ECONOMIC IMPACT OF PUBLIC TRANSIT

KANSAS CITY METROPOLITAN AREA

13.9 million

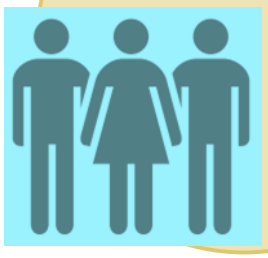
rides each year in metro KC

Direct annual spending

$125.4 million

by transit agencies

Transit providers employ



890

people per year

Transit riders spend another

$138.5 million

attributable to their rides

$786.4 million total economic impact

6,310 direct and indirect jobs

Sponsors

CITIZENS FOR MODERN TRANSIT
MAKING TRANSIT A PRIORITY

AARP Real Possibilities
St. Louis

MPTA
Missouri Public Transit Association

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Public Transit-Generated Economic Impacts in the Kansas City Metropolitan Area

Four Kansas City metro area transit providers responded to the economic impact survey:

- Kansas City Area Transit Authority, which includes the Kansas part of the metro area.
- OATS Transportation Services
- Ray County Transportation
- EITAS

Together, these transit providers spend about $125.4 million in an average year from 2015 to 2019. These expenditures are shown on the "Direct Spending" line of columns 1, 2, and 3 of the accompanying table.

- $23.8 million goes toward capital expenditures (19.0%).
- $35.1 million pays for non-labor operations (27.9%).
- $66.6 million pays employees (53.1%).[1]

ECONOMIC IMPACT OF PUBLIC TRANSIT IN THE KANSAS CITY METROPOLITAN AREA
(2015-2019 Annual Averages in 2019 Dollars)

	(1) Capital Expenditures	(2) Goods & Services Purchased	(3) Employee Compensation and Value of Benefits	(4) Spending by Riders Attributable to Their Rides	(5) Total
Direct Spending	$ 23,794,000	$ 35,053,000	$ 66,593,000	$ 138,500,000	$ 263,940,000
Annual Average Number of Transit Rides					*13,850,000*
Multipliers					
Output	2.15	2.28	1.40	2.15	1.98
Earnings	0.68	0.80	0.42	0.70	0.64
Employment	15.02	30.25	11.62	23.30	20.53
ADDED ECONOMIC IMPACT IN THE KANSAS CITY METRO AREA					
Output	$ 51,174,000	$ 79,942,000	$ 93,104,000	$ 298,223,000	$ 522,443,000
Earnings	$ 16,220,000	$ 28,039,000	$ 27,836,000	$ 97,267,000	$ 169,362,000
Indirect Jobs Held by Kansas City Metro Area Residents	360	1,060	770	3,230	5,420
TOTAL ECONOMIC IMPACT IN THE KANSAS CITY METRO AREA					
Output	$ 74,968,000	$ 114,995,000	$ 159,697,000	$ 436,723,000	$ 786,383,000
Earnings					$ 235,955,000
Direct Jobs in Transit Held By in Kansas City Metro Area Residents					890
Total Direct Jobs in Metro Area Plus Indirect Jobs Held by Metro Area Residents					6,310
Average Annual Earnings per Direct Transit Job					$ 74,800
Average Annual Earnings per Indirect Multiplier Job					$ 31,200

Multiplier Definitions:	
Output:	Total dollar change in the Kansas City metro area economy due to expenditures by the transit industry.
Earnings:	Total dollar change in earnings of households in metropolitan Kansas City due to expenditures by the transit industry.
Employment:	Total change in the number of jobs held by metropolitan Kansas City residents per $1,000,000 of added output.

Transit riders in the Kansas City area spend another $138.5 million per year that can be attributed to their transit rides for purchases they would not otherwise make (column 4).

Column 5 shows that an average year results in total direct spending of the sum of the first four columns, or $263.9 million. These expenditures trigger multiplier effects throughout the metropolitan area economy.

The second line of the table shows the number of transit rides in an average year for the four survey respondents: 13,850,000. Not shown is the average $10.00 spent per rider per trip *in addition to* what riders would spend during an average car trip. This additional spending is due to savings from not driving automobiles.

The next set of numbers are multipliers obtained from the federal government for economic sectors relating to the spending categories. "Goods and Services" spending in column 2, for instance, relies on multipliers for the *transit and ground passenger transportation* sector. There is no finer-grained sector for public transit primarily

[1] KCATA alone accounted for 96% of the capital spending, 90% of the non-labor operational spending, 97% of the labor costs, and 98% of all ridership.

because of limitations of the economic data. In other words, spending by transit agencies for non-labor operations (titled here "goods and services") is multiplied in the Kansas City economy through the *transit and ground passenger transportation* sector.

Multipliers for capital improvement spending (column 1) are best obtained from the *construction* sector of the economy. Again, there is no finer-grained capital improvements sector for transit because of national data limitations. Moreover, most capital improvement spending is for construction kinds of projects, so money spent on construction is best measured through the *construction* multipliers.

The multipliers that best depict how employees will spend their earnings (column 4) in the regional economy are from the *households* sector.

Thus, direct spending by the transit agencies themselves to support their missions are tracked through three direct sectors of the region's economy: *transit and ground passenger transportation*, *construction*, and *households*.

The fourth spending category is a bit more complicated—spending by riders that can be attributed to their transit rides. In this case, nine multiplier sectors were selected where riders would most likely spend their average of $10.00/ride. These nine sectors were compared to the Consumer Expenditure Survey data of the U.S. Department of Labor to determine percentages of spending in those nine sectors assuming that the entire $10.00 are spent in those sectors. The percentages were used as statistical weights to determine an overall set of multipliers, shown on the table below, for the rider spending category.

Food and beverage stores	29.0%
General merchandise stores	12.2%
Other retail	5.1%
Educational services	9.9%
Ambulatory health care services	5.8%
Performing arts, spectator sports, museums, and related activities	5.0%
Amusements, gambling, and recreation industries	4.0%
Accommodation	6.7%
Food services and drinking places	22.4%
TOTAL	100.0%

Thus, the multiplier coefficients shown in column 4 represent a weighted average of the above nine sectors as they apply in the Kansas City metro area.

There are three multiplier coefficients in each column: output, household earnings, and employment.

1. Output: this is the overall economic activity multiplier. It is multiplied by the direct spending to determine overall indirect spending that the region's economy should expect to be supported by the rounds of re-spending triggered by the initial spending. Thus, for example, the annual average of $23.8 million in capital improvements is multiplied by 2.15 to determine that the additional impact in the metro area should be almost $51.2 million, shown on the rows just below the multiplier coefficients.

2. Household Earnings: this is also multiplied by the initial direct spending to determine added earnings for metro Kansas Citians that should result from the initial spending. Under capital improvements, this amounts to $23.8 million in spending x 0.68 to result in $16.2 million that will end up as household earnings during the re-spending rounds.

3. Employment: this is for jobs supported *because of* the multiplier effects, or "jobs per million dollars in initial spending." So, the $23.8 million in initial capital improvements must first be divided by one million (= 23.8), then multiplied by 15.02 to determine that the initial capital improvements spending will help support about 360 additional jobs in the regional economy, in many different sectors. The largest job

benefits will be in the construction sector but spending for construction also requires goods and services (thus, jobs) from several manufacturing sectors, from wholesale trade, and even health services.

After all the multiplication is completed, the benefits of initial spending are shown in column 5 under the section "Added Economic Impact in the Kansas City Metro Area." This shows that additional economic output in the state within most or all other sectors, would be about $522.4 million because of initial spending. Of this added economic output, $169.4 million would become added earnings for households in the region and there would be 5,420 additional jobs supported in the metro area. Dividing added jobs by added earnings indicates that the average multiplier job would be paid $31,200 per year, a figure show further down the table.

Adding direct spending to multiplier effects yields "Total Economic Impact in the Kansas City Metro Area." With all the spending by the transit agencies, by their riders, and the multiplier effects, **the transit sector triggers $786.4 million in region-wide economic activity per average year. This activity supports $236.0 million in household earnings and 6,310 jobs** (the sum of 890 transit agency jobs *plus* multiplier jobs). As shown just below those numbers, the average transit worker in the region is paid $74,800 in wages or salaries while the average multiplier job is paid $31,200. The much lower amount in multiplier jobs is primarily attributable to multiplier effects in lower paying sectors like retail and many services.

Finally, the economic impact of *investment* in public transit is the ratio between capital improvements spending and resulting overall economic activity. In the Kansas City area, the annual average capital investment in transit facilities from 2015 to 2019 was $23.8 million, resulting in overall economic activity of $786.4 million. Thus, each dollar in capital investment helped generate $33.00 in overall economic activity, a ratio of 33-to-1.

Below are estimated tax revenues accruing to the Missouri state government treasury attributable to the public transit sector in metropolitan Kansas City plus multiplier effects. The table is based on the very strong statistical correlation between household earnings and individual income tax collections in the state as well as the strong correlation between household earnings and other taxes. Thus, because multiplier effects determined household earnings, individual income tax collections attributable to the transit industry can be estimated.

Totals based on metropolitan economic impacts were then multiplied by 54.8% to reflect the share of overall jobs in the Missouri side of the metro area, being careful to not overstate taxes paid to the Missouri treasury. As a result, the public transit sector in the Kansas City metropolitan area supports annual Missouri state government revenues of about $6.1 million.

Missouri State Taxes From Direct and Multiplier Effects of Public Transit in the Kansas City Metropolitan Area				
Individual Income Tax	$	3,470,000	2.68%	of direct & indirect earnings triggered by the public transit sector
Corporate Income Tax	$	166,000	6.66%	of individual income taxes triggered by indirect earnings from public transit
Sales and Use Taxes (State)	$	1,716,000	49.46%	of individual income taxes triggered by public transit's economic impacts
Other Taxes*	$	746,000	13.93%	of the three taxes above
Sales and Use Taxes (Local)	$	1,580,000	45.54%	of individual income taxes triggered by public transit's economic impacts
Total Collections	**$**	**7,678,000**	0.98%	of total economic impact from public transit in the KC metro
Total Collections Just State Government	**$**	**6,098,000**	0.78%	of total economic impact from public transit in the KC metro