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R POLICY

THE SOUTH JERSEY ECONOMIC REVIEW

About the SJER

Since 2006, the South Jersey Economic Review has provided the region's stakeholders and policymakers timely, high-quality research that focuses on the regional economy. The Review analyzes the region's key industries and tracks its most important labor force, wage, and demographic trends. The Review is published bi-annually under the aegis of Stockton University's William J. Hughes Center for Public Policy.

IN THIS ISSUE

Estimating COVID's Impact.................... 1

Regional Economy 2019 Review 4

Minimum Wage Legislation 7

Gaming Industry 2019 Review.............. 10

EDITORIAL NOTE

e 2020 COVID-19 pandemic will be a de ning historical moment. Like other such moments (be they wars, natural disasters, or prior pandemics) this year's novel coronavirus has already produced indelible images, stories, and unimaginable human su ering. And, though its public health dimensions are not unprecedented the continued daily rise in the number of deaths due to COVID-19, more than 140,000 globally (as of April 17), remains sobering. e University of Washington's Institute for Health Metrics and Evaluation estimates that the American death toll (nearly 31,000) may still surpass 60,000 by early August.

e pandemic will also produce signi cant social, political, and economic change. Indeed, the current wave of national economic lockdowns enacted in response to the pandemic has upended the lives of millions across the world while sending their governments into unchartered policy territory and their economies plummeting to depths rarely, if ever, experienced.

It is against this somber backdrop that the current edition of is published. e pandemic resulted in a signi cant publishing delay as we grappled with whether and how to estimate the regional impact of the pandemic. We ultimately decided to delay publication and produce a set of estimates. ese estimates, and our discussion of them, are set out in Section 1. All material that follows Section 1 was completed in late February. Much of this analysis and discussion highlights the regional economy's solid economic performance last year. Needless to say, the pandemic provides a signi cantly altered lens through which last year's performance will be assessed. e decision to include our 2019 analysis was driven by a belief that the region's stakeholders would still bene t from having a comprehensive sense of where the regional economy stood prior to the onset of the COVID-19 crisis.

In addition to a broad overview of the regional economy's performance last year, the e ects of last year's minimum wage legislation are assessed, and the gaming industry's performance is reviewed.

e economic dimensions of today's COVID-19 pandemic are unprecedented. Today's economy boasts linkages far wider and deeper than those that existed a century ago when the Spanish u of 1918-19 took the lives of 675,000 Americans and millions more across the globe. While today's globalized economy enables the rapid transmission of localized economic events from one country to another, depth-oriented industry and sectoral linkages quickly magnify such events through local and regional populations and their economies. e complexity of these horizontal and vertical linkages signi cantly increases the di culty of predicting the economic consequences of the present world-wide wave of pandemic-induced national lockdowns. Re ecting this, private-sector estimates of the COVID-19 pandemic's e ect on the U.S. economy in 2020 vary widely—though virtually all now suggest that 2020 will be dreadful in GDP terms. A late-March survey by of eighteen investment banks and consultancies turned up a median estimate of -3 percent for U.S. GDP in 2020, with a range of -7.5 to -0.3 percent.[1] e IMF estimates it will contract 5.9 percent. e national economy contracted 2.5 percent in 2009 amid the Great Recession.

Estimating the impact of the lockdown on local economies is especially di cult. While local inputs are obviously smaller than those used in a national modeling

2

context, they are often characterized by greater volatility, which reduces estimation precision. is is especially true for regional economies like southern New Jersey's with high concentrations of industries disproportionately a ected by the lockdown. Ongoing scal and monetary policy responses to the pandemic fallout further complicate e orts to estimate the pandemic's economic impact. Finally, the nation has only recently begun to think through the myriad technical complexities and signi cant ethical and political questions that will be involved with restarting the economy. Given these caveats, the estimates presented below—which aim to provide the region's stakeholders a very broad sense of the possible trajectories of the regional economy over the remainder of 2020—are best conceived as educated guesses.

One nal remark should be underscored. ese types of economic impact exercises—which ultimately reduce myriad assumptions, signi cant political and moral questions, and unimaginable socio-economic complexity and human su ering to a single number—often, and understandably, invite charges of crassness. But, it is important to keep in mind that however imperfect the metrics these exercises produce are, they nevertheless represent attempts to capture something meaningful about whether the regional economy contracts 5, 10, or 25 percent over the coming year translate into starkly di erent welfare outcomes for its population.

Re ecting time constraints, the uidity of the moment, and the lack of precedents, the model used to derive the estimates presented here is austere.[2] Its only input is industry-based gross output (GDP) data for metropolitan areas produced by the U.S. Bureau of Economic Analysis. e model aggregates these data over the Atlantic City-Hammonton and Ocean City metropolitan areas to create a Southern New Jersey regional economy. e use of industry-based output data is especially important owing to the structural makeup of the regional economy and its heavy reliance upon hospitality and tourism and the summer shore season.

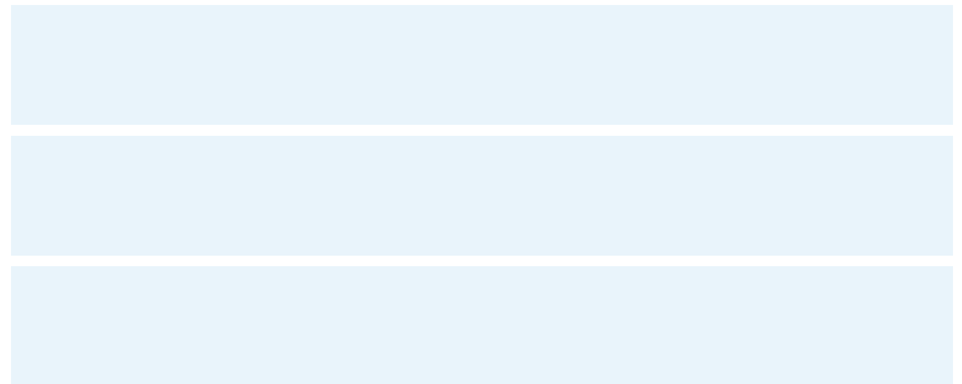
ree key assumptions drive the model:

- **e percentage of economic output lost in the regional economy between mid-March and the end of May**—the ten-week period that roughly coincides with the start of the lockdown and the commencement of the summer shore season.
- **e speed at which the economy returns to some semblance of "normalcy"**—which dictates the number of summer shore season weeks that will be adversely a ected by the lockdown.[3]
- **e percentage of economic output lost *post* a return to normalcy**—referred to as the "COVID-19 drag." is drag captures the longer-term adverse economic e ects likely to be left in the pandemic's wake, e.g., enhanced fear of public spaces like restaurants, casinos, convention halls, entertainment venues, beaches, shopping districts, classrooms and commercial aircraft cabins, etc.

Table 1 shows the model's estimates for the decline in real gross domestic product (GDP) for the regional economy in 2020. Table 1 assumes that the percentage of economic output lost in the regional economy for the ten-week period between mid-March and the end of May equals 40 percent.[4]

As shown, estimates for the decline in real GDP range from a low of $2.1 billion (equal to a 11.9 percent decline in real GDP relative to 2019) to a high of $5.1 billion (-28.3 percent). e median estimate is -$3.9 billion (-21.4 percent). Unsurprisingly, there is a trade-o between the model's "speed" and "drag" dimensions, i.e., how many weeks it takes for the economy to return to some semblance of normalcy and COVID-19's more lasting impact on the overall level of economic activity. For example, a fast return to normalcy (mid-June) coupled with a moderate COVID-19 drag (-15 percent) would yield a loss of -$3.3 billion in regional economic output—a 18.1 percent decline in real GDP. Alternatively, a more moderately-paced return to normalcy (mid-July) coupled with a relatively small drag (-5 percent) would result in $2.9 billion of lost output—an 16.4 percent decline in real GDP. To take another example, a speedy return to normalcy with a signi cant drag results in $4.4 billion of lost output (a 24.4 percent decline in real GDP), which is roughly on par with what a slow recovery and moderate drag would yield.

One way to gauge these estimates is to consider them in light of the overall economy. Southern New Jersey's $18.2 billion economy generates a straight-line average of $49.7 million of output daily. Multiplying that gure by 84 days (12 weeks or, say, the period between mid-March and mid-June) equals $4.2 billion. is is the approximate value of output that would



be lost were the regional economy to stop for nearly one-quarter of a year which it has not (despite understandable widespread sentiment that it e ectively has).[5] is is marginally larger than the median estimate in Table 1 (-$3.9 billion or -21.4 percent) that involves a mid-July return to "normalcy" and a moderate COVID-19 drag.

Table 2 provides several additional benchmarks against which the estimates can be assessed. e Great Recession and related nancial crisis provide another useful benchmark. e regional economy contracted 9.6 percent in 2009, whereas the smallest contraction estimated in Table 1 equals -11.9 percent. It is also noteworthy that the regional economy's decline in 2009 was signi cantly larger than the state's and the nation's (-4.1 and -2.5 percent respectively).

to involve a host of remarkable changes in millions of Americans' daily lives. And, those changes will produce a post-pandemic economy very unlike the economy we all knew in February 2020.

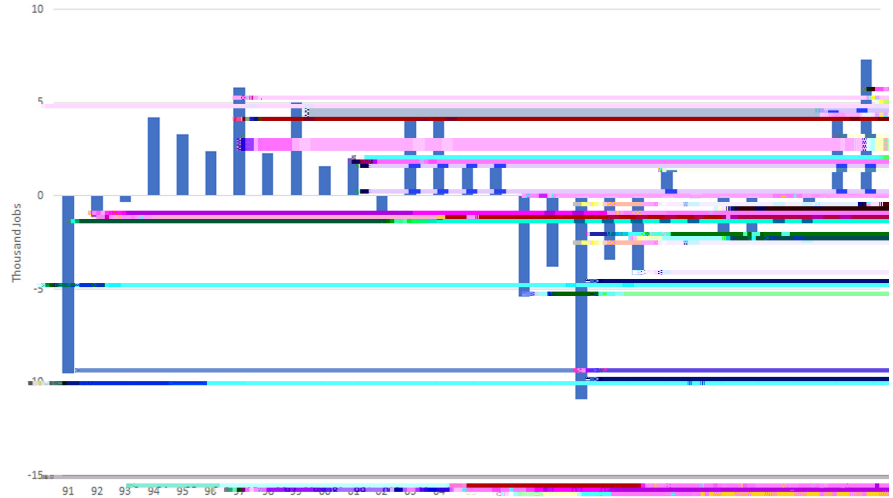
While there are reasons to believe that the o cial unemployment rate may be a particularly good barometer of the pandemic's economic impact over the next several months, it may nevertheless prove useful to place the regional economy's 2009 Great Recession contraction (which, again, equaled -9.6 percent) in unemployment terms.[7] e regional unemployment rate climbed to 11.9 percent in 2009 from 7.4 percent the prior year as the number of unemployed individuals increased by 64 percent to 31,500. e implication is that a 2020 recession in the range of 15-20 percent of real GDP would almost assuredly push the regional unemployment rate above 20 percent.

It is important to note that the estimates presented in Table 1 do not take into account recent scal and monetary policy measures that have been enacted to counter the economic fallout of the coronavirus pandemic. ese unprecedented policy responses will undoubtedly help o set some (though clearly not all) of the economic losses associated with the pandemic lockdown. In addition to the aforementioned enhanced and extended unemployment bene ts included in the $2 trillion , the so-called —designed to help small businesses retain/rehire and employees—will prove especially important to smaller local and regional economies like southern New Jersey's. County Business Patterns data from the U.S. Census Bureau indicate that 88 percent of all business establishments in the regional economy have fewer than 20 employees. Should small businesses comply with the program's payroll retention and other requirements, these loans will eventually be forgiven.[8] While recent news suggests the program got o to a rocky start, it is clear its take-up rate has been sky-high. Indeed, as of April 16, e Small Business Administration indicated that the $350 billion originally allocated to the program had already been exhausted via its approval of 1.6 million loans. us, the SBA won't be accepting new aid applications or enrolling new lenders until Congress agrees on additional funding. Ensuring these federal monies continue to ow into the nation's small business communities is vitally important to the stabilization of their local economies.

In addition to its programs targeting small businesses, the created a $500 billion Treasury-administered program designed to aid a range of industries disproportionately impacted by the pandemic. While $46 billion of this was reserved for passenger air carriers, cargo air carriers, and other industries critical to U.S. security, the remaining $454 billion is intended for other sectors hard hit by the pandemic—including the hospitality industry. Again, given the Treasury's apparent wide latitude in administering these monies, it will be incumbent upon regional politicians, stakeholders, and watchdog groups to ensure that these funds make their way into the regional hospitality industry. While much has been made of the apparent fact that the provided local governments little aid,holdpalatissoal ely with2221 luusthcrissal goUn(am gensTLab1lan T

job gain ever recorded by the metropolitan area. Meanwhile, the Vineland-Bridgeton metropolitan area saw employment increase by 1,100 (+1.9 percent).

All three metropolitan areas experienced declines in their unemployment rates last year despite solid labor force growth. Atlantic City's unemployment rate fell to a seasonally adjusted 5 percent from 5.9 in 2018, while its labor force expanded by 2.4 percent. (Figure 3) e comparable gures for Cape May County were 7 percent (vs. 8.5 percent in 2018) and 3.3 percent; and in Cumberland County, 5.5 percent (vs. 6.5 percent in 2018) and 1.4 percent.

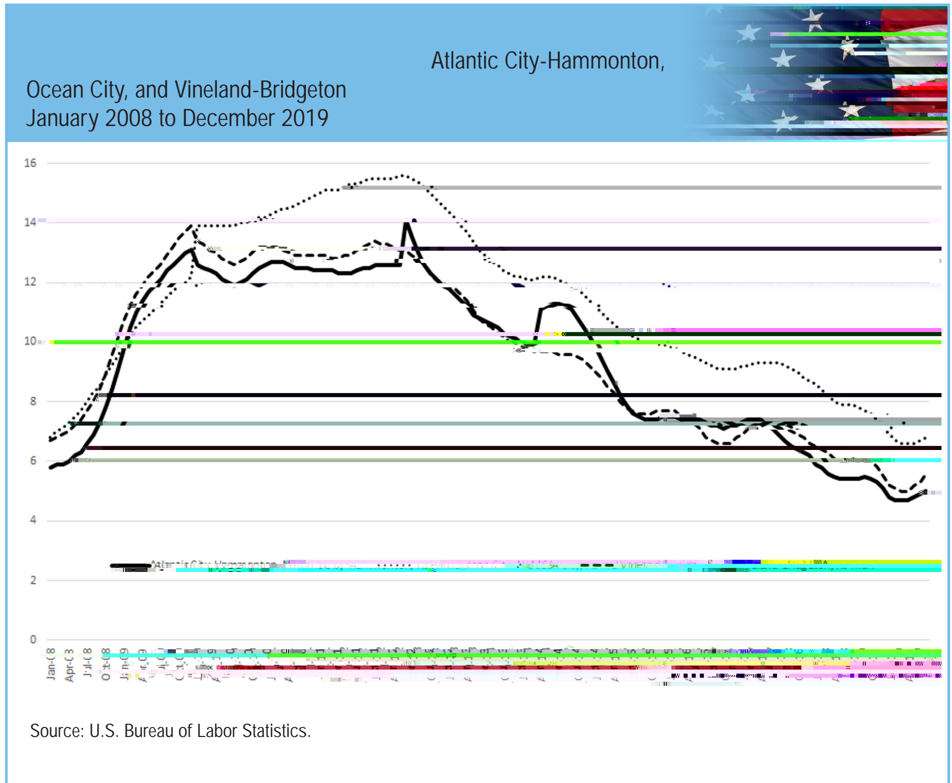


Establishment employment climbed by 3,300 jobs last year which marked the rst time since 2006 that the Atlantic City metropolitan area recorded job growth in two consecutive years. (Table 3) e leisure and hospitality sector added 3,200 jobs (+8 percent) accounting for virtually all of last year's job growth. e accommodations sector (which includes both the casino hotels as well as non-gaming accommodation establishments) saw employment increase by 2,100, while restaurants and bars added 600 employees.

Outside the leisure and hospitality sector, job gains were also recorded in transportation and warehousing (+200); professional and business services (+300); education and health services (+300); and, other services (+200). ose gains were largely o set, however, by losses in construction (-300); retail and wholesale trade (-500); and, government (-100).

While the past two years' worth of job gains in Atlantic City have been critically important as they have stabilized the local economy, total employment remains 10 percent below (-15,000) its 2007 level, the year prior to the onset of the Great Recession. Since 2007, net job declines

share of total employment has increased to 31 percent from 26 percent. (Figure 4)
is 5-percentage-point increase in service's share of total employment was mirrored by a 5-percentage-point decline in leisure and hospitality's share. e Great Recession and its aftermath bu eted the local gaming industry for several years and drove this share down to 28 percent in 2017 (from nearly 37 percent in 2007), as casino hotel employment plummeted by nearly 19,000 (-49 percent) between 2007 and 2017. e last two years' worth of job gains in leisure and hospitality have increased the sector's share of total employment back above 30 percent. While the recent job gains in leisure and hospitality have rightfully been cause for celebration (as they have signaled a healthier local gaming industry), a longer-term continuation of a rise in the sector's share of



Atlantic City-Hammonton,
Ocean City, and Vineland-Bridgeton
January 2008 to December 2019

Source: U.S. Bureau of Labor Statistics.

Total	149.5	127.3	131.2	134.5	3.3	2.5%	7.2	5.7%	-15.0	-10.0%
Private	127.1	106.1	110.3	113.7	3.4	3.0%	7.6	7.2%	-13.4	-10.6%
Construction	7.2	5.4	5.8	5.4	-0.3	-5.6%	0.0	0.8%	-1.7	-23.9%
Manufacturing	3.8	2.2	2.3	2.3	0.0	0.0%	0.1	3.0%	-1.6	-41.1%
Wholesale Trade	3.1	2.8	2.5	2.5	-0.1	-2.3%	-0.3	-11.7%	-0.7	-21.6%
Retail Trade	16.5	16.0	15.7	15.4	-0.4	-2.2%	-0.6	-4.0%	-1.1	-6.6%
Transportation, Warehousing, and Utilities	3.0	3.0	3.2	3.3	0.2	5.8%	0.3	10.8%	0.4	12.4%
Information	1.1	0.8	0.7	0.7	0.0	-1.2%	-0.1	-7.8%	-0.4	-37.6%
Financial Activities	4.6	3.8	3.7	3.7	0.0	-0.2%	-0.1	-3.5%	-0.9	-19.7%
Professional and Business Services	10.7	10.3	10.6	10.9	0.3	2.8%	0.5	5.3%	0.2	1.5%
Education and Health Services	18.1	20.8	21.2	21.4	0.3	1.3%	0.6	2.9%	3.4	18.7%
Hospitals	6.2	5.9	5.8	5.8	0.0	0.1%	-0.1	-1.4%	-0.4	-6.2%
Leisure and Hospitality	54.8	35.7	39.4	42.6	3.2	8.0%	6.9	19.4%	-12.2	-22.2%
Accommodation and Food Services	52.8	33.9	37.6	40.3	2.7	7.1%	6.4	19.0%	-12.5	-23.6%
Accommodation	41.0	22.2	25.5	27.6	2.1	8.2%	5.5	24.6%	-13.4	-32.6%
Casino Hotels	38.6	19.7	23.1	24.3	1.2	5.0%	4.6	23.1%	-14.3	-37.1%
Food Services and Drinking Places	11.8	11.7	12.1	12.7	0.6	4.8%	1.0	8.3%	0.9	7.8%
Other Services	4.4	5.3	5.4	5.6	0.2	3.7%	0.3	5.0%	1.2	26.8%
Government	22.3	21.2	20.9	20.8	-0.1	-0.4%	-0.4	-1.8%	-1.5	-6.9%
Federal Government	2.7	2.6	2.6	2.5	-0.1	-3.6%	-0.1	-5.4%	-0.2	-6.9%
State Government	3.6	3.6	3.6	3.8	0.2	5.3%	0.2	5.1%	0.2	6.8%
Local Government	16.1	15.0	14.7	14.5	-0.2	-1.3%	-0.4	-2.9%	-1.6	-9.9%

* 2017 represented the employment trough for the metropolitan area.
Source: U.S. Bureau of Labor Statistics.

total employment would arguably not be, as it would represent a return to an economy whose relative lack of diversi cation would make it very susceptible to industry-speci c shocks as seen in 2014.

Last year saw the passage of signi cant minimum wage legislation in New Jersey as the state became the fourth to set its minimum wage on a glide path toward $15 per hour. e legislation will ratchet the state's minimum wage up in $1 increments each January 1, so that it eventually reaches

were ostensibly driven by a standard set of considerations—most importantly their expectations regarding the strength of the 2019 summer shore season. (Last year's minimum wage legislation was signed into law by the governor in early February.)

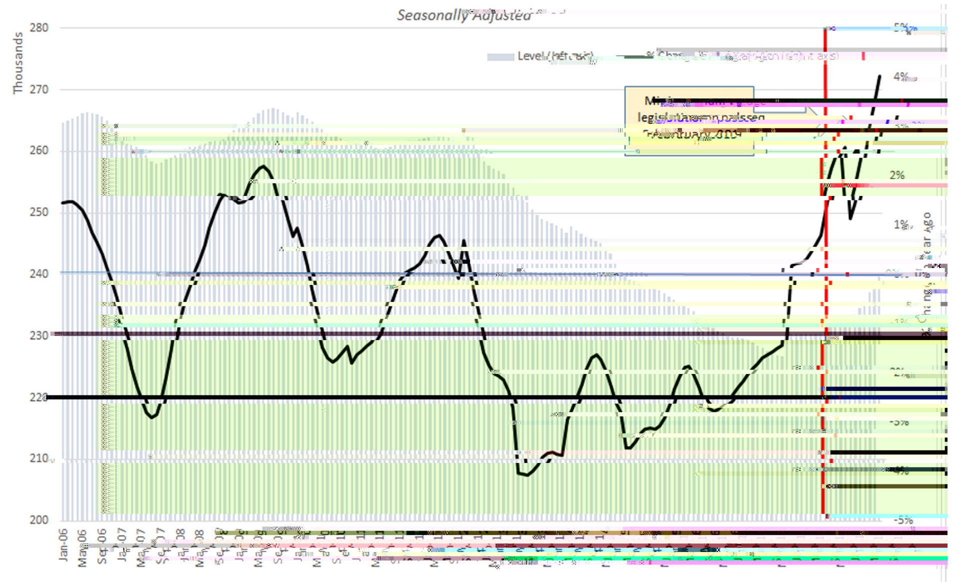
Column A in Tables 4 and 5 shows the average increase in employment that occurred between the January-April and May-August periods for industries in the Atlantic City and Ocean City metropolitan areas between 2007 and 2018. Total employment typically increases by 5 percent (+6,500) during the summer shore season in Atlantic City, while it increases by 52.3 percent in Ocean City (+17,800). Last year, total employment increased by 5.1 percent in Atlantic City, and 52.6 percent in Ocean City. In other words, recorded by each metropolitan area last year was smaller than it typically is. In Atlantic City, this share declined to 5.6 percent from a historic benchmark of 13.5 percent. In Ocean City, it declined to 11.8 percent from 15.5 percent.

e vast majority of jobs gains that occur in retail trade in both metropolitan areas every summer are of course seasonal in nature. Moreover, a signi cant proportion of retail trade establishments are small businesses.[13]

e upshot is that a signi cant proportion of all retail trade establishment owners in the two metropolitan areas were protected from last July's increase in the minimum wage, i.e., their hourly labor costs were una ected by the legislation. us, there is little reason to believe that the smaller-than-usrt4 1olun(eas9opory)-

pockets. And, despite mainstream economic theory's prediction, it appears many regional employers were willing to put those extra dollars into those pockets.

By ANTHONY MARINO



In both 2005 and 2006, shortly after the Borgata opened, nearly 35 million visit-trips were made to Atlantic City. A decade-long decline in gross gaming win began in 2007 that at rst many attributed to the national economic recession of 2007 to 2009. Subsequent analysis suggests the major in uence on decreasing casino revenues in Atlantic City during that period was actually the opening of Pennsylvania casinos in 2006 across the Delaware River in or near Philadelphia, and a few years later the launch of video machine gambling at two racinos across the Hudson River from New Jersey at Aqueduct Racetrack and Yonkers Raceway in New York.

As a result of this nearby competition, brick and mortar casino revenue in the resort fell annually until 2017. It increased again in both 2018 and last year because of the two new casinos - Ocean Casino Resort and Hard Rock - that opened in mid-2018. eir marketing e orts plus aggressive "comping" programs boosted tourism. Atlantic City Visitor Trips, as shown in Table 6, increased from 24.1 million in 2017 to about 25.5 million annual trips in 2019, an increase in two years of about 6 percent.

In 2019 the demand for the brick and mortar casino option expanded but not nearly enough to keep pace with all the new supply. If this trend continues through 2020, Atlantic City may experience another round of downsizing as it did from 12 casinos at the end of 2013 to seven by the end of 2016.

Table 7 tracks the brick and mortar win in the last three years for each of the seven casinos that were still open in 2017.

Collectively, these seven casinos had a retail gross win of $2.4 billion dollars in 2017. eir win decreased to $2.3 billion in 2018, and fell again to nearly $2.1 billion dollars in 2019, an approximate 11 percent decrease amounting to a brick and mortar gaming revenue loss of $262 million dollars in two years. However, when Hard Rock and Ocean Casino Resort 2019 revenues are added to the original seven-casino subtotal the industry's total gross retail win last year was nearly $2.7 billion dollars, an increase of 11.5 percent over two years.

at 11.5 percent increase in brick and mortar market demand, while welcome, was not nearly enough to cover the approximate supply increase of 25 percent to 40 percent between 2017 and 2019 of most casino indicators. For example, the two new casinos added about 3,800 new hotel rooms, an expansion of nearly 35 percent of rooms in the market. Similar increases of slot machine and table game numbers, food and beverage outlets, and casino parking spaces occurred according to New Jersey Casino 802 Td(fr)6 (oma(w)6 (elhigas i72 Tw 0 -1.kinnearly

e estimates shown in Table 1 rely on gross domestic product (GDP) data for metropolitan areas produced by the U.S. Bureau of Economic Analysis. As noted, the Atlantic City-Hammonton and Ocean City metropolitan areas were aggregated to create a southern New Jersey regional economy. State-level GDP data for industries are available for 2019, while metro-level data are only available for 2018. us, regional industry-based output gures for 2019 were rst estimated by adding one percentage-point to observed rates of real output growth in state-based industries in 2019. For example, retail trade output increased 5.5 percent (in real terms) statewide in 2019. us, our estimate for the regional economy's retail trade output in 2019 equals its 2018 level multiplied by 1.065. e decision to modestly scale up state-based industry growth rates helps capture the regional economy's outperformance vis-à-vis the rest of the state last year. In particular, the regional economy's overall rate of job growth last year was nearly three times the state's (3.1 percent vs. 1.1 percent). is approach was used to estimate real output for sixteen major industries/sectors in the regional economy for 2019.

e model assumes that output in three of these industries is concentrated in the summer months. Speci cally, it assumes this proportion is 40 percent in retail trade; 60 percent in FIRE (nance, insurance, real estate, rental and leasing); and, 50 percent in leisure and hospitality. Real estate—which includes summer shore rental and leasing activity—accounts for 92 percent of the regional economy's FIRE sector output. Based on historical averages, the twelve summer weeks account for approximately 30 percent of Atlantic City brick and mortar gaming industry win, while they account for roughly 70 percent of annual hotel and motel occupancy taxes in the region. Output for the remaining industries is assumed to be uniform across the year. Average weekly output for summer and non-summer weeks was computed for each industry.

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ese weekly summer and non-summer industry output gures were then combined with the model's two key parameters—the speed at which the economy returns to some semblance of normalcy (which determines the number of summer weeks that will be adversely impacted by the lockdown) and the future C-ent of Aent ofCD-d(cjA4fAent ofCD-4Ce then

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