

Summary of an Evaluation of the Economic Impact of Contributions by Clinton Community College

Clinton Community College has maintained an illustrious history and contributions to residents of Clinton County, New York, and beyond. While we often take for granted the contributions an education institution makes to society, rarely are we afforded the opportunity to quantify its benefits to the local economy. This report summarizes these contributions Clinton Community College makes to the Clinton County economy.

Four dimensions of contributions are analyzed. First, I describe the contributions the payroll and spending by CCC makes in direct stimuli to the local economy, the indirect contributions through its payroll and expenditures, and the additional spending induced as broad-based income is raised and consumption is enabled. I use the IMPLAN input-output software and methodology to measure these economic impacts. IMPLAN is the standard method to measure the various contributions of corporations and institutions to the local economy by tracking patterns of expenditures as they flow through various sectors of the economy.

I then use the IMPLAN methodology to measure the benefits that accrue to the local region as a result of the contribution the college makes to the earning potential of students graduating from the college. I benchmark the increment to earning potential compared to what these student would be expected to earn without the contribution CCC makes.

I also describe contributions CCC faculty and staff make through community engagement that is enabled by the opportunity to find professional employment at CCC.

Finally, I note that the employment CCC enables results in the generation of tax revenue to local and state coffers. These contributions offset the subsidies offered public education institutions.

Contributions to the Local Economy Through CCC Spending

The college employs 77 fulltime-equivalent staff and generates payroll spending of \$8,614,844 annually in 2023/4. In addition, there is total spending of \$1,891,922 in educational support, including operation of the plant and equipment. This spending generates 4 additional jobs for local suppliers, and induces an additional 40 jobs in the larger economy from the income it generates for employees and suppliers:

| Impact Summary - College Spending | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | | (thousands) |
|--|---------------------------------|---------------------------------|-------------------|-------------|
| ImpactType | Employment | Labor Income | Total Value Added | Output |
| Direct Effect | 77 | \$8,615 | \$9,954 | \$6,615 |
| Indirect Effect | 4 | \$183 | \$291 | \$484 |
| Induced Effect | 40 | \$2,208 | \$3,695 | \$5,297 |
| Total Effect | 121 | \$11,006 | \$13,939 | \$12,396 |

In total, 121 jobs are generated and \$11.006 million of payroll is supported in the local economy. When one also considers the various taxes paid and other income, the total value-added to the Clinton County economy is \$13.939 million annually.

These additional benefits accrue from approximately 68 academic jobs and the 12 jobs that are created in Clinton County physical plant and building services, but also include demand for food and drink establishments, medical offices, nursing facilities and hospitals, general governmental support, and retail and wholesale trade:

| Top Ten for Employment | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | | (thousands) |
|---|---------------------------------|---------------------------------|-------------------|-----------------------|
| Sector | Total Employment | Total Labor Income | Total Value Added | Total Regional Output |
| Employment and payroll only (state & local govt, education) | 68 | \$6,886 | \$7,799 | \$1,750 |
| Services to buildings and dwellings | 12 | \$1,970 | \$2,428 | \$4,943 |
| Food services and drinking places | 5 | \$120 | \$176 | \$289 |
| Offices of physicians, dentists, and other health practitioners | 3 | \$225 | \$261 | \$337 |
| Private hospitals | 3 | \$217 | \$227 | \$423 |
| Employment and payroll only (state & local govt, non-education) | 2 | \$231 | \$261 | \$59 |
| Retail Stores - Food and beverage | 2 | \$54 | \$83 | \$134 |
| Retail Stores - General merchandise | 2 | \$51 | \$75 | \$111 |
| Nursing and residential care facilities | 1 | \$66 | \$69 | \$107 |
| Wholesale trade businesses | 1 | \$57 | \$61 | \$67 |

These larger multiplier effects that are directly related to educational spending at CCC represent a multiplier effect of 1.57 arising from Clinton Community College operations.

Contributions that Arise as a Result of Education and Training Provided by CCC

Far more significant is in the value of the diplomas issued by the College. On a 5-year moving average basis, the college graduates the following number of students:

| category | graduates |
|------------------------|-----------|
| Nursing | 31.4 |
| Policing and Prisons | 6 |
| STEM-related | 36.4 |
| Business | 10 |
| Liberal Arts | 14.8 |
| Information Technology | 36.4 |
| Human Services | 22.2 |

These students pursue their studies at least in part because of the additional lifetime income they can generate over typical employment for those with only a high school diploma. If these graduates each add a similar increment to lifetime income each year, then the lifetime income of one graduating cohort then represents the value created by CCC degrees. In this analysis, I assume a working career of 45 years.

Of course, future years must be discounted compared to the present, according to the financial concept of time-value-of-money. If we discount future earnings at a rate of 6% annually, and we recognize that to obtain a two year degree also requires one to forego alternative employment for two years, we can calculate this increment to lifetime earnings.

We should further discount the fact that only a little more than half of the students educated at Clinton Community College remain in the county if we wish to measure the impact of CCC on the local economy. This difference then accrues to other counties elsewhere, but are not directly captured here. Note that

this is a conservative approach because our county also benefits from the training elsewhere of residents who move to Clinton County. Even if we do not consider such contributions, we still find a significant amount of income generated by graduates in their chosen fields:

| category | increment to lifetime income |
|------------------------|------------------------------|
| Nursing | \$765,262 |
| Policing and Prisons | \$199,695 |
| STEM-related | \$385,593 |
| Business | \$360,795 |
| Liberal Arts | \$367,701 |
| Information Technology | \$410,087 |
| Human Services | \$135,105 |

We can explore the effect of such income creation in the Clinton County economy:

| Impact Summary - Lifetime Income | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | (thousands) | |
|---|---------------------------------|---------------------------------|-----------------|-----------------|
| ImpactType | Employment | LaborIncome | TotalValueAdded | Output |
| Direct Effect | 400 | \$35,716 | \$34,193 | \$44,775 |
| Indirect Effect | 73 | \$3,699 | \$5,950 | \$9,399 |
| Induced Effect | 166 | \$8,718 | \$15,057 | \$22,497 |
| Total Effect | 638 | \$48,132 | \$55,200 | \$76,671 |

We find that the number of local jobs created that arise from graduates of the various CCC programs who choose to remain in Clinton County totals 638 jobs and \$48.132 million in annual payrolls. The top ten industries that benefit from CCC training are:

| Top Ten for Employment | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | (thousands) | |
|---|---------------------------------|---------------------------------|-------------------|-----------------------|
| Sector | Total Employment | Total Labor Income | Total Value Added | Total Regional Output |
| Private hospitals | 173 | \$14,614 | \$15,348 | \$28,578 |
| Management, scientific, and technical | 153 | \$10,451 | \$12,025 | \$16,081 |
| Computer systems design services | 134 | \$10,538 | \$8,583 | \$7,844 |
| Business support services | 65 | \$2,252 | \$3,055 | \$5,503 |
| Individual and family services | 59 | \$1,977 | \$2,207 | \$3,164 |
| * Employment and payroll only (state & local govt, education) | 43 | \$3,865 | \$4,377 | \$982 |
| Food services and drinking places | 32 | \$803 | \$1,182 | \$1,940 |
| Employment services | 18 | \$761 | \$820 | \$902 |
| * Employment and payroll only (state & local govt, non-education) | 15 | \$1,374 | \$1,556 | \$349 |
| Offices of physicians/health practitioners | 11 | \$985 | \$1,139 | \$1,471 |

Contributions Made by Community Engagement of CCC Staff and Faculty

The faculty and staff of the College are afforded an opportunity for viable employment in the county, and likewise add to the fabric of the community. The College has surveyed the rate of volunteerism. If the

survey is extrapolated to the entire employment base, it translates to 4,306 hours of community service arising from CCC's employment base. A recent study values volunteer hours at \$31.80. The additional impact to the community is equivalent to 6 jobs and \$209,000 of additional payroll across a number of sectors in the economy:

| Impact Summary - Community Service | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | | (thousands) |
|---|---------------------------------|---------------------------------|-----------------|-------------|
| ImpactType | Employment | LaborIncome | TotalValueAdded | Output |
| Direct Effect | 5 | \$139 | \$81 | \$287 |
| Indirect Effect | 0 | \$28 | \$52 | \$81 |
| Induced Effect | 1 | \$42 | \$70 | \$98 |
| Total Effect | 6 | \$209 | \$202 | \$466 |

| Top Ten for Employment | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | | (thousands) |
|---|---------------------------------|---------------------------------|-------------------|-----------------------|
| Sector | Total Employment | Total Labor Income | Total Value Added | Total Regional Output |
| Civic, social, professional organizations | 5 | \$139 | \$81 | \$289 |
| Food services and drinking places | 0 | \$3 | \$5 | \$8 |
| Monetary authorities and intermediation | 0 | \$6 | \$16 | \$21 |
| Employment services | 0 | \$2 | \$3 | \$3 |
| * Employment and payroll only (state & local govt, education) | 0 | \$5 | \$6 | \$1 |
| * Employment and payroll only (state & local govt, non-education) | 0 | \$5 | \$6 | \$1 |
| Real estate establishments | 0 | \$2 | \$10 | \$13 |
| Offices of physicians, dentists, and other health practitioners | 0 | \$4 | \$5 | \$6 |
| Private hospitals | 0 | \$4 | \$4 | \$8 |
| Wholesale trade businesses | 0 | \$3 | \$5 | \$8 |

Contributions to the Local and Regional Tax Base that Arise from the Presence of CCC in the Local Economy

These stimulation to the local economy also expands the tax base arising from corporate and personal income taxes, self employed and proprietor income generated, and taxes on production, and social security-related taxes at the federal level:

| Federal Tax Impact by Total | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN Group, Inc. | | | | |
|---------------------------------------|---------------------------------|---|-------------------|-------------|--------------|--------------|
| Description | Employee Compensation | Proprietor Income | Tax on Production | Households | Corporations | |
| Social Ins Tax- Employee Contribution | \$3,101,781 | \$538,776 | | | | |
| Social Ins Tax- Employer Contribution | \$3,136,841 | | | | | |
| Indirect Bus Tax: Excise Taxes | | | \$33,873 | | | |
| Indirect Bus Tax: Custom Duty | | | \$15,775 | | | |
| Indirect Bus Tax: Fed NonTaxes | | | \$26,039 | | | |
| Corporate Profits Tax | | | | | \$442,698 | |
| Personal Tax: Income Tax | | | | \$3,255,897 | | |
| Total Federal Tax | \$6,238,621 | \$538,776 | \$75,687 | \$3,255,897 | \$442,698 | \$10,551,679 |

The total federal tax base is expanded by \$10.551 million because of the various activities of Clinton Community College. Perhaps more relevant are the accruals to state and local government because these entities directly fund a large measure of CCC's educational mission. The following table shows that \$3.70 million of state and local taxes are derived from various sources.

| | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN Group, Inc. | | | | |
|--|---------------------------------|---|-------------------|--------------------|------------------|--------------------|
| State and Local Impact by Total | | | | | | |
| Description | Employee Compens | Proprietor Income | Tax on Production | Households | Corporations | |
| Dividends | | | | | \$356,201 | |
| Social Ins Tax- Employee Contribution | \$80,324 | | | | | |
| Social Ins Tax- Employer Contribution | \$345,582 | | | | | |
| Indirect Bus Tax: Sales Tax | | | \$276,015 | | | |
| Indirect Bus Tax: Property Tax | | | \$339,350 | | | |
| Indirect Bus Tax: Motor Vehicle Lic | | | \$3,269 | | | |
| Indirect Bus Tax: Severance Tax | | | | | | |
| Indirect Bus Tax: Other Taxes | | | \$55,562 | | | |
| Indirect Bus Tax: S/L NonTaxes | | | \$9,434 | | | |
| Corporate Profits Tax | | | | | \$248,605 | |
| Personal Tax: Income Tax | | | | \$1,633,013 | | |
| Personal Tax: NonTaxes (Fines- Fees | | | | \$307,487 | | |
| Personal Tax: Motor Vehicle License | | | | \$27,327 | | |
| Personal Tax: Property Taxes | | | | \$32,486 | | |
| Personal Tax: Other Tax (Fish/Hunt) | | | | \$6,016 | | |
| Total State and Local Tax | \$425,907 | | \$683,632 | \$2,006,328 | \$604,806 | \$3,720,673 |

Summary

When we combine the various forms of economic activity that arise from Clinton Community College, we find that they lead to 765 jobs in Clinton County annually, and generate payroll of \$59.347 million. Only about 16% of these jobs arise from educational spending, and only 10% of the jobs are directly created at the college.

| Impact Summary - Combined Effects | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | | (thousands) |
|--|---------------------------------|---------------------------------|-------------------|-----------------|
| ImpactType | Employment | Labor Income | Total Value Added | Output |
| Direct Effect | 482 | \$44,469 | \$44,228 | \$51,677 |
| Indirect Effect | 77 | \$3,909 | \$6,292 | \$9,964 |
| Induced Effect | 207 | \$10,968 | \$18,821 | \$27,892 |
| Total Effect | 765 | \$59,347 | \$69,341 | \$89,534 |

In other words, for every job created at the College, another nine jobs arise in the local community. This multiplier effect of 10 is because of the significant value-added through education of Clinton County residents who successfully graduate from the College. These economic benefits are distributed across a wide variety of sectors in the local economy:

| Top Ten for Employment | Clinton Community College.impdb | Copyright 2024 Minnesota IMPLAN | | (thousands) |
|---|---------------------------------|---------------------------------|-------------------|------------------|
| Sector | Total Employment | Total Labor Income | Total Value Added | Total Regional C |
| Private hospitals | 245 | \$21,639 | \$23,228 | \$30,616 |
| Management, scientific, and technical | 165 | \$12,424 | \$14,459 | \$21,031 |
| Computer systems design services | 139 | \$10,664 | \$8,775 | \$8,155 |
| Business support services | 68 | \$2,480 | \$3,318 | \$5,843 |
| Individual and family services | 62 | \$2,199 | \$2,441 | \$3,589 |
| * Employment and payroll only (state & local govt, education) | 45 | \$4,101 | \$4,644 | \$1,042 |
| Food services and drinking places | 33 | \$859 | \$1,274 | \$2,087 |
| Employment services | 20 | \$816 | \$900 | \$1,019 |
| * Employment and payroll only (state & local govt, non-education) | 16 | 1,444 | 1,629 | 464 |
| Offices of physicians/health practitioners | 13 | \$1,044 | \$1,205 | \$1,547 |

One could argue that, if CCC did not exist, some of these jobs would be created anyway. This assumes that the CCC student population would instead attend other colleges and would then return to Clinton County. However, one of the important characteristics of a community college is that it affords access to those who cannot afford alternative colleges or the additional time it takes to obtain their desired credentials. CCC plays an important role in stimulating a very significant multiplier in our regional economy because of the unique role it serves.

Note that these are conservative figures. They do not include the additional marketability of students who do not complete their diplomas or who bring their training elsewhere. Nor do I attempt to capture various lifestyle effects, including the higher quality of life reported by those who obtain post-high school education, or the lower crime rate associated with a more educated community and workforce. As such, the benefits of a community college in Clinton County that is able to maintain the track record of graduating local residents is far in excess of the combined state, county, and tuition contributions that support its educational mission.