Economic Impact Study of Jacksonville Transportation Authority (JTA) Operations, 2018

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Executive Summary

In 2018, JTA's operations:

- had a total economic impact of $198,810,458 in output, 2,703 full time equivalent (FTE) regional jobs, and $73,631,085 in regional labor compensation;
- resulted in $5,637,114 paid in state and local taxes and $16,820,118 in federal taxes;
- reduced cost of transportation for consumers by $23,436,237;
- generated productivity time savings for riders of $5,006,639;
- generated savings from congestion reduction valued at $246,380;
- generated a benefit in economic disruption avoidance valued at $48,432,173.

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Introduction

The purpose of this study is to assess the economic impact of the operations of the Jacksonville Transportation Authority (JTA). As the only public transit service provider in Jacksonville, JTA provides multimodal transportation to residents of and visitors to the city. JTA's operations provides many benefits to the community and contributes directly to the local economy.

Like all economic impact studies, this one measures the contribution of JTA's operations to the economy in the forms of output, employment, labor compensation, and tax payments. Further, this study attempts to measure several economic benefits of JTA's operations to the users of JTA services and other users of roadways in Jacksonville.

Economic Impact: Output, Employment and Labor Compensation

In 2018, JTA had operating revenues of $112,566,339, payroll of $43,738,615, and an employment roster of 2,104 full time equivalents (FTEs).[1] These are considered direct impacts to the economy (Table 1).

Since JTA's operations requires inputs from other sectors (insurance, maintenance and repair, accounting, etc.), outputs from and the resultant employment and labor compensation in other sectors are considered as indirect impacts of JTA's operations. While the direct impact took place in Jacksonville (Duval County), indirect impacts were felt in nearby counties. In this study we consider the five-county area[2] when evaluating indirect impact. JTA's indirect impact on employment is estimated at 247 FTEs, labor compensation at $14,182,088, and output from other sectors at $37,367,699.

The labor earnings by employees of JTA and employees in related sectors led to consumption of goods and services in all other sectors (groceries, haircuts, gasoline, health care, entertainment, real estate, etc.), referred to as induced impact. The induced impact on employment due to JTA's operations was estimated at 352 FTEs and on labor compensation at $15,710,382. The induced impact on output of other sectors is estimated at $48,876,420.

Altogether the economic impact of JTA's operations on output in the five-county Jacksonville Metropolitan Statistical Area (MSA) was close to $199M in 2018. During the year, the total impact on employment was 2,703 FTEs, and on labor compensation over $73.6M.

Table 1. Total Economic Impact of JTA Operations in 2018

Impact Type	**Employment**	**Labor Income**	**Total Value Added**	**Output**
Direct Effect	2,104	$43,738,615	$69,096,528	$112,566,339
Indirect Effect	247	$14,182,088	$20,935,706	$37,367,699
Induced Effect	352	$15,710,382	$28,609,421	$48,876,420
Total Effect	**2,703**	**$73,631,085**	**$118,641,655**	**$198,810,458**

The top 25 industries affected by JTA's operations in terms of output, employment, and labor income are reported in Appendix I.

[1] Source: Jacksonville Transportation Authority.

[2] The five-county area consists of Baker, Clay, Duval, Nassau, and St. Johns counties. It is also known as the Jacksonville Metropolitan Statistical Area (MSA).

Combining the direct, indirect and induced effects, JTA operations resulted in considerable tax impact at both state/local and federal levels. As shown in Table 2, the tax revenue JTA's operations generated for state and local governments on production and imports is estimated at $4,812,074. Taxes paid by households and corporations were $478,383 and $346,657, respectively. The total tax impact at the state and local levels exceeded $5.6M.

Table 2. State/Local Tax Impact of JTA Operations in 2018

Description	**Tax on Production and Imports**	**Tax on Households**	**Tax on Corporations**	
Dividends			$41,238	
Social Ins Tax- Employee Contribution				
Social Ins Tax- Employer Contribution				
TOPI: Sales Tax	$2,763,015			
TOPI: Property Tax	$1,499,581			
TOPI: Motor Vehicle Lic	$38,848			
TOPI: Severance Tax	$2,292			
TOPI: Other Taxes	$357,296			
TOPI: S/L NonTaxes	$151,042			
Corporate Profits Tax			$305,419	
Personal Tax: Income Tax				
Personal Tax: NonTaxes (Fines- Fees		$390,595		
Personal Tax: Motor Vehicle License		$61,038		
Personal Tax: Property Taxes		$23,512		
Personal Tax: Other Tax (Fish/Hunt)		$3,238		
Total State and Local Tax	**$4,812,074**	**$478,383**	**$346,657**	**$5,637,114**

As shown in Table 3, at the federal level, JTA's operations generated $8,276,088 in social insurance taxes, $590,510 in taxes on production and imports, $6,161,529 in personal income tax, and $1,791,991 in corporate tax. The total federal tax generated was $16,820,118 in 2018.

Table 3. Federal Tax Impact of JTA Operations in 2018

Description	**Employee Compens-ation**	**Proprietor Income**	**Taxes on Production and Imports**	**Household Taxes**	**Corporate Taxes**	
Social Ins Tax-Employee Contribution	$4,130,978	$226,198				
Social Ins Tax-Employer Contribution	$3,918,912					
TOPI: Excise Taxes			$399,092			
TOPI: Custom Duty			$165,516			
TOPI: Fed NonTaxes			$25,902			
Corporate Profits Tax					$1,791,991	
Personal Tax: Income Tax				$6,161,529		
Total Federal Tax	**$8,049,890**	**$226,198**	**$590,510**	**$6,161,529**	**$1,791,991**	**$16,820,118**

Economic Benefit: Reduced Cost of Transportation for Consumers

Total passenger-miles for JTA's services in 2018 were reported at 64,332,545.[3] If all passengers traveled the same number of miles by driving themselves, the cost of transportation would have been significantly higher than the cost of using JTA's services, which they paid in the form of fares or passes.

According to AAA's *Your Driving Costs* study in 2017[4], the annual cost of operating a vehicle, including depreciation, maintenance and repair, and fuel, based on 15,000 miles driven annually, was $6,354 for a small sedan, $8,171 for a medium sedan, and $9,399 for a large sedan. Based on the unweighted average of costs across these three vehicle types, the cost of operating a car per mile is 53 cents.[5] This implies that the total cost of traveling 64,332,545 miles would have amounted to $34,096,249 through passengers driving themselves.

The potential cost savings on transportation for JTA's passengers in 2018 can thus be computed as the cost of driving less what they paid for JTA's services. Given the JTA's total passenger revenue from fixed route bus service in 2018, which is $10,660,012, this cost savings is estimated at **$23,436,237** ($34,096,249 - $10,660,012).

[3] Source: Jacksonville Transportation Authority.
[4] https://newsroom.aaa.com/tag/cost-of-operating-a-vehicle/
[5] The IRS allowed a comparable 54.5 cents as a mileage rate in 2018.
(https://www.ifebp.org/news/regulatoryupdates/Pages/2018-irs-mileage-rates.aspx.)

Economic Benefit: Productivity Time Savings for Riders

When a passenger uses JTA service for business-related trips and commuting for work, he or she can avoid driving, which requires his or her undivided attention on the road and the traffic. Time spent on the bus or the Skyway, however, can be productive (e.g. replying to emails and typing reports on a laptop) or productivity-enhancing (e.g. reading and resting). Note that the time spent on JTA rides is likely longer than the alternative of driving one's own vehicle, because public transit is not optimized for every individual. While it is true that the riders can devote the entire time on JTA rides to productive or productivity-enhancing activities, only the portion equivalent to the driving length is relevant to this productivity time saving.

The monetary value of such productivity time savings can be estimated by (number of work-related passenger-trips) x (average duration of a work-related trip by driving) x (hourly wage rate). The information used to estimate these components comes from two sources, including JTA's ridership statistics and the 2016 Onboard Rider Demographic Survey[6] data.

According to JTA's ridership statistics, the total number of passenger-trips in 2018 was 11,718,575. Based on the 2016 Onboard Rider Demographic Survey data, work-related trips taken by passengers with full-time jobs accounted for 20.02% of all trips, while work-related trips taken by passengers with part-time jobs accounted for 6.75% of all trips. The distinction between full-time and part-time workers is important because the corresponding wage rate and the average duration of trips can be significantly different. Based on the sample proportion, it was determined that 2,346,059 work related passenger trips were taken by passengers with full-time jobs, and 791,003 by those with part-time jobs (Table 4). These passenger trips were then adjusted for the average number of transfers of 1.526, per statistics from the survey data.

Table 4. JTA Passenger Trips by Employment Status and Trip Purpose

	Full-time work related	**Part-time work related**
% of all passenger trips	20.02%	6.75%
Number of passenger trips	2,346,059	791,003
Number of passenger trips (adjusted for number of transfers)	1,537,391	519,350

The average duration of passenger trips in the case of driving was estimated using the 2016 Onboard Rider Demographic Survey data. Bing Maps was used to calculate the driving time, with traffic, between the boarding and exiting locations of each of the 5,185 riders in the sample. This

[6] Source: Jacksonville Transportation Authority.

measure reflects optimized routes for driving between origin and destination, not the fixed JTA routes. As summarized in Table 5, the passenger trips that were related to full-time work would have taken an average of 12.83 minutes driving time from origin to destination. Passenger trips that were part-time work-related would have taken an average of 11.78 minutes driving time.

Table 5. Summary Statistics of Duration of Passenger Trips via Driving (Minutes)

	Full-time work-related	Part-time work-related
Mean	12.83	11.78
Minimum	0.50	1.77
Maximum	39.62	36.57

For hourly wage rate, common practice is to use the mean or median at the macroeconomic level. According to the Bureau of Labor Statistics, the mean and median hourly wages for the Jacksonville MSA were $22.56 and $17.21, respectively, in 2018. Since JTA riders have disproportionately low incomes, using the macroeconomic mean or median can considerably overstate the income of the population of interest in this project. Fortunately the 2016 survey data offered an opportunity to generate a better measure. The categorical income variable was first converted to a continuous income variable by replacing the range category with the center value of the range. For passengers with full-time work, the income variable was divided by 40 to get an hourly wage rate of $12.35. For those with part-time work, the income variable was divided by 30 to get an hourly wage of $9.30.

Table 6 reports the final calculation. In 2018 the productivity time savings was $4,060,456 for full-time workers, and $946,183 for part-time workers, who used JTA. All together the productivity time saving was over $5M.

Table 6. Productivity Time Savings

	Full-time work-related (1)	Part-time work-related (2)	**Total**
Productivity Time Savings	$4,060,456	$946,183	**$5,006,639**

Economic Benefit: Savings from Congestion Reduction

Public transit can be an effective way to reduce road congestion. Measuring this economic benefit can be challenging without a pre- and post- comparison and a detailed microlevel traffic simulation. Nevertheless, this study attempts to estimate this benefit as a result of JTA's operations by analyzing the statistical relationship between traffic delay and traffic volume in Jacksonville and simulating the scenario in which those JTA riders for whom driving is a viable alternative become drivers on the road. The estimate was converted into monetary value based on the notion of opportunity cost of time.

According to data reported in the 2017 and 2018 North Florida TPO Annual Mobility Reports, as shown in Table 7, traffic delay, traffic congestion, and traffic volume trended upward from 2010 to 2016.[7] The expected relationship between traffic congestion and traffic delay on the one hand, and traffic volume on the other hand, are largely reflected in the scatter plots in Figure 1.

Table 7. Traffic Delay, Congestion, and Traffic Volume in Jacksonville, 2010-2016

Year	Vehicles per Lane-Mile (Peak Hours)	Delay (Vehicle-hours per day)	% Travel Severely Congested (peak hours)	% Miles Severely Congested (peak hours
2010	599.80	32,157	0.20	5.46
2011	598.30	36,188	0.30	6.99
2012	573.13	33,540	0.19	4.39
2013	592.20	32,653	0.23	6.46
2014	599.00	33,244	0.19	6.32
2015	651.00	35,612	0.22	7.47
2016	665.24	37,979	0.30	10.61

Source: North Florida TPO Mobility Report, 2017 & 2018 (http://northfloridatpo.com/data/congestion-mobility/)

[7] While data prior to 2010 are available in earlier mobility reports, they were not used in this analysis due to data inconsistency.

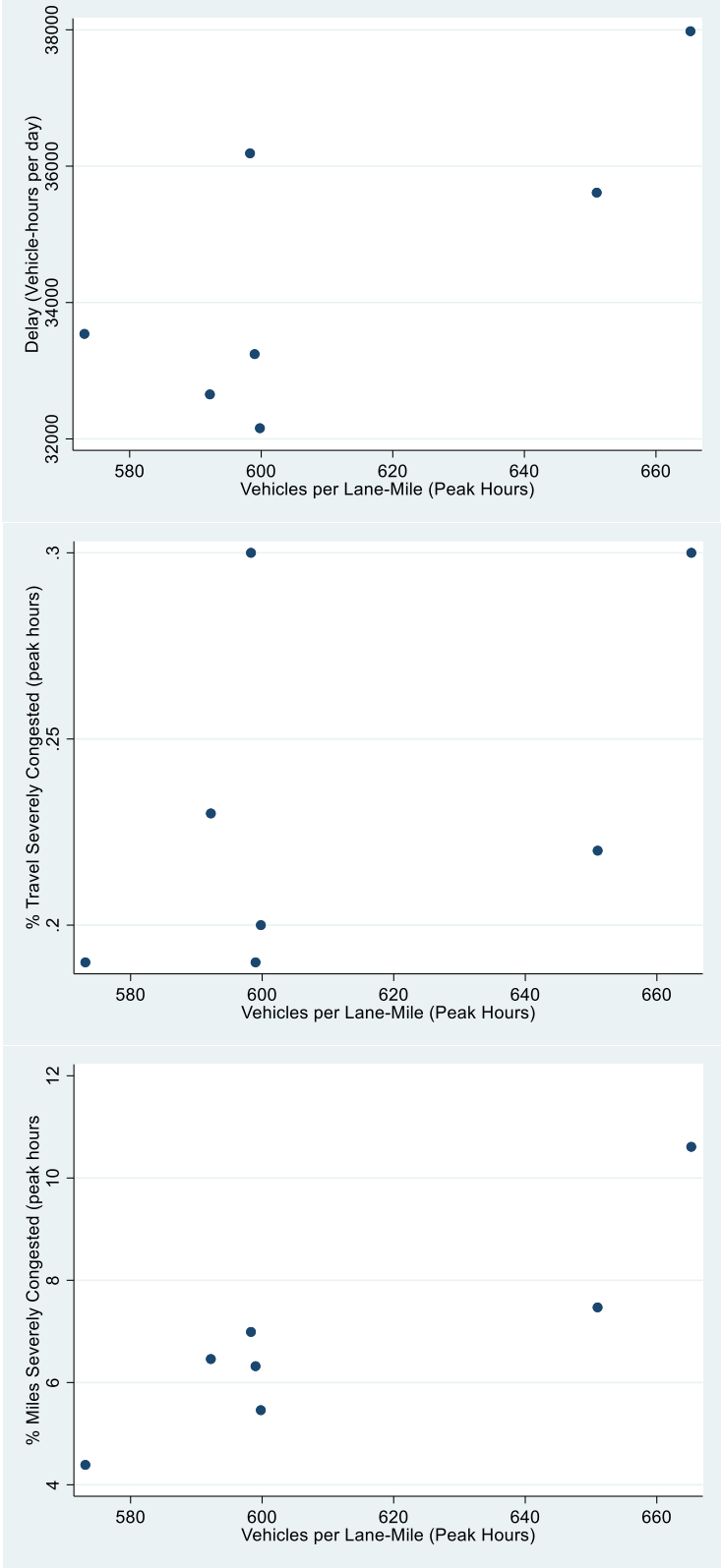

Figure 1. Traffic Delay, Traffic Congestion, and Traffic Volume in Jacksonville, 2010-2016

The relationship between traffic delay in vehicle hours per day (D), % travel severely congested (T), % of miles severely congested (M) and vehicles per lane-mile per day (V) was estimated with the following model:

$$D = \beta_0 + \beta_1 V + \varepsilon_D$$
$$T = \gamma_0 + \gamma_1 V + \varepsilon_T$$
$$M = \delta_0 + \delta_1 V + \varepsilon_M$$

where ε_D, ε_T, ε_M are correlated random errors. The model was estimated using Zellner's Seemingly Unrelated Regression (SUR). While the estimated coefficients are identical to those derived equation-by-equation using standard ordinary least squares, the SUR estimation is more efficient. The coefficient of particular interest to this study is β_1, which represents the delay in vehicle hours per day for each additional vehicle per lane-mile per day.

Table 8 shows the estimation results from the SUR using data presented in Table 7 and Figure 1. The coefficient estimate suggests that the traffic delay increases by 48 vehicle hours per day for every additional vehicle per lane-mile during the peak hours. This estimate is statistically significant at the 0.01 level.

Table 8. Seemingly Unrelated Regression Estimation of Traffic Delay and Congestion

	Coefficient	Standard error
Delay (Vehicle-hours per day)		
Vehicles per Lane-Mile (Peak Hours)	47.954**	15.95
Constant	5170.298	9763.44
% Travel Severely Congested (peak hours)		
Vehicles per Lane-Mile (Peak Hours)	0.001	0.00
Constant	-0.204	0.29
% Miles Severely Congested (peak hours		
Vehicles per Lane-Mile (Peak Hours)	0.052***	0.01
Constant	-24.783***	6.22
R-squared Equation 1	0.5635	
Equation 2	0.2479	
Equation 3	0.7871	
Sample size	7	

* p<0.05; ** p<0.01; *** p<0.001

In 2018, JTA's operations on weekdays (when traffic congestion is most problematic) covered a total of 53,394,013 passenger-miles. According to the 2016 Onboard Rider Demographic Survey data, the afternoon peak period accounted for 35 percent of all JTA rides. Assuming that peak

hours account for half of the peak period (3-6pm as defined in the survey) traffic volume, the peak hours should cover around 9,343,952 passenger miles over 261 weekdays, or 35,801 passenger miles per weekday, on average.

Based on the 2016 Onboard Rider Demographic Survey data, 18.02 percent of JTA riders reported that they would have driven had they not used JTA service. Based on this ratio, approximately 6,451 passenger miles would have been added to peak hour traffic in the absence of JTA service. When spread over the entire 3,712 miles of roadway[8] in Jacksonville, assuming 2 lanes of travel in each direction, the potential additional driving by JTA riders would be equivalent to an increase of 0.4345 vehicles per lane-mile. Based on the coefficient estimates reported above, the increase in traffic volume would have led to an increased delay of 20.84 vehicle-hours per day. In 2018, there were a total of 261 weekdays, so the total increased delay would have been 5,439 vehicle-hours during the year.

According to the 2018 Mobility Report, average vehicle occupancy was 1.64 persons. When valued at $27.62, the average hourly earnings in Jacksonville[9], for each passenger in the vehicle, the monetary cost of traffic delay would have been $246,380. In other words, JTA's operations contributed to a cost saving of **$246,380** due to its effect in reducing congestion.

[8] Source: *2017 City County Mileage*, Florida Department of Transportation. (https://www.fdot.gov)
[9] Source: Current Employment Statistics (CES), Florida Department of Economic Opportunity. (https://www.floridajobs.org)

Economic Benefit: Economic Disruption Avoidance

The most recent survey of JTA's riders (2016 Onboard Rider Demographic Survey) confirmed that JTA's services are disproportionately utilized by economically disadvantaged populations. Many riders would not be able to commute to work or, worse, hold jobs at all had JTA's services not been available. It is thus reasonable to argue that JTA's operations are associated with the economic benefit of improving access to work for economically disadvantaged populations.

The 2016 Onboard Rider Demographic Survey data provides useful information on riders' income and alternative means of transportation or the lack thereof, which makes it possible for this study to determine how many riders' earnings can be associated with the use of JTA services. However, it is not clear what these riders' alternative employment and earnings potential are within a radius in which public transportation is unnecessary. Several assumptions were made to estimate such opportunity costs.

In 2018, JTA's operations accumulated 11,718,575 passenger trips[10], or 225,357 passenger-trips per week. Based on the utilization frequency distribution in the 2016 Onboard Rider Demographic Survey data (Table 9), one can calculate the average number of trips a typical rider takes per week as 9.988. The average number of transfers was 0.526, which should be a discounting factor since a transfer is presumably counted as a separate trip in the passenger trip statistics. After both factors are considered, the total number of distinct passengers is estimated at 14,786 in 2018.

Table 9. JTA Service Utilization Frequency Distribution

Frequency	**# of trips implied; assuming round trip**	**Probability**
1 day per week or less	2	4.21%
2 days per week	4	5.35%
3 days per week	6	9.48%
4 days per week	8	9.76%
5 days per week	10	29.93%
6 days per week	12	10.92%
7 days per week	14	28.58%
First time riding	2	1.78%

The 2016 Onboard Rider Demographic Survey reported that 40.83% of JTA riders have incomes under the poverty threshold. Of these poor riders, 32.47% (1960 individuals) hold full-time jobs

[10] Source: Jacksonville Transportation Authority

and consider JTA their only feasible method of transportation for work-related trips. Another 27.50% of the riders in poverty (1660 individuals) hold part-time jobs and consider JTA their only feasible method of transportation for work-related trips.

According to the survey data, the poor group with full-time jobs has an average income of $25,687, and the group with part-time jobs an average income of $14,505. It is assumed that the opportunity that would remain for both groups in the case that public transportation were unavailable is one that pays minimum wage ($8.25) at a 20-hour per week employment capacity, or an annual income of $8,580.

Thus, the benefit of improving access to work for the full-time group is estimated at $33,529,720 (= [$25,687 - $8,580] x 1,960), and for the part-time group at $9,835,500 (= [$14,505 - $8,580] x 1,660). The total benefit in economic disruption avoidance is **$43,365,220**.

Economic Benefit: Reduction in Road Wear and Maintenance Cost

As previously discussed, JTA's operations help reduce the number of private cars on the roadways in Jacksonville. This impact has the potential to reduce road wear and thus lower road maintenance costs. However, JTA's operations can also create additional strain on the roads, since heavy vehicles such as buses can be disproportionately more damaging to the pavement than passenger cars.

While there is a sizable body of studies on road wear and road maintenance, few provide useful statistics for properly evaluating cost savings in terms of road wear. The few that explore the relationship between road wear and traffic volume are predominantly from Europe. Among them, only a German study attempts to estimate the cost function with traffic volume by cars as an input factor. Link (2014) estimated that the marginal cost of road maintenance is around 0.01 Euro/vehicle-km for cars, according to a translog model specification. The marginal cost can be converted into 0.007 USD/vehicle-mile, based on the current exchange rate (1 Euro = 1.12 USD) and the distance conversion ratio (1 mile = 1.6km). Unfortunately, due to lack of information, the measure is not adjusted for the road maintenance cost difference between Hesse, Germany and Florida, US.

Given the total JTA passenger-miles, 63,834,091 in 2018, and that 18.02% of riders would have driven in the absence of JTA service, the total number of vehicle-miles that could have been added to road traffic is around 11,502,903. Assuming a constant marginal cost of road maintenance at 0.007 USD/vehicle-miles, the additional traffic would lead to an increased maintenance cost of $80,520.

However, in order to result in a net cost saving, the cost saving due to decreased car use needs to be large enough to offset the cost of road wear caused by the heavy vehicles utilized in JTA's operations. While this researcher is unable to find any estimate in existing literature to help determine the cost of road wear due to JTA's operations, the literature seems quite indicative that such cost can be very high. Theoretically, traffic from heavier vehicles is significantly more damaging to pavement than lighter vehicles (Yarmukhamedov & Swärdh, 2016). According to a Minnesota study, the impact of a bus on the roadway is 851 times the impact of a passenger car (Wilde, 2014). In that case, JTA's operations should result in increased costs due to road wear.[11]

[11] Based on JTA bus schedules for a typical weekday, the total vehicle-miles driven by JTA buses should exceed 200,000. Based on $5.957 per vehicle-mile for bus (=$0.007*851), the cost of road wear by JTA operation will exceed $1.1M in 2018.

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Appendix I

Table A1. Top 25 Industries Affected by JTA Operations in 2018 (Output in Dollars)

Description	Direct	Indirect	Induced	Total
Total	112,566,339.33	37,367,699	48,876,420	198,810,458
Transit and ground passenger transportation	112,566,339.33	36,781.35	113,190.71	112,716,311.39
Owner-occupied dwellings	0.00	0.00	6,919,652.61	6,919,652.61
Insurance agencies, brokerages, and related activities	0.00	3,903,959.46	484,188.15	4,388,147.61
Wholesale trade	0.00	1,906,764.52	2,249,305.24	4,156,069.76
Real estate	0.00	1,234,287.46	2,846,826.53	4,081,114.00
Insurance carriers	0.00	2,167,601.65	1,487,002.51	3,654,604.15
Hospitals	0.00	0.00	3,570,548.15	3,570,548.15
Maintenance and repair construction of nonresidential structures	0.00	2,625,049.95	254,634.75	2,879,684.70
Monetary authorities and depository credit intermediation	0.00	1,670,871.72	1,197,784.88	2,868,656.60
Management consulting services	0.00	2,380,462.35	289,911.61	2,670,373.96
Nondepository credit intermediation and related activities	0.00	2,193,995.96	460,733.70	2,654,729.66
Waste management and remediation services	0.00	2,129,283.74	148,300.46	2,277,584.20
Limited-service restaurants	0.00	124,003.52	1,874,454.17	1,998,457.69
Local government electric utilities	0.00	958,477.01	1,028,033.81	1,986,510.82
Offices of physicians	0.00	0.00	1,702,502.83	1,702,502.83
Employment services	0.00	1,107,535.33	418,737.44	1,526,272.77
Legal services	0.00	798,609.68	621,384.90	1,419,994.58
Full-service restaurants	0.00	137,222.32	1,111,291.57	1,248,513.88
Other financial investment activities	0.00	338,270.04	871,598.61	1,209,868.65
Management of companies and enterprises	0.00	562,136.04	542,078.13	1,104,214.17
Accounting, tax preparation, bookkeeping, and payroll services	0.00	816,140.50	288,008.66	1,104,149.16
Services to buildings	0.00	825,789.96	240,418.27	1,066,208.24
Retail - Nonstore retailers	0.00	43,306.57	965,477.82	1,008,784.39
Commercial and industrial machinery and equipment rental and leasing	0.00	937,670.41	63,624.37	1,001,294.79
Wired telecommunications carriers	0.00	520,561.98	441,172.56	961,734.54

Table A2. Top 25 Industries Affected by JTA Operations in 2018 (Employment in FTE)

Description	Direct	Indirect	Induced	Total
Total	2,104.08	247.22	351.77	2,703.07
Transit and ground passenger transportation	2,104.08	0.69	2.12	2,106.88
Management consulting services	0.00	23.17	2.82	26.00
Services to buildings	0.00	18.86	5.49	24.35
Full-service restaurants	0.00	2.67	21.66	24.33
Hospitals	0.00	0.00	23.18	23.18
Insurance agencies, brokerages, and related activities	0.00	20.46	2.54	23.00
Limited-service restaurants	0.00	1.43	21.57	22.99
Real estate	0.00	6.40	14.76	21.15
Wholesale trade	0.00	8.79	10.37	19.17
Employment services	0.00	12.54	4.74	17.27
Maintenance and repair construction of nonresidential structures	0.00	15.73	1.53	17.25
Nondepository credit intermediation and related activities	0.00	13.70	2.88	16.58
Monetary authorities and depository credit intermediation	0.00	7.08	5.08	12.15
All other food and drinking places	0.00	0.70	11.36	12.06
Retail - General merchandise stores	0.00	0.22	11.62	11.84
Retail - Food and beverage stores	0.00	0.08	11.61	11.69
Dry-cleaning and laundry services	0.00	10.83	0.83	11.67
Waste management and remediation services	0.00	10.90	0.76	11.66
Offices of physicians	0.00	0.00	11.00	11.00
Accounting, tax preparation, bookkeeping, and payroll services	0.00	7.44	2.63	10.07
Landscape and horticultural services	0.00	6.94	2.55	9.49
Insurance carriers	0.00	4.83	3.32	8.15
Personal care services	0.00	0.00	7.81	7.81
Home health care services	0.00	0.00	7.67	7.67

Table A3. Top 25 Industries Affected by JTA Operations in 2018 (Labor Compensation in Dollars)

Description	Direct	Indirect	Induced	Total
Total	43,738,615.06	14,182,088.46	15,710,381.75	73,631,085.27
Transit and ground passenger transportation	43,738,615.06	13,961.28	42,964.37	43,795,540.72
Management consulting services	0.00	1,446,345.16	176,147.40	1,622,492.56
Hospitals	0.00	0.00	1,572,706.48	1,572,706.48
Insurance agencies, brokerages, and related activities	0.00	1,349,208.96	167,335.50	1,516,544.46
Wholesale trade	0.00	605,323.86	714,067.26	1,319,391.12
Nondepository credit intermediation and related activities	0.00	1,049,904.20	220,477.27	1,270,381.47
Offices of physicians	0.00	0.00	1,172,757.55	1,172,757.55
Monetary authorities and depository credit intermediation	0.00	657,205.96	471,126.16	1,128,332.12
Maintenance and repair construction of nonresidential structures	0.00	855,434.64	82,978.76	938,413.40
Insurance carriers	0.00	500,711.67	343,494.62	844,206.29
Employment services	0.00	576,415.05	217,931.25	794,346.30
Accounting, tax preparation, bookkeeping, and payroll services	0.00	480,082.49	169,416.80	649,499.30
Waste management and remediation services	0.00	606,129.28	42,215.72	648,345.00
Legal services	0.00	363,333.56	282,703.80	646,037.36
Full-service restaurants	0.00	65,776.25	532,687.32	598,463.57
Real estate	0.00	174,901.53	403,402.24	578,303.77
Management of companies and enterprises	0.00	289,137.32	278,820.44	567,957.76
Services to buildings	0.00	425,036.60	123,744.02	548,780.61
Securities and commodity contracts intermediation and brokerage	0.00	300,840.69	179,332.20	480,172.89
Limited-service restaurants	0.00	27,584.09	416,964.92	444,549.01
Dry-cleaning and laundry services	0.00	355,069.35	27,307.24	382,376.58
Environmental and other technical consulting services	0.00	324,009.47	37,731.51	361,740.98
Home health care services	0.00	0.00	351,383.99	351,383.99
Local government electric utilities	0.00	169,382.61	181,674.72	351,057.33