------------|------------|---------------|-------------------|---------------|
| Direct Effect | 396 | \$ 24,094,249 | \$ 25,703,825 | \$ 47,101,564 |
| Indirect Effect | 81 | \$ 4,136,735 | \$ 6,136,499 | \$ 11,095,735 |
| Induced Effect | 153 | \$ 6,196,706 | \$ 12,125,485 | \$ 19,894,790 |
| Total Effect | 630 | \$ 34,427,690 | \$ 43,965,810 | \$ 78,092,089 |

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Capital Improvements

The Hotel has averaged about \$1.2 million per year in capital improvements, while the Conference Center has averaged about \$350,000 per year in capital improvements. Hotel management staff indicated that about 65% of capital investments affect the local economy. Thus, capital improvements had an estimated \$11.7 million of total impact in the region from 1996-2014 in today's dollars. Capital improvements supported about 15 jobs per year. There were no capital improvements in 1995 which was the year the facility was renovated and re-opened (see Initial Renovation above).

Hotel Roanoke and Conference Center Capital Improvements Impact 1996-2014

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|---------------|---------------|---------------|
| Direct Effect | 165 | \$ 10,702,589 | \$ 11,298,221 | \$ 18,362,996 |
| Indirect Effect | 28 | \$ 1,328,542 | \$ 2,063,382 | \$ 3,670,012 |
| Induced Effect | 65 | \$ 2,637,360 | \$ 5,160,601 | \$ 8,467,113 |
| Total Effect | 258 | \$ 14,668,491 | \$ 18,522,205 | \$ 30,500,122 |

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Notes: Excludes initial renovation. 65% local purchases

Hotel Sales

Hotel impacts are modeled using revenues. The IMPLAN model uses multipliers and regional data on the hotel industry to estimate employment, indirect effects, and induced effects. It is important to note that the Hotel sales do not represent a 100% contribution to the regionally economy. The intrinsic growth of the larger Hotel sector is documented in the following tables.

Hotel Industry Growth by Metropolitan Statistical Area (MSA)

| Roanoke MSA | 1992 | 1997 | 2002 | 2007 | %Change |
|-------------------|---------------|---------------|---------------|---------------|---------|
| Hotels and Motels | 49 | 63 | 73 | 75 | 53% |
| Receipts | \$ 46,610,000 | \$ 79,793,000 | \$ 86,919,000 | \$ 98,504,000 | 111% |

| Lynchburg MSA | 1992 | 1997 | 2002 | 2007 | %Change |
|-------------------|---------------|---------------|---------------|---------------|---------|
| Hotels and Motels | 24 | 22 | 37 | 41 | 71% |
| Receipts | \$ 20,273,000 | \$ 24,943,000 | \$ 26,966,000 | \$ 35,753,000 | 76% |

| Richmond MSA | 1992 | 1997 | 2002 | 2007 | %Change |
|-------------------|----------------|----------------|----------------|----------------|---------|
| Hotels and Motels | 115 | 163 | 226 | 246 | 114% |
| Receipts | \$ 160,478,000 | \$ 225,438,000 | \$ 315,557,000 | \$ 421,698,000 | 163% |

Thus, it is easy to see that an inherent demand for Hotel services has caused supply and revenues to increase over the past 20 years. If the Hotel Roanoke ceased to exist, a portion of business would be absorbed in the existing and future marketplace. However, the Hotel Roanoke is in the unique position of generating business from the Conference Center, as well as

through its reputation and proximity to downtown attractions. About 30% of Hotel guests were associated with conferences. For this analysis, it was also assumed that an additional 30% of guests came specifically to the Hotel Roanoke as a destination or to be close to downtown. Thus a broad assumption is made that the remaining 40% of hotel guests could be absorbed into the existing market. As a result, 60% of Hotel sales (less capital improvements) were used to model the economic impact (rather than a figure that represents 100% of their current market share). Considering this 40% absorption of guests, Hotel sales contributed an estimated \$351 million to the regional economy over the past 19 years. Capital expenditures were excluded in the sales model.

Hotel Sales Estimated Impact 1995-2014

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|---------------|----------------|----------------|
| Direct Effect | 1,948 | \$ 53,645,738 | \$ 100,611,683 | \$ 217,463,163 |
| Indirect Effect | 625 | \$ 26,852,622 | \$ 43,400,636 | \$ 77,172,909 |
| Induced Effect | 441 | \$ 17,851,408 | \$ 34,936,745 | \$ 57,328,396 |
| Total Effect | 3,014 | \$ 98,349,768 | \$ 178,949,064 | \$ 351,964,469 |

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Conference Center Sales

The Conference Center is a unique facility that draws a variety of conferences, workshops and visitors to the region. There are few comparable facilities in the Roanoke Valley, thus 100% of sales were used to model the impact. The Conference Center was estimated to have had an impact of \$86.5 million over the 19 year period, excluding capital improvements. Capital expenditures were excluded in the sales model.



Conference Center Sales 1995-2014 (less capital improvements)

| Impact Type | Employment | Labor Income | Total Value Added | Output |
|-----------------|------------|---------------|-------------------|---------------|
| Direct Effect | 401 | \$ 4,556,598 | \$ 48,500,388 | \$ 67,426,099 |
| Indirect Effect | 99 | \$ 3,657,209 | \$ 8,088,003 | \$ 13,229,037 |
| Induced Effect | 45 | \$ 1,819,100 | \$ 3,560,308 | \$ 5,842,288 |
| Total Effect | 544 | \$ 10,032,907 | \$ 60,148,700 | \$ 86,497,424 |

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Visitor Spending

Hotel and Conference Center impacts discussed thus far have not taken into account visitor spending to the region. Detailed data on conferences, types of attendees, and spending patterns was difficult to identify. The Conference Center was able to supply some estimates of conference attendees. It is estimated that 30% of attendees also purchase a room, thus a 30/70 percent split was used to estimate conference overnight and day guests as follows.



Estimated Conference Attendees

| Years | Conferees | Overnight | Day Attendees |
|-----------|-----------|-----------|---------------|
| 1995-2014 | 2,722,658 | 816,797 | 1,905,861 |

However, some portion of the conference center visitors could likely be absorbed into the existing conference market. In other words, if the Conference Center ceased to exist, other venues would pick up some new business. Over the 19 year period, the Hotel booked nearly 1.6 million room nights. We previously assumed 40% of these rooms could be absorbed into the existing market. However, since there is no comparable conference facility in the region, the absorption for the conference center business would be much smaller, meaning that demand for conference services would be higher than supply if the Conference Center did not exist. Likewise, some portion of overnight guests are also visitors to the region that are not participating in a conference. Furthermore, some conferences draw overflow guests that stay at other hotels. In simple terms, there are many factors that can influence the economic model, and it is difficult to reconcile and estimate these influences without detailed survey data on visitation. For this analysis we used 100% conference overnight attendees to estimate visitor (conference and non-conference) spending. However, we assumed that 40% of the day conference attendees were from the local region, and they were not counted in visitor impacts. Virginia Tourism Commission spending profile data was used to estimate visitor spending. Expenditures on meals, admissions, retail, and gas were thought to be reasonable for conference attendee. Data on a day visitor to the conference was estimated based on federal per diem rates for Roanoke. Lodging was excluded because it is already accounted for in the Hotel sales model.

Visitor Spending Profile

| VTC-Survey Data | Overnight Per Trip* | Overnight Per Day | Day** Visitor |
|-----------------|---------------------|-------------------|---------------|
| Party spending | \$ 401 | \$ 115.00 | \$ 45.00 |
| Nights per trip | 3.5 | 1 | 0 |
| Meals | 22% | \$ 25.30 | \$ 21.00 |
| Admissions | 8% | \$ 9.20 | \$ 1.00 |
| Retail | 10% | \$ 11.50 | \$ 6.00 |
| Gas | 26% | \$ 29.90 | \$ 17.00 |

*Source: VTC-Shenandoah Valley Profile, 2013

**Estimated based on GSA per diem allowance

Thus, each overnight visitor to a hotel is currently estimated to generate \$75.90 in non-lodging expenditures in the Roanoke MSA. Each day visitor is estimated to spend \$45. No attempt was made to deflate current spending to older levels in the 1995-2014 spending estimates.

It is estimated that visitors have generated about \$61 million in additional regional impact since 1995. These visitors have helped support about 40 jobs per year in the regional economy.

Visitor Spending Impact 1995-2014

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|---------------|---------------|---------------|
| Direct Effect | 590 | \$ 13,173,850 | \$ 21,530,344 | \$ 39,036,592 |
| Indirect Effect | 74 | \$ 3,098,195 | \$ 6,066,614 | \$ 10,337,431 |
| Induced Effect | 88 | \$ 3,575,739 | \$ 6,997,026 | \$ 11,480,468 |
| Total Effect | 752 | \$ 19,847,784 | \$ 34,593,984 | \$ 60,854,491 |

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Includes food, gas, retail and admissions for non-local day and overnight visitors. Excludes lodging

Hotel Roanoke and Conference Center 2014 Impact

Another analysis for only 2014 shows an estimated impact of about \$40 million. Sales, visitation, and capital improvements are included. The model accounts for some absorption, thus direct employment is slightly understated.

Hotel Roanoke and Conference Center Total Estimated Impact 2014

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|---------------|---------------|---------------|
| Direct Effect | 227 | \$ 6,120,785 | \$ 12,907,589 | \$ 25,410,787 |
| Indirect Effect | 65 | \$ 2,786,183 | \$ 4,650,826 | \$ 8,193,955 |
| Induced Effect | 49 | \$ 1,972,211 | \$ 3,859,708 | \$ 6,333,380 |
| Total Effect | 341 | \$ 10,879,179 | \$ 21,418,122 | \$ 39,938,122 |

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Note: Actual employment is about 280

Hotel Roanoke and Conference Center Summary

- The total impact of the Hotel Roanoke and Conference Center was estimated to be about \$616 million over the past 19 years (includes initial renovation, capital improvements, hotel and conference center sales, and visitor spending)
- Direct spending by the Hotel, Conference Center and visitors equates to over \$395 million of regional impact, while indirect and induced spending by vendors, employees and households adds an additional \$220 million.
- Over \$36 million of this impact has been in the form of local taxes according to Hotel and Conference Center management.
- The Hotel Roanoke and Conference Center has directly employed between 250 and 300 people each year over the past 19 years.
- The Hotel and Conference Center has helped support about 77 additional jobs through indirect and induced spending each year since its reopening in 1995.
- In 2014, the estimated impact of the Hotel and Conference Center was \$40 million.

When modeled as a whole, the Hotel and Conference Center has had an estimated impact of \$616 million over the past 19 years. Combining an entire 19 years into the model is not ideal, but it can provide sense of the economic market share and contribution made by the Hotel Roanoke and Conference Center. The total estimated impact includes the initial renovation and construction, hotel sales, conference center sales, capital improvements and visitor impacts.

Hotel and Conference Center Total Estimated Impact 1995-2014

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|----------------|----------------|----------------|
| Direct Effect | 3,538 | \$ 106,607,315 | \$ 212,267,052 | \$ 395,816,816 |
| Indirect Effect | 916 | \$ 39,421,873 | \$ 66,526,005 | \$ 116,765,989 |
| Induced Effect | 797 | \$ 32,253,692 | \$ 63,119,499 | \$ 103,569,885 |
| Total Effect | 5,251 | \$ 178,282,879 | \$ 341,912,556 | \$ 616,152,690 |

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The table above does not reflect 100% of direct jobs because employment in the model reflects potential absorption to other hotels and other factors. Ideally, the model should be estimating “new” economic activity to the region. It should be noted that the IMPLAN model does not differentiate between full and part-time jobs. A previous estimate of economic impact after ten years indicated a \$141 million impact according to the Hotel.

The following table lists the employment sectors impacted by the Hotel Roanoke and Conference Center and visitor spending from 1995-2014. Two sectors represent the Hotel and Conference Center and the remaining eight represent other major sectors being impacted through renovations, repairs, services, and visitors.

Top Ten Impacted Employment Sectors 1995-2014

| Description | Employment | Labor Income | Value Added | Total Output |
|---|------------|---------------|----------------|----------------|
| Hotels and motels | 1,950 | \$ 53,679,088 | \$ 100,674,231 | \$ 217,598,356 |
| Food services and drinking places | 654 | \$ 13,251,051 | \$ 19,829,690 | \$ 38,665,792 |
| Conference Center/Real estate establishments | 528 | \$ 6,005,193 | \$ 63,919,223 | \$ 88,861,632 |
| Construction of other new nonresidential structures | 395 | \$ 24,094,249 | \$ 25,703,825 | \$ 47,101,564 |
| Maintenance and repair of nonresidential structures | 226 | \$ 14,631,947 | \$ 15,446,260 | \$ 25,104,803 |
| Services to buildings and dwellings | 101 | \$ 2,268,678 | \$ 2,821,500 | \$ 5,704,949 |
| Employment services | 95 | \$ 2,494,488 | \$ 2,854,279 | \$ 3,685,423 |
| Retail Stores - General merchandise | 81 | \$ 2,018,667 | \$ 3,589,287 | \$ 4,718,685 |
| Retail Stores - Gasoline stations | 59 | \$ 1,622,807 | \$ 3,162,186 | \$ 4,764,563 |
| Management of companies and enterprises | 46 | \$ 3,875,296 | \$ 4,792,616 | \$ 9,110,810 |

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Downtown Roanoke Change and Economic Impact

Since the Hotel and downtown are integrally tied together it seemed important to examine how changes in downtown could also be measured and modelled. A general renewal of downtown over the last 20 years had occurred because of significant private and public investments into downtown. A shift towards downtown residential living and the continued use of downtown as a regional employment center has led to many positive changes in downtown. None of these impacts are included in the Hotel Roanoke and Conference Center models, but are provided for reference and documentation purposes.

Downtown Employment

For most purposes, the traditional downtown service district was used in this study. The one exception is the measurement of employment by US Census Bureau geography. Employment data was obtained from the US Census Bureau for 1990 and 2010 by Traffic Analysis Zones (TAZ). The TAZs are used by transportation planners to estimate traffic conditions by small geographic areas. In general, the TAZ data reflects about 92% of actual employment because of how the Census Bureau conducts samples, so the estimated employment would actually be slightly higher than the numbers reported below. However, the change in employment from 1990 to 2010 in the greater downtown area is still estimated to be 1,800 people.

Employment-Downtown Roanoke

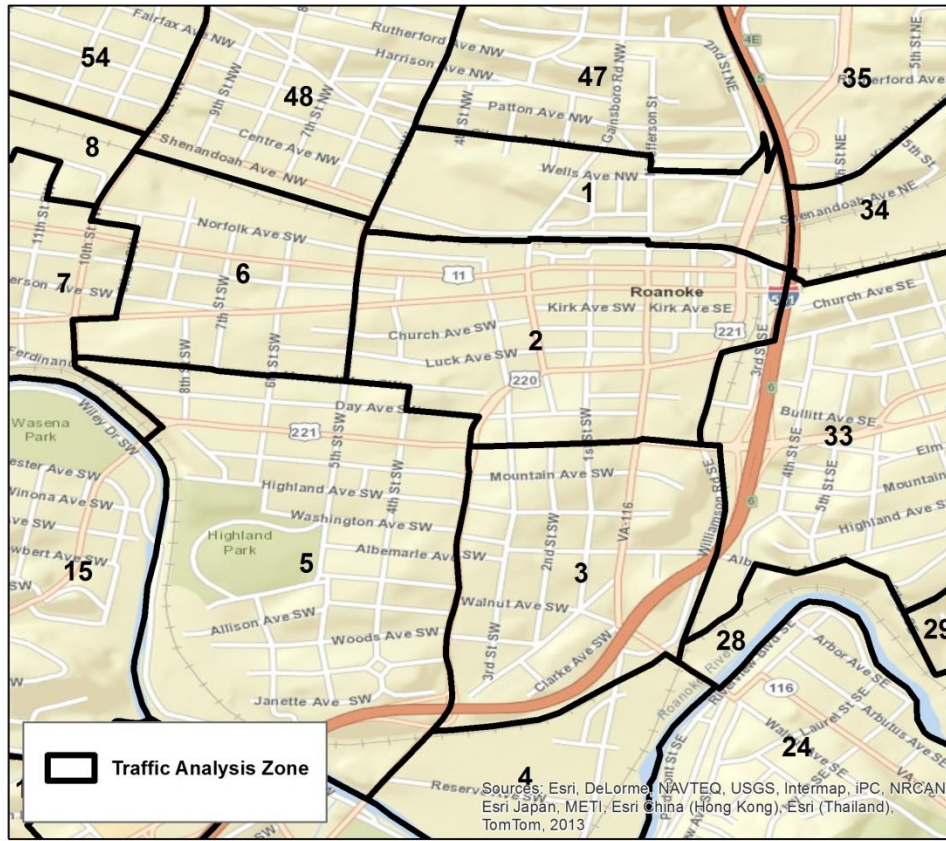
| | 1990 | 2010 |
|---------|--------|--------|
| Core | 11,400 | 12,700 |
| Greater | 16,200 | 18,000 |

Source: US Census Bureau

Core Area-Traffic Analysis Zone 2

Greater Downtown-Traffic Analysis Zones 1, 2, 3, 6

Location of Traffic Analysis Zones used to estimate Employment



An increase of 1,800 employees in downtown Roanoke yielded about \$327 million of additional yearly impact over the 1990 employment.

Downtown Employment Growth 1990-2010

| Impact Type | Employment | Labor Income | Total Value Added | Output |
|-----------------|------------|----------------|-------------------|----------------|
| Direct Effect | 1,800 | \$ 86,018,933 | \$ 113,196,251 | \$ 204,036,914 |
| Indirect Effect | 390 | \$ 16,589,565 | \$ 30,424,061 | \$ 50,960,253 |
| Induced Effect | 561 | \$ 22,702,024 | \$ 44,421,187 | \$ 72,884,525 |
| Total Effect | 2,751 | \$ 125,310,522 | \$ 188,041,499 | \$ 327,881,693 |

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The 1,800 increase in employment was broken down across twelve sectors representative of downtown employment characteristics. The resulting IMPLAN impacts influence the following top ten sectors as indicated below. The table represents the modeled new growth and doesn't represent overall employment or actual employment.

Top Ten Sectors-Modeled Downtown Employment Growth Estimates

| Description | Employment | Labor Income | Value Added | Total Output |
|--|------------|---------------|---------------|---------------|
| Food services and drinking places | 485 | \$ 9,822,381 | \$ 14,698,817 | \$ 28,661,134 |
| Other state and local government enterprises | 214 | \$ 10,216,966 | \$ 16,887,747 | \$ 43,043,805 |
| Business support services | 207 | \$ 11,426,552 | \$ 11,823,663 | \$ 17,536,363 |
| Custom computer programming services | 200 | \$ 10,908,456 | \$ 12,657,068 | \$ 23,596,315 |
| Civic, social, professional, and similar organizations | 119 | \$ 3,849,056 | \$ 3,141,727 | \$ 5,531,665 |
| Accounting, tax preparation, bookkeeping services | 118 | \$ 5,931,644 | \$ 10,313,933 | \$ 13,380,717 |
| Insurance agencies, brokerages, and related activities | 114 | \$ 6,281,927 | \$ 9,459,301 | \$ 15,171,635 |
| Legal services | 112 | \$ 6,923,824 | \$ 12,434,685 | \$ 16,982,697 |
| Medical and diagnostic labs.. | 111 | \$ 7,743,427 | \$ 11,367,509 | \$ 15,944,155 |
| Private junior colleges, colleges, universities... | 108 | \$ 4,250,344 | \$ 4,651,191 | \$ 8,875,051 |

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Downtown Restaurants

In 1992, Downtown Roanoke Incorporated produced a “Downtown Data Book” that was useful in documenting the number of restaurants and related employment in downtown. The report documented that there were 56 restaurants which employed 464 people in 1992. Downtown Roanoke Inc. currently lists 72 restaurants on their website, which are estimated to employ 900 people based on Virginia Employment Commission data and calculations to estimate the average employment per downtown restaurant. The 1992 downtown service district area was used for this analysis.

Restaurants- Downtown Roanoke

| | 1992 | 2014 |
|-------------|------|------|
| Restaurants | 56 | 72 |
| Employment | 464 | 900 |

Sources: Virginia Employment Commission

Infosys, Inc. Downtown Roanoke, Inc.

Note: Employment for restaurants in 2014 was estimated based on 2013 VEC data:12.5 people per location.

Economic growth within the restaurant industry is more volatile than the hotel industry. Data below shows the growth of restaurants in the Cities of Lynchburg, Richmond and Roanoke for comparison.

Restaurant Industry Growth by City

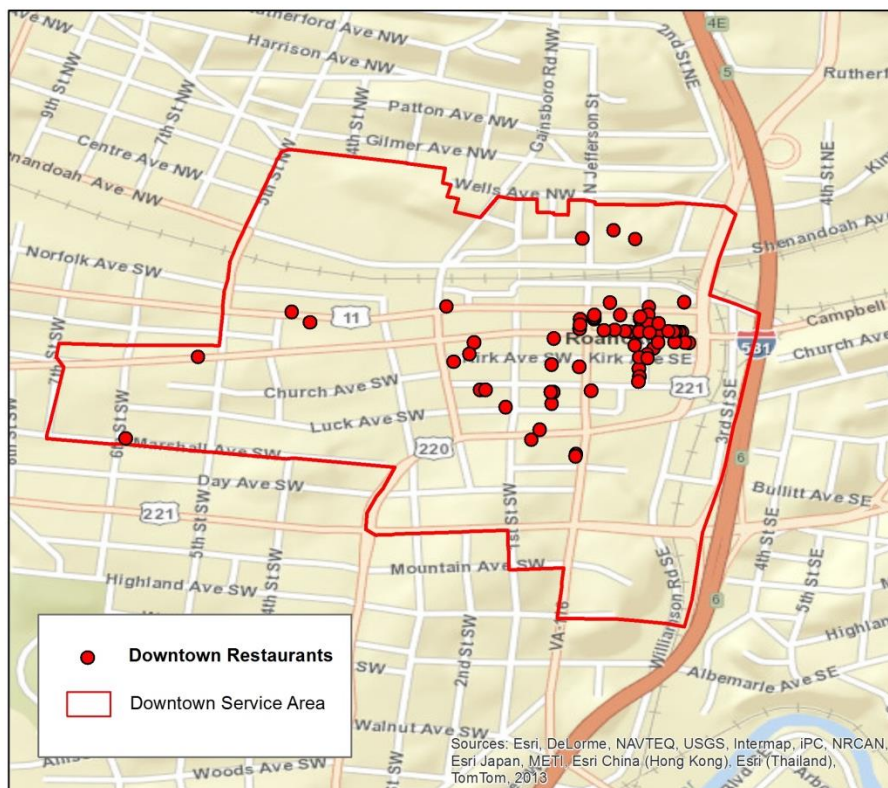
| City of Roanoke | 1992 | 1997 | 2002 | 2007 | %Change |
|---------------------|----------------|----------------|----------------|----------------|---------|
| Food Establishments | 241 | 296 | 258 | 268 | 11% |
| Receipts | \$ 110,375,000 | \$ 155,577,000 | \$ 163,963,000 | \$ 206,674,000 | 87% |

| City of Lynchburg | 1992 | 1997 | 2002 | 2007 | %Change |
|---------------------|---------------|---------------|----------------|----------------|---------|
| Food Establishments | 151 | 163 | 159 | 215 | 42% |
| Receipts | \$ 72,815,000 | \$ 92,649,000 | \$ 113,963,000 | \$ 164,991,000 | 127% |

| City of Richmond | 1992 | 1997 | 2002 | 2007 | %Change |
|---------------------|----------------|----------------|----------------|----------------|---------|
| Food Establishments | 564 | 515 | 562 | 506 | -10% |
| Receipts | \$ 229,303,000 | \$ 229,955,000 | \$ 334,579,000 | \$ 334,579,000 | 46% |

Source: US Economic Census 1992-2007

Restaurants in Downtown-2014



Total restaurant employment in downtown Roanoke has increased by an estimated 436 people which has contributed an additional \$450 million to the local economy over the past 22 years. Taken as a whole, the 73 restaurants downtown employ about 900 people and contribute over \$83 million annually to the regional economy. This growth in restaurants and employment can be attributed to multiple factors.

Downtown Restaurants 2014 Impact Summary

| Impact Type | Employment | Labor Income | Total Value Added | Output |
|-----------------|------------|---------------|-------------------|---------------|
| Direct Effect | 900 | \$ 18,237,584 | \$ 27,291,846 | \$ 53,216,204 |
| Indirect Effect | 98 | \$ 4,298,021 | \$ 8,138,649 | \$ 14,133,845 |
| Induced Effect | 122 | \$ 4,953,640 | \$ 9,693,393 | \$ 15,904,650 |
| Total Effect | 1,120 | \$ 27,489,245 | \$ 45,123,887 | \$ 83,254,698 |

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Real Estate Taxation and Valuation

There are approximately 750 parcels in the downtown area. In 2001, the real estate valuation of these parcels was \$411 million. By 2014, the valuation had reached \$906 million. A portion of this real estate is tax exempt, and data prior to 2001 was unavailable. Over the 13 year period, the increase in real estate valuation has contributed an additional \$24 million to the tax base of the City of Roanoke due to investment and growth. In 2014, the real estate taxes collected from downtown were over \$7 million. The downtown tax district requires 10 cents per \$100 of valuation to be provided to Downtown Roanoke Inc. This additional tax has generated over \$6 million during the past 19 years which has been reinvested in Downtown Roanoke Inc. services.

Housing Units

The number of housing units has increased dramatically in the downtown area over the past 20 years. In 1990, there were about 10 units and now there are estimated to be 980 units. Investments made into these properties are partially reflected in the building permit data discussed below. In 2010, there were over 1300 residents in downtown. Residents contribute to the vitality of downtown through the patronage of businesses and restaurants. The actual contribution of the residents cannot be modeled with a detailed spending profile.

Housing Units- Downtown Roanoke

| | 1990 | 2015 |
|---------------|------|------|
| Housing Units | 10 | 980 |

Downtown Roanoke, Inc.

Building Permits and Investment

The City of Roanoke assisted in the compilation of building permit data for 2001-2014. Data prior to 2001 was not available. There were a total of 410 permits for about 120 parcels in the downtown area. The total valuation of these permits was \$95.7 million. Unfortunately, building permit data alone cannot be used to model investment because permit valuation typically underestimates the true value of the investment. For example, the Taubman Museum of Art cost about \$66 million to build, but the permitted value was \$9.9 million.



Downtown Roanoke Inc. compiled data on downtown investments from 1995-2000, likely based on building permit data. The total value of investment was \$42.1 million for this period. Combined building permit data from 1995-2014 indicate a total investment of \$137.8 million. The IMPLAN model estimates a total impact of \$229 million if this level of investment is used and not adjusted for inflation.

Downtown Roanoke Inc. Annual Report Data

| Downtown Roanoke Annual Reports | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---------------------------------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Business Openings | 26 | 33 | 44 | 37 | 39 | 45 |
| New Employees | 73 | | | 96 | 547 | 196 |
| Building Permits Issued | | 90 | 77 | 71 | 85 | 79 |
| Visitors to Visitor Center | 46,509 | 41,726 | 39,053 | 31,080 | 30,302 | 25,576 |
| Average number of Farmers on Market | 50 | 52 | | | | |
| Sales of Real Estate | \$ 7,764,800 | \$ 2,112,600 | \$ 4,483,100 | \$ 10,834,600 | \$ 24,115,559 | \$ 5,640,400 |
| New Private Sector Capital Investment | \$ 4,104,371 | \$ 3,662,743 | \$ 2,312,283 | \$ 2,591,981 | \$ 4,631,336 | \$ 18,493,382 |
| New Public Sector Capital Investment | \$ 789,916 | \$ 4,638,600 | \$ 942,357 | | | |
| Attendance at Downtown Festivals | 520,000 | 560,000 | 620,000 | 630,000 | 600,000 | 615,000 |
| Business Closings | 12 | 14 | 27 | 20 | 14 | 11 |
| Downtown Employees Lost | | | | 61 | 70 | 69 |

Source: Downtown Roanoke Inc. (Data/reports not available after 2000)

Using actual investment data from news reports and other sources, a much higher level of investment can be identified. In June 2014, The Roanoker Magazine had a feature story on downtown Roanoke that documented much of this investment. Other data was obtained from Roanoke Times news stories and City of Roanoke building permit records.

Large Investments in Downtown Roanoke 1995-2014

| Project | Year | Amount |
|---|-------|----------------|
| Roanoke Higher Education Center | 1999 | \$ 19,000,000 |
| Hotel Roanoke and Conference Center | 1995 | \$ 50,000,000 |
| Campbell Avenue Parking Deck | 2007 | \$ 7,000,000 |
| YMCA | 2003 | \$ 5,300,000 |
| Expansion of YMCA | 2010 | \$ 1,500,000 |
| Roanoke Times Press | 2002 | \$ 2,300,000 |
| Downtown Pedestrian Bridge | 1995 | \$ 3,500,000 |
| Patrick Henry Renovation | 2010 | \$ 14,000,000 |
| Police Department Expansion | 2004 | \$ 2,250,000 |
| Cotton Mill Renovation | 2008 | \$ 9,000,000 |
| Ponce de Leon Renovation | 2012 | \$ 7,900,000 |
| Shenandoah Building | 2012 | \$ 7,000,000 |
| Hancock Building | 2007 | \$ 7,200,000 |
| Interior Renovations HSMM | 2005 | \$ 1,300,000 |
| 8 Jefferson Place | 2001 | \$ 6,100,000 |
| Fulton Motor Lofts | 2007 | \$ 2,300,000 |
| Colonial Arms | 2005 | \$ 3,300,000 |
| Center in the Square Renovation | 2013 | \$ 30,000,000 |
| Taubman Museum | 2008 | \$ 66,000,000 |
| Roanoke City Market Building | 2011 | \$ 7,900,000 |
| Poff Federal Building | 2012 | \$ 80,000,000 |
| Roanoke Library | 2014 | \$ 3,270,000 |
| Elmwood Park | 2014 | \$ 4,000,000 |
| Visitor Center and Link Museum | 2003 | \$ 10,000,000 |
| <i>Sources: Roanoker Magazine, Roanoke Times, City of Roanoke</i> | Total | \$ 350,120,000 |

The 24 largest renovation and construction investments in downtown Roanoke have totaled \$350 million (not adjusted for inflation) which yields a total impact of nearly \$582 million. Combined with smaller investments, it is estimated that the entire impact of revitalization in the downtown area likely exceeded \$750 million over the past two decades.

Impact of Major Downtown Investments 1995-2014

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|----------------|----------------|----------------|
| Direct Effect | 3,149 | \$ 204,062,051 | \$ 215,418,740 | \$ 350,120,001 |
| Indirect Effect | 534 | \$ 25,330,797 | \$ 39,341,705 | \$ 69,974,696 |
| Induced Effect | 1,242 | \$ 50,285,508 | \$ 98,395,165 | \$ 161,439,133 |
| Total Effect | 4,925 | \$ 279,678,356 | \$ 353,155,610 | \$ 581,533,830 |

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Downtown Roanoke Summary

The downtown has undergone revitalization through modest growth and investment, and the Hotel Roanoke and Conference Center has been a visible indicator and component of this growth over the past 20 years.

- The 25 largest renovation and construction investments in downtown Roanoke have totaled \$350 million of direct investment which yields a total impact of nearly \$582 million. Combined with smaller investments, it is estimated that the entire impact of revitalization in the downtown area has likely exceeded \$750 million over the past two decades.
- Total restaurant employment in downtown Roanoke has increased by an estimated 436 people which has contributed an additional \$450 million to the local economy over the past 22 years. Taken as a whole, the 73 restaurants downtown employ about 900 people and contribute over \$83 million annually to the regional economy.
- Residential units in the downtown area have increased from nearly zero in 1995 to almost 1000 by 2014. In 2010, over 1300 people were living downtown.
- From 2001-2014 an increase in real estate valuation downtown has contributed an additional \$24 million to the tax base of the City of Roanoke due to investment and growth. Over \$6 million in downtown service district taxes have been distributed for Downtown Roanoke, Inc services over the past 19 years.