



As described in Section III, in order to determine the total economic impact arising from purchases associated with this construction and site development, a detailed structural model (known as an input-output model) of the Chester County economy is utilized, with these capital investments serving as the primary direct effects. These initial

rounds of direct spending then lead to subsequent rounds of spending (known as the multiplier effect). The total economic impacts in Chester County that will likely arise from all anticipated purchasing activity associated with the construction and site development of the quarry appear in **Table 2**.

Table 2 – Economic Impact of Construction and Site Development on Chester County

Project Phase	Description	Annual Employment	Annual Total Compensation	Annual Total Impact
Phase I Quarry Years 1-10	Direct Effect	31	\$1,444,424	\$3,857,107
	Multiplier Effect	8	\$278,092	\$1,053,606
	Total Impact	38	\$1,722,516	\$4,910,713

Phase II Quarry Years 11-20	Direct Effect	45	\$2,200,850	\$5,445,452
	Multiplier Effect	10	\$374,288	\$1,434,443
	Total Impact	55	\$2,575,138	\$6,879,894

Cumulative Totals		47¹	\$42,976,539	\$117,906,073

Phase I – the first ten years of capital investment into the Chester County quarry – will likely begin by the year 2022. All of the construction and site development associated with this initial investment is expected to generate an average annual economic impact of approximately \$4.9 million for Chester County during this ten-year timeframe (Quarry Years 1-10). This total impact is also estimated to create an average of approximately 38 temporary jobs each year that would pay approximately \$1.7 million in total compensation annually.

Following this initial investment and the beginning of regular operations at the new quarry, an increase in capital investment primarily geared towards additional infrastructure (plant and equipment) – Phase II – will occur from Quarry Years 11-20. During this period an additional \$54.5 million will be invested into the Chester County quarry, or about \$5.5 million per year. This additional investment activity would generate an average annual economic impact of approximately \$6.9 million for Chester County throughout this ten-period period. This total impact, in turn, is estimated to create approximately 55 temporary jobs each year that would pay \$2.6 million in total compensation annually.

¹ This estimate represents the average number of jobs created per year due to construction and site development between Years 1 and 20; estimates in all tables throughout this report may not always sum due to rounding.



In sum, all construction and site development associated with all projected capital investments towards the Chester County quarry for the first twenty years are estimated to generate a total economic impact of nearly \$118 million for Chester County.

In sum, all construction and site development associated with all projected capital investments towards the Chester County quarry for the first twenty years are estimated to generate a total economic impact of nearly \$118 million for Chester County. This level of economic activity will initially support an average of 38 temporary jobs each year during Quarry Years 1-10, which will then scale up to 55 temporary jobs during Quarry Years 11-20. This implies that the average annual number of temporary jobs that will be created across the full twenty-year investment period is 47.

In addition to Chester County itself, the economic impacts of the new quarry will also extend statewide. As previously noted, many direct and indirect expenditures associated with the economic impact of the quarry will be made outside of Chester County for a variety of reasons. For example, workers will spend part of their incomes inside of South Carolina - but outside of Chester County, just as some of the vendors servicing the quarry will be based in South Carolina but outside of Chester County. These additional economic impacts can be quantified and, when added to the existing impact estimates shown in [Table 2](#), reflect the total impact of the Chester County quarry on South Carolina. These results are displayed in [Table 3](#).



Table 3 - Economic Impact of Construction and Site Development on South Carolina

Project Phase	Description	Annual Employment	Annual Total Compensation	Annual Total Impact
Phase I Quarry Years 1-10	Direct Effect	31	\$1,444,424	\$3,857,107
	Multiplier Effect	24	\$842,683	\$2,809,970
	Total Impact	54	\$2,287,107	\$6,667,076

Phase II Quarry Years 11-20	Direct Effect	45	\$2,200,850	\$5,445,452
	Multiplier Effect	24	\$1,121,481	\$3,735,079
	Total Impact	68	\$3,322,331	\$9,180,531

Cumulative Totals		61²	\$56,094,375	\$158,476,070

Note that the total economic impact of the Chester County quarry from capital investment during Years 1-20 increases from approximately \$118 million to \$158 million when examining its impact at the state level. This \$158 million in economic activity

also implies that the average annual number of temporary jobs that will be created across the state during the full twenty-year investment period is 61, which will be projected to pay a total of \$56.1 million in total compensation over this same time period.

Permanent Economic Impacts: Ongoing Operations

The temporary economic impacts associated with all construction and site development will be followed by more permanent impacts associated with the ongoing operations of the quarry. Specifically, the operations of the new Chester County quarry are expected to begin during Quarry Year 2. In other words, Luck Companies expects that sufficient construction and site development will be completed after one year of capital investment at the quarry site

for partial operations to begin. Based on projections provided by Luck Companies over the first twenty years of quarry operations (Quarry Years 2-21) as it continuously scales up to full capacity, this study has estimated the total permanent economic impacts that will likely arise from such operations in both Chester County and the state of South Carolina as a whole. These estimates are broken down and displayed in **Tables 4-5**.

² This estimate represents the average number of jobs created per year due to construction and site development between Years 1 and 20.



Table 4 - Economic Impact of Ongoing Operations on Chester County

Quarry Year	Annual Employment		Annual Total Compensation		Annual Total Impact	
	Direct	Total	Direct	Total	Direct	Total
1	0	0	\$0	\$0	\$0	\$0
2	11	18	\$788,822	\$1,054,407	\$3,750,000	\$4,715,573
3	11	18	\$804,599	\$1,075,495	\$5,737,500	\$7,214,827
4	11	18	\$820,691	\$1,097,005	\$7,803,000	\$9,812,164
5	27	44	\$1,887,303	\$2,522,731	\$10,612,080	\$13,344,543
6	27	44	\$1,925,049	\$2,573,186	\$13,530,402	\$17,014,293
7	27	44	\$1,963,550	\$2,624,650	\$14,077,030	\$17,701,670
8	27	44	\$2,002,821	\$2,677,143	\$14,645,742	\$18,416,818
9	27	44	\$2,042,878	\$2,730,685	\$15,237,430	\$19,160,857
10	27	44	\$2,083,735	\$2,785,299	\$15,853,022	\$19,934,956
11	27	44	\$2,125,410	\$2,841,005	\$16,493,485	\$20,740,328
12	27	44	\$2,167,918	\$2,897,825	\$17,159,821	\$21,578,237
13	27	44	\$2,211,277	\$2,955,782	\$17,853,078	\$22,449,998
14	27	44	\$2,255,502	\$3,014,897	\$18,574,342	\$23,356,978
15	27	44	\$2,300,612	\$3,075,195	\$19,324,746	\$24,300,600
16	27	44	\$2,346,625	\$3,136,699	\$20,105,466	\$25,282,344
17	27	44	\$2,393,557	\$3,199,433	\$20,917,726	\$26,303,751
18	27	44	\$2,441,428	\$3,263,422	\$21,762,803	\$27,366,422
19	27	44	\$2,490,257	\$3,328,690	\$22,642,020	\$28,472,026
20	27	44	\$2,540,062	\$3,395,264	\$23,556,757	\$29,622,296
21	27	44	\$2,590,863	\$3,463,169	\$24,508,450	\$30,819,037

Totals	25³	40	\$40,182,960	\$53,711,984	\$324,144,902	\$407,607,719



³ This estimate – along with the total jobs estimate of 40 – represents the average number of jobs created per year due to all Chester quarry operations in Chester County, SC between Quarry Years 2 and 21.



Table 5 - Economic Impact of Ongoing Operations on South Carolina

Quarry Year	Annual Employment		Annual Total Compensation		Annual Total Impact	
	Direct	Total	Direct	Total	Direct	Total
1	0	0	\$0	\$0	\$0	\$0
2	11	24	\$788,822	\$1,435,674	\$3,750,000	\$5,823,543
3	11	24	\$804,599	\$1,464,388	\$5,737,500	\$8,910,021
4	11	24	\$820,691	\$1,493,676	\$7,803,000	\$12,117,628
5	27	59	\$1,887,303	\$3,434,935	\$10,612,080	\$16,479,974
6	27	59	\$1,925,049	\$3,503,634	\$13,530,402	\$21,011,967
7	27	59	\$1,963,550	\$3,573,706	\$14,077,030	\$21,860,851
8	27	59	\$2,002,821	\$3,645,181	\$14,645,742	\$22,744,029
9	27	59	\$2,042,878	\$3,718,084	\$15,237,430	\$23,662,888
10	27	59	\$2,083,735	\$3,792,446	\$15,853,022	\$24,618,869
11	27	59	\$2,125,410	\$3,868,295	\$16,493,485	\$25,613,471
12	27	59	\$2,167,918	\$3,945,661	\$17,159,821	\$26,648,255
13	27	59	\$2,211,277	\$4,024,574	\$17,853,078	\$27,724,845
14	27	59	\$2,255,502	\$4,105,065	\$18,574,342	\$28,844,929
15	27	59	\$2,300,612	\$4,187,167	\$19,324,746	\$30,010,264
16	27	59	\$2,346,625	\$4,270,910	\$20,105,466	\$31,222,678
17	27	59	\$2,393,557	\$4,356,328	\$20,917,726	\$32,484,074
18	27	59	\$2,441,428	\$4,443,455	\$21,762,803	\$33,796,431
19	27	59	\$2,490,257	\$4,532,324	\$22,642,020	\$35,161,807
20	27	59	\$2,540,062	\$4,622,970	\$23,556,757	\$36,582,344
21	27	59	\$2,590,863	\$4,715,430	\$24,508,450	\$38,060,271
Totals	25⁴	54	\$40,182,960	\$73,133,903	\$324,144,902	\$503,379,140

⁴ This estimate – along with the total jobs estimate of 54 – represents the average number of jobs created per year due to all Chester quarry operations in South Carolina between Quarry Years 2 and 21.

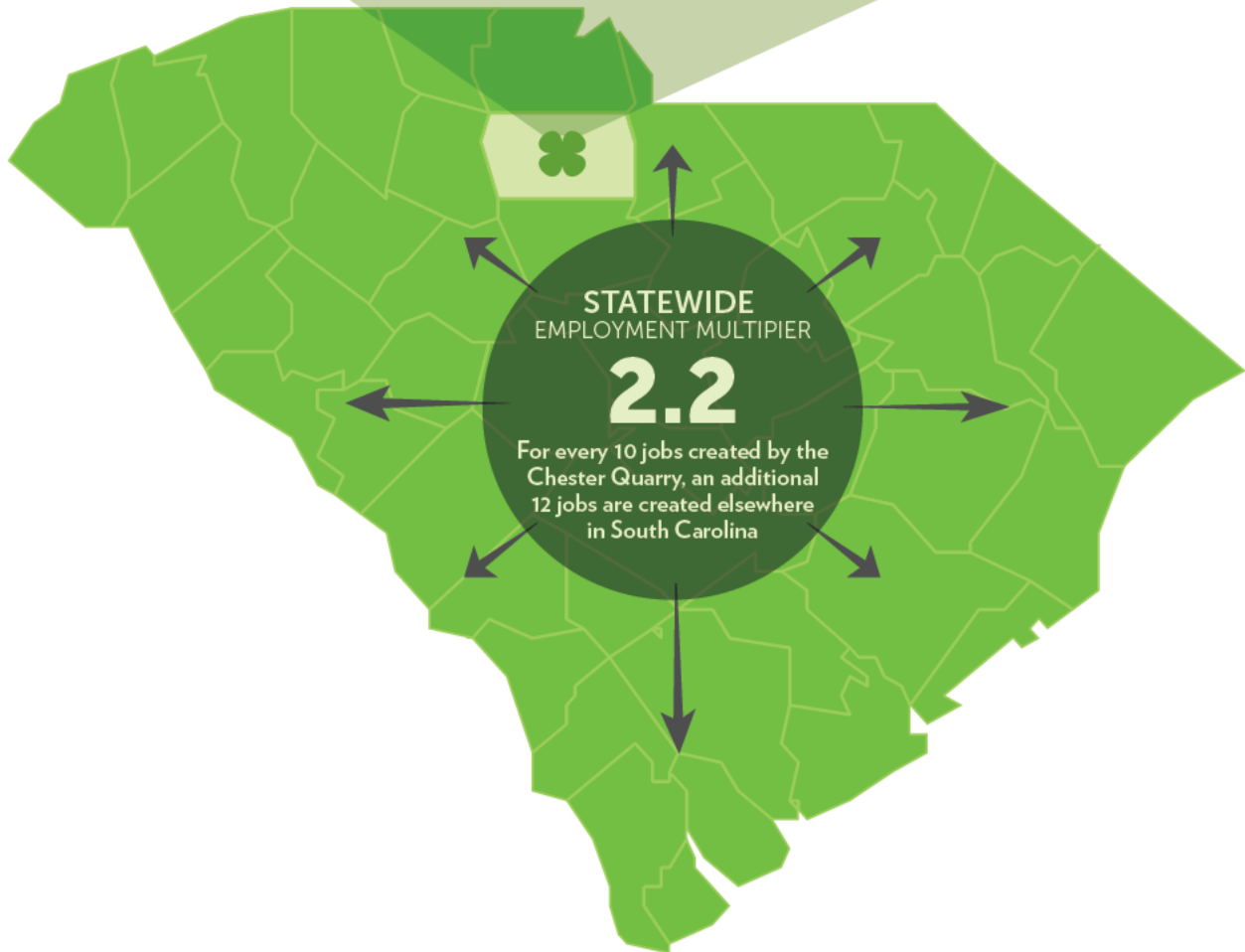


These tables highlight how the operations at the Chester County quarry site will scale up consistently for the first five years until meeting full operational capacity and then will likely sustain a steady projected growth rate of approximately four percent per year. More specifically, after one year of capital investment (Quarry Year 1) in which quarry-related construction and site development is completed to the point that it allows for operations to begin, **Table 4** reveals that the quarry's total economic impact will increase from \$4.7 million in Quarry Year 2 to \$13.3 million by Quarry Year 5. This impact will increase further such that by Quarry Year 21, the projected permanent economic impact of the quarry's ongoing operations will total \$30.8 million annually. These figures reflect the dollar value representing all final goods and services produced in Chester County that can be attributed (directly or indirectly) to the quarry's ongoing operations. This level of economic activity in Quarry Year 21 is also estimated to generate 44 permanent jobs in Chester County that will - in turn - generate approximately \$3.5 million in total compensation. In sum, in Quarry Years 2-21, all quarry operations in Chester County are expected to generate nearly \$408 million in total economic activity for Chester County, which will support a total of 44 permanent jobs by Quarry Year 21.

In a similar fashion, as shown in **Table 5**, expanding the region of analysis to South Carolina reveals that the total economic impact of the Chester County quarry for the state as whole will total nearly \$504 million from Quarry Years 2-21. By Quarry Year 21, all quarry operations are anticipated to generate a permanent total annual economic impact of \$38.1 million on the state of South Carolina. This would support (directly or indirectly) 59 permanent jobs for South Carolinians along with approximately \$4.7 million in annual total compensation.

In addition to the overall magnitude, a second important takeaway of these results is the employment multiplier effect itself. **Tables 4-5** specifically reveal that the employment multiplier associated with the operations of the Chester County quarry is approximately 1.6. This implies that for every 10 jobs that are created and supported directly by the operations of the quarry, an additional 6 jobs are created elsewhere in Chester County. Moreover, this employment multiplier effect increases to an estimated value of 2.2 when extending the analysis statewide. This means that every 10 jobs created directly by the quarry leads to 6 additional jobs within Chester County and 6 additional jobs outside of Chester County, but within South Carolina. These multiplier effects are the result of the high degree of local purchasing on the part of Luck Companies. For example, because Luck Companies does not employ truckers directly, it will hire local truckers in and around Chester County for transportation requirements associated with the quarry.

Scaling Up Employment in Chester County and Across South Carolina



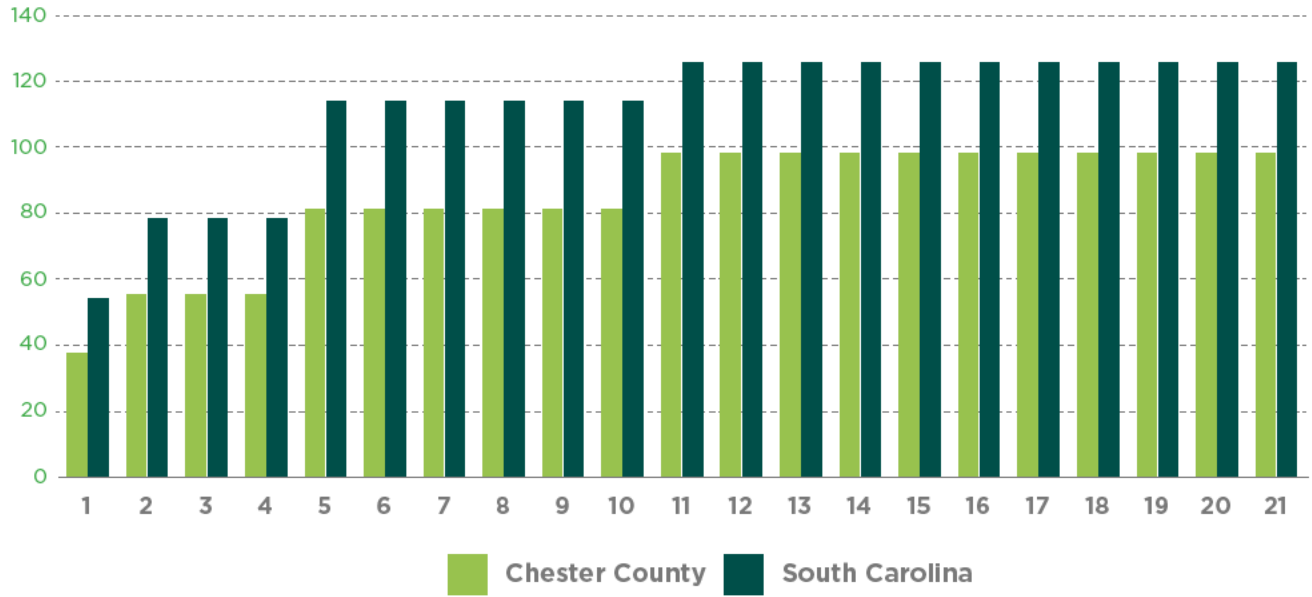


When combining the economic impacts associated with both construction and site development alongside all ongoing operations, the cumulative economic impact of the quarry on Chester County and the state of South Carolina by Quarry Year 21 is projected to total nearly \$526 million and \$662 million, respectively. This impact represents the sum total of all economic activity supported (directly or indirectly) by the

quarry in Chester County and in South Carolina from Quarry Years 1-21. **Figure 1** summarizes the annual total job creation associated with these economic impact estimates. Note that by Quarry Year 21, total job creation in Chester County and South Carolina resulting from all economic activity associated with the Chester quarry site – including both direct and indirect employment – is estimated to total 99 and 127, respectively.



Figure 1 – Annual Total Employment Generated from the Chester County Quarry: Years 1-21





Economic Impacts of Ancillary Industrial Commercial Property

In addition to the development and operation of a new quarry site in Chester County, Luck Companies is also planning to engage in the site development and construction of additional industrial commercial property on adjacent land in Chester County for external use. Once this site development and construction is completed, it will be leased by Luck Companies to businesses looking to relocate/expand to Chester County and/or South Carolina. The site development and construction will be specifically tailored for use by manufacturing, logistics, and warehousing businesses.

Another long-run economic benefit to Chester County and South Carolina that will likely result from the development and operation of the Chester County quarry is this ancillary industrial commercial property development. Yet while **Tables 6-7** highlight the economic impacts from this planned capital investment, these do not account for the significant potential impacts that such infrastructure will create over time. Through expanding basic infrastructure in Chester County, Luck Companies is increasing the local resources available to the county to aid in their efforts toward proactively recruiting businesses and engaging in broader economic development efforts. This type of resource expansion can lead to sizable long-run economic benefits for the region. The economic impacts of the industry commercial property development itself is displayed in **Tables 6-7**. These impacts will yield total economic activity of \$6.8 million and \$9.1 million in Chester County and South Carolina, respectively. This level of activity is estimated to create (directly and indirectly) between 45 and 59 temporary jobs during period of construction and site development.

Through expanding basic infrastructure in Chester County, Luck Companies is increasing the local resources available to the county to aid in their efforts toward proactively recruiting firms and engaging in broader economic development efforts. This type of resource expansion can lead to sizable long-run economic benefits for the region.