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& deed*

**The Potential Impact of the Chattanooga  
Regional  
Growth Initiative on the Urban Poor**

by

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## **Abstract**

The Chattanooga Regional Growth Initiative (CRGI) attempts to use strategic clusters to foster competition, innovation, and economic growth. The following paper examines the impact that such growth would have on job opportunities for the urban poor. Using a state-of-the-art, computerized economic model, we measure the impacts of the CRGI on 819 occupations distributed across 528 economic sectors. We find that growth resulting from the CRGI will create a large number of jobs for unskilled and low-skilled workers at wages that are above the poverty level. Efforts to prepare the poor for such work should focus on "soft skills" training such as writing a resume, interviewing for a job, communicating effectively, being timely, exhibiting attitudes of respect, having a good work ethic, etc. Such training may best be provided by grassroots, community organizations that can provide low-income persons with supportive relationships to address the behavioral, emotional, and social dimensions of work readiness.

Almost eighteen months ago, the Chattanooga Area Chamber of Commerce launched the Chattanooga Regional Growth Initiative (CRGI)--an innovative economic development strategy for Chattanooga and the neighboring counties. The approach that was set in motion was to mimic what has become known as the "Chattanooga process," the participatory process used in Vision 2000 and ReVision 2000 that has led to the downtown renaissance. Michael Porter, Professor at the Harvard Business School, was retained to oversee the construction of the CRGI and to lend credibility to the effort.

Simultaneously, the City of Chattanooga and Hamilton County purchased a 940-acre parcel located within the Volunteer Army Ammunitions Plant (VAAP) site near Ooltewah, TN. This purchase was viewed as part of the solution to Chattanooga's stagnant economic and population growth, as it provided ample land within the city for the construction of industrial and commercial property for the first time in decades. City and county officials have often cited the lack of available land and buildings as a major weakness for the city, and the absence of available industrial sites caused several large corporations to locate elsewhere.

As the community watched the launching of the CRGI and the purchase of the VAAP site, many wondered how these economic development initiatives would impact the residents of Chattanooga's inner-city. Mayor Kinsey had placed great emphasis on urban neighborhoods, creating the Department of Neighborhood Services and dedicating financial resources to assist neighborhoods in their revitalization. Furthermore, there has been a rise in the prominence of grassroots organizations working to reclaim communities from crime and violence, to instill hope through educational and family programs, and to create wealth through economic development projects. Many have wondered how these inner-city efforts will be connected to and supported by the CRGI and the purchase of the VAAP site.

The present paper focuses on the ways that the CRGI--if successful--will impact employment opportunities in the inner-city and suggests ways to link the efforts of grassroots organizations to the CRGI. In a companion paper--*The Impacts of Alternative Uses of the Volunteer Army Ammunitions Plant Site on the Urban Poor*--we discuss similar issues for usage of the VAAP parcel (see Fikkert and Shideler 2001).

The CRGI leadership was aware of the need to connect with grassroots, revitalization efforts in more than just rhetoric. The CRGI leadership had been told that Chattanooga could not accept another economic development strategy that was grounded in trickle-down economics. All boats do not rise with the tide, and the CRGI leadership truly wanted the process to address the needs of people across all socio-economic strata. Hence, the CRGI leadership made impact on neighborhoods a priority. This position is summarized well in *CRGI: A Progress Report of the Chattanooga Regional Growth Initiative* which states:

But economic development is not truly successful if it leaves whole segments of the region behind, relying only on the higher-tier successes to raise the overall averages and create a false impression of broad success" (pg 75).

This emphasis was reiterated by Professor Porter during his second visit to Chattanooga, when he stated, “We’re at a good moment for even the inner city to prosper (Porter 2000).”

The most logical way to connect the inner city and the CRGI would be to create jobs which are "accessible" both in terms of location and skill requirements. Urban residents often do not have access to adequate transportation, so locating jobs near their places of residence is an important element of "accessibility." Of course, it will do little good to place jobs in close geographic proximity to the inner-city population if those jobs do not match the education, abilities, and experiences of that population. Unfortunately, achieving both dimensions of accessibility is never easy. The present paper does not address the geographic impacts of the CRGI but focuses on the extent to which the types of jobs created by the CRGI match the skill levels of the urban population. However, it is worth noting that two of the clusters of the CRGI are anchored in the inner city: hospitality and tourism, and medical devices and health services.

In addition to accessibility there is another concern: economic mobility, the process by which individuals increase their wealth and consequently move themselves from a lower to a higher economic class. In the case of the poor, the challenge to city leadership is to create accessible jobs that empower people to move out of poverty and into economic self-sufficiency.

In this paper, we evaluate the potential of the CRGI to address the following issues:

1. Will the CRGI create jobs which match the skills of the urban residents of Chattanooga, with a particular focus on the urban poor?
2. Do these jobs have the potential to empower the poor towards upward economic mobility?
3. What is the best way to link the CRGI to grassroots, community development efforts?

This paper does not address whether the CRGI will actually spur economic growth. Rather, it assumes that it will and then examines the impact of that growth on the urban poor.

### ***Methodology***<sup>1</sup>

Estimating the impacts of CRGI on the growth of various types of jobs is an extremely complex undertaking. Consider for example the impacts of growth in the Hospitality and Tourism cluster. When this cluster grows, there will be an increase in employment in firms in this cluster, e.g. restaurants, hotels, and tourist attractions. This initial increase in employment in the firms in this cluster is referred to as the "direct effect" of the CRGI. But as these firms grow, they will increase their demand for the products of linked firms. For example, as hotels experience an increase in their occupancy rates, they will necessarily increase their need for linens, cleaning supplies, television repair services, etc. Hence, these linked industries, whose outputs are used by the hotel industry, will also experience growth in their output and employment. To the extent that these linked industries are located in Chattanooga, there will be additional growth in employment in Chattanooga's industries outside of the Hospitality and Tourism cluster. This growth in linked industries is referred to as the "indirect effect" on employment of the CRGI. Finally, the increased employment in the Hospitality and Tourism cluster and in the industries linked to this cluster will result in more people with more jobs in the Chattanooga region. These people are likely to spend a large percentage of their salaries on locally produced goods and

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<sup>1</sup> See Shideler and Fikkert 2001 for a detailed description of the methodology employed in this paper.

services, thereby generating even more demand for Chattanooga's firms. This increase in demand will result in firms having to hire even more workers, the resulting increase in employment being called the "induced effect" of the CRGI.

Clearly, trying to measure the number of jobs created by the direct, indirect, and induced effects is a mammoth undertaking, requiring detailed knowledge of inter-firm linkages, the local structure of the economy, and consumer spending patterns. Furthermore, we want to know not only the numbers of jobs created but also the nature of those jobs in terms of skill requirements and wages. The informational and computational requirements are mind-boggling.

Fortunately, economists have developed a methodology--input-output analysis--to handle this complexity. Input-output analysis uses data on economic linkages between industries in the U.S. economy, data on the local industrial composition, and data on expenditure patterns of U.S. consumers of various economic levels to estimate the direct, indirect, and induced effects on various occupations. When combined with additional data on the skill requirements of those occupations, it is possible to analyze the impacts of CRGI on jobs which are appropriate for the poor.

For this paper, we used IMPLAN software to perform the input-output analysis on 819 occupational categories distributed across 528 economic sectors in Chattanooga. IMPLAN was originally created for the U.S. Department of Agriculture Forest Service as a planning tool for its Land Management Planning Unit. IMPLAN has been widely used by the academic and economic development communities to estimate structural changes to local economies. The software utilizes local employment and output data available at the county or zip code level and national production functions to simulate a locale's economy. The database is built from Bureau of Labor Statistics' Covered Wages and Employment Survey (ES-202 data) and output data from the Bureau of Economic Analysis. By inputting an employment or output change, the software is able to estimate the impact a structural change will have in the local economy for 528 economic sectors, including government and non-profit sectors.<sup>2</sup> IMPLAN generates estimates of employment, output, labor income and taxes generated from the economic shock. IMPLAN also provides a staffing patterns matrix to translate the industrial employment impacts into occupational employment estimates for 819 different occupations.

Once IMPLAN has estimated the number of jobs created in each occupation, it is important to gain some understanding of the nature of those jobs in terms of their wages and skill and educational requirements. Towards that end, we utilized the O\*NET Career Exploration Program of the National O\*NET Consortium, which stratifies occupations into five categories by their Specific Vocational Preparation (SVP) value. We assigned these "job zone" values to the 819 occupations in our data set.<sup>3</sup> The job zone categories provide the database user with an idea of how much training, education and experience is needed to enter any given occupation. The job zones are assigned a number between 1 and 5, where a higher number corresponds to higher experience, education, and/or training requirements for occupations in that job zone. For

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<sup>2</sup> Of the 528 institutions in IMPLAN, ten of these sectors were excluded from our analysis due to their inappropriateness to our study.

<sup>3</sup> Since an SVP cannot be calculated for aggregated occupation codes (i.e., our "other" categories), we assigned the most common job zone category within the occupational group as the job zone for the aggregated occupation code.

example, Job Zone 1 contains all the occupations for which no previous experience, high school education or training is required. Job Zone 5, on the other hand, contains those occupations that require extensive skills and education, with a bachelor's degree being the minimum education requirement. By sorting the final occupational projections by job zone, we were able to aggregate the distribution of jobs across the job zones and compute the average wage for each job zone, in addition to identifying the estimated number of jobs and average wages in each occupation within each job zone. Table 1 presents descriptions of the five job zones.

Table 1: Job Zone Descriptions

Job Zone	Description	SVP Range	Examples
1	<ul style="list-style-type: none"> <li>No previous work-related skill, knowledge, or experience is needed for these occupations.</li> <li>One may need a high school diploma or GED.</li> <li>Training will last as few as a couple of days to a couple of months.</li> </ul>	< 4.0	<ul style="list-style-type: none"> <li>Bus drivers</li> <li>General office clerks</li> <li>Home health aides</li> <li>Waiters/Waitresses</li> </ul>
2	<ul style="list-style-type: none"> <li>Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed.</li> <li>A high school diploma or GED is required, and in some cases additional vocational training or course work may be necessary.</li> <li>Training will last between a few months and one year.</li> </ul>	4.0 – 6.0	<ul style="list-style-type: none"> <li>Drywall installers</li> <li>Flight attendants</li> <li>Salespersons</li> <li>Bank tellers</li> </ul>
3	<ul style="list-style-type: none"> <li>Previous work-related skill, knowledge, or experience is required for these occupations.</li> <li>Most occupations will require vocational training, on-the-job experience, and/or an associate's degree. Some may require a bachelor's degree.</li> <li>Training requires one to two years involving on-the-job/informal training.</li> </ul>	6.0 – 7.0	<ul style="list-style-type: none"> <li>Dental assistants</li> <li>Fish and game wardens</li> <li>Personnel recruiters</li> <li>Recreation workers</li> </ul>
4	<ul style="list-style-type: none"> <li>Minimum of two to four years of work-related skill, knowledge or experience is required.</li> <li>Most occupations will require a four-year bachelor's degree.</li> <li>Training involves several years of on-the-job and vocational training.</li> </ul>	7.0 – 8.0	<ul style="list-style-type: none"> <li>Accountants</li> <li>Chefs</li> <li>Historians</li> <li>Pharmacists</li> </ul>
5	<ul style="list-style-type: none"> <li>Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.</li> <li>A bachelor's degree is the minimum requirement for these occupations. Many require a graduate degree.</li> </ul>	> 8.0	<ul style="list-style-type: none"> <li>Lawyers</li> <li>Doctors</li> <li>Scientists</li> </ul>

	<ul style="list-style-type: none"> <li>It is assumed that the individual is already trained for the position.</li> </ul>		
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To estimate the employment impact, we assume that the clusters will grow faster than they have previously because of increases in productivity--a primary tenet of Professor Porter's theories and the chief goal of the CRGI. Using data for the period between 1988 and 1997,<sup>4</sup> Professor Porter's staff estimated the annualized growth in employment for each of the four initial clusters: Medical Devices and Health Services, Logistics and Transportation, Hospitality and Tourism, and Confectionery and Baked Goods. For our scenarios, we assumed that each cluster grew at a rate of 150% of its previous growth. We multiplied this higher growth rate by the level of output in 1997 of each sector of the cluster to compute the direct effect on employment of one year of the cluster's growth. Table 2 summarizes these data.

Table 2: Growth Estimates for the Four Initial Clusters

Cluster Name <sup>5</sup>	1997 Output (in millions)	Estimated Growth Rate	Projected Increase in Output (in millions of dollars)	Direct Employment Shock (nos. of jobs)
Medical Devices and Health Services	\$2,449.44	13.5%	\$330.67	3,055
Logistics and Transportation	\$1,391.02	7.9%	\$109.89	961
Hospitality and Tourism	\$522.41	6.0%	\$31.34	454
Confectionery and Baked Goods	\$1,127.78	3.2%	\$35.53	157

The projected increase in output (column 4 of Table 2) is used to estimate the direct, indirect, and induced effects of CRGI on Hamilton County's economy.<sup>6</sup>

Although input-output analysis is a powerful tool, there are two major drawbacks with using input-output analysis to generate employment projections. The first is that one cannot predict how long it will take the direct, indirect, and induced effects to be fully realized in the local economy. Typically, economic developers would say that it takes a *reasonable* amount of time -- not more than 10 years--but it is hard to be precise about how long it will take the economy to fully adjust to the initial event. Second, while input-output analysis generates specific employment and output figures, these figures are based on data which is imperfect; hence, the figures should be viewed as estimates of impact magnitude and not as precise measures.

### ***Results and Implications***

As previously mentioned in Table 2, we assumed that CRGI would create more productive and prosperous clusters--as Porter's competitive advantage theory predicts. Table 3 shows the total employment impact, as estimated in IMPLAN, of the increased output listed in Table 2.<sup>7</sup>

<sup>4</sup> 1997 is the most recent year for which data is available. Because there have not been significant structural changes in the Chattanooga economy since then, the results are nearly identical to what would have been obtained if more recent data were available.

<sup>5</sup> The cluster definitions were provided by Michael E. Porter, Harvard Business School, as part of his involvement in creating the Chattanooga Regional Growth Initiative. See Appendix 2 for the specific definitions of these clusters. Cluster definitions include only those industries that export a majority of their output outside of the region.

<sup>6</sup> Even though the CRGI defined its region as the eight counties of Bradley, TN, Hamilton, TN, Marion, TN, Rhea, TN, Catoosa, GA, Dade, GA, Walker, GA and Whitfield, GA, our study only focuses on the impact of the CRGI on Hamilton County because Hamilton County contains the urban core of the region, namely Chattanooga, TN.

Table 3: Total Employment Impacts

Cluster Name	Assumed Estimated Growth Rate from Table 1	Total Employment Creation (nos. of jobs)	Employment Creation from Direct Effects	Employment Creation from Indirect and Induced Effects
Medical Devices and Health Services	13.5%	6,219	3,055	3,164
Logistics and Transportation	7.9%	2,232	961	1,271
Hospitality and Tourism	6.0%	779	454	325
Confectionery and Baked Goods	3.15%	470	157	313

If Chattanooga leaders were only concerned with job creation, Medical Devices and Health Services would be the clear choice of clusters on which to focus their economic development efforts, and Logistics and Transportation would be a great second choice because of the number of jobs these clusters will create. Assuming the Medical Devices and Health Services cluster grows 13.5% annually, the estimated, total job creation resulting from one year of such growth will be 6,219 jobs. Likewise, if the Logistics and Transportation cluster increases output by 7.9% annually, a total of 2,232 new jobs will result from one year of this growth. Note that in all four clusters, the number of jobs created due to the indirect and induced effects are a large percentage of the total number of jobs created. Without the input-output methodology, one would be forced to examine only the direct effects and would miss a considerable amount of the story.

The Chattanooga Area Chamber of Commerce, administrator of the Initiative, has chosen to pursue all of the clusters rather than select just one, so one would expect each of these clusters to grow faster simultaneously than in previous years. However, we conducted the simulations in Table 3 as though each cluster were growing on its own with the other clusters not growing. For example, when estimating the impacts of growth in the Medical Devices and Health Services cluster, we assumed the other three clusters were not growing. In reality, if all of clusters grow simultaneously, there will be synergies and linkages that will enhance their combined growth beyond the estimates in Table 3. As a result, the results in Table 3 cannot simply be summed to arrive at a total impact if the clusters grow simultaneously. This is clearly a problem in trying to evaluate the overall impact of CRGI, but the good news is that the sum of the employment estimates in Table 3 will underestimate the actual employment generated from all four clusters growing.

The employment projections in Table 3 were then translated into occupation projections by multiplying the total employment impact by industry from IMPLAN by the national staffing patterns matrix to yield occupational employment projections and estimated average wages. These occupation projections were then stratified by their job zone values. Table 4 presents the stratified occupation results for each cluster.

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<sup>7</sup> Because IMPLAN aggregates some SIC codes to form its industrial sectors, our clusters are not exactly congruent to Porter's cluster definitions. For example, Porter defines the Medical Devices and Health Services cluster to include SIC 5047: Medical and Hospital Equipment. However, IMPLAN aggregates all Wholesale Trade SIC codes into one sector, Sector 447. Because of the distortion created by this aggregation in IMPLAN, we chose to exclude Wholesale Trade from our Medical Devices and Health Services cluster.

Table 4: Stratified Occupation Projections by Cluster

Cluster	Job Zone	No. of Jobs (% of total jobs created)	Hourly Wage Range	Average Hourly Wage
Medical Devices and Health Services	Total	6,219	\$5.86 – \$51.96	\$14.63
	1	1,650 (27%)	\$5.86 – \$19.40	\$9.78
	2	1,382 (22%)	\$6.10 – \$26.54	\$12.24
	3	1,451 (23%)	\$6.70 – \$27.80	\$14.12
	4	1,325 (21%)	\$8.01 – \$40.90	\$18.82
	5	409 (7%)	\$10.19 – \$51.96	\$24.15
Logistics and Transportation	Total	2,232	\$5.87 – \$50.75	\$14.65
	1	1,049 (47%)	\$5.87 – \$19.40	\$9.91
	2	464 (21%)	\$6.10 – \$26.60	\$12.26
	3	356 (16%)	\$6.72 – \$28.16	\$14.09
	4	259 (12%)	\$8.27 – \$40.86	\$18.76
	5	103 (5%)	\$10.19 – \$50.75	\$24.07
Hospitality and Tourism	Total	779	\$6.11 – \$50.37	\$14.67
	1	309 (40%)	\$6.11 – \$18.21	\$9.69
	2	170 (22%)	\$6.36 – \$26.69	\$12.29
	3	145 (19%)	\$7.31 – \$27.79	\$14.13
	4	112 (14%)	\$8.32 – \$40.86	\$18.84
	5	42 (5%)	\$10.19 – \$50.37	\$23.97
Confectionery and Baked Goods	Total	470	\$5.88 – \$50.71	\$14.73
	1	204 (43%)	\$5.88 – \$18.25	\$9.92
	2	99 (21%)	\$6.10 – \$26.70	\$12.34
	3	92 (20%)	\$6.74 – \$27.94	\$14.21
	4	55 (12%)	\$8.23 – \$40.86	\$18.73
	5	20 (4%)	\$10.19 – \$50.71	\$24.09

From Table 4, it is evident that employment opportunities accessible to unskilled workers are abundant. In three of the four clusters, job creation in Job Zone 1, the unskilled category, accounts for forty to fifty percent of all jobs to be created. Even in Medical Devices and Health Services, Job Zone 1 occupations comprise one-quarter of all jobs to be created. Furthermore, Job Zone 2 occupations, which require a high school education but no experience, account for roughly a fifth of all jobs created in each cluster. From an equity perspective, the employment opportunities created by growth in these four clusters heavily favor occupations that require no experience, little education and no training. In all but Medical Devices and Health Services, those occupations requiring more than a high school education and/or previous experience (Job Zone 3 or higher) represent only about one-third of the total jobs created by the cluster's growth. These occupations comprise about half of the jobs created in Medical Devices and Health

Services. All of this suggests that ample opportunities are created for existing unskilled labor, but it also suggests that some opportunities will exist for more educated individuals<sup>8</sup>.

Even though the number of new jobs created by the four estimated scenarios tend to be skewed toward less-skilled workers, the wages paid in these clusters are relatively high. On average, all clusters pay over 2.5 times the minimum wage and, when hourly wages are annualized,<sup>9</sup> pay is well above the poverty line with average annual pay ranging from \$29,850 to \$30,050.<sup>10, 11</sup>

Additionally, the data in Table 4 are at least suggestive<sup>12</sup> of the types of vocational training/educational programs that labor market intermediaries--e.g. workforce development organizations, jobs readiness trainers, and welfare-to-work programs--should design. Given the high number of new jobs which require low levels of education and no formal training (Job Zones 1 and 2), labor market intermediaries should consider job readiness programs that focus on "soft skills" training such as writing a resume, interviewing for a job, communicating effectively, being timely, exhibiting attitudes of respect, having a good work ethic, etc. One of the key ways to link CRGI to grassroots, community development efforts is for the city to encourage and support organizations that provide the "soft skills" training required for low-income persons to access the jobs created by the CRGI.

These results provide good news for local Temporary Assistance for Needy Families (TANF) programs. Because TANF recipients must seek employment first before receiving technical training and/or education vouchers, it is imperative that there be a large number of jobs available that do not have substantial educational requirements. Because CRGI will generate many jobs that do not require technical training or higher education, there is reason to hope that TANF recipients will be able to obtain work and then qualify for vouchers to receive additional education, which should eventually lead to their earning higher wages.

For occupations requiring more specific skills training, the labor market intermediary would need to know the exact occupations for which to target their programs. Table 5 presents the list of occupations, by job zone, in which 50 or more jobs would be created due to growth in the Medical Devices and Health Services cluster. (A complete list of all jobs created by each cluster for all 819 occupations is available from the authors upon request.) For example, 195 general office clerk positions will be created by this scenario with each paying on average \$9.58 per

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<sup>8</sup> In addition to a large, poor, inner-city population, the Chattanooga region has difficulty retaining skilled and educated labor due to the perceptions of low wages and lack of opportunities for these workers.

<sup>9</sup> Multiplying the hourly wage by 2,040 hours (40 hrs/wk times 52 weeks) annualizes hourly wages. This is the methodology suggested by the US Department of Labor, Bureau of Labor Statistics.

<sup>10</sup> For our purposes, the poverty line was defined as the US Department of Health and Human Services Poverty Guidelines, which are established every 10 years based upon the decennial census and adjusted annually for inflation. The Poverty Guidelines are the qualifying income levels for many federal and state welfare programs. In 2000, the Poverty Guideline for a family of four was \$17,050.

<sup>11</sup> The data used to compute these wages for each occupation are from national averages. Hence, they are accurate reflections of Chattanooga's situation to the extent that Chattanooga's labor markets follow national trends. Clearly, this is more likely to be true in the long-run than in the short-run.

<sup>12</sup> The results presented in Table 5 are only suggestive since other factors affect the demand for workforce development activities, such as the extent to which the skills already exist in the workforce, the state of the labor market/local economy, and the present existence of appropriate training programs.

hour. Likewise, 162 top executive/general manager positions will be created each paying roughly \$64,500 annually (\$31.62 per hour times 2,040 hours per year).

Local technical or community colleges may want to focus on providing training for the rapidly growing occupations in Job Zone 3, which require some post-secondary training. Specifically, using Table 5 we see that local technical schools may want to consider providing training in licensed practical nursing, phlebotomy, or medical records management. In fact, Chattanooga State Technical Community College offers several associate degree and certificate programs in Applied Health to address these skill needs. Furthermore, organizational management skills are common among Job Zone 4 and 5 occupations, which suggests that local colleges and universities may want to increase the resources they allocate to providing courses in these areas.

Table 5: Occupation Projections from the Medical Devices and Health Services

Occupation Title	No. of Jobs	Average Hourly Wage
<b>Job Zone 1</b>		
General Office Clerks	195	\$9.58
Receptionists and Information Clerks	150	\$9.26
Cashiers	93	\$6.98
Home Health Aides	90	\$8.65
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	70	\$8.01
Maids and Housekeeping Cleaners	62	\$7.35
Waiters and Waitresses	54	\$5.86
All Other Clerical and Administrative Support Workers	54	\$11.49
<b>Job Zone 2</b>		
Secretaries, Except Legal and Medical	148	\$11.81
Salespersons, Retail	123	\$8.34
Bookkeeping, Accounting, and Auditing Clerks	98	\$11.48
Nursing Aides, Orderlies, and Attendants	83	\$8.29
Insurance Policy Processing Clerks	72	\$11.92
Insurance Claims Clerks	70	\$12.15
Adjustment Clerks	52	\$11.67
<b>Job Zone 3</b>		
First-Line Supervisors and Managers/Supervisors - Clerical and Administrative Support Workers	130	\$16.45
Sales Agents and Placers, Insurance	106	\$19.25
Insurance adjusters, Examiners, and Investigators	93	\$19.24
Licensed Practical Nurses	84	\$12.81
First-Line Supervisors and Managers/Supervisors - Sales and Related Workers	70	\$17.72
Medical Assistants	62	\$10.06
Dental Assistants	60	\$10.86
All Other Health Professionals, Paraprofessionals, and Technicians	53	\$14.36
Systems Analysts, Electronic Data Processing	50	\$24.16
<b>Job Zone 4</b>		
Registered Nurses	310	\$19.94
All Other Managers and Administrators	66	\$26.27
Accountants and Auditors	60	\$19.35
All Other Management Support Workers	52	\$18.72
<b>Job Zone 5</b>		
General Managers and Top Executives	162	\$31.62

Physicians and Surgeons	103	\$51.96
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To identify further the specific characteristics of an occupation, one would consult the O\*NET 3.0 database, which is available on-line at [www.onetcenter.org](http://www.onetcenter.org). This exhaustive database provides the intermediary with information on the skills, minimum education level and/or training, and experience requirements as well as examples of tasks and other characteristics associated with the occupation. For example, the three most common tasks of general office clerks are documenting/recording information, processing information, and communicating with individuals outside the organization. The most important skills to an office clerk include clerical skills, customer and personal service and mastery of the English language. A training program targeting this particular occupation would focus their training on developing competency in these skills and tasks.

### ***Conclusion***

Overall, it appears that the Chattanooga Regional Growth Initiative will succeed in creating job opportunities that are accessible to all residents of the community. Most of the jobs created require little experience, education/training, or skill (i.e., they are Job Zone 1 and 2 occupations) and yet are at a livable wage above the poverty line. In addition, ample jobs will be created for graduates of the various higher education institutions in the community, the overall result being that the average wage of the jobs created is more than a dollar per hour higher than the regional average wage of \$13.48 per hour.<sup>13</sup> Thus, the CRGI has the potential to create not just jobs but jobs that offer families economic independence and stability and the opportunity to raise the standard of living for the region.

One should not conclude from this study that the CRGI will automatically solve the economic problems of inner-city residents. Raising demand for unskilled labor is necessary but not sufficient to empower inner-city residents to obtain stable employment. In fact, without additional interventions, significant barriers to stable employment are likely to persist. As mentioned earlier, depending on where these new jobs are located geographically, inner-city residents may face prohibitive transportation barriers in accessing these jobs. Furthermore, many low-income residents need "soft-skills," job-readiness training such as writing a resume, interviewing for a job, communicating effectively, being timely, exhibiting attitudes of respect, having a good work ethic, etc. Unless these transportation and job-preparedness issues are addressed, it is likely that CRGI will bypass the poor. Although transportation issues can be addressed by the public sector, the behavioral, emotional, and social dimensions of preparing people for work are best addressed by grassroots, community development organizations that can provide low-income persons with supportive relationships that the public sector simply cannot offer. There is increasing evidence that such support is often strongest when provided by faith-based, charitable organizations.

The complex nature of poverty requires a multifaceted approach in which the government, business, and non-profit sectors work together in concert, each respecting the legitimacy and

<sup>13</sup> Regional average hourly wages for Chattanooga were provided by the Chattanooga Area Chamber of Commerce, and they are available on-line at:

<http://www.chattanooga-chamber.com/economicdev/communitydata/workforce2.htm#market>

necessity of the other sectors. The CRGI has always tried to bring representatives of the government and business community to the same table. If the CRGI leadership is serious about impacting the inner-city poor, it needs to provide seats at the table for the non-profit sector as well.

### ***Bibliography***

*CRGI: A Progress Report of the Chattanooga Regional Growth Initiative*, 2000. Produced and distributed by the Chattanooga Area Chamber of Commerce. Contact Mary Clarke Guenther, Director of Marketing & Communications at the Chamber for a copy.

Fikkert, Brian and David Shideler, 2001. *The Impacts of Alternative Uses of the Volunteer Army Ammunitions Plant Site on the Urban Poor*, Working Paper #102, Chalmers Center for Economic Development at Covenant College.

Minnesota IMPLAN Group, Inc. IMPLAN Professional version 2.0.1017. 1725 Tower Drive West, Suite 140, Stillwater, MN 55082, [www.implan.com](http://www.implan.com), 1997.

Occupational Information Network (O\*NET<sup>TM</sup>) 3.0. O\*NET is a registered trademark of the U.S. Department of Labor, Employment and Training Administration.  
<http://www.onetcenter.org>

Porter, Michael, 2000. Speech delivered at Chattanooga Trade Center, July 12, 2000.

Shideler, David and Brian Fikkert, 2001. *Creating Occupation Projections Using Input-Output Analysis*, Working Paper #100, Chalmers Center for Economic Development at Covenant College.

Theodore, Nikolas and Virginia L. Carlson, 1998. "Targeting Job Opportunities: Developing Measures of Local Employment." *Economic Development Quarterly*, 12(2): 137-149.

Walton, Judy, 2000. "City, County Eager for VAAP Handover." *Chattanooga Times-Free Press*, September 22, 2000.

