



**The Economic
Impact of
Luck Companies
on South Carolina**

Development,
Construction, &
Operation of the
**Spartanburg County
Quarry Site**



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Author Profile

Dr. Joseph C. Von Nessen is a research economist in the Division of Research at the Darla Moore School of Business where he specializes in regional economics, regional economic forecasting and housing economics. He regularly conducts a wide variety of economic impact analyses, feasibility studies and independent market research projects for clients in both the private and public sector.

Dr. Von Nessen engages in industry-level and regional economic forecasting for organizations at the state, national and international level. He has served as lead researcher on projects with clients as diverse as Sonoco, BlueCross BlueShield, Michelin, Boeing and the Savannah River National Lab, among others. He has also been the recipient of many grants from both local and national sources, including the U.S. Department of Energy and the U.S. Department of Defense.



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Dr. Von Nessen is also responsible for the preparation and presentation of the University of South Carolina's annual statewide economic forecast. He serves on the advisory committee of the South Carolina Board of Economic Advisors and is regularly invited to brief the Federal Reserve Bank of Richmond on economic conditions in South Carolina. He frequently appears on programs at national conventions, including the International Builders Show, the 21st Century Building Expo and the North American Regional Science Council and its subsidiaries.

In addition, Dr. Von Nessen specializes in housing economics and residential real estate and provides economic and marketing research and consulting services to builders, developers and other businesses in the housing industry on a regular basis. His recent academic research has focused on the application of hedonic house price modeling to the housing industry. He is a member of the National Association of Home Builders and is actively involved with the local branches of the Home Builders Association and the Association of REALTORS throughout South Carolina.

Dr. Von Nessen is a frequent speaker for business and government leaders throughout the southeast, providing information and consultation about business, housing markets and local economies. He also makes frequent media appearances to discuss various local economic topics of interest.

EXECUTIVE SUMMARY

Luck Companies, founded in 1923, is a family owned and operated business organization that has been building and serving strong communities for nearly 100 years. Through three generations of family leadership, Luck Companies prides itself on being consistently driven by the values of integrity, commitment, leadership, and creativity in order to ignite the potential of its employees, associates, and the communities that it supports in order to make a positive and lasting impact.

Headquartered in Richmond, Virginia, Luck Companies maintains three primary business units in the sustainable production of quality aggregate materials and related services that serve as the foundation for roads, bridges, buildings, and other outdoor structures. The largest business unit is Luck Stone, which currently operates 24 locations across Virginia, the Carolinas, and Georgia. However, Luck Companies structures its properties to maximize the incorporation of all three of its business units, including through community and third-party opportunities.

Luck Companies maintains a commitment to making a positive impact throughout South Carolina—economically, environmentally and in the community. In addition, their stated interest in South Carolina is part of a long-term growth strategy for the company: one that prioritizes the prosperity of people, drives their associates to build lasting relationships, and facilitates Luck Companies' ability to provide high quality aggregates materials and services that will support the growth of the state for decades to come.

In 2021, in addition to its existing location in Kershaw County, Luck Companies is planning to expand its presence in South Carolina by acquiring undeveloped land and then building and operating three new quarries – a process known as greenfielding. This will include a quarry and real estate development area located in Spartanburg County. The purpose of this study is to specifically quantify the potential future economic impacts that will likely arise from the development of the Spartanburg County quarry – both on Spartanburg County itself and on the state of South Carolina as a whole. The key findings of this study are as follows:

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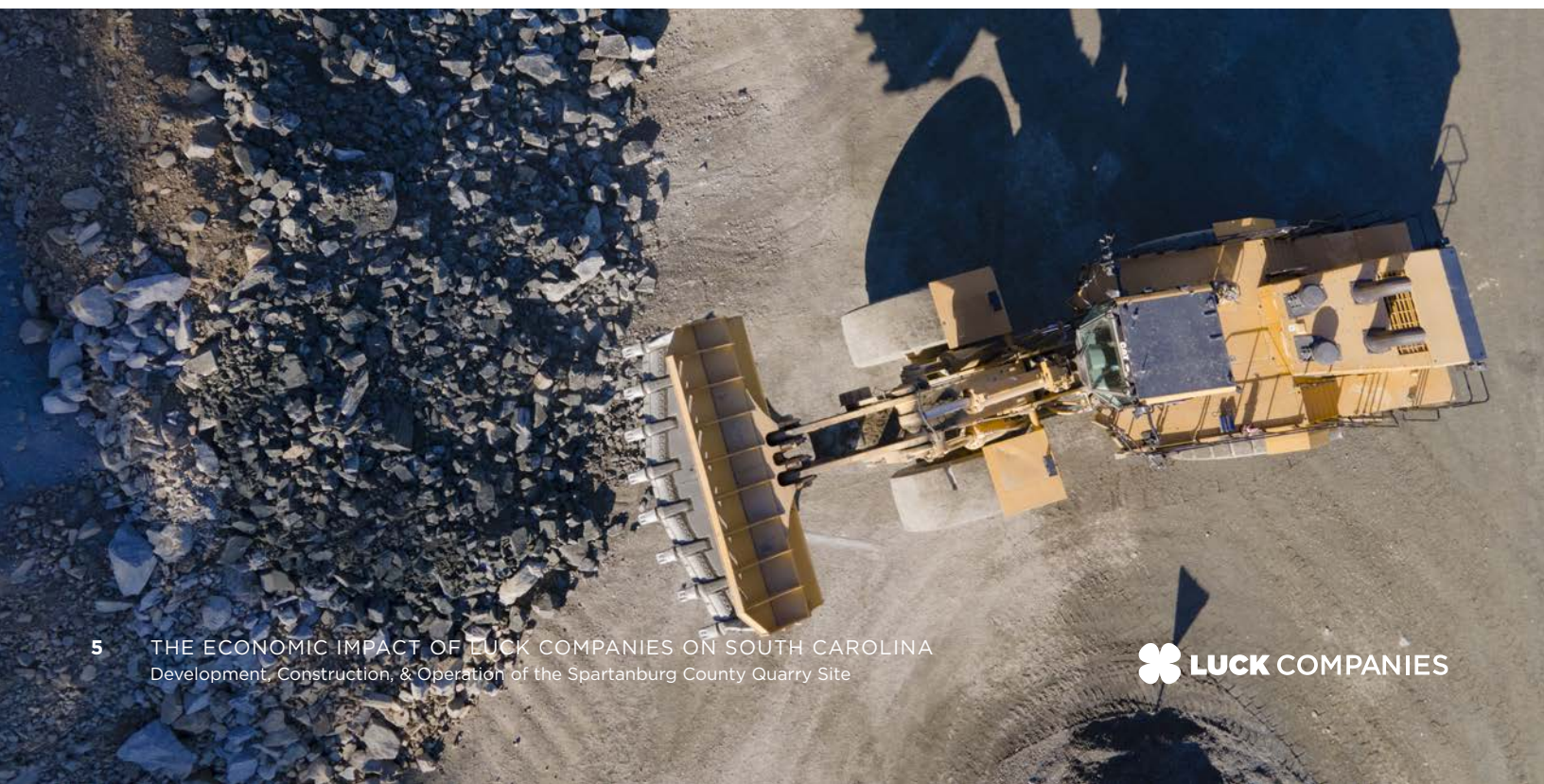
- *When the Spartanburg quarry project moves forward, Luck Companies is expected to invest approximately \$97.7 million towards construction and site development over the next 20 years in two investment phases of ten years each. The average annual capital expenditures during Phase I (Years 1-10) will approximate \$4.2 million, which will then increase to \$5.5 million annually during Phase II (Years 11-20).*
- *The total economic impact of the Spartanburg quarry is estimated to generate an employment multiplier of 1.6. This implies that for every 10 jobs created directly by the Spartanburg quarry, another 6 jobs, on average, will be created elsewhere in Spartanburg County. Moreover, this employment multiplier increases to 2.2 when examined for the state of South Carolina as a whole. These multiplier effects would primarily be the result of the high degree of local purchasing on the part of Luck Companies.*
- *The capital investments towards construction and site development are expected to generate a total economic impact of nearly \$132 million in Spartanburg County by the end of Phase II (Year 20), with an average of 49 temporary jobs supported (directly or indirectly) per year between Years 1 and 20 along with approximately \$51.0 million in total compensation over this same time period. When examined at the state level, the estimated total impact of all construction and site development associated with the Spartanburg site by the end of Phase II increases to \$167 million, which will support a total of 59 jobs annually over the 20-year investment period.*
- *The operations of the new Spartanburg County quarry are expected to begin during the second year of construction and site development. These operations are projected to scale up consistently for five years until meeting demand and then continuing a steady projected revenue growth rate of four percent per year. This schedule implies that the economic impact of all operations associated with the quarry will total nearly \$414 million for Spartanburg County over the first 20 years of operations. By the 20th year, the quarry is expected to support \$31.3 million in economic output annually along with 44 permanent jobs. For the state of South Carolina, the annual impact estimates of the Spartanburg site increase to \$38.1 million by the 20th year of operations along with 59 permanent jobs.*
- *In addition to the development and operation of a new quarry site in Spartanburg County, Luck Companies is also planning to engage in the site development and construction of additional industrial commercial property on adjacent land in Spartanburg County for external use. Through expanding basic infrastructure in Spartanburg County, Luck Companies is increasing the local resources available to the county to aid in their efforts towards proactively recruiting businesses and engaging in broader economic development efforts. Furthermore, through active participation with local community colleges, Luck Companies will also engage and support broader regional efforts towards expanding workforce training. These types of resource expansions can lead to sizable long-run economic benefits that will help to sustain regional growth for far longer than just the lifetime of the quarry.*
- *The operation and opportunities associated with the Luck Companies' Spartanburg site has the ability to provide Spartanburg County with long-term, multi-generational employment sustainability. The long-term viability and necessity of local production coupled with projected increases in local growth rates implies that Luck Companies has the potential to significantly reduce unemployment in and around Spartanburg County in the coming years.*

SECTION *One*

Introduction

The investment activities in which Luck Companies is expected to engage across the state of South Carolina in the coming years has the potential to generate significant long-run economic benefits for the Palmetto State. This includes the site development, construction, and long-term operations of three new quarry sites in South Carolina – including a quarry site in Spartanburg County. This study has specifically quantified the economic impacts that would likely arise from the new Spartanburg quarry – both on Spartanburg County itself and the state of South Carolina as a whole.

When the Spartanburg quarry project moves forward, Luck Companies is expected to invest approximately \$97.7 million towards construction and site development over the next 20 years. These capital investments will likely generate a total economic impact of nearly \$132 million in Spartanburg County over this 20-year time period along with an average of 49 jobs annually. When examined at the state level, this impact increases to over \$167 million and 59 jobs. As construction and site development is completed, the operations of the quarry will begin, thus leading to additional local economic activity. Operations are specifically anticipated to begin during the second year of construction and site development, and all ongoing operations will generate nearly \$414 million in additional economic activity for Spartanburg County during the first 20 years of operations. By the 20th year, the quarry is estimated to generate \$31.3 million in economic activity annually along with 44 permanent jobs. For the state of South Carolina, the Spartanburg site's impact increases to \$38.1 million along with 59 permanent jobs.





The presence of Luck Companies also has the potential to impact broader economic growth trends of the Spartanburg County region. For example, part of the plans surrounding the development and operation of the Spartanburg quarry includes the development of additional commercial property on adjacent land for external use. Such an expansion of basic infrastructure increases county-level resources to proactively recruit businesses and engage in broader long-run economic development efforts.

As South Carolina continues to recover from the COVID-19 pandemic, capital investments and new, sustainable business activities that help to support higher rates of long-run economic growth have become more important for the state than perhaps ever before. The South Carolina-based investments of Luck Companies, in particular, serve not only to boost long-run rates of economic growth through providing a sizable number of jobs and incomes for local residents, but also through supporting broader investments in more rural areas of the state where economic growth is needed most. It is these types of sustainable, long-term investments that will help put South Carolina in a position to continue to outpace the nation's economic growth rate in the 2020s as it has over the previous decade.

The remainder of this study is organized as follows: Section II provides a brief history of Luck Companies; Section III then details economic impact methodology and the specific empirical techniques used to quantify all estimates in this report; Section IV follows by documenting the primary results of this study through highlighting the economic impact of the Spartanburg quarry on the regions of Spartanburg County and the state of South Carolina as a whole – including all impacts resulting from the economic multiplier effect; finally, Section V offers a brief conclusion.

SECTION *Two*

A Brief History of Luck Companies

Luck Companies, founded in 1923, is a family owned and operated business organization that has been building and serving strong communities for nearly 100 years. Through three generations of family leadership, Luck Companies prides itself on being consistently driven by the values of integrity, commitment, creativity, and leadership in order to ignite the potential of its employees, associates, and the communities that it supports in order to make a positive and lasting impact.

Headquartered in Richmond, Virginia, Luck Companies maintains three primary business units in the sustainable production of quality aggregate materials and related services that serve as the foundation for roads, bridges, buildings, and other outdoor structures. The largest business unit is Luck Stone, which currently operates 24 locations across Virginia, the Carolinas, and Georgia. However, Luck Companies structures its properties to maximize the incorporation of all three of its business units, including through community and third-party opportunities.

Luck Stone is a producer of crushed stone, sand, and gravel – known collectively as aggregate materials – and serves the construction, civil engineering, and environmental industries. Luck Ecosystems is an industry leader in scientifically-based environmental performance products and provides a range of solutions to manage the effects of storm water runoff in a variety of outdoor settings. This includes keeping waterways more pollutant-free, supporting plant growth, and optimizing outdoor sports playing surfaces. Luck Real Estate Ventures specializes in the development of industrial and commercial land.

In 2021, Luck Companies plans to expand its presence in South Carolina by acquiring undeveloped land and then building and operating three new quarries – a process known as greenfielding. When combined with Luck Stone's existing quarry located in Kershaw County, these four quarry operations will represent Luck Stone's total business activities in South Carolina.



LOOKING BACK, LOOKING

Forward



Luck Benefits Package

The commitment of Luck Companies to the communities that it serves is evident not only through its business activities but also through the additional contributions it provides to the people of the community. Such contributions begin with the benefits package available for all of the associates at Luck Companies. Associates have access to a wide range of resources designed to maximize their physical, mental, and financial well-being. The benefits package of Luck Companies includes access to each of the following:

- The Luck Companies Retirement Plan, which provides a pension benefit upon retirement from the company
- Medical coverage, including 100 percent coverage of preventative care
- Telemedicine, which provides 24/7/365 access to a primary care or pediatric medical provider for non-emergency services over the phone or through video chat
- Wellness resources & incentives, which include access to professionals in the fields of mental health, substance abuse, financial counseling, adoption education, child and senior care services, pet care, and legal counseling
- Lifestyle management programs and wellness/fitness coaching programs
- Pre-natal education and support programs
- Health savings accounts, flexible spending accounts, dental care, vision care, life insurance, and disability insurance
- Credit union membership
- Product discounts
- Tuition assistance and reimbursement
- Uniform allowance

Source: Luck Companies, 2021

The Luck Companies Foundation offers grants and charitable donations to local, purpose-driven organizations and also partners with non-profits to lead work that results in long-term, positive outcomes for the local communities. Over the past five years, Luck Companies has awarded over \$4 million through its foundation.

Luck Companies also supports its associates through matching donations through associate giving. Moreover, the Luck Companies Foundation offers grants and charitable donations to local, purpose-driven organizations and also partners with non-profits to lead work that results in long-term, positive outcomes for the local communities. Over the past five years, Luck Companies has awarded over \$4 million through its foundation. These grants are primarily focused in the areas of Values Based Leadership and Environmental Stewardship.

Luck Companies' Values

Luck Companies' dedication to Values Based Leadership (VBL) stems from their commitment to people and values. The spirit of VBL embodies living, working, and leading in alignment with your personal core values, principles, beliefs and purpose to ignite the extraordinary potential in those around you. As the deep-rooted foundation of this organization, these values extend to business and community interactions through their people and the Luck Foundation philanthropy.



LEADERSHIP

Ignites human potential and performance



COMMITMENT

Takes personal responsibility for the success of self, others and the organization



INTEGRITY

Earns the trust and respect of others



CREATIVITY

Delivers ideas and innovation that add value



Source: Luck Companies, 2021

SECTION *Three*

Economic Impact Methodology



This economic impact analysis seeks to determine the impact, or economic footprint, that Luck Companies will have within the state of South Carolina through the development and operation of the currently proposed Spartanburg quarry. Such an impact can be measured by estimating how the expenditures (or purchases) associated with the Spartanburg quarry will likely increase the demand for goods and services in the local economy. For example, if Luck Companies were to make a large local purchase of new equipment or of transportation services from local vendors, the total change in total employment or gross state product that would result from this increase in demand could be estimated. There are three standard categories that are generally estimated that summarize the major contributions of an organization – including Luck Companies – to its local economy: economic output, employment, and total compensation. Each of these categories, in turn, can be broken down into direct, indirect, and induced effects.

The direct effect reflects all of the expenditures that Luck Companies makes directly within a particular region. This includes, for example, employee wages and benefits, mining development, equipment, vendors, and other overhead and administrative costs. These expenditures represent the initial change to the local economy.

The indirect effect reflects all of the additional economic impacts resulting from inter-industry linkages between local businesses within a particular region. For example, if Luck Companies were to make a large purchase of machinery in Spartanburg County, the machinery vendor would then have to purchase additional inputs from its suppliers and hire additional workers to handle this new order volume. The suppliers of the machinery vendor would then also experience an increase in demand and have to purchase additional staff and other inputs as well. These indirect effects ripple throughout the economic region and affect many industrial sectors. The total size of the indirect effect is a function of the size of the local supplier network and the size of the initial direct effects.



The induced effect reflects all of the additional economic impacts that result from increases in household spending due to changes in wages. For example, assume again that Luck Companies were to make a large machinery purchase in Spartanburg County. The machinery vendor would purchase additional inputs and hire additional labor. These new workers, in turn, would spend some of their new income on goods and services in a variety of industries within the county – including housing, food, and entertainment. The housing, food, and entertainment industries in Spartanburg County would then see an increase in demand, leading to the hiring of additional workers in these industries, leading to further increases in household spending, and so on.

These successive rounds of indirect and induced effects do not go on forever, which is why a specific value can be calculated for each of them. In each round of spending, money is “leaked out” of the county for a variety of reasons. For example, workers will save some of their additional income and part of the income they do spend will be spent outside of the county. Businesses, too, will necessarily purchase some input materials from outside of the county.

An economic multiplier can be used to determine the total economic impact (direct, indirect, and induced) that results from an initial change in economic activity (the direct effect). For example, if Luck Companies spent \$10 million on machine equipment and this led to a total increase in economic output of \$15 million across all industries in the economy, the economic output multiplier would be 1.5. Multiplier effects vary across industries and, as mentioned above, depend largely on the size of the supplier network. They also depend on the size of the economic region being analyzed. For example, a \$10 million purchase would have a larger impact in South Carolina than on Spartanburg County alone. In addition to economic output, multiplier effects are also calculated for employment and total compensation.



In this study, the economic impact of Luck Companies is estimated for two specific regions: Spartanburg County and the state of South Carolina as a whole. The first step in the estimation process is to compile projected expenditure data for the new quarry. Luck Companies provided annual data on projected revenue, expenses, employment, and payroll associated with all capital investment and operational expenses of the new Spartanburg County quarry for its first 21 years. All impact estimates were calculated using detailed structural models (known as input-output models) of the South Carolina economy containing specific information on economic linkages between different industries throughout the state and within Spartanburg County. This study also utilized the input-output modeling software IMPLAN in calculating estimates.

Impact estimates were calculated for each of the three categories – defined below – that summarize the impact of the Spartanburg County quarry on Spartanburg County and on the state of South Carolina as a whole, with each category’s estimates broken down into direct, indirect, and induced effects:

Total Economic Impact (or Output):
the dollar value representing the total contribution to overall economic activity

Employment:
the total number of full-time equivalent jobs that are needed to deliver the demand for the goods and services as measured by total economic output

Total Compensation:
the total contribution to wages, salaries, and benefits affiliated with total employment



SECTION *Four*

The Economic Impact of the Spartanburg County Quarry

Temporary Economic Impacts: Construction and Site Development

When the development and operation of the currently proposed Spartanburg quarry moves forward, Luck Companies is expected to invest approximately \$97.7 million in Spartanburg County towards site development and construction over the next twenty years. As Table 1 below denotes, this would consist of two primary investment phases of approximately ten years each that would include all purchases related to property acquisition and the construction of facilities (along with all equipment requirements) necessary for housing business activities associated with quarry operations. Note that the average annual capital expenditures are projected to increase from approximately \$4.2 million in Years 1-10 to \$5.5 million in Years 11-20.



Spartanburg County

Table 1 – Anticipated Capital Investments in Spartanburg County

Source: Luck Companies

Project Phase	Time Period	Estimated <u>Annual</u> Investment	Estimated <u>Total</u> Investment
Phase I	Quarry Years 1-10	\$4,234,464	\$42,344,636
Phase II	Quarry Years 11-20	\$5,536,250	\$55,362,504



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 Spartanburg 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 Spartanburg 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 Spartanburg County

Project Phase	Description	Annual Employment	Annual Total Compensation	Annual Total Impact
Phase I Quarry Years 1-10	Direct Effect	31	\$1,622,466	\$4,234,464
	Multiplier Effect	12	\$492,518	\$1,590,634
	Total Impact	43	\$2,114,983	\$5,825,097

Phase II Quarry Years 11-20	Direct Effect	42	\$2,414,948	\$5,536,250
	Multiplier Effect	13	\$573,305	\$1,836,243
	Total Impact	55	\$2,988,253	\$7,372,493

Cumulative Totals		49¹	\$51,032,366	\$131,975,908

Phase I – the first ten years of capital investment into the Spartanburg 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 \$5.8 million for Spartanburg County during this ten-year timeframe (Quarry Years 1-10). This total impact is also estimated to create an average of approximately 43 temporary jobs each year that would pay approximately \$2.1 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 \$55.4 million will be invested into the Spartanburg County quarry, or about \$5.5 million per year. This additional investment activity would generate an average annual economic impact of approximately \$7.4 million for Spartanburg County throughout this ten-period period. This total impact, in turn, is estimated to create approximately 55 temporary jobs each year that would pay \$3.0 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 Spartanburg County quarry for the first twenty years are estimated to generate a total economic impact of nearly \$132 million for Spartanburg County.

In sum, all construction and site development associated with all projected capital investments towards the Spartanburg County quarry for the first twenty years are estimated to generate a total economic impact of nearly \$132 million for Spartanburg County. This level of economic activity will initially support an average of 43 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 49.

In addition to Spartanburg 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 Spartanburg County for a variety of reasons. For example, workers will spend part of their incomes inside of South Carolina – but outside of Spartanburg County, just as some of the vendors servicing the quarry will be based in South Carolina but outside of Spartanburg 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 Spartanburg County quarry on South Carolina. These results are displayed in Table 3.

**Table 3 – Economic Impact of Spartanburg County 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	\$1,622,466	\$4,234,464
	Multiplier Effect	20	\$942,258	\$3,152,295
	Total Impact	51	\$2,564,724	\$7,386,759

Phase II Quarry Years 11-20	Direct Effect	42	\$2,414,948	\$5,536,250
	Multiplier Effect	24	\$1,140,181	\$3,797,358
	Total Impact	66	\$3,555,129	\$9,333,609

Cumulative Totals		59²	\$61,198,523	\$167,203,673

Note that the total economic impact of the Spartanburg County quarry from capital investment during Years 1-20 increases from approximately \$132 million to \$167 million when examining its impact at the state level. This \$167 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 59, which will be projected to pay a total of \$61.2 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 Spartanburg 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 Spartanburg 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 Spartanburg County Operations
on Spartanburg 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	\$1,120,568	\$3,750,000	\$4,785,911
3	11	18	\$804,599	\$1,142,980	\$5,737,500	\$7,322,444
4	11	18	\$820,691	\$1,165,840	\$7,803,000	\$9,958,524
5	27	44	\$1,887,303	\$2,681,025	\$10,612,080	\$13,543,592
6	27	44	\$1,925,049	\$2,734,645	\$13,530,402	\$17,268,080
7	27	44	\$1,963,550	\$2,789,338	\$14,077,030	\$17,965,710
8	27	44	\$2,002,821	\$2,845,125	\$14,645,742	\$18,691,525
9	27	44	\$2,042,878	\$2,902,028	\$15,237,430	\$19,446,662
10	27	44	\$2,083,735	\$2,960,068	\$15,853,022	\$20,232,307
11	27	44	\$2,125,410	\$3,019,270	\$16,493,485	\$21,049,694
12	27	44	\$2,167,918	\$3,079,655	\$17,159,821	\$21,900,100
13	27	44	\$2,211,277	\$3,141,249	\$17,853,078	\$22,784,865
14	27	44	\$2,255,502	\$3,204,073	\$18,574,342	\$23,705,373
15	27	44	\$2,300,612	\$3,268,155	\$19,324,746	\$24,663,071
16	27	44	\$2,346,625	\$3,333,519	\$20,105,466	\$25,659,459
17	27	44	\$2,393,557	\$3,400,188	\$20,917,726	\$26,696,100
18	27	44	\$2,441,428	\$3,468,192	\$21,762,803	\$27,774,624
19	27	44	\$2,490,257	\$3,537,556	\$22,642,020	\$28,896,718
20	27	44	\$2,540,062	\$3,608,307	\$23,556,757	\$30,064,145
21	27	44	\$2,590,863	\$3,680,473	\$24,508,450	\$31,278,736

Totals	25³	40	\$40,182,960	\$57,082,254	\$324,144,902	\$413,687,638



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



Table 5 – Economic Impact of Spartanburg County 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 Spartanburg quarry operations in South Carolina between Quarry Years 2 and 21.



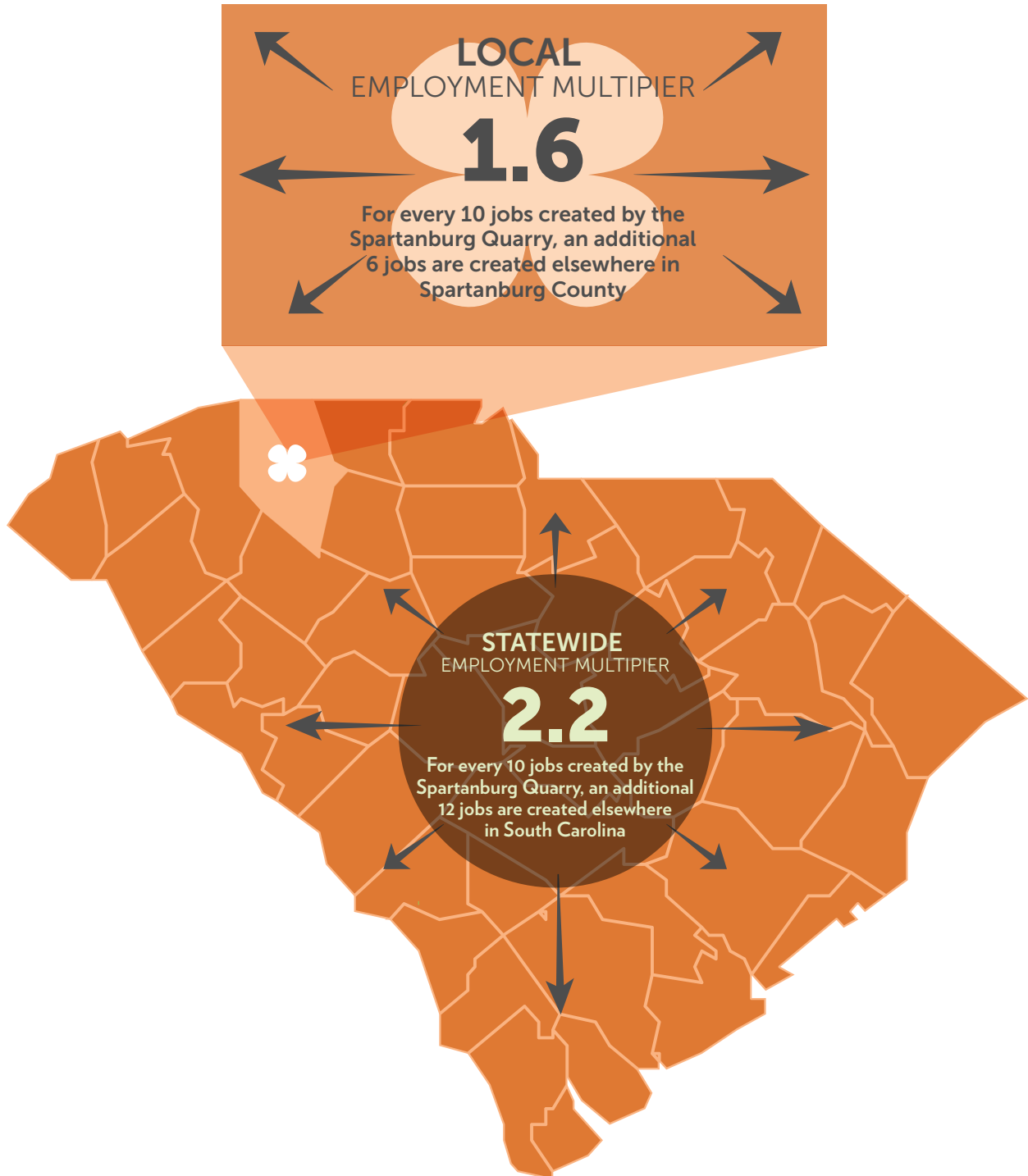
These tables highlight how the operations at the Spartanburg County quarry site will scale up consistently for the first five years until meeting full operational capacity and then will likely sustain a steady projected growth rate of approximately four percent per year. More specifically, after one 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 \$4.8 million in Quarry Year 2 to \$13.5 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 \$31.3 million annually. These figures reflect the dollar value representing all final goods and services produced in Spartanburg 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 Spartanburg County that will - in turn - generate approximately \$3.7 million in total compensation. In sum, in Quarry Years 2-21, all quarry operations in Spartanburg County are expected to generate nearly \$414 million in total economic activity for Spartanburg 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 Spartanburg 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 Spartanburg 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 Spartanburg 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 Spartanburg County and 6 additional jobs outside of Spartanburg 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 Spartanburg County for transportation requirements associated with the quarry.



Scaling Up Employment in Spartanburg County and Across South Carolina



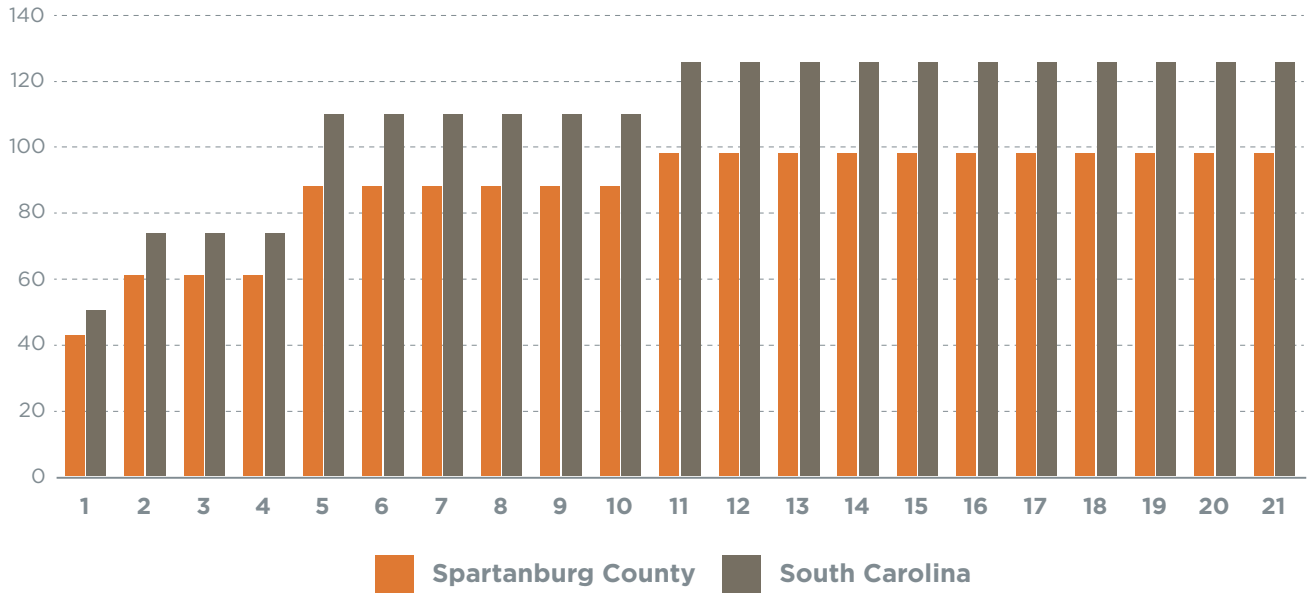


When combining the economic impacts associated with both construction and site development alongside all ongoing operations, the cumulative economic impact of the quarry on Spartanburg County and the state of South Carolina by Quarry Year 21 is projected to total approximately \$546 million and \$671 million, respectively. This impact represents the sum total of all economic activity supported (directly or indirectly) by the quarry in Spartanburg 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 Spartanburg County and South Carolina resulting from all economic activity associated with the Spartanburg quarry site – including both direct and indirect employment – is estimated to total 99 and 125, respectively.



Figure 1 – Annual Total Employment Generated from the Spartanburg 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 Spartanburg County, Luck Companies is also planning to engage in the site development and construction of additional industrial commercial property on adjacent land in Spartanburg 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 Spartanburg 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 Spartanburg County and South Carolina that will likely result from the development and operation of the Spartanburg 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 Spartanburg 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 \$46.7 million and \$59.4 million in Spartanburg County and South Carolina, respectively. This level of activity is estimated to create (directly and indirectly) between 303 and 367 temporary jobs during period of construction and site development.

Through expanding basic infrastructure in Spartanburg 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.



Table 6 – Economic Impact of Ancillary Industrial Commercial Property on Spartanburg County

Projected Impacts Resulting from Capital Investment and Rental Revenue

	Employment	Total Compensation	Economic Output
Direct Effect	218	\$13,568,036	\$35,225,000
Multiplier Effect	85	\$3,571,356	\$11,433,164
Total Impact	303	\$17,139,392	\$46,658,164

Table 7 – Economic Impact of Ancillary Industrial Commercial Property on South Carolina

Projected Impacts Resulting from Capital Investment and Rental Revenue

	Employment	Total Compensation	Economic Output
Direct Effect	218	\$13,568,036	\$35,225,000
Multiplier Effect	149	\$7,219,301	\$24,219,276
Total Impact	367	\$20,787,337	\$59,444,276

SECTION *Five*

Conclusion

Luck Companies will significantly expand their investment activities in South Carolina in 2021, which will generate sizable long-run economic benefits for the Palmetto State in the coming years. Part of this investment includes \$97.7 million in local spending towards the site development, construction, and long-term operations of a new quarry site in Spartanburg County.

This study has found that the investment dollars associated with site development and construction of the quarry in Spartanburg County will generate a total economic impact of nearly \$132 million in Spartanburg County alone over the next 20 years along with an average of 49 jobs annually. This impact of the Spartanburg quarry expands to \$167 million and 59 jobs when examined at the state level. In addition, the operations of the quarry site – which are scheduled to begin during the second year of construction and site development – are anticipated to generate an additional \$414 million in economic activity for Spartanburg County along with an average of 40 permanent jobs by the 20th year of operations. The impact of the Spartanburg quarry site's operations on South Carolina will total over \$503 million by the 20th year and support 59 permanent jobs.

As South Carolina continues to recover from the COVID-19 pandemic, capital investments and new, sustainable business activities that help to support higher rates of long-run economic growth have become more important for the state than perhaps ever before. The South Carolina-based investments of Luck Companies, in particular, serve not only to boost long-run rates of economic growth through providing a sizable number of jobs and incomes for local residents, but also through supporting broader investments in more rural areas of the state where economic growth is needed most. It is these types of sustainable, long-term investments that will help put South Carolina in a position to continue to outpace the nation's economic growth rate in the 2020s as it has over the previous decade. 🍀





For us, our family and our company, sustainability is about harnessing the potential in people: using our energy, resources, and values to positively impact those around us, now and into the future. We work to ensure that we are honoring those who came before us by operating in ways that generate growth for those who will come after.



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