

RUTGERS

Center for Advanced Infrastructure
and Transportation

Rutgers Regional Report

Fast Track Research Notes Issue Number 6: October 2020

Coronavirus Economic Advances Wane: Fast Lane to Slow Lane in New Jersey and the Nation

James W. Hughes

University Professor
Dean Emeritus of the
Edward J. Bloustein
School of Planning
and Public Policy
Rutgers, The State University
of New Jersey

Connie O. Hughes

Former Chief, Management &
Policy, NJ Governor's Office
Former President & Commissioner
NJ Board of Public Utilities
Former Deputy Commissioner
NJ Department of Labor

Joseph J. Seneca

University Professor Emeritus
Vice President for Academic
Affairs Emeritus
Distinguished Professor of
Economics Emeritus
Rutgers, The State University
of New Jersey

Coronavirus Economic Advances Wane: Fast Lane to Slow Lane in New Jersey and the Nation

The economies of New Jersey and the United States have made enormous job advances since the coronavirus-driven employment freefall ended in April 2020. But strong monthly job gains have been decreasing to more modest levels and the deficit reduction curve is flattening. While not about to enter hibernation, the employment recovery's subdued pace implies an extended time horizon to return to pre-pandemic "normals." The ominous precedent is the aftermath of the Great 2007-2009 Recession—a multiyear journey to *full* employment recovery.¹ This time may be different—significantly different—since this was an unequalled downturn.

At the start of 2020, COVID-19 dropped the biggest economic bombshell in eight decades—paralleled only by the massive disruptions of the Great Depression and World War II. Before the coronavirus hit (February 2020), the great American job-creation machine had been running flat out.² The pandemic-triggered economic lockdown quickly transformed it into a merciless job-destruction machine. The labor-market meltdown was simply unparalleled.

A catastrophe was avoided in the United States because of unprecedented government intervention—direct aid to workers and business firms, massive federal budget deficits (fiscal stimulus), and actions by the Fed in financial markets (monetary stimulus). A remarkable employment bounce back unfolded by late spring. ***By the end of the summer (September), the nation had recovered 51.5 percent of its massive pandemic-driven employment losses while New Jersey recaptured 56.2 percent of its even more severe employment losses.***³ ***Thus, both have surpassed the “halfway” recovery mark in just a five-month period.***

¹ It took until May 2014 to return to the employment level of December 2007, which was the start of the Great Recession.

² February 2020 was the end of the record-breaking 128-month long “Great Expansion” and the beginning of the “Great Contraction.” The strong economy of January and February, marked by robust job gains, was propelled by the momentum of a decade of record-breaking employment growth. Thus, the economy did not simply slip into recession, it plunged into recession.

³ Between February 2020 and April 2020, the United States lost 14.5 percent of its employment base (table A-2), while New Jersey lost 19.6 percent (table A-5). Thus New Jersey was one of the two states—along with New York—hardest hit by the national downturn—both losing one out of five of their pre-pandemic jobs.

To put these gains in perspective, it took the nation 29 months to reach the halfway employment-recovery mark following the Great 2007-2009 Recession while it took New Jersey 51 months. The rapidity and scale of this current five-month comeback was certainly not anticipated during the dark days that prevailed in April when the economy was seriously “on the ropes.” Nonetheless, the employment progress to date is still incomplete—not only in aggregate numerical terms, but in dealing with the economic scars that are continuing to assert their long-term impact.

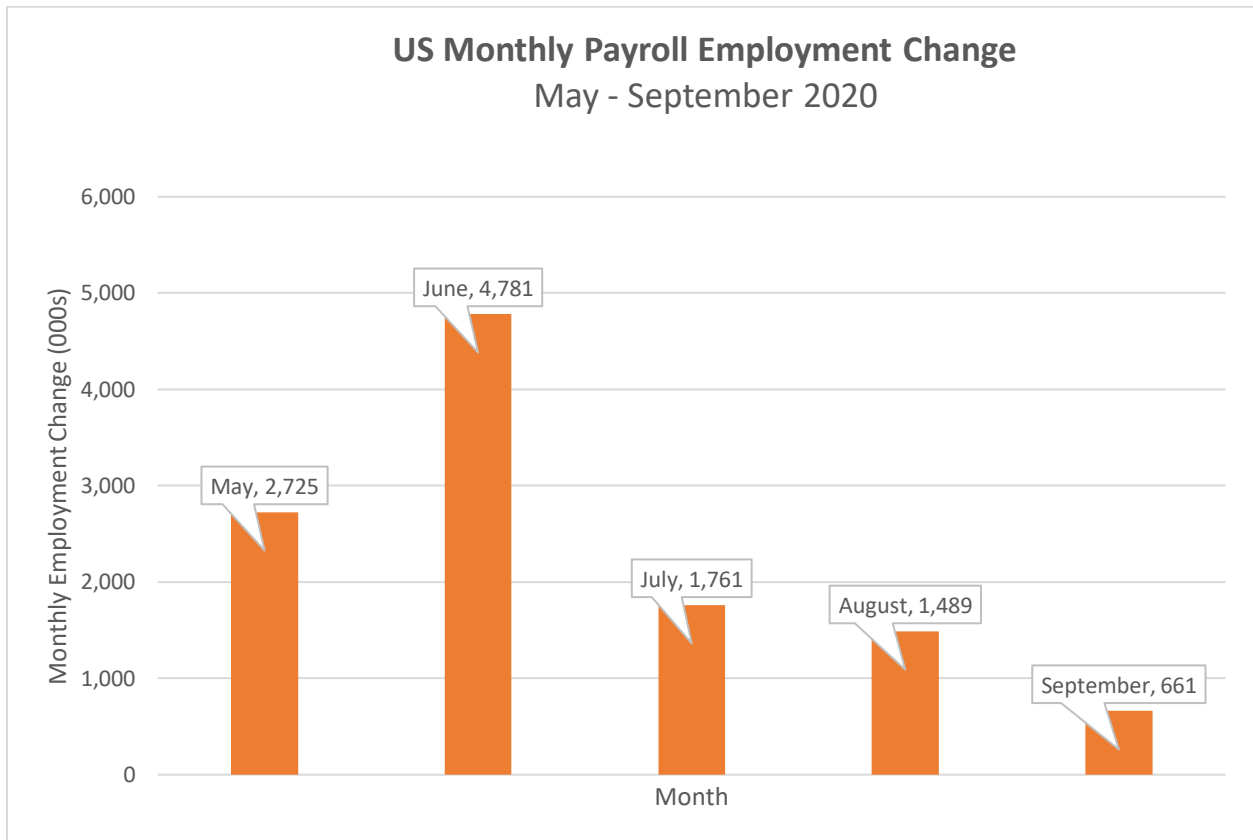
As detailed in preceding Fast Track Research Notes reports, the gains to date largely represent the easily harvested, low-hanging recovery fruit. *For the current upswing to achieve full recovery there will need to be a longer time frame and it will need to encompass a much broader swath of the economy.* The ongoing adjustments and adaptations to metastasizing structural changes in the economy are immense and may invoke significant pain.⁴ Increasing numbers of companies and organizations are starting to “readjust their headcounts” as they transform themselves. Such aftershocks of coronavirus-triggered economic disruptions are not about to abate anytime soon, emphasizing the need for additional public policy interventions. Renewed stimulus spending will prove critical to sustained economic recovery.

Revising Down the Future: Fast Lane to Slow Lane

Not unexpectedly, the journey of employment on the recovery highway has decelerated from the fast lane to the slow lane. *While September 2020 was the fifth straight month of the nation’s employment recovery, it was also the third straight month of declining job gains.* The sharp descending order of magnitude is visibly evident in chart 1, which presents employment growth for each of the five recovery months.

⁴ As discussed in previous Fast Track reports, the initial hopes and expectations were that the coronavirus economic shock was temporary, and a fast bounce back would ensue. But it is increasingly recognized that the longer-term economic reality would have to grapple with furloughs turning into permanent layoffs, short-term business shutdowns turning into bankruptcies and permanent closures, more pervasive organizational restructurings, constant adaptations to unanticipated pandemic economic scars, and potential COVID-19 upsurges.

Chart 1



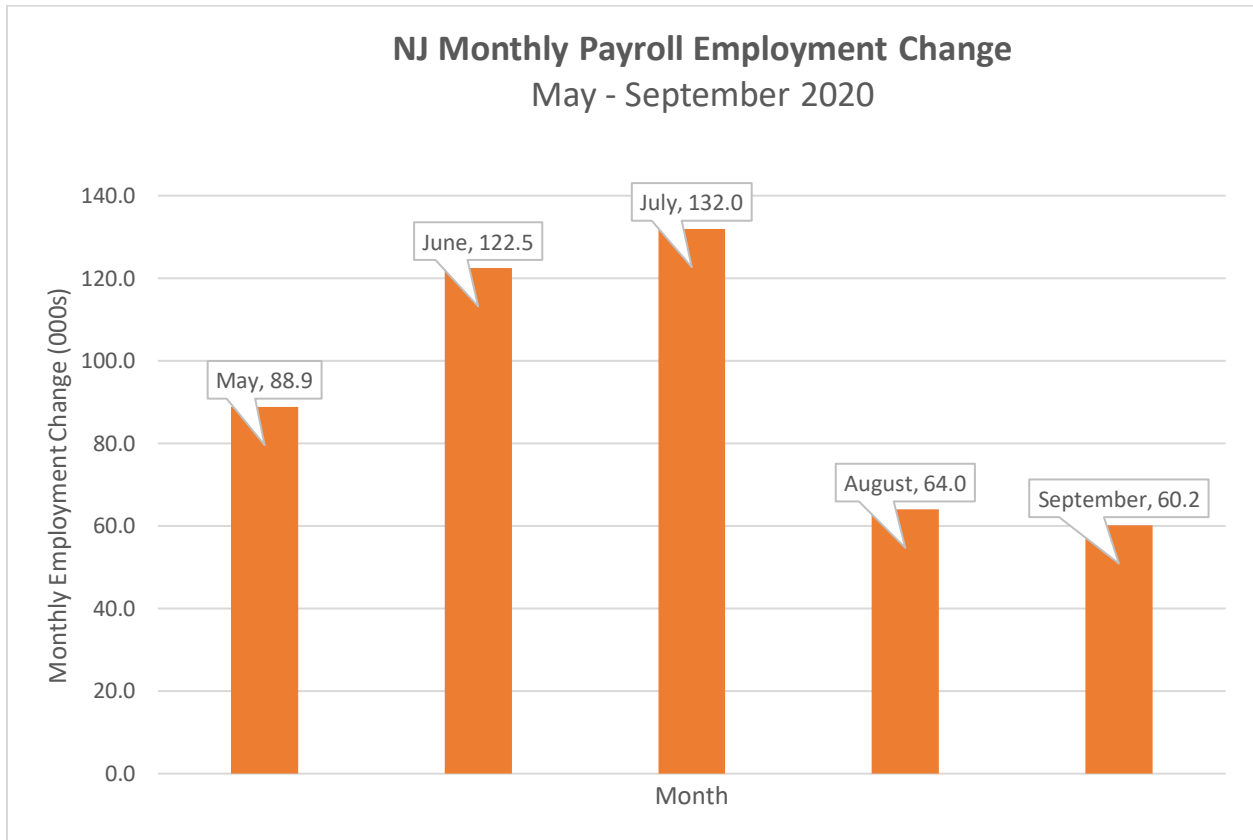
September was also the first time since the rebound began that monthly employment growth in the nation fell below one-million jobs, dropping to just 661,000 jobs (chart1). This was less than 14 percent of the outsized record gains achieved in June (+4.78 million jobs), when the post-lockdown employment rebound peaked. And September’s gain (+661,000 jobs) was less than one-half that of August (+1.49 million jobs).⁵

A similar shift to the slow recovery lane is evident in New Jersey (chart 2), but less so than in the nation. *The state’s job-growth recovery machine was in overdrive in July—one month beyond the nation’s recovery peak— when a state-record monthly employment gain*

⁵ There are two cautionary notes on the August and September employment totals that suggest that the drop-off between the two months may be overstated. First, the August total was bolstered by the addition of 250,000 federal government jobs, reflecting the hiring of temporary Census 2020 workers. Second, September’s employment total was reduced by the loss of 231,100 jobs in local government education, reflecting both delayed school openings and seasonal adjustment uncertainties linked to the start of the academic year. Nonetheless, this would reduce only the scale, not the substance, of growth deceleration.

was set (+132,000 jobs). However, the employment increase of August (+64,000 jobs) was exactly one-half that of July, while September’s gain represented a more modest downshift to 60,200 jobs.⁶

Chart 2



In both cases, being “stuck” in the slow lane will result in a much greater amount of time needed to work off the enormous employment deficits that have accumulated. As the pace of employment growth eases, so too will the pace of deficit reduction. ***By September, the nation had recovered 11.4 million of the 22.2 million jobs of the pandemic-driven employment losses—a recovery rate of 51.5 percent—leaving a deficit of 10.7 million jobs. New Jersey had recovered 467,600 jobs of its losses (831,300 jobs)—a recovery rate of 56.2 percent—leaving a deficit of 363,700 jobs.*** Moreover, New Jersey’s total employment in September 2020 (3.88 million jobs) was still at 1999 levels—it has not yet made it into the new millennium.

⁶ In contrast to the nation, New Jersey’s September total was bolstered by a gain of 22,600 jobs in local government, reflecting school openings and the start of the academic year.

The result of decelerating monthly job gains is a noticeable flattening of the “swoosh” recovery trajectory revealed in charts 3 and 4.⁷ *For the United States (chart 3), the cumulative deficit declined by 7.5 million jobs during May and June.*⁸ These two months comprised the heart of the period of the rapid rehiring of laid off or furloughed workers. *But in August and September, the latest two-month period, the deficit was reduced by only 2.2 million jobs, less than one-third that (-7.5 million jobs) of May and June.*⁹ In part, this reflected the failure or inability to bring back into the workforce the cadre of still unemployed workers, as well as the slow pace of new job creation throughout the economy.

Chart 3



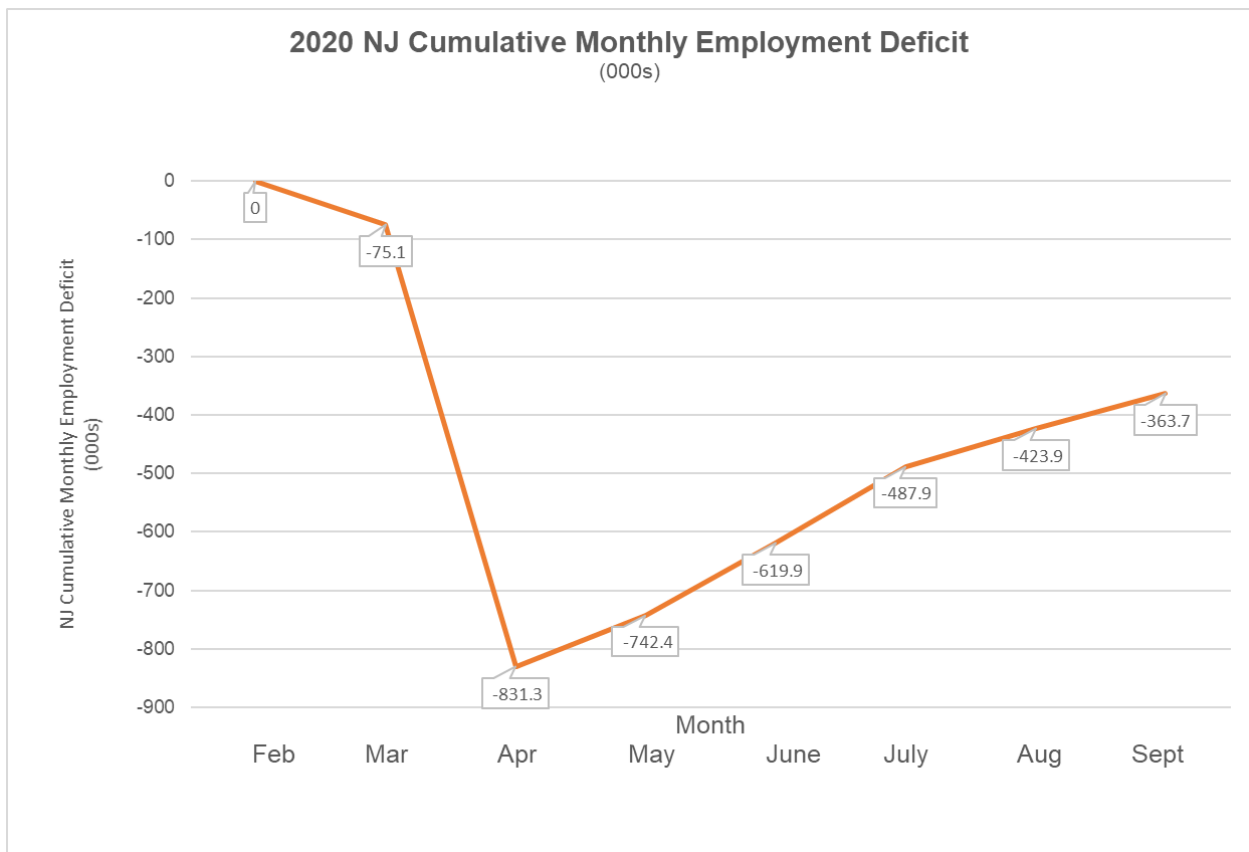
⁷ The “swoosh,” the shape akin to the Nike sports brand logo, was detailed in Fast Track Research Notes Issue Number 5. The “flattening” is much more pronounced in the nation than in New Jersey.

⁸ In April, the deficit was 22.2 million jobs. Two months later, in June, it had dropped to 14.7 million jobs, a decline in the deficit of 33.8 percent or 7.5 million jobs.

⁹ In July, the deficit was 12.9 million jobs. Two months later, in September, it had fallen to 10.7 million jobs, a decline of 17.1 percent or 2.2 million jobs.

The outstanding employment “arrears” are of such magnitude that full recovery to February’s pre-recession level will prove to be a herculean task. *If the magnitude of September’s national employment gain (+661,000 jobs) could be replicated every month into the future, it would take over 16 months to erase the current deficit (10.7 million jobs). Full recovery would then not be realized until March 2022.* However, in pre-pandemic math, monthly job growth at September’s level would have been “gangbuster” extraordinary. For it to continue for 16-straight months would be an over-the-top fantasy.

Chart 4



New Jersey’s deficit had contracted by 254,500 jobs in June and July combined (from 742,400 jobs in May to 487,900 jobs in July), its two strongest employment recovery months (chart 4). But in August and September, the two-month deficit reduction dropped to 124,200 jobs (from 487,900 jobs in July to 363,700 jobs in August), less than one-half that of June and July.

Thus, like the nation, the state still has substantial employment arrears to make up. To compare with the national analysis: *If the magnitude of September’s employment gain (+60,200 jobs) in New Jersey could be replicated every month into the future—which would be a remarkable feat—it would take only six months to erase the current deficit (363,700 jobs). Full recovery would then be realized in March 2021, one year ahead of the nation.*

Such an achievement would be record shattering. Again, pre-pandemic math proves useful in assessing such a possibility. *In the 10-year period between February 2010 and February 2020 (table A-4), New Jersey gained 405,900 jobs, or 40,590 jobs per year. Securing a sustained monthly gain of 60,200 jobs (September’s increase) for six-straight months would raise eyebrows sky high.*

The Long Crawl: Recovery Sprint Yields to Recovery Marathon

The subtitle of Fast Track Research Notes Issue Number 2 (June 2020) was “Precipitous Fall to Recovery Crawl.” The “crawl” was anticipated to be the third stage of the pandemic-driven economic odyssey, following the dizzying employment contraction (stage 1) and the initial burst of rehiring (stage 2).¹⁰ *In September, as employment growth eased, the “crawl” fully commenced.*

As an aside, while there is consensus among economic observers that we have entered this new stage of “softer” employment recovery, many alternative labels have been constructed: *a long slog, a slow grind, a plodding clawback, and a protracted path*, among others. Illustrative is the analysis presented in the Federal Reserve Bank of Atlanta’s *macroblog*.¹¹ “The

¹⁰ The \$2.2 trillion Cares Act, passed by Congress in March 2020, was designed to sustain business and workers over the short term. Expectations were that economic interruptions would ease substantially by the summer, when the virus would be under control, the economy would reopen, and workers would return to their jobs. The reality that is unfolding suggests permanent layoffs, business closures, and organizational restructuring.

¹¹ <https://www.frbatlanta.org/research/surveys/business-uncertainty.aspx> This Atlanta Fed microblog post (October 1, 2020), “Post-COVID Recovery? Not So Fast, My Friend,” reports on the Atlanta Fed/Chicago Booth/Stanford Survey of Business Uncertainty (SBU). This panel survey measures the one-year ahead expectations and uncertainties that firms have about their own employment and sales. The sample covers all regions of the U.S. economy, every industry sector except agriculture and government, and a broad range of firm sizes.

question of how quickly the United States is going to return to prepandemic level of activity looms large. Data from the Survey of Business Uncertainty (SBU) suggest that the road forward is going to be *a tough slog* [emphasis added]...based on the latest average projection, it will take firms more than four-and-one-half years to recover their pre-COVID employment levels.” Indeed, a week later, Jerome H. Powell, Chair of the Federal Reserve, stated: “There is a risk that the rapid initial gains from reopening may transition to *a longer than expected slog back* [emphasis added] to full recovery as some segments struggle with the pandemic’s continued fallout.”¹² Thus, Fast Track Issue Number 2’s adoption of the term “crawl” is not an outlier.

Eight months into the coronavirus-inspired economic crisis it is likely that the economic finish line—a return to pre-pandemic “normals”—is still far into the future.¹³ Despite the tantalizing prospects raised in the preceding section, the race to recovery is destined to be a long-distance marathon, not a middle-distance run, certainly not a short-distance dash/sprint.

The Status of the Five-Month (April 2020-September 2020) Rebound

United States

Updating the metrics of previous Fact Track reports, table 1 shows the employment change by detailed industrial sector for the first five months of the economic recovery of the United States. Between April 2020 and September 2020, the nation’s total employment increased by 11.4 million jobs (+8.8 percent). The private sector (+11.4 million jobs or +10.5 percent) accounted for nearly the entire growth since government employment grew by only 27,000 jobs (+0.1 percent) during this period. This overall five-month tepid increase was linked to September’s weakness resulting from school opening delays and seasonal adjustment issues.

¹² <https://www.federalreserve.gov/newsevents/speech/powell20201006a.htm>

¹³ The recession officially started in February 2020, according to the National Bureau of Economic Research’s Business Cycle Dating Committee. That was also the peak of the last expansion (June 2009-February 2020). March was the first full month of the downturn. Thus, October—the date of this report—is the eighth month of recession.

Table 1				
United States				
April 2020-September 2020 Nonagricultural Wage and Salary Employment				
Seasonally Adjusted (2019 Benchmark)				
(In Thousands)				
	2020	2020	Change: Apr-Sept	
	Apr	Sept	Number	Percent
TOTAL NONFARM	130,303	141,720	11,417	8.8%
TOTAL PRIVATE SECTOR	108,527	119,917	11,390	10.5%
Goods-Producing	18,698	20,063	1,365	7.3%
Mining, Logging, and Construction	7,209	7,858	649	9.0%
Mining and Logging	653	613	-40	-6.1%
Construction	6,556	7,245	689	10.5%
Manufacturing	11,489	12,205	716	6.2%
Durable Goods	7,126	7,614	488	6.8%
Non-Durable Goods	4,363	4,591	228	5.2%
Service-Providing	111,605	121,657	10,052	9.0%
Private Service-Providing	89,829	99,854	10,025	11.2%
Trade, Transportation, and Utilities	24,475	26,727	2,252	9.2%
Wholesale Trade	5,537	5,623	86	1.5%
Retail Trade	13,288	15,189	1,901	14.3%
Transportation, Warehousing, and Utilities	5,651	5,916	265	4.7%
Information	2,609	2,618	9	0.3%
Financial Activities	8,556	8,683	127	1.5%
Finance and Insurance	6,443	6,482	40	0.6%
Real Estate and Rental & Leasing	2,124	2,200	77	3.6%
Professional and Business Services	19,254	20,164	910	4.7%
Professional, Scientific, and Technical Services	9,147	9,387	240	2.6%
Management of Companies and Enterprises	2,356	2,351	-4	-0.2%
Adm./Suppt. and Waste Mgt./Remed. Services	7,752	8,426	674	8.7%
Education and Health Services	21,805	23,189	1,384	6.3%
Educational Services	3,318	3,474	156	4.7%
Health Care and Social Assistance	18,488	19,715	1,227	6.6%
Leisure and Hospitality	8,549	13,027	4,478	52.4%
Arts, Entertainment, and Recreation	1,143	1,677	534	46.7%
Accommodation and Food Services	7,406	11,351	3,945	53.3%
Other Services	4,571	5,446	875	19.1%
GOVERNMENT	21,776	21,803	27	0.1%
Federal Government	2,893	3,128	235	8.1%
State Government	4,993	4,935	-58	-1.2%
Local Government	13,890	13,740	-150	-1.1%
Source: United States Bureau of Labor Statistics				

Extending the pattern of the preceding four months, the frontrunning growth sectors of the nation remained those that had been hardest hit during the draconian economic shutdown of March and April. Rebounding strongly during the April-to-September period were: accommodation and food services (+3.9 million jobs or +53.3 percent); retail trade (+1.9 million jobs or +14.3 percent); and health care and social assistance (+1.2 million jobs or +6.6 percent). ***The growth of these three sectors combined (6.7 million jobs) accounted for 62.0 percent of the total employment gain (11.4 million jobs) for the five-month period.*** Surprisingly, their share of total employment growth in the month of September increased to 75.8 percent, mainly reflecting the deceleration of overall job growth in September (+661,000 jobs) that was the result of the weak performance in the other sectors—a strong indication that employment gains in future months likely will be smaller.¹⁴ ***Thus, when the rapid-recovery phase tapers off in subsequent months, a key question will remain: Will the other sectors begin to contribute more significantly to growth?***

Table 2 details the five-month (April-to-September) rebound share of the February-to-April pandemic-driven employment loss in the United States. ***Overall, the nation passed a key milestone: It has now recovered more than one-half (51.5 percent) of the jobs lost during the contraction.*** Standing almost alone on top of the recovery-rate ladder was finance and insurance (90.8 percent). However, the impressive recovery rate of 90.8 percent was the result of a small gain of just 40,000 jobs in this sector. In contrast, the five-month recovery share of second-ranking retail trade (79.7 percent) was the result of the recapture of 1.9 million of the 2.4 million jobs lost in the February-to-April contraction.

The other industry sectors that have recovered more than half of their losses are: other services (63.9 percent); construction (63.6 percent); accommodation and food services (56.4 percent); health care and social assistance (54.1 percent); and manufacturing (52.5 percent). In contrast, state and local government, mining and logging, and management of companies and enterprises had net job losses during this five-month period.

¹⁴ The September percentage was computed from data in: <https://www.bls.gov/news.release/empsit.toc.htm>

Table 2			
United States			
Recovery Gains (April 2020-September 2020) vs. Pandemic Losses (February 2020-April 2020)			
Seasonally Adjusted (2019 Benchmark)			
(In Thousands)			
	Pandemic Loss (Feb-Apr)	Recovery (Apr-Sept)	Recovery Share of Loss
TOTAL NONFARM	-22,160	11,417	51.5%
TOTAL PRIVATE SECTOR	-21,191	11,390	53.7%
Goods-Producing	-2,507	1,365	54.4%
Mining, Logging, and Construction	-1,144	649	56.7%
Mining and Logging	-61	-40	-
Construction	-1,083	689	63.6%
Manufacturing	-1,363	716	52.5%
Durable Goods	-932	488	52.4%
Non-Durable Goods	-431	228	52.9%
Service-Providing	-19,653	10,052	51.1%
Private Service-Providing	-18,684	10,025	53.7%
Trade, Transportation, and Utilities	-3,355	2,252	67.1%
Wholesale Trade	-397	86	21.5%
Retail Trade	-2,384	1,901	79.7%
Transportation, Warehousing, and Utilities	-574	265	46.2%
Information	-285	9	-
Financial Activities	-289	127	43.9%
Finance and Insurance	-44	40	90.8%
Real Estate and Rental & Leasing	-235	77	32.6%
Professional and Business Services	-2,296	910	39.6%
Professional, Scientific, and Technical Services	-561	240	42.8%
Management of Companies and Enterprises	-92	-4	-
Adm./Suppt. and Waste Mgt./Remed. Services	-1,643	674	41.0%
Education and Health Services	-2,781	1,384	49.8%
Educational Services	-511	156	30.6%
Health Care and Social Assistance	-2,270	1,227	54.1%
Leisure and Hospitality	-8,318	4,478	53.8%
Arts, Entertainment, and Recreation	-1,329	534	40.1%
Accommodation and Food Services	-6,988	3,945	56.4%
Other Services	-1,370	875	63.9%
GOVERNMENT	-969	27	2.8%
Federal Government	26	235	-
State Government	-206	-58	-
Local Government	-789	-150	-

Source: United States Bureau of Labor Statistics

New Jersey

The full detailing by industry sector of the five-month reopening of the economy is presented in table 3—the New Jersey equivalent to the nation’s table 1. ***Between April 2020 and September 2020, total employment in the state grew by 467,600 jobs, representing a rate of increase (+13.7 percent) approximately half again as high as that of the nation (+8.8 percent).*** As noted in earlier Fast Track reports, this stronger rebound is not surprising, since New Jersey (along with New York) suffered disproportionately during the February-to-April contraction. The state has had much more economic ground to make up and has been doing so.

The private sector (+452,900 jobs or +16.0 percent) accounted for almost all the total employment growth in New Jersey; government employment for the five-month period increased by only 14,700 jobs (+2.5 percent). Like the United States, the governmental sector in New Jersey was bolstered by the addition of temporary 2020 Census hires—federal government employment in the state increased by 7,700 jobs (+15.8 percent). However, state government employment contracted by 3,300 jobs (-2.4 percent).

In contrast to the nation, local government employment increased (+10,300 jobs or +2.6 percent) during the five-month period. This difference is likely due to the timing of the start of the school year and the seasonal adjustment issues that usually occur in September. In September, local government employment in New Jersey increased by 17,600 jobs; nationally, it declined by 216,000 jobs.

The most prominent employment growth sectors of New Jersey did not vary substantially from those of the nation. Rebounding strongly were specific parts of the economy—those relying on extensive in-person contact—that had been hardest hit during the stay-at-home economic lockdown imposed to counteract the negative health effects of the coronavirus. Strong gains were registered by accommodation and food services (+123,300 jobs or +99.0 percent), retail trade (+68,600 jobs or +18.7 percent), and health care and social assistance (+56,300 jobs or +11.1 percent). These three sectors combined (+248,200 jobs) accounted for 53.0 percent of the total employment gain (+467,600 jobs) of the five-month period, a slightly smaller share than that of the nation (62.0 percent).

Table 3				
New Jersey				
April 2020-September 2020 Nonagricultural Wage and Salary Employment				
Seasonally Adjusted (2019 Benchmark)				
(In Thousands)				
	2020	2020	Change: Apr-Sept	
	Apr	Sept	Number	Percent
TOTAL NONFARM	3,410.6	3,878.2	467.6	13.7%
TOTAL PRIVATE SECTOR	2,829.6	3,282.5	452.9	16.0%
Goods-Producing	339.9	392.2	52.3	15.4%
Mining, Logging, and Construction	123.3	150.2	26.9	21.8%
Mining and Logging	1.4	1.5	0.1	7.1%
Construction	121.9	148.7	26.8	22.0%
Manufacturing	216.6	242.0	25.4	11.7%
Durable Goods	96.5	114.5	18.0	18.7%
Non-Durable Goods	120.1	127.5	7.4	6.2%
Service-Providing	3,070.7	3,486.0	415.3	13.5%
Private Service-Providing	2,489.7	2,890.3	400.6	16.1%
Trade, Transportation, and Utilities	737.4	846.5	109.1	14.8%
Wholesale Trade	186.2	206.7	20.5	11.0%
Retail Trade	365.9	434.5	68.6	18.7%
Transportation, Warehousing, and Utilities	185.3	205.3	20.0	10.8%
Information	62.2	63.1	0.9	1.4%
Financial Activities	237.6	242.5	4.9	2.1%
Finance and Insurance	185.9	187.6	1.7	0.9%
Real Estate and Rental & Leasing	51.7	54.9	3.2	6.2%
Professional and Business Services	592.1	627.7	35.6	6.0%
Professional, Scientific, and Technical Services	280.8	280.0	-0.8	-0.3%
Management of Companies and Enterprises	81.8	84.2	2.4	2.9%
Adm./Suppt. and Waste Mgt./Remed. Services	229.5	263.5	34.0	14.8%
Education and Health Services	600.0	664.2	64.2	10.7%
Educational Services	93.5	101.4	7.9	8.4%
Health Care and Social Assistance	506.5	562.8	56.3	11.1%
Leisure and Hospitality	145.1	289.7	144.6	99.7%
Arts, Entertainment, and Recreation	20.6	41.9	21.3	103.4%
Accommodation and Food Services	124.5	247.8	123.3	99.0%
Other Services	115.3	156.6	41.3	35.8%
GOVERNMENT	581.0	595.7	14.7	2.5%
Federal Government	48.8	56.5	7.7	15.8%
State Government	138.6	135.3	-3.3	-2.4%
Local Government	393.6	403.9	10.3	2.6%

Source: New Jersey Department of Labor and Workforce Development, Economic & Demographic Research

Table 4			
New Jersey			
Recovery Gains (April 2020-Sept 2020) vs. Pandemic Losses (February 2020-April 2020)			
Seasonally Adjusted (2019 Benchmark)			
(In Thousands)			
	Pandemic Loss (Feb-Apr)	Recovery Apr-Sept	Recovery Share of Loss
TOTAL NONFARM	-831.3	467.6	56.2%
TOTAL PRIVATE SECTOR	-804.4	452.9	56.3%
Goods-Producing	-81.2	52.3	64.4%
Mining, Logging, and Construction	-44.7	26.9	60.2%
Mining and Logging	-0.1	0.1	100.0%
Construction	-44.6	26.8	60.1%
Manufacturing	-36.4	25.4	69.8%
Durable Goods	-21.7	18.0	82.9%
Non-Durable Goods	-14.7	7.4	50.3%
Service-Providing	-750.1	415.3	55.4%
Private Service-Providing	-723.2	400.6	55.4%
Trade, Transportation, and Utilities	-157.2	109.1	69.4%
Wholesale Trade	-29.4	20.5	69.7%
Retail Trade	-86.9	68.6	78.9%
Transportation, Warehousing, and Utilities	-40.9	20.0	48.9%
Information	-4.2	0.9	21.4%
Financial Activities	-15.9	4.9	30.8%
Finance and Insurance	-5.3	1.7	32.1%
Real Estate and Rental & Leasing	-10.6	3.2	30.2%
Professional and Business Services	-98.2	35.6	36.3%
Professional, Scientific, and Technical Services	-22.8	-0.8	-3.5%
Management of Companies and Enterprises	-6.8	2.4	35.3%
Adm./Suppt. and Waste Mgt./Remed. Services	-68.6	34.0	49.6%
Education and Health Services	-130.6	64.2	49.2%
Educational Services	-22.5	7.9	35.1%
Health Care and Social Assistance	-108.1	56.3	52.1%
Leisure and Hospitality	-258.9	144.6	55.9%
Arts, Entertainment, and Recreation	-54.1	21.3	39.4%
Accommodation and Food Services	-204.8	123.3	60.2%
Other Services	-58.2	41.3	71.0%
GOVERNMENT	-26.9	14.7	54.6%
Federal Government	-0.3	7.7	2566.7%
State Government	-3.4	-3.3	-
Local Government	-23.2	10.3	44.4%

Source: New Jersey Department of Labor and Workforce Development, Economic & Demographic Research

Table 4 details the April-to-September recovery (or economic reopening) share of the February-to-April pandemic loss. *As a result of the strong re-employment gains of the last five months, New Jersey has now recovered more than half (56.2 percent) of its losses, exceeding the recovery performance (51.5 percent) of the nation.* The state has now regained 467,600 jobs of the 831,300 jobs lost during the February-to-April contraction. However, **New Jersey still needs to add 363,700 jobs to achieve full employment recovery.**

Of the major industrial sectors, the highest job-recovery rates in New Jersey occurred in other services (71.0 percent); manufacturing (69.8 percent); trade, transportation, and utilities (69.4 percent); construction (60.1 percent); and leisure and hospitality (55.9 percent). Much lower recovery rates took place in information (21.4 percent), financial activities (30.8 percent), and professional and business services (36.3 percent).

Disconnect/Disparity Observations

Is the balance of 2020—and 2021—destined to be the “two-lane” or “two-track” recovery? In Fast Track Research Notes Issue Number 5, the disparate “K” pattern of economic rebound—drawn from the alphabet soup of options—was noted: a two-track path specifically highlighted by elite-credentialed professionals successfully working remotely at home (upper arm of the K) versus lower-wage support workers with fewer credentials who are bearing the brunt of the economic shock (lower arm of the K). *This disparity has been described as “Zoom and gloom”*—the rapid adoption of technology facilitating successful remote working and economic continuity but concurrently producing numerous labor-market casualties. The coronavirus economy has carved the pre-existing have/have-not divide much deeper.

Another have/have-not dimension of the K is education: college graduates who have recovered lost ground versus those low-wage workers with only a high school (or less) education who fell further behind. Compounding and exacerbating this disparity/inequality is the fact that low-wage workers disproportionately comprise racial and ethnic minorities, and women. Thus, those workers with historic disadvantages have been most negatively affected by the pandemic, which is serving as an accelerant of harsh realities that were already present.

Such deepening economic divisions are paralleled on a macro-economic scale by the disconnects between financial markets and Main Street, and between statistical reality and “boots-on-the-ground” reality. There is certainly historical precedent. For example, the Great 2007-2009 Recession technically started in December 2007 and ended 18-months later in June 2009, according to the Business Cycle Dating Committee of the National Bureau of Economic Research.¹⁵ However, somebody forgot to inform the labor market and the ranks of the unemployed that the recession was over. Despite its “official” end—when economic output started to increase—total employment in the United States continued to decline steadily until February 2010. It took an additional eight months for employment to finally stem its losses and start its recovery.¹⁶

Subsequently, it was not until May 2014, 51-months later, before total employment reached and surpassed its previous peak, January 2008 (the first month into the 2007-2009 downturn). In contrast, GDP had almost returned to its pre-recession peak by the fourth quarter of 2010 and finally surpassed it in the second quarter of 2011. Thus, there was a four-year disconnect between economic output recovery and labor market recovery.¹⁷ Given the depth of the 2020 contraction, and its potential long-term residual economic scars, an even greater

¹⁵ The NBER committee views real gross domestic product (GDP), reported quarterly by the U.S. Bureau of Economic Analysis, as the single best measure of aggregate economic activity (economic output). To choose the monthly dates of business cycle turning points, the committee also considers a variety of monthly measures of activity across the entire economy, including payroll employment.

In terms of the 2007-2009 recession, real GDP (as measured in chained 2012 dollars) peaked (\$15.76 trillion) in the fourth quarter of 2007 and then started to contract, finally bottoming out in the second quarter of 2009 (\$15.13 trillion). These quarters closely correspond to the committee’s determination of the start (December 2007) and end (June 2009) of the recession. GDP almost fully recovered in the fourth quarter of 2010 (\$15.75 trillion), but it took until the second quarter of 2011 (\$15.83 trillion) to finally surpass the pre-recession peak (fourth quarter of 2007). See: <https://fred.stlouisfed.org/series/GDPC1>

¹⁶ Total U.S. employment peaked in January 2008 (138.4 million jobs) and bottomed out in February 2010 (129.7 million jobs), a loss of 8.7 million jobs over 25 months. Full employment recovery from the February 2010 trough was finally achieved in May 2014 (138.5 million jobs).

¹⁷ The time gap was probably wider, since long-term demographic trends indicated that the labor force would grow by approximately one million persons per year. The nation would have had to add one-million jobs per year to keep labor market conditions stable. Thus, to keep pace with four years of demographic trend growth, other things being equal, an additional four million jobs would be required.

disconnect could emerge when economic output fully recovers.¹⁸ Already, Wall Street has boomed while Main Street limped, producing a widening gulf between financial markets and the “real” or “authentic” economy.

Typifying the disparity in the business world is the striking difference in economic fortune between large, financially well-endowed firms, which in many cases are faring quite well, and smaller, rival firms, which are experiencing severe economic difficulties. The same partition is visibly evident in the restaurant world.¹⁹ Many large, well-capitalized chains are thriving—perhaps feasting—while small independent local restaurants struggle to survive or are about to go bust.²⁰ This is just one upheaval that is altering and reshaping the nation’s and state’s economic fabrics.

Will the Last Person Out Please Turn off the Lights?²¹

The heading of this section is obviously an exaggeration, a symbolic statement originating in events that took place in Seattle almost one-half century ago (1971). Repeated

¹⁸ On October 29, 2020, the advance estimate of third-quarter Gross Domestic Product will be released. Following the record 31.4 percent plunge (annual rate) in the second quarter (April, May, and June), GDP is projected to grow by a record 25 to 30 percent in the third quarter (July, August, and September). This is the “delayed” or “lagged” equivalent of the employment bounce back, from record job losses in April to record gains in May and June. It is likely that fourth-quarter GDP will slow dramatically, again following the path carved out earlier by the employment metrics. But caution should be advised in interpreting the “fast-lane” headline third-quarter GDP number—it is destined to shift to the “slow lane” in the fourth quarter. These data will not be available until January 2021, when the advance estimate will be released. Nonetheless, GDP will likely achieve full recovery long before employment achieves full recovery.

¹⁹ https://www.wsj.com/articles/mcdonalds-chipotle-and-dominos-are-feasting-during-coronavirus-while-your-neighborhood-restaurant-fasts-11602302431?mod=itp_wsj&mod=&mod=djemITP_h

²⁰ Not all big restaurant chains are immune to the downturn. Many casual-dining companies are also struggling or closing, while other large chains—particularly with efficient drive-throughs—are adapting quite well. The turmoil engulfing many local independent operators will cascade down to a broad swath of the supplier ecosystem.

²¹ This is a basic take on an iconic event that took place in 1971 in Seattle, when two real estate agents put up a billboard near Sea-Tac International Airport with the then daring humorous statement: “Will the last person leaving SEATTLE—Turn out the lights.” They were responding to the economic pessimism that gripped the city resulting from the aerospace industry’s recessionary nosedive, led by Boeing, then the region’s largest employer. The billboard received major national news attention, but after 15 days, the billboard company, under local pressure, removed it.

here, it directs attention to the fact that *population outmigration—far more people going than coming—has been an endemic demographic “ailment” afflicting New Jersey and New York City*. This structural condition is now being impacted by the pandemic, although the outcome does not yet lend itself to precise measurement. But its continuation or acceleration will have a demonstrable effect on the future economy of the state, city, and overall metropolitan region.

There has already been substantial attention this year focused on another related population movement: the increase in urban-suburban migration flows accelerated by the shock of COVID-19.²² By the summer of 2020, lower-density suburban housing markets in New York and New Jersey were seemingly under assault by millennial homeownership aspirants fleeing higher-density urban environments. Still, their movements were largely geographically limited to the commuter sheds of the economically integrated New York-New Jersey region.

But the global pandemic is now intersecting with a much broader demographic reset—a sustained population “exodus” out of New Jersey and New York City to other states nationwide.²³ This can be conceptualized as a second migration layer. *Between April 1, 2010 and July 1, 2019, New Jersey had been losing 145 people per day due to population outmigration to the rest of the country. Not to be outdone, New York City had been hemorrhaging 266 people per day due to outmigration to the rest of the country.* These net outflows were a major contributing factor in the plateauing of the overall population levels (and actual end-of-decade population declines) of the state and city.²⁴

²² As pointed out in previous issues of Fast Track Research Notes, one economic shock of COVID-19 was the sharp increase in the pace of structural changes already under way. Pre-pandemic, for example, urban-centric “aging” millennials were slowly migrating to more child-friendly, family-raising environments. The coronavirus accelerated this life cycle-driven migration.

²³ This population exodus is measured via the Census Bureau’s calculation of net *domestic* migration—the balance between persons entering (inflows) and leaving an area (outflows) within the United States. There have always been simultaneous *domestic* flows of people moving into and out of New Jersey and New York City, but departures now increasingly reign – far greater in magnitude than arrivals.

²⁴ There are two other major components of population change that will be impacted by the pandemic. The first comprises international migration flows to the city and state from abroad. The other component is natural increase (births minus deaths). However, the number of births nationally has been declining and international migration has been slowing, increasing the significance of domestic migration in maintaining population stability.

These off-the-chart numbers deserve elaboration. *Between 2010 and 2019, New Jersey's net domestic migration loss to the rest of the country approached one-half million (-491,174) people.²⁵ This translates into net outflows of 53,072 people per year, 1,018 people per week, and 145 people per day.*

New York City is the knowledge-dependent, innovation-based economic mecca of the nation – the pinnacle of aspiration for America's tech-savvy millennials. *Despite its lofty position, it is experiencing a brain drain greater than its brain gain. New York City had a net domestic outflow of 899,806 people between 2010 and 2019. This translates into a net loss to the rest of the country of 96,960 per year, 1,865 people per week, and 266 people per day.²⁶*

The outmigration flows are destined to be recalibrated by the shocks of the coronavirus, and their net effects will be modified by more local urban-suburban household movements. Data released by the Census Bureau in 2021 will be key to untangling the dynamics at work. The outcome will likely be a further reset of the demographic and economic contours of New Jersey and New York City.

Detailed Components of Population Change

Population in a geographic area can change depending on the balance between the number of people being born and dying, the number people moving in, and the number of people moving out. Demographers have termed these three elements as the components of population change: births, deaths, and migration. The difference between births and deaths is labeled “net

²⁵ This is the balance/difference between the number of people who had resided in New Jersey and moved to the rest of the country and the number of people that moved into New Jersey who had resided in the rest of the country. The exact loss per day is 145.4 persons, rounded down to 145 persons. (Subsequent calculations are based on unrounded numbers.) The post-2010 period used in this section (April 1, 2010 to July 1, 2019) consists of 3,378 days, slightly longer than nine years. April 1, 2010 to April 1, 2019 is exactly nine years. Then, April 1, 2019 to July 1, 2019 adds 91 additional days to the nine years. There were two leap years (2012 and 2016) which adds two additional days. Thus, the April 1, 2010-July 1, 2019 period analyzed here consists of 3,378 days, which was used to determine the net daily migration loss of 145 persons in New Jersey and 266 persons (266.4 persons before rounding) in New York City.

²⁶ This daily figure is rounded down from 266.37 (899,806 divided by 3,378 days). The mathematics are described in the preceding footnote.

natural increase.” Net natural increase is positive when births exceed deaths; it is negative when the number of people dying exceeds the number of people being born.²⁷

Migration is the flow of people moving from one jurisdiction to another. The Census Bureau usually employs “net migration” in its tabulations, which is the difference between the number of people moving into an area and the number of people moving out of an area. The Bureau also partitions net migration into its domestic and international components. Net domestic migration includes only movements whose origins are internal to the United States and whose destinations remain within the United States.

Net international migration is the difference between the number of people moving into the United States from foreign countries versus those moving from the United States to other countries.²⁸ The number of international in-movers has been consistently far greater than the number of out-movers. Over time, international migration has become a greater component of population growth for the United States since net natural increase has declined during the past decade. In New Jersey and New York City, international in-migration has contributed even more to population growth due to the high levels of domestic out-migration from both areas. Nonetheless, total population growth post-2016 has flatlined in New Jersey and declined slightly in New York City, caused at least partially by immigration contraction.

Table 5 details the components of population change for New Jersey and New York City for the period between April 1, 2010 and July 1, 2019. New Jersey’s population grew by 90,212 people (+1.0 percent). This rate of increase is far below that (+6.3 percent) of the nation. The state’s population gain (+90,212 people) was the result of a positive net natural increase (births minus deaths) of 282,620 people and an overall net migration loss of 192,493 people. The latter

²⁷ Natural decrease usually occurs in areas that are characterized by aging populations with an insufficient number of young adults in their prime child-bearing years. This is a rare but not unprecedented condition in the United States. In the post-2010 period, among the 50 states only West Virginia and Maine experienced natural decrease (or negative natural increase).

²⁸ In-movers are largely foreign-born individuals supplemented by such population subsectors as returning United States citizens who had been working abroad and returning members of the United States military who had been serving or stationed in other countries.

is the result of international migration (+298,681 people) not of sufficient magnitude to counterbalance domestic migration losses (-491,174 people).

Table 5					
New Jersey vs. United States vs. New York City					
Components of Population Change					
April 1, 2010-July 1, 2019					
Population Change					
Geographic Area	Population		Change: 2010-2019		
	April 1, 2010	July 1, 2019	Number	Percent	
United States	308,758,105	328,239,523	19,481,418	6.3%	
New Jersey	8,791,978	8,882,190	90,212	1.0%	
New York City	8,175,133	8,336,817	161,684	2.0%	
Components of Population Change: April 1, 2010-July 1, 2019					
	Population Change	Net Natural Increase	Net Migration		
			Total	Domestic	International
New Jersey	90,212	282,620	-192,493	-491,174	298,681
New York City	161,684	565,205	-403,736	-899,806	496,070

Source: United States Bureau of Labor Statistics

At the same time, the population of New York City grew by 161,684 people (+2.0 percent), a rate of growth double that (+1.0 percent) of New Jersey, but just one-third of that (+6.3 percent) of the nation. Like New Jersey, the city experienced a net natural increase (+565,205 people) large enough to counterbalance negative net migration (-403,736 people). Domestic outmigration (-899,806 people) was far greater than international in-migration (+496,070 people), resulting in the overall net migration loss.

Immigration is still a critical and powerful demographic growth locomotive, but its motive power is declining. In addition, fertility rates have been declining throughout the nation, reaching historical lows; the resulting fewer births have reduced the size of net natural increase. As a result, domestic migration has been thrust into a much more prominent role in determining population growth. The numbers bear repeating.

Between April 1, 2010 and July 1, 2019, New Jersey's net domestic migration loss approached one-half million (-491,174) people.²⁹ This translates into a net daily loss of 145 people per day, a net weekly outflow of 1,018 people, and a net yearly (annual) outflow of 53,072 people. Concurrently, New York City's net domestic outflow approached nearly 900,000 (-899,806) people between April 1, 2010 and July 1, 2019. This translates into a loss to the rest of the country of 266 people per day, a net weekly outflow of 1,865 people and a net yearly (annual) outflow of 96,960.

But these demographic patterns are now part of pre-pandemic history. What will emerge post-pandemic will undoubtedly result in further shifts in the demographic contours of New Jersey and New York City.

New York City, Philadelphia, & New Jersey: Employment Recovery Patterns

Analyses of the economic linkages between New Jersey and New York City were presented in Fast Track Research Notes Issue Number 4 (August 2020) and will not be repeated here. Suffice it to say New York City had served as a potent growth locomotive in the 2010-2020 period but faltered in the aftermath of the coronavirus-driven economic setback of 2020. Its

²⁹ Footnote 25 also bears repeating. This is the balance/difference between the number of people who had resided in New Jersey and moved to the rest of the country and the number of people that moved into New Jersey who had resided in the rest of the country. The exact loss per day is 145.4 persons, rounded down to 145 persons. (Subsequent calculations are based on unrounded numbers.) The post-2010 period used in this section (April 1, 2010 to July 1, 2019) consists of 3,378 days, slightly longer than nine years. April 1, 2010 to April 1, 2019 is exactly nine years. Then, April 1, 2019 to July 1, 2019 adds 91 additional days to the nine years. There were two leap years (2012 and 2016) which adds two additional days. Thus, the April 1, 2010-July 1, 2019 period analyzed in this report consists of 3,378 days, which was used to determine the net daily migration loss of 145 persons in New Jersey and 266 persons (266.4 persons before rounding) in New York City.

recovery has lagged that of New Jersey (table 6). *Between April 2020 and September 2020, New York City regained 278,000 jobs (+7.4 percent). In contrast, New Jersey added 467,000 jobs (+13.7 percent). Thus, during this five-month period, New York City has recovered 29.4 percent of its job losses compared to 56.2 percent in New Jersey.*

New York City's employment deficit (666,100 jobs) is almost double that of New Jersey (363,700 jobs). And by September, New Jersey's unemployment rate (6.7 percent) was less than one half that of New York City (14.1 percent). However, strong caution is urged in making the unemployment rate comparison since New Jersey's improvement may be overstated.³⁰

Table 6 also includes the other urban concentration that sits astride New Jersey—Philadelphia. While much smaller demographically and economically than New York City, it has generally followed similar employment growth and decline trajectories and had been a positive force bolstering New Jersey following the Great 2007-2009 Recession. Its recovery had been lagging that of New Jersey but exceeded that of New York City, as detailed in Fast Track Research Notes Issue Number 5 (September 2020). However as of this writing, September data were not available for Philadelphia; thus, August data are presented in table 6.

The strong linkages between the two cities and New Jersey will be a crucial factor for success in surmounting the coronavirus-driven setbacks of 2020. Future issues of this report series will continue to monitor the economic progress of all three geographic jurisdictions.

Note: Since the basic recovery patterns are generally established, the next issue will be scheduled for January. Moreover, the November and December holidays could potentially interfere with the likely release dates of the Fast Track Research Notes series. Thus, Issue Number 7 is scheduled for January 2021 when we will be able to include the full fourth quarter 2020 data, as well as providing a preliminary summary of the full year 2020. Of course, if unusual disruptive events occur in November and/or December that shift current trends, we will revisit this decision.

³⁰ "The drop was due to workers leaving the labor force altogether and not to gains in employment. Revisions to monthly estimates and again at the end of the year during annual processing may be expected."
https://www.nj.gov/labor/lwdhome/press/2020/20201015_septemberemployment.shtml

Table 6						
Employment Change: New Jersey vs. New York City and Philadelphia						
February 2010 - September 2020						
Seasonally Adjusted						
					Employment Change	
					Number	Percent
The Ten-Year Expansion (Feb 2010 - Feb 2020)						
		New York City			976,300	26.3%
		Philadelphia			102,900	15.8%
		New Jersey			405,600	10.6%
The Two-Month Contraction (Feb 2020 - April 2020)						
		New York City			-944,100	-20.1%
		Philadelphia			-106,600	-14.1%
		New Jersey			-831,300	-19.6%
The Five-Month Recovery (April 2020 - September 2020)						
		New York City			278,000	7.4%
		Philadelphia (Through August)			43,400	6.7%
		New Jersey			467,600	13.7%
					Recovery Rates	
Recovery Rates (April 2020 - September 2020)						
		New York City			29.4%	
		Philadelphia (Through August)			40.7%	
		New Jersey			56.2%	
					Unemployment Rates	
					Aug 2020	Sept 2020
Unemployment Rates (August 2020 and September 2020)						
		New York City			16.0%	14.1%
		Philadelphia			14.7%	NA
		New Jersey			11.1%	6.7%
Source: United States Bureau of Labor Statistics						

RUTGERS REGIONAL REPORT FAST TRACK RESEARCH NOTES

Previous Issues

ISSUE 5:

Coronavirus Economic Recuperation Continues: New Jersey and the Nation—Not Yet Back to the Future

<https://rucore.libraries.rutgers.edu/rutgers-lib/64529/PDF/1/play/>

ISSUE 4:

Coronavirus Economic Downshift: New Jersey Defies the National Deceleration

<https://rucore.libraries.rutgers.edu/rutgers-lib/64232/PDF/1/play/>

ISSUE 3:

Coronavirus Economic Rebound: Bucking New Headwinds

<https://rucore.libraries.rutgers.edu/rutgers-lib/63967/PDF/1/play/>

ISSUE 2:

Coronavirus Economic Pivot: Precipitous Fall to Recovery Crawl

<https://rucore.libraries.rutgers.edu/rutgers-lib/63791/PDF/1/play/>

ISSUE 1:

Coronavirus Economic Shocks: NJ versus the Nation

<https://rucore.libraries.rutgers.edu/rutgers-lib/63658/PDF/1/play/>

Rutgers Regional Report Issue Paper Series

(Asterix Indicates Availability on SOAR)

- “‘Urbs,’ ‘Burbs,’ and the Immigration Locomotive.”** Number 41, February 2020 *
- “Move Over Millennials: New Jersey’s Unfolding Generational Disruptions.”** Number 40, July 2019 *
- “The ‘Burbs’ Bounce Back: ‘Trendlet’ or ‘Dead Cat Bounce’.”** Number 39, August 2018 *
- “New Jersey’s Economic Roller Coaster: “From ‘Go-Go’ to ‘Slow-Go’.”** Number 38, October 2017 *
- “The Receding Metropolitan Perimeter: A New Postsuburban Demographic Normal.”** Number 37, September 2014 *
- “Employment Recession and Recovery in the 50 States: A Further Update.”** Number 36, July 2013 *
- “Inching Our Way Back: The Nation’s Tepid Employment Recovery.”** Number 35, April 2013 *
- “The Economic and Fiscal Impacts of Hurricane Sandy in New Jersey, A Macroeconomic Analysis.”** Number 34, April 2013 *
- “Reinventing the New Jersey Economy: New Metropolitan and Regional Employment Dynamics.”** Number 33, December 2012 *
- “The Evolving Rental Housing Market in New Jersey: Retrospective and Prospective.”** Number 32, November 2012 *
- “Fiscal Flows in New Jersey: A Spatial Analysis of Major State Taxes and State Aid Programs.”** Number 31, October 2012 *
- “Employment Recession and Recovery in the 50 States: An Update.”** Number 30, July 2012 *
- “Demographics, Economics, and Housing Demand.”** Number 29, April 2012 *
- “Employment Recession and Recovery in the 50 States.”** Number 28, September 2011 *
- “Reversal of Economic Fortune: Regional and State Prosperity at Risk.”** Number 27, April 2008 *
- “Where Have All the Dollars Gone? An Analysis of New Jersey Migration Patterns.”** Number 26, October 2007 *
- “New Jersey’s New Economy Growth Challenges.”** Number 25, July 2006 *
- “Anatomy of a Recovery: A New Jersey Report Card.”** Number 24, July 2005 *
- “A Transportation-Driven World Class Economy: New Jersey at Risk.”** Number 23, April 2005 *

“Tri-State Affluence: Losing by Winning.” Number 22, November 2004 *

“The Beginning of the End of Sprawl?” Number 21, May 2004 *

“Then and Now: Sixty Years of Economic Change in New Jersey.” Number 20, January 2004

“Housing Bubble or Shelter-Safe Haven?” Number 19, September 2003

“Anticipating Census 2000: New Jersey’s Emerging Demographic Profile.” Number 18, July 2000

“The Emerging Wealth Belt: New Jersey’s New Millennium Geography.” Number 17, September 1999

“Anatomy of a Business Cycle: The Final Report Card.” Number 16, December 1997

“Long-Term Regional Momentum: Employment and Income Dimensions.” Number 15, August 1997

“New Jersey Cities in the 1990s: An Updated Employment Report Card.” Number 14, October 1996

“The New Jersey Housing Trajectory: Cycles within Cycles.” Number 13, January 1996

“New Dimensions of National and Regional Output and Productivity: New Jersey’s Economic History Revisited.” Number 12, January 1995

“Anatomy of a Recovery: The Geography of Economic Rebound.” Number 11, July 1994

“Bicoastal Economic Recovery and Lag: Post-Recession Employment Growth Patterns.” Number 10, April 1994

“Commercial Office Space Overhangs: 21st Century Regional Economic Geographies.” Number 9, December 1993

“The Tidal Wave of Income Suburbanization: New Jersey, New York and Philadelphia Metropolitan Dynamics.” Number 8, October 1993

“The Income Roller Coaster: New Cycles in New Jersey and the Tri-State Region.” Number 7, July 1993

“Anatomy of a Recession: New Jersey’s Long Road Back.” Number 6, January 1993

“The Suburban Employment Perimeter: Municipal Job Growth in the 1980s.” Number 5, November 1992

“The New Jersey Manufacturing Employment Hemorrhage.” Number 4, June 1992

“New Jersey Cities in the 1980s: An Employment Report Card.” Number 3, February 1992

“One-Half Century of Job Growth in New Jersey: 1940 to 1990.” Number 2, April 1991

“One-Half Century of Housing Production in New Jersey: 1940 to 1990.” Number 1, December 1990.

Advance and Rutgers Report Series

Issue Paper Number 7, November 2011: “**A Tripartite Post-Recession Rebalancing.**”

Issue Paper Number 6, August 2011: “**Economic Soft Patch 2: A Second-Half Rebound or Redux?**”

Issue Paper Number 5, May 2011: **Solar Power in the Garden State.**”

Issue Paper Number 4, December 2010: “**The Great Uncertainty.**”

Issue Paper Number 3, July 2010: “**Post-Recession America: A New Economic Geography?**”

Issue Paper Number 2, February 2010: “**Y2K+10: A New Decade Unfolds.**”

Issue Paper Number 1, September 2009: “**America’s New Post-Recession Employment Arithmetic.**”

Sitar-Rutgers Regional Report

48 Quarterly Reports on the Economy and Real Estate Markets: 1997 to 2009

RRR Monographs and Large Report Series

REGIONAL ECONOMIC LONG WAVES: EMPLOYMENT DYNAMICS IN THE TRI-STATE REGION – A RUTGERS REGIONAL REPORT MONOGRAPH

(New Brunswick: Center for Urban Policy Research, Rutgers University, 1996) (jointly)

RANKING THE MUNICIPALITIES: INCOMES AND HOUSE VALUES - A RUTGERS REGIONAL REPORT MONOGRAPH

(New Brunswick: Center for Urban Policy Research, Rutgers University, 1994) (jointly)

THE NEW GEOGRAPHY OF SERVICES AND OFFICE BUILDINGS - A RUTGERS REGIONAL REPORT MONOGRAPH

(New Brunswick: Center for Urban Policy Research, Rutgers University, 1992)

RUTGERS REGIONAL REPORT VOLUME III: RETAILING AND REGIONAL MALLS

(New Brunswick: Center for Urban Policy Research, Rutgers University, 1990)

RUTGERS REGIONAL REPORT VOLUME II: NEW JERSEY HOME PRICES

(New Brunswick: Center for Urban Policy Research, Rutgers University, 1990)

RUTGERS REGIONAL REPORT VOLUME I: JOB, INCOME, POPULATION AND HOUSING BASELINES

(New Brunswick: Center for Urban Policy Research, Rutgers University, 1989)

APPENDIX

This appendix provides additional historic tabular material to support the analyses of this report.

List of Tables

Table A-1

United States February 2010-February 2020 Nonagricultural Wage and Salary Employment

Table A-2

United States February 2020-April 2020 Nonagricultural Wage and Salary Employment

Table A-3

United States Expansion Gains (February 2010-February 2020) vs. Pandemic Losses (February 2020-April 2020)

Table A-4

New Jersey February 2010-February 2020 Nonagricultural Wage and Salary Employment

Table A-5

New Jersey February 2020-April 2020 Nonagricultural Wage and Salary Employment

Table A-6

New Jersey Expansion Gains (February 2010-February 2020) vs. Pandemic Losses (February 2020-April 2020)

Table A-1					
United States					
February 2010-February 2020 Nonagricultural Wage and Salary Employment					
Seasonally Adjusted (2019 Benchmark)					
(In Thousands)					
	2010	2020	Change: 2010-2020		
	Feb	Feb	Number	Percent	
TOTAL NONFARM	129,698.0	152,463.0	22,765.0	17.6	
TOTAL PRIVATE SECTOR	107,222.0	129,718.0	22,496.0	21.0	
Goods-Producing	17,627.0	21,205.0	3,578.0	20.3	
Mining, Logging, and Construction	6,174.0	8,353.0	2,179.0	35.3	
Mining and Logging	674.0	714.0	40.0	5.9	
Construction	5,500.0	7,639.0	2,139.0	38.9	
Manufacturing	11,453.0	12,852.0	1,399.0	12.2	
Durable Goods	6,985.0	8,058.0	1,073.0	15.4	
Non-Durable Goods	4,468.0	4,794.0	326.0	7.3	
Service-Providing	112,071.0	131,258.0	19,187.0	17.1	
Private Service-Providing	89,595.0	108,513.0	18,918.0	21.1	
Trade, Transportation, and Utilities	24,461.0	27,830.0	3,369.0	13.8	
Wholesale Trade	5,379.3	5,934.2	554.9	10.3	
Retail Trade	14,397.1	15,672.0	1,274.9	8.9	
Transportation, Warehousing, and Utilities	4,684.2	6,224.2	1,540.0	32.9	
Information	2,737.0	2,894.0	157.0	5.7	
Financial Activities	7,724.0	8,845.0	1,121.0	14.5	
Finance and Insurance	5,772.7	6,486.4	713.7	12.4	
Real Estate and Rental & Leasing	1,951.7	2,358.5	406.8	20.8	
Professional and Business Services	16,591.0	21,550.0	4,959.0	29.9	
Professional, Scientific, and Technical Services	7,466.2	9,707.6	2,241.4	30.0	
Management of Companies and Enterprises	1,859.4	2,447.3	587.9	31.6	
Adm./Suppt. and Waste Mgt./Remed. Services	7,265.2	9,395.0	2,129.8	29.3	
Education and Health Services	19,839.0	24,586.0	4,747.0	23.9	
Educational Services	3,112.5	3,828.5	716.0	23.0	
Health Care and Social Assistance	16,726.9	20,757.7	4,030.8	24.1	
Leisure and Hospitality	12,927.0	16,867.0	3,940.0	30.5	
Arts, Entertainment, and Recreation	1,885.9	2,472.4	586.5	31.1	
Accommodation and Food Services	11,041.1	14,394.1	3,353.0	30.4	
Other Services	5,316.0	5,941.0	625.0	11.8	
GOVERNMENT	22,476.0	22,745.0	269.0	1.2	
Federal Government	2,872.0	2,867.0	-5.0	-0.2	
State Government	5,147.0	5,199.0	52.0	1.0	
Local Government	14,457.0	14,679.0	222.0	1.5	
Source: United States Bureau of Labor Statistics					

Table A-2				
United States				
February 2020-April 2020 Nonagricultural Wage and Salary Employment				
Seasonally Adjusted (2019 Benchmark)				
(In Thousands)				
	2020	2020	Change: Feb-Apr	
	Feb	Apr	Number	Percent
TOTAL NONFARM	152,463.0	130,303	-22,160	-14.5
TOTAL PRIVATE SECTOR	129,718.0	108,527	-21,191	-16.3
Goods-Producing	21,205.0	18,698	-2,507	-11.8
Mining, Logging, and Construction	8,353.0	7,209	-1,144	-13.7
Mining and Logging	714.0	653	-61	-8.5
Construction	7,639.0	6,556	-1,083	-14.2
Manufacturing	12,852.0	11,489	-1,363	-10.6
Durable Goods	8,058.0	7,126	-932	-11.6
Non-Durable Goods	4,794.0	4,363	-431	-9.0
Service-Providing	131,258.0	111,605	-19,653	-15.0
Private Service-Providing	108,513.0	89,829	-18,684	-17.2
Trade, Transportation, and Utilities	27,830.0	24,475	-3,355	-12.1
Wholesale Trade	5,934.2	5,537	-397	-6.7
Retail Trade	15,672.0	13,288	-2,384	-15.2
Transportation, Warehousing, and Utilities	6,224.2	5,651	-574	-9.2
Information	2,894.0	2,609	-285	-9.8
Financial Activities	8,845.0	8,556	-289	-3.3
Finance and Insurance	6,486.4	6,443	-44	-0.7
Real Estate and Rental & Leasing	2,358.5	2,124	-235	-10.0
Professional and Business Services	21,550.0	19,254	-2,296	-10.7
Professional, Scientific, and Technical Services	9,707.6	9,147	-561	-5.8
Management of Companies and Enterprises	2,447.3	2,356	-92	-3.8
Adm./Suppt. and Waste Mgt./Remed. Services	9,395.0	7,752	-1,643	-17.5
Education and Health Services	24,586.0	21,805	-2,781	-11.3
Educational Services	3,828.5	3,318	-511	-13.3
Health Care and Social Assistance	20,757.7	18,488	-2,270	-10.9
Leisure and Hospitality	16,867.0	8,549	-8,318	-49.3
Arts, Entertainment, and Recreation	2,472.4	1,143	-1,329	-53.8
Accommodation and Food Services	14,394.1	7,406	-6,988	-48.5
Other Services	5,941.0	4,571	-1,370	-23.1
GOVERNMENT	22,745.0	21,776	-969	-4.3
Federal Government	2,867.0	2,893	26	0.9
State Government	5,199.0	4,993	-206	-4.0
Local Government	14,679.0	13,890	-789	-5.4

Source: United States Bureau of Labor Statistics

Table A-3			
United States			
Expansion Gains (February 2010-February 2020) vs. Pandemic Losses (February 2020-April 2020)			
Seasonally Adjusted (2019 Benchmark)			
(In Thousands)			
	Expansion	Pandemic	Ratio:
	Gain	Loss	Loss to Gain
TOTAL NONFARM	22,765.0	-22,160	0.97
TOTAL PRIVATE SECTOR	22,496.0	-21,191	0.94
Goods-Producing	3,578.0	-2,507	0.70
Mining, Logging, and Construction	2,179.0	-1,144	0.53
Mining and Logging	40.0	-61	
Construction	2,139.0	-1,083	0.51
Manufacturing	1,399.0	-1,363	0.97
Durable Goods	1,073.0	-932	0.87
Non-Durable Goods	326.0	-431	1.32
Service-Providing	19,187.0	-19,653	1.02
Private Service-Providing	18,918.0	-18,684	0.99
Trade, Transportation, and Utilities	3,369.0	-3,355	1.00
Wholesale Trade	554.9	-397	0.72
Retail Trade	1,274.9	-2,384	1.87
Transportation, Warehousing, and Utilities	1,540.0	-574	0.37
Information	157.0	-285	1.82
Financial Activities	1,121.0	-289	0.26
Finance and Insurance	713.7	-44	0.06
Real Estate and Rental & Leasing	406.8	-235	0.58
Professional and Business Services	4,959.0	-2,296	0.46
Professional, Scientific, and Technical Services	2,241.4	-561	0.25
Management of Companies and Enterprises	587.9	-92	0.16
Adm./Suppt. and Waste Mgt./Remed. Services	2,129.8	-1,643	0.77
Education and Health Services	4,747.0	-2,781	0.59
Educational Services	716.0	-511	0.71
Health Care and Social Assistance	4,030.8	-2,270	0.56
Leisure and Hospitality	3,940.0	-8,318	2.11
Arts, Entertainment, and Recreation	586.5	-1,329	2.27
Accommodation and Food Services	3,353.0	-6,988	2.08
Other Services	625.0	-1,370	2.19
GOVERNMENT	269.0	-969	3.60
Federal Government	-5.0	26	-
State Government	52.0	-206	3.96
Local Government	222.0	-789	3.55
Source: United States Bureau of Labor Statistics			

Table A-4				
New Jersey				
February 2010-February 2020 Nonagricultural Wage and Salary Employment				
Seasonally Adjusted (2019 Benchmark)				
(In Thousands)				
	2010	2020	Change: 2010-2020	
	Feb	Feb	Number	Percent
TOTAL NONFARM	3,836.0	4,241.9	405.9	10.6
TOTAL PRIVATE SECTOR	3,192.7	3,634.0	441.3	13.8
Goods-Producing	387.1	421.1	34.0	8.8
Mining, Logging, and Construction	132.3	168.0	35.7	27.0
Mining and Logging	1.5	1.5	0.0	0.0
Construction	130.8	166.5	35.7	27.3
Manufacturing	254.8	253.0	-1.8	-0.7
Durable Goods	114.4	118.2	3.8	3.3
Non-Durable Goods	140.4	134.8	-5.6	-4.0
Service-Providing	3,448.9	3,820.8	371.9	10.8
Private Service-Providing	2,805.6	3,212.9	407.3	14.5
Trade, Transportation, and Utilities	802.7	894.6	91.9	11.4
Wholesale Trade	207.2	215.6	8.4	4.1
Retail Trade	433.9	452.8	18.9	4.4
Transportation, Warehousing, and Utilities	161.6	226.2	64.6	40.0
Information	79.4	66.4	-13.0	-16.4
Financial Activities	249.3	253.5	4.2	1.7
Finance and Insurance	194.9	191.2	-3.7	-1.9
Real Estate and Rental & Leasing	54.4	62.3	7.9	14.5
Professional and Business Services	585.5	690.3	104.8	17.9
Professional, Scientific, and Technical Services	276.6	303.6	27.0	9.8
Management of Companies and Enterprises	74.9	88.6	13.7	18.3
Adm./Suppt. and Waste Mgt./Remed. Services	234.0	298.1	64.1	27.4
Education and Health Services	600.0	730.6	130.6	21.8
Educational Services	87.8	116.0	28.2	32.1
Health Care and Social Assistance	512.2	614.6	102.4	20.0
Leisure and Hospitality	329.5	404.0	74.5	22.6
Arts, Entertainment, and Recreation	51.3	74.7	23.4	45.6
Accommodation and Food Services	278.2	329.3	51.1	18.4
Other Services	159.2	173.5	14.3	9.0
GOVERNMENT	643.3	607.9	-35.4	-5.5
Federal Government	58.8	49.1	-9.7	-16.5
State Government	153.4	142.0	-11.4	-7.4
Local Government	431.1	416.8	-14.3	-3.3
Source: New Jersey Department of Labor and Workforce Development, Economic & Demographic Research				

Table A-5				
New Jersey				
February 2020-April 2020 Nonagricultural Wage and Salary Employment				
Seasonally Adjusted (2019 Benchmark)				
(In Thousands)				
	2020	2020	Change: Feb-Apr	
	Feb	Apr	Number	Percent
TOTAL NONFARM	4,241.9	3,410.6	-831.3	-19.6
TOTAL PRIVATE SECTOR	3,634.0	2,829.6	-804.4	-22.1
Goods-Producing	421.1	339.9	-81.2	-19.3
Mining, Logging, and Construction	168.0	123.3	-44.7	-26.6
Mining and Logging	1.5	1.4	-0.1	-6.7
Construction	166.5	121.9	-44.6	-26.8
Manufacturing	253.0	216.6	-36.4	-14.4
Durable Goods	118.2	96.5	-21.7	-18.4
Non-Durable Goods	134.8	120.1	-14.7	-10.9
Service-Providing	3,820.8	3,070.7	-750.1	-19.6
Private Service-Providing	3,212.9	2,489.7	-723.2	-22.5
Trade, Transportation, and Utilities	894.6	737.4	-157.2	-17.6
Wholesale Trade	215.6	186.2	-29.4	-13.6
Retail Trade	452.8	365.9	-86.9	-19.2
Transportation, Warehousing, and Utilities	226.2	185.3	-40.9	-18.1
Information	66.4	62.2	-4.2	-6.3
Financial Activities	253.5	237.6	-15.9	-6.3
Finance and Insurance	191.2	185.9	-5.3	-2.8
Real Estate and Rental & Leasing	62.3	51.7	-10.6	-17.0
Professional and Business Services	690.3	592.1	-98.2	-14.2
Professional, Scientific, and Technical Services	303.6	280.8	-22.8	-7.5
Management of Companies and Enterprises	88.6	81.8	-6.8	-7.7
Adm./Suppt. and Waste Mgt./Remed. Services	298.1	229.5	-68.6	-23.0
Education and Health Services	730.6	600.0	-130.6	-17.9
Educational Services	116.0	93.5	-22.5	-19.4
Health Care and Social Assistance	614.6	506.5	-108.1	-17.6
Leisure and Hospitality	404.0	145.1	-258.9	-64.1
Arts, Entertainment, and Recreation	74.7	20.6	-54.1	-72.4
Accommodation and Food Services	329.3	124.5	-204.8	-62.2
Other Services	173.5	115.3	-58.2	-33.5
GOVERNMENT	607.9	581.0	-26.9	-4.4
Federal Government	49.1	48.8	-0.3	-0.6
State Government	142.0	138.6	-3.4	-2.4
Local Government	416.8	393.6	-23.2	-5.6

Source: New Jersey Department of Labor and Workforce Development, Economic & Demographic Research

Table A-6			
New Jersey			
Expansion Gains (February 2010-February 2020) vs. Pandemic Losses (February 2020-April 2020)			
Seasonally Adjusted (2019 Benchmark)			
(In Thousands)			
	Expansion	Pandemic	Ratio:
	Gain	Loss	Loss to Gain
TOTAL NONFARM	405.9	-831.3	2.05
TOTAL PRIVATE SECTOR	441.3	-804.4	1.82
Goods-Producing	34.0	-81.2	2.39
Mining, Logging, and Construction	35.7	-44.7	1.25
Mining and Logging	0.0	-0.1	
Construction	35.7	-44.6	1.25
Manufacturing	-1.8	-36.4	-
Durable Goods	3.8	-21.7	5.71
Non-Durable Goods	-5.6	-14.7	-
Service-Providing	371.9	-750.1	2.02
Private Service-Providing	407.3	-723.2	1.78
Trade, Transportation, and Utilities	91.9	-157.2	1.71
Wholesale Trade	8.4	-29.4	3.50
Retail Trade	18.9	-86.9	4.60
Transportation, Warehousing, and Utilities	64.6	-40.9	0.63
Information	-13.0	-4.2	-
Financial Activities	4.2	-15.9	3.79
Finance and Insurance	-3.7	-5.3	-
Real Estate and Rental & Leasing	7.9	-10.6	1.34
Professional and Business Services	104.8	-98.2	0.94
Professional, Scientific, and Technical Services	27.0	-22.8	0.84
Management of Companies and Enterprises	13.7	-6.8	0.50
Adm./Suppt. and Waste Mgt./Remed. Services	64.1	-68.6	1.07
Education and Health Services	130.6	-130.6	1.00
Educational Services	28.2	-22.5	0.80
Health Care and Social Assistance	102.4	-108.1	1.06
Leisure and Hospitality	74.5	-258.9	3.48
Arts, Entertainment, and Recreation	23.4	-54.1	2.31
Accommodation and Food Services	51.1	-204.8	4.01
Other Services	14.3	-58.2	4.07
GOVERNMENT	-35.4	-26.9	-
Federal Government	-9.7	-0.3	-
State Government	-11.4	-3.4	-
Local Government	-14.3	-23.2	-

Source: New Jersey Department of Labor and Workforce Development, Economic & Demographic Research

