

STATE OF MISSOURI AND SELECTED REGIONS OF THE STATE

ECONOMIC IMPACT OF PUBLIC TRANSIT IN MISSOURI

OCTOBER 2019

PREPARED FOR

Citizens for Modern Transit

AARP St. Louis

Missouri Public Transit Association

"People ride public transit for two reasons – to make money and to spend money. That's why public transit is an economic development program with social benefits."

...Oklahoma Transit Association

<https://oktransitassociation.com/>

Robert M. Lewis, FAICP, CEcD
Independent Consultant
Assistant Professor of Urban Planning & Development



SAINT LOUIS UNIVERSITY
—
URBAN PLANNING AND DEVELOPMENT



SAINT LOUIS UNIVERSITY

URBAN PLANNING AND DEVELOPMENT

October 1, 2019

Ms. Kimberly Cella
Executive Director
Missouri Public Transit Association and
Citizens for Modern Transit
911 Washington Avenue, Suite 200
St. Louis, Missouri 63101

Dear Ms. Cella:

Representing Saint Louis University, I am very pleased to submit this economic impact analysis of the public transit industry in the state of Missouri as well as in several sub-areas of the state. Data to conduct this study were obtained from a survey of the members of the Missouri Public Transit Association. We received 18 survey responses plus a 19th from the St. Clair County Transit District in the Illinois part of the St. Louis metropolitan area because of its very close operational relationships with Bi-State Development/Metro Transit. Conclusions of this report reflect only the received surveys.

Respondents to the survey employed an annual average of 4,500 people between 2015 and 2019 to provide transit services in virtually every county of Missouri. These agencies spent an annual average of about \$675 million on capital improvements, labor compensation, and other operations. They provided just over 60 million rides, or about 10 rides per year for every resident of the state. Moreover, the transit riders spent another \$600 million on goods and services attributable to their rides in addition to money they would have spent anyway because of their trips. Together, this totals some \$1.28 billion in direct economic impact per year.

That direct spending triggered another \$2.40 billion in statewide economic activity and the support of another 24,980 jobs in the state across virtually all economic sectors when multiplier effects are calculated. Those added jobs paid an average of \$30,200 per year compared to \$64,200 for the average transit employee.

Over the five calendar years covered by the survey, the responding transit agencies spent an average of \$91.2 million annually on capital investments yielding an overall economic impact (direct plus indirect) of \$3.67 billion dollars. This is a remarkable 40-to-1 ratio between capital investments and economic benefit for the state! State government collects an estimated \$48.8 million in taxes because of the direct and multiplier effects of transit. This represents a 28.7-to-1 ratio based on the \$1.75 million in annual state government support of public transit.

Many thanks to Jonathan Weyer, intern from Saint Louis University working at Citizens for Modern Transit, in assisting with the survey process. And, of course, many thanks to you, Sheila Holm of AARP St. Louis, and Mark Mehmert in Jefferson City for their assistance and commentary.

I have much enjoyed evaluating public transit's economic impact on behalf of CMT, AARP, and MPTA. Please do not hesitate to contact me if further clarification is needed.

Respectfully submitted on behalf of Saint Louis University,

Robert M. Lewis, FAICP, CEcD
Assistant Professor, Urban Planning & Development
Independent Consultant in Urban Planning & Development

Contents

1.0 EXECUTIVE SUMMARY.....	1
2.0 INTRODUCTION AND BACKGROUND.....	4
THE BOTTOM LINE IS THIS	7
3.0 SURVEY RESULTS OF MISSOURI'S PUBLIC TRANSIT INDUSTRY	8
THE RESPONDING TRANSIT ORGANIZATIONS	8
SURVEY, DATA COMPILATION, AND ANALYSIS METHODOLOGY	8
AVERAGE ANNUAL DIRECT SPENDING AND IMPACTS	9
SAVINGS BY RIDERS FROM NOT DRIVING AUTOMOBILES.....	10
SPENDING BY RIDERS ATTRIBUTABLE TO THEIR RIDES	10
EFFECTS OF THE METROPOLITAN AREAS.....	12
FIVE-YEAR TRENDS IN RIDERSHIP, EMPLOYMENT, AND EXPENDITURES	12
4.0 MULTIPLIER EFFECTS: HOW THEY WORK.....	15
5.0 MULTIPLIER EFFECTS IN MISSOURI AND SELECTED SUB-AREAS.....	18
ECONOMIC IMPACTS IN MISSOURI (TABLE 1)	18
ECONOMIC IMPACTS IN METROPOLITAN ST. LOUIS (TABLE 2).....	22
ECONOMIC IMPACTS IN METROPOLITAN KANSAS CITY (TABLE 3).....	23
ECONOMIC IMPACTS IN METROPOLITAN ST. JOSEPH (TABLE 4)	24
ECONOMIC IMPACTS IN GREENE COUNTY (SPRINGFIELD) (TABLE 5)	25
ECONOMIC IMPACTS IN COLE COUNTY (JEFFERSON CITY) (TABLE 6)	26
ECONOMIC IMPACTS IN CAMDEN COUNTY (LAKE OF THE OZARKS) (TABLE 7).....	27
ECONOMIC IMPACTS IN JEFFERSON COUNTY (SUBSET OF METRO ST. LOUIS) (TABLE 8)	28
ECONOMIC IMPACTS IN BOONE COUNTY (SAME AS METRO COLUMBIA) (TABLE 9)	29
6.0 MISSOURI STATE TAX REVENUES FROM TRANSIT IMPACTS.....	30
APPENDIX A: QUESTIONNAIRE USED IN THE SURVEY OF MISSOURI TRANSIT PROVIDERS.....	33
APPENDIX B: BRIEF PROFILES OF SURVEY RESPONDENTS	39
BI-STATE DEVELOPMENT/METRO ST. LOUIS.....	39
KANSAS CITY AREA TRANSPORTATION AUTHORITY	39
OATS TRANSIT.....	40
EITAS	42
CITY OF ST. JOSEPH: THE RIDE.....	43
CITY UTILITIES OF SPRINGFIELD: THE BUS	44
JEFFTRAN	44
CAPE GIRARDEAU COUNTY TRANSIT AUTHORITY	45
CITY OF COLUMBIA – GoCoMo TRANSIT.....	45

CITY OF HOUSTON BUS SERVICE..... 47
CITY OF MT. VERNON TAXI SERVICE..... 47
CITY OF NEVADA FARE SHARE TRANSPORTATION PROGRAM..... 48
CITY OF EXCELSIOR SPRINGS TRANSPORTATION DEPARTMENT 48
CITY OF JOPLIN..... 49
SCOTT COUNTY TRANSPORTATION SYSTEMS 49
SOUTHEAST MISSOURI TRANSPORTATION SERVICE 50
APPENDIX C: SPONSORS OF THE ECONOMIC IMPACT STUDY..... 51

1.0 Executive Summary

Transit systems serving the state of Missouri generated an annual average of 60.1 million rides¹ in the five years between 2015 and 2019. This is the equivalent of 9.8 rides per year for each Missouri resident!

These transit providers employ 4,500 people in an average year and pay those workers an annual average of \$64,200 (2019 dollars). The agencies spend \$675.0 million each year to provide their services which, alone, has a multiplier effect of \$1.18 billion in *additional* economic activity in the state. Riders of the transit systems also contribute an estimated \$600 million in spending within the state *that can be attributed to their transit rides*, increasing the overall multiplier effect to \$2.4 billion in *additional* economic activity. Within that economic activity are supported another 24,680 jobs in the state paying an average of \$30,200 per year.



There are 34 public transit agencies based in and serving every county in the state of Missouri who are members of the Missouri Public Transit Association. These are certainly dominated by Metro Transit in the St. Louis area and the Kansas City

Area Transportation Authority. But there is public transit service available in various forms to serve every Missourian in every county, including rural areas and small towns.



Of these 34 agencies, 18 completed a questionnaire in mid-2019 to determine their collective economic impact in the state and, in some cases, their own service areas. An additional survey response was received from the St. Clair County Transit District in the Illinois portion of metropolitan St. Louis because of its joint operations with Metro/Bi-State. St. Clair County is, therefore, included in the “Missouri Totals,” thus increasing the survey response rate to 19 out of 35 agencies.²



Over the five-year period of 2015 through 2019,³ these 19 transit agencies served an annual average

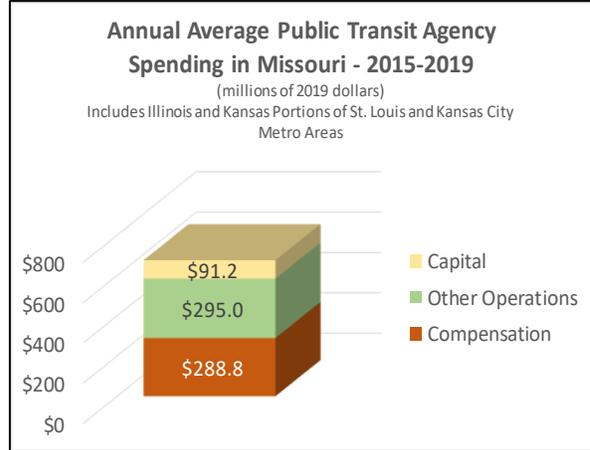
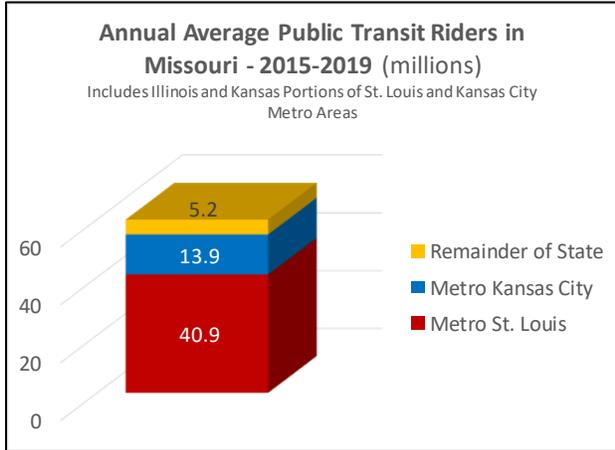
¹ A rider is considered a single individual taking a single ride on a transit vehicle from one point to another. If a transfer is made to another transit vehicle to complete the full trip, that individual is counted as two riders. Moreover, the trip to a place is one ride while the return trip is considered a second ride. That individual is, therefore, counted as two riders.

² A 35th possible respondent was the Madison County Transit District, also in Metro East Illinois, because of its overlapping and complementary service with Metro St. Louis. MCT, however, did not respond.

³ 2019 data as presented in this report are based on estimates and projections provided by the responding

of 60.1 million rides which is equivalent to 9.8 rides per resident of Missouri⁴ each year. The 19 transit agencies also spent an annual average of \$675.0 million between 2015 and 2019 for employee compensation, the purchase of goods and

services from outside vendors, and capital improvements. This is an average of \$11.27 per transit rider.



The riders, themselves, contribute further to the direct and indirect economic impact of transit service in Missouri. While many of the destinations of transit riders can be accessed in other ways, these riders save money on maintenance of their private vehicles and parking. They also enable the public and private sectors to reduce spending for parking facilities, thus freeing up funds for other urgent purposes. And there are plenty of studies that conclude that transit riders tend to be healthier than car drivers because there is always “a walk” before and after the transit ride. Moreover, riders spend money when they get to their destinations.

drive and park a car and partly from fewer health difficulties, among other factors.

Being careful not to overstate these non-cash and cash benefits created when transit is utilized, this study assumes that direct rider spending that can be attributed to their rides averages \$10.00 per person per ride. Where do these \$10.00 come from? Partly from the savings from not having to

Adding this direct spending by riders increases the direct economic impacts of public transit in Missouri by some \$600 million per year and adds another \$1.2 billion in statewide multiplier effects.

All of this spending and employment, therefore, generates tremendous economic benefits for the state. The direct spending by the agencies to support their operations and capital investments, plus the direct spending by employees to support their households and spending by riders because of their trips, have total multiplier effects of:

- \$2.4 billion in *added* economic activity in the state for a net multiplier of 1.88.
- 24,680 *added* jobs in the state, or 5.5 times more jobs than are directly employed by the transit agencies.

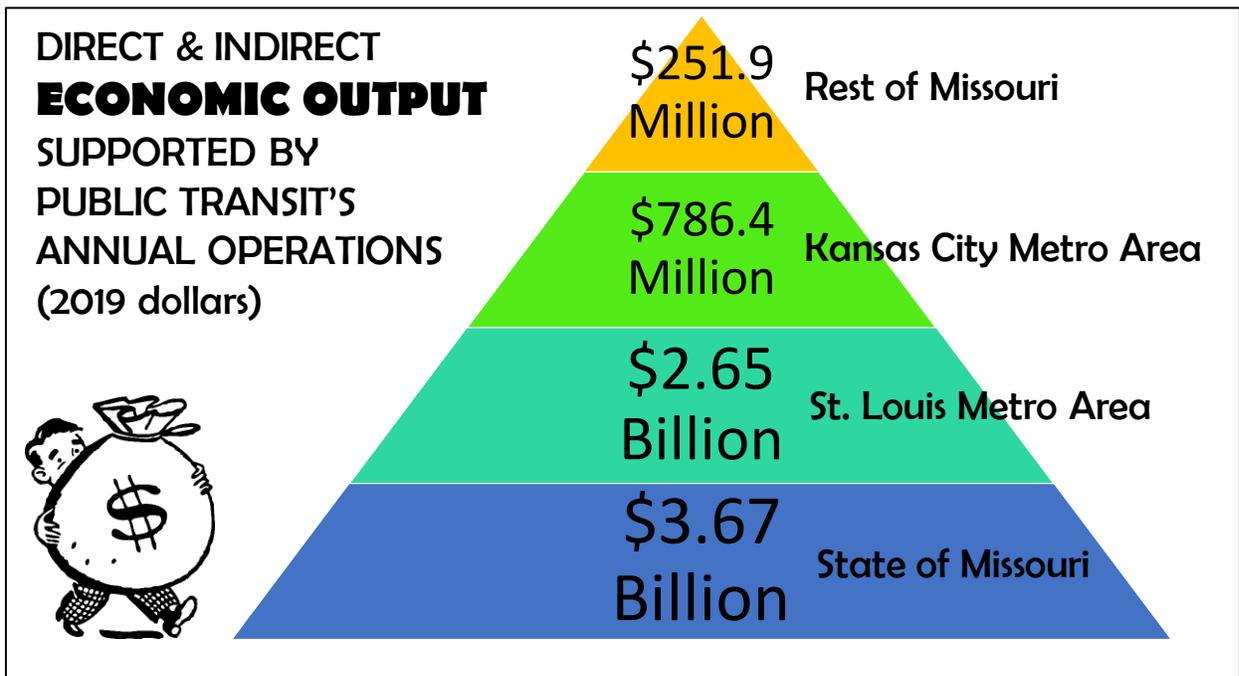
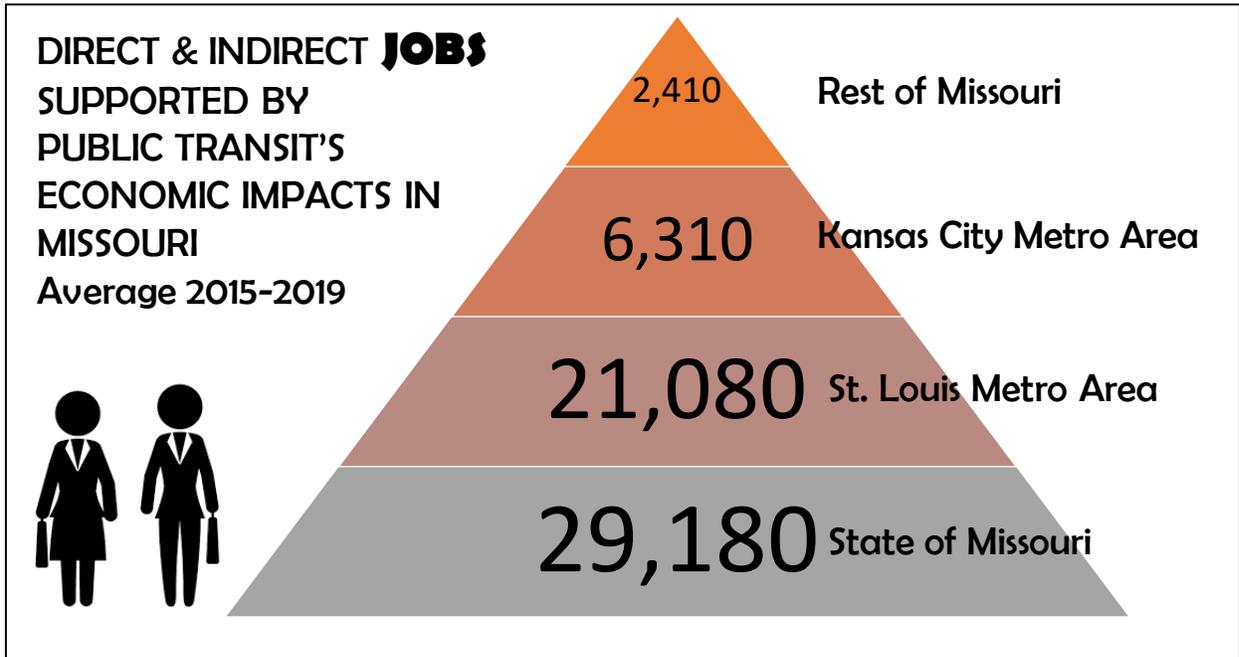
agencies or by projections made by the author of this report based on 2015 to 2018 data. Some agencies provided 2019 data “to date” thus covering about half of the calendar year; this information helped to improve

the quality of subsequent projections by the author for the entire year.

⁴ The U.S. Census Bureau estimates that the average annual population of Missouri between 2015 and 2018 (latest year available) was 6,098,500.

- Added average earnings for those additional jobs of \$30,200.

Altogether, on an average annual basis, spending by the public transit industry, its employees, and riders in Missouri supports 29,180 direct and indirect jobs and \$3.67 billion in economic activity.



Note: Numbers on the graphs do not add exactly because of the bi-state effects of multipliers for the two largest metropolitan areas. The Missouri total excludes the impacts that spill over into Illinois and Kansas.

2.0 Introduction and Background

“Transportation is kind of like electricity and water. You don’t think about it until it’s not there. Then you think about it a lot.”

Southeast Missouri Transportation Service (<http://ridesmts.org/>)

Mankind has always relied on and tried to improve various ways to get around and to carry things. Vehicles and networks to get around form a transportation system. Walking, of course, is one of those ways to get around, and walking is just fine for short distances or relatively light loads. Longer distances and heavier loads in early days of human development often relied on water and boats, or on animals when on land. Eventually, self-propelled vehicles replaced most animals in most societies. And there is any variety of such vehicles!

Transportation networks come in a wide variety, too. Water, residential streets, railroad tracks, highways, air flight, and others provide opportunities, choices, and speeds that best match purposes at hand. As humans increasingly settled into communities and cities of relatively dense populations and buildings, shared transportation systems evolved into what we today call transit systems. Enterprising business people realized that money could be made by transporting people in common conveyances, thus saving those riders money that they didn’t have to spend on personal vehicles. This also minimized traffic on crowded streets in dense places—a factor which still contributes to reasons why private transit operations became public operations.

Public transit evolved from private transit systems when economies of scale began to diminish the profitability of some forms of shared conveyance. By then, however, the efficient function of complex cities and regions required “mass transit” to serve people who otherwise couldn’t afford other types of travel and to again minimize traffic on increasingly crowded streets. Private transit systems, therefore, quickly became public systems which were, and are, often subsidized by public resources in order to assure that people and goods can get around more efficiently in pursuit of prosperity and wealth for all.

Thus, the quote on the title page of this report: “People ride public transit for two reasons – to make money and to spend money. That’s why public transit is an economic development program with social benefits.”

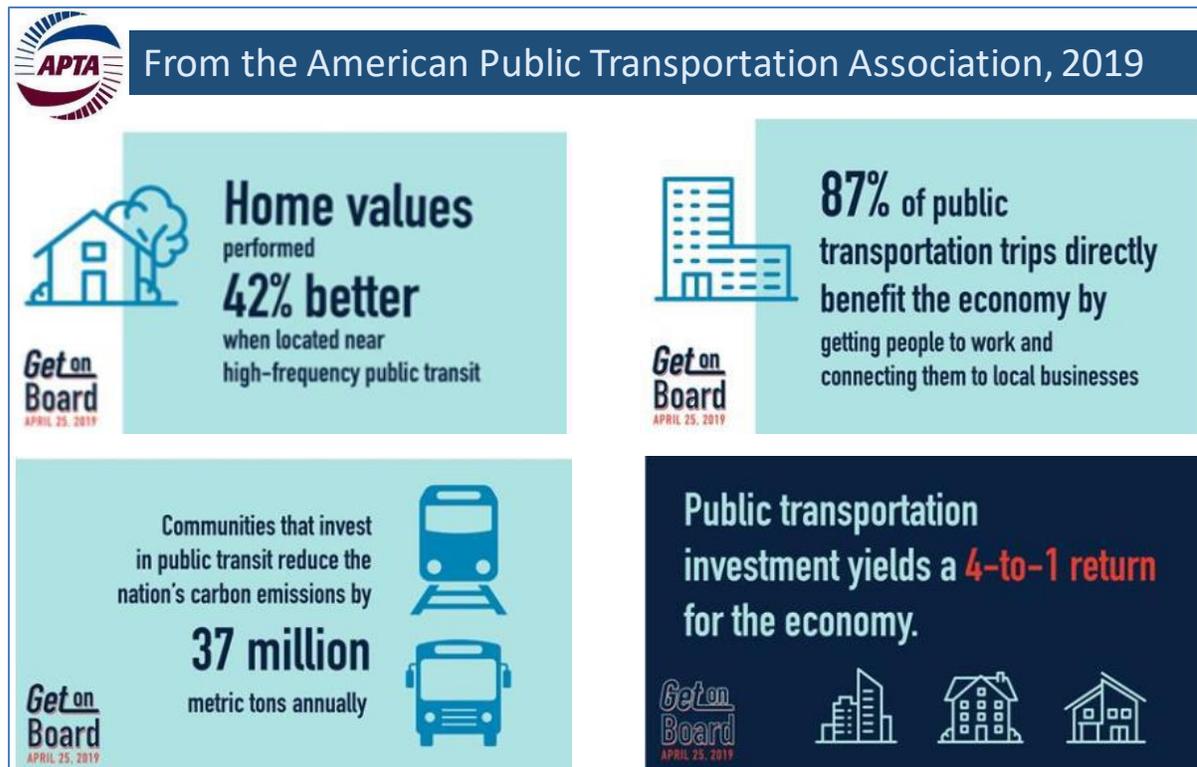
Partly because shared transportation, or transit, has become a public good or service that improves the quality of life and pursuit of economic gain, it is important that citizens and public decision makers be made aware of the economic impacts of transit. Of course, there are several ways to frame transit’s economic impact.

- One is to measure the value to each individual who uses transit to get to work, to attend entertainment events, to reach school, and so on. Such riders may not have, or at least may not need, personal vehicles,

In communities, public transportation is the link between people and possibility. It joins workers and jobs, consumers and businesses and entertainment venues, restaurants and customers. Public transportation is a part of modern society; it provides a range of critical services for people and the communities in which they live. Communities are places where people share a connection with each other. And public transportation is a cornerstone on which these connections are built. Yet, when it comes to justifying and financing public investment in public transit facilities and services, community residents and public leaders need to be reminded of the value that communities receive from this investment. Additionally, public transit agencies themselves may wish to better understand the economic and societal implications of their internal decision-making.

. . . American Public Transit Association, *My Economic Impact: How to Talk About My Numbers*, No date

thus saving them operating and parking costs. Not spending money is an economic benefit for people who could use that money for other purposes.



- Another measure might be the economic value to non-riders of transit. While they may rely on personal vehicles or bicycles or walking, they may see value in public transit because it helps their fellow citizens get to work or school and/or they recognize that more people riding transit means fewer cars and lower congestion on the roadways. One can get to one's destination more quickly with less congestion—a factor, too, which can be translated to economic value if given the right assumptions and statistics.
- Business owners and employers should see economic benefits of transit. Employees can get to work with less stress, perhaps, and thus be more productive during working hours. There is a reduced need to provide parking spaces, thus saving the employer some money. Transit can carry many people at one time, thus potentially increasing foot traffic for street-level businesses.
- There can be economic benefits measured in terms of lower air pollution or even noise pollution. More rides per vehicle on buses or trains, for instance, can reduce the amount of emissions from cars and trucks. Again, given appropriate economic and financial statistics, it is possible to measure the extended benefits of environmental impacts resulting from more transit usage (public health improves, life expectancy and economic productivity increase, and people generally have a higher quality of life).
- Economic benefits of transit can also affect property values. Many studies show that homes and apartments located within easy walking distance of transit stations achieve higher values in the marketplace than those further away. In theory, renters and buyers of such dwellings are willing to pay more for the convenience of transit and, perhaps, the costs savings of fewer cars or lower maintenance costs for their cars.
- In a related sense, transit also improves land use efficiency typically in the form of higher density of buildings. Transit reduces the need for parking lots, on-street parking, and on-site residential parking,

thus increasing the amount of land that can be devoted to more productive land uses like occupied buildings. Denser land use patterns also reduce municipal and utility costs by decreasing the amount of space between buildings thus reducing infrastructure and/or increasing the use of infrastructure per building or per capita. In other words, transit can make infrastructure more cost-efficient.

- These property value impacts extend to employment centers. More transit usage means lesser reliance on parking spaces and parking structures. More land can be put to productive use where people can be employed. More productive land and real estate commands higher values in the market.
- The most traditional way to measure economic impacts of transit—indeed, of just about any economic activity—is to consider the multiplier effects of spending money. Transit providers are economic entities, even if they are public or quasi-public organizations. They raise money, they spend money. They spend money to pay employees, to buy necessary goods and services to support their operations, and to make long term capital improvements. The money they spend becomes income to the recipients of that money. Those recipients then spend the money again (and again and again. . .) to support their businesses or households. Thus, the initial spending to support a transit system not only provides a valuable service for a city or region; it also re-inserts money into the local economy which can continue to circulate in support of other economic activity.

This latter measure is the primary basis of this report. A wide range of transit providers in Missouri were surveyed to determine how much money they spend in an average year, how many people they employ, and how many riders they serve. With such information as “inputs,” it is possible to estimate the multiplier, or ripple, effects, of the spending and continuous re-spending of dollars which, in this case, are funneled into the transit providers (revenues, grants, taxes, fares, etc.) and are spent to provide transit services. Thus, in this report, the initial spending that triggers multiplier effects is the annual spending by the transit providers. The benefits, or impacts, are measured in terms of the amount of increased economic activity that takes place in the economy as a result of that initial spending.

This report does not attempt to measure the other forms of economic impact suggested above. There are ample studies that support such economic benefits, though most tend to be generic or global in scope, or focus on a particular economic area (a city, a corridor, perhaps a state). Translating such studies to the direct experience of Missouri might be possible, but is not undertaken here. Still, the amount of economic activity in the state that is demonstrated in this limited report, alone, should be strongly indicative of the likely scale of the other forms of economic benefit.

The Bottom Line is This: Public transportation connects and grows our communities. It helps support a thriving economy in communities large and small throughout our nation. It increases property values, creates destinations for businesses and forms the basis for livable, walkable communities. Public transit connects people to jobs, education, healthcare, and to restaurants, friends and many essential services. It is the most desirable option for some travelers, a backup option for others, and the only option for yet others. It provides basic mobility for people who cannot, should not or do not have the option to drive. It can also offer efficiencies over other alternatives, including savings in time and travel-related expenses. Public transit can help ease congestion on roads and it helps limit carbon and other pollutant emissions. Sometimes it can enable government and the public to avoid further investment in auto-oriented infrastructure including roads and parking. It also plays a role in achieving strategic planning and sustainable development goals: it supports economic development through cost savings, broader market access, and facilitation of cluster development. Public transit can encourage investment in economically disadvantaged neighborhoods or communities, providing access to opportunity. It can further support public policy goals through encouragement of more efficient land development and more livable communities. And the public taxes spent on public transit are also returned to the community in the form of jobs and income that benefit residents and businesses.

. . . American Public Transit Association, *My Economic Impact: How to Talk About My Numbers*, No date

3.0 Survey Results of Missouri's Public Transit Industry

The Responding Transit Organizations

Of 34 members of the Missouri Public Transit Association (MPTA), 18 completed an economic impact survey in mid-2019. A 19th survey was completed by the St. Clair County Transit District in the Illinois portion of the St. Louis metropolitan area, one of two transit districts in Metro East who were invited to participate in the survey because of their close links with Metro Transit operated by Bi-State Development in St. Louis. Thus, there were 19 respondents from a mailing list of 36 public transit organizations, a response rate of 53 percent.⁵ The 19 respondents are:

1. MO Slick/Boonslick Regional Commission
2. Ray County Transportation
3. Southeast Missouri Transportation Service (SMTS)
4. City of Joplin
5. Cape Girardeau County Transit Authority
6. City Utilities of Springfield – The Bus
7. OATS Transit
8. Kansas City Area Transportation Authority
9. City of Mt. Vernon Transportation
10. City of Nevada, Missouri Fare Share Public Transportation
11. EITAS – Jackson County
12. Bi-State Development/Metro St. Louis
13. City of St. Joseph – The Ride
14. JeffTran
15. City of Houston
16. Excelsior Springs Transportation
17. City of Columbia
18. Scott County Transit
19. Metro East Transit District of St. Clair County, Illinois

Profiles of these transit providers are in Appendix B.

Survey, Data Compilation, and Analysis Methodology

The 34 members of the Missouri Public Transit Association, and the two transit districts serving the Metro East portion of the St. Louis metropolitan area, were sent emails informing them of the economic impact survey and urging their participation, initially in May 2019. The questionnaire, itself, was composed on and delivered via the commercial survey vendor, SurveyMonkey. A copy of the questionnaire is attached as Appendix A to this report. The survey process was managed by Citizens for Modern Transit in St. Louis.⁶ Responses were received over a period of almost two months, with some agencies having to be telephoned and more strongly encouraged to participate. In several cases, because of small agency size and/or multiple departments to consult within larger agencies, it took a seemingly long time to find the necessary survey answers and to put them into the format requested by the questionnaire. Consistent formatting was desired so that the resulting database could be readily analyzed and comparisons could be made between agencies and geographic areas.

Key data were requested for calendar years 2015 through 2019. Because 2019 is not yet a complete year, some respondents provided year-to-date data while others provided their own projections for the year. Authors of this report evaluated all such data and sometimes created statistical projections for the full year of 2019 when there was either no data reported or only year-to-date data.

⁵ In some ways, this is a misleading response rate because it does not account for possibly more meaningful measures like the number of transit rides or riders in the state. While the largest transit agencies in Missouri, in terms of annual ridership, responded to the survey, there is no equivalent source of information for the amount of ridership for all transit agencies. Thus, it is not known what share of all ridership is represented by the 19 respondents to the survey.

⁶ The executive director of Citizens for Modern Transit, Kimberly Cella, also serves as the executive director for the Missouri Public Transit Association.

The year-by-year data that was requested fall into five categories: (1) employees of the agency, (2) dollar compensation of those employees on an annual basis, (3) other operational expenditures other than employee compensation, (4) capital expenditures, and (5) number of rides provided by the transit system each year. Keep in mind that a “rider” is an individual who uses a transit vehicle between one point and another. If that individual transfers to another transit vehicle to reach a final destination, the trip counts as two rides. When that person returns to the original destination using the same transfer network, there would have been a total of four rides recorded for the round-trip. Thus, commuters, for example, who ride the bus from home to their place of work in a single ride, then return home at the end of their workday on the bus are counted as two rides, or two riders for that day.

Other data requested include the types of transit service provided (e.g., bus, rail, call-a-ride), the percentage of ridership by each separate service, and the typical cost to the rider for each type of ride. In some cases, this information is complete and is reported on at appropriate points in this report.

All survey data were compiled into a single workbook database (in Microsoft Excel) where the “raw” information could be double-checked, edited, and put into consistent formats. The resulting spreadsheet “model” then linked the raw data to other sheets in the model containing economic impact multipliers, summary tables, consumer expenditure data, population, and other factors deemed important for this economic impact study.

The Excel model is provided separately to CMT, AARP, and MPTA.

Average Annual Direct Spending and Impacts

The 19 transit agencies provide an annual average of almost 60.1 million rides each year (average for 2015 through 2019).⁷ Together, these providers spend an

A SUCCESS STORY FROM OATS: GREG STEELE

With the aid of the Missouri Vocational Rehabilitation service, Greg Steele was able to turn his passion into a career. Greg recently opened *Steele’s Skull Mounts* at his grandparents’ farm near Gorin, Missouri.

He trained under a master taxidermist and earned his certification through the Missouri Department of Conservation. **OATS Transit** was able to provide transportation to this training in Kirksville, which was funded by the local Small Business 40 board. Greg is employed full-time through Industrial Opportunities in Kahoka.

He launched his new business just in time for the 2018 deer season. “It is a service I believe can benefit area hunters, offering an alternative type of trophy mount that can be really affordable,” he said.

The vocational rehab program, administered through the Missouri Department of Elementary and Secondary Education, assists individuals with disabilities that may limit them in finding employment or prevent them from advancing in a workplace. Working with a vocational rehabilitation counselor, Greg was able to identify a small business opportunity, pursue the necessary training, and secure the equipment required to fulfill his plan.

Through Partnerships—Voc Rehab, SB 40 Board, Department of Conservation, Industrial Opportunities and OATS Transit—Greg’s dream was made possible!

⁷ The response from the St. Clair County Transit District in metro east Illinois is included in this Missouri analysis because its services are closely tied to Metro St. Louis transit services with a great deal of overlapping ridership. Likewise,

average of \$675.0 million each year (again, an annual average for 2015 through 2019 restated in 2019 dollar values⁸) to manage their agencies and make capital improvements. This averages roughly \$11.27 per year per ride when combining all 19 “systems.”⁹

Of the \$675.0 million in average annual spending:

- \$91.2 million goes toward capital expenditures (13.5%),
- \$295.0 million pays for non-labor operations (43.7%), and
- \$288.8 million pays employees (42.8%).

These 19 agencies directly employ 4,500 employees in a typical year. Average compensation for those employees (in 2019 dollars) is \$64,200 per year.

Savings by Riders from Not Driving Automobiles

One of the advantages of riding transit for various purposes is that it saves on costs to own, rent, and operate a personal vehicle. For the year 2018, AAA estimates that it cost the average American between 51¢ and 75¢ per mile to operate a personal vehicle.¹⁰ Lesser amounts per mile apply for more miles driven each year due to certain economies of scale. Such costs include the purchase price of the car, insurance, parking, normal maintenance, registration and licensing, and fuel.

Thus, on average, a Missouri transit rider could save between \$4.00 and \$6.00 for an eight-mile transit ride. This can also mean that the rider now has extra cash to spend in the local economy because that money was not needed for the transit ride.

Of course, some of those saved automobile dollars must pay for the transit ride ticket. If the average transit ride in Missouri cost the rider \$2.00 in out-of-pocket charges, the car-cost savings would be reduced to \$2.00 for \$4.00 for that same eight-mile trip.

While the survey conducted for this report did not ask for miles-per-ride against which the AAA findings could be measured, there are other ways to use the AAA car-cost information to estimate such savings for the average Missouri transit rider.

Spending by Riders Attributable to Their Rides

The economic impact survey queried each transit provider about their own expenditures, employment, and riders. Such information enables a determination of multiplier effects throughout the economy, a topic for

the entirety of the data from the Kansas City Area Transit Authority (KCATA) is included in this Missouri analysis because KCATA serves counties in both Missouri and Kansas with no easy way to separate the data. Thus, the survey responses slightly overstate the impacts within Missouri itself, but the riders and transit services of these two large metropolitan areas bring substantial economic benefits to Missouri.

⁸ Conversion of 2015 through 2018 dollar amounts reported on the surveys to 2019 dollars was done utilizing the “inflation calculator” of the U.S. Bureau of Labor Statistics (www.bls.gov).

⁹ Unfortunately, this report’s author has deemed the survey information regarding typical cost recovery from riders as inadequate, inconsistent, or sufficiently questionable such that it prevents a comparative analysis between, say, fare box recovery and actual expenses. Future surveys will need to better address this topic so that reliable and accurate information is gathered.

¹⁰ *Your Driving Costs: How Much are You Really Paying to Drive?* By AAA (2018 Edition).

the next section of this report. But the riders themselves also contribute to the economic impact by spending money which, in turn, starts to ripple through the economy. That said, public transit systems cannot legitimately take credit for *all* of the spending by riders who attend sporting events or buy breakfast as they walk to work from the train. In most cases, such expenditures would have been made anyway but, without transit, the riders would have had to find their way to their destinations by other means.

It is not an easy task to differentiate spending that would have taken place anyway from spending that can be directly attributable to riding the transit system. But the transit operators contacted during this survey agreed that *some* of the rider spending should be credited toward the economic impact of transit.

While there is scant data on this topic that is readily applied to the experience in Missouri, this report makes an informed assumption that an average of \$10.00 (2019 value) per ride can be safely and conservatively applied to the overall economic impact of transit. Where do the riders get this \$10.00 to spend *in addition to the spending they would have spent anyway*? It is well documented in transit research literature that transit riders save money by not using automobiles. Personal automobile maintenance is lowered when cars are used less often. There are savings in gasoline purchases, parking fees, and even auto insurance if the car owner can demonstrate that the vehicle is not used very often for many trips. Thus, while transit riders are aware of their lower travel expenditures, they are also aware that they have a little extra household budget for non-transit purposes.

For the annual average of 60.1 million rides by transit users over the 2015-2019 period, additional spending of \$10.00 per ride increases the direct economic impact of transit by \$600.5 million in the Missouri economy.

St. Louis Metro Transit Passenger Profile: KATHLEEN

Metro Transit holds a special family connection for Kathleen. In 1993, Kathleen's father helped contribute to a light rail system that would later span 46 miles in Missouri and Illinois. His name is etched on special commemorative disks inside the Convention Center MetroLink Station. The following year, Kathleen's one-year old daughter helped beautify the Delmar Loop MetroLink Station by etching her name in tiles that would later be showcased on benches.



"For me, MetroLink is part of the family," Kathleen said. "I've been riding ever since 1993." To get to work in downtown each day, Kathleen boards the train at the Central West End MetroLink Station. If she needs a morning pick-me-up, she'll exit at the 8th & Pine for a donut or iced tea. For a shorter walk, Kathleen will choose the Convention Center MetroLink Station.

"I love riding Metro because I feel free on it," she said. "I can read a book or use my cell phone to look up news stories. I used to ride from Shrewsbury and that was a 30-minute commute. That's an hour a day of reading, so I got through a lot of books. Metro provides a great sense of freedom."

In addition to satisfying her love of reading, Kathleen knows that a trip on transit is a journey to a cleaner, healthier environment. "Metro is the best tool we have to fight climate change at this point," she said. "It prevents pollutants from being put into the air. If riders weren't on Metro, they'd be driving cars. They'd be putting pollutants in the air that cause asthma and other respiratory ailments."

Kathleen currently lives in the Central West End and, in addition to being convenient, her transit trips also allow her to fit in a few steps during the day. "The Central West End has more opportunities for walkability," she said. "Plus, it made our commutes a lot shorter."

Effects of the Metropolitan Areas

Unsurprisingly, the two bi-state transit districts serving the St. Louis and Kansas City metropolitan areas dominate the state statistics. These districts are also served by a few smaller transit agencies (most particularly OATS), so there is some additional counting in the metropolitan statistics beyond the main transit agencies, but it is notable that two-thirds of all transit rides in Missouri are within the St. Louis metro area (68.3%) while just under a quarter of all rides are generated within the Kansas City metro area (23.1%). The city of Columbia's transit system generates 2.4% of all state riders for the third largest system, followed closely by the Springfield area at 2.3%.

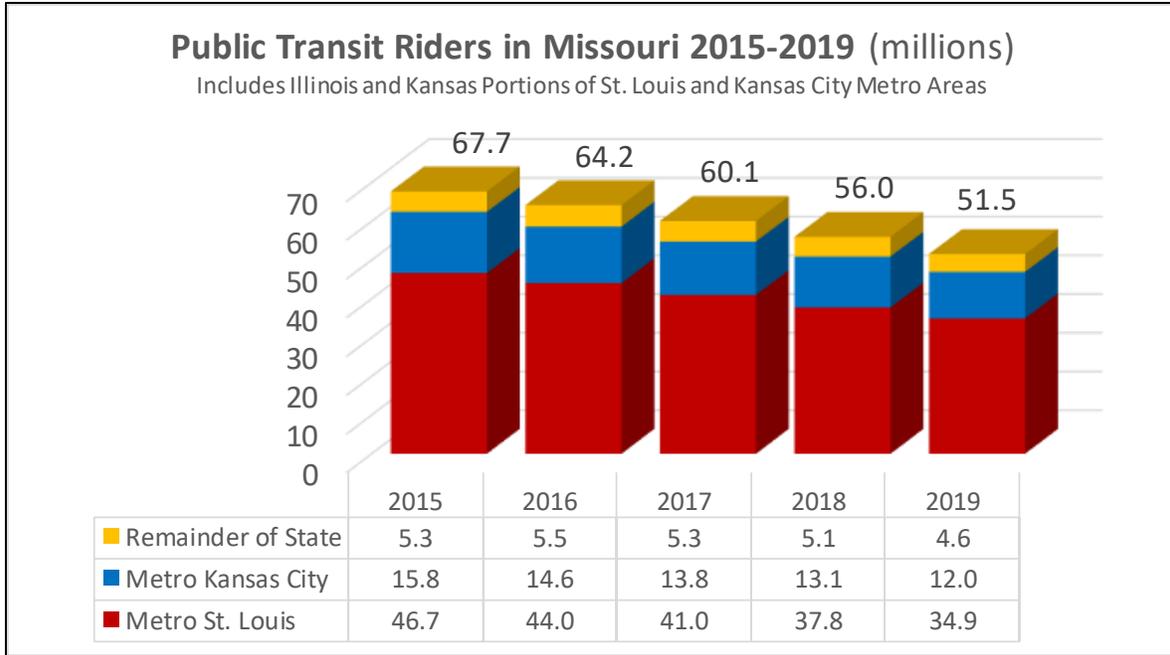
While the bulk of public transit rides are in the urban areas, transit in every rural area and county is an essential lifeline for many people. OATS indicates, for instance, that 43 percent of its rides are for people going to work. The second most common reason for these rural area trips is for health care services. In many ways, riders in rural areas use public transit for the same reasons as urban riders. There aren't as many rural riders, but the services are just as indispensable—maybe more so in light of the distances to jobs and services and the lack of other transportation options.

Five-Year Trends in Ridership, Employment, and Expenditures

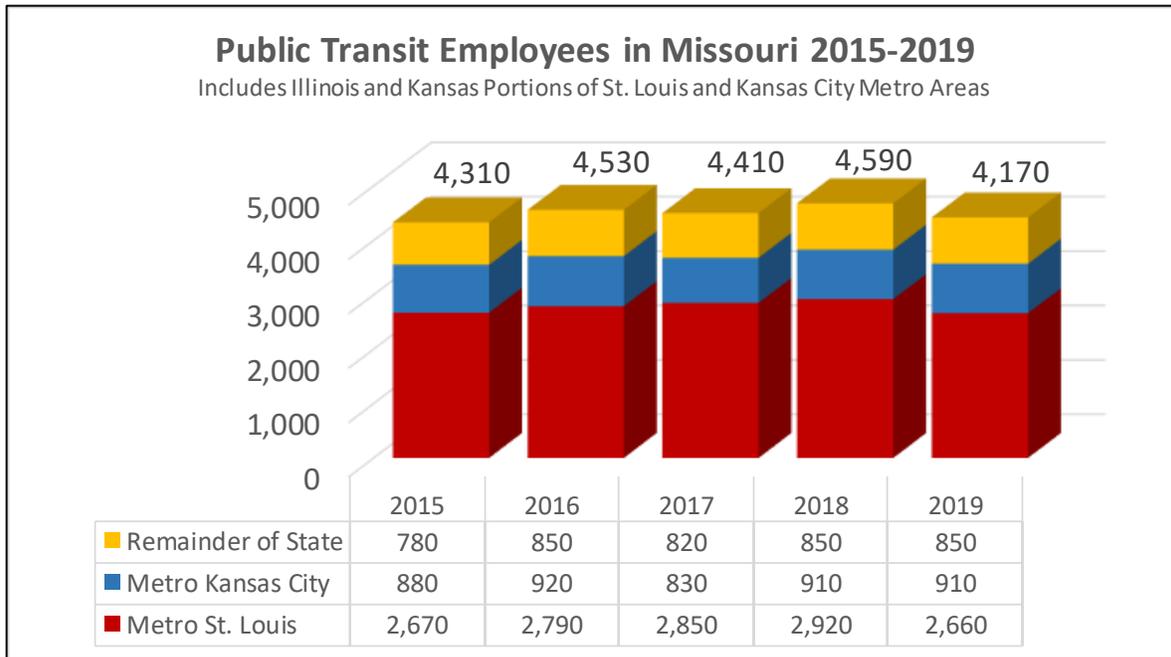
Perhaps a little disturbingly, statewide transit ridership has been declining over the five years of the survey. As shown on the following graph, there were 67.7 million riders statewide in 2015, but this dropped 24 percent to 51.5 million (projected) for 2019. Thus, the overall five-year average of 60.1 million riders is well above the projected 2019 number.

But general ridership decline was not a universal finding. OATS Transit, which serves most of the counties in Missouri, increased its statewide ridership between 2015 and 2019 from 1,486,500 to 1,621,200, up 9.1 percent. This wasn't a straight line, however. There was a slight decline in OATS ridership from 2016 to 2017, but a strong increase after that.¹¹

¹¹ OATS asked separately for specific data on its operations in Camden and Jefferson Counties. Based on information provided, OATS in Camden County had ridership growth from about 12,100 in 2015 to 29,000 in 2019 (up a whopping 140%). Jefferson County also grew, but not as aggressively, from 106,500 in 2015 to 110,600 in 2019 (up 3.9%).

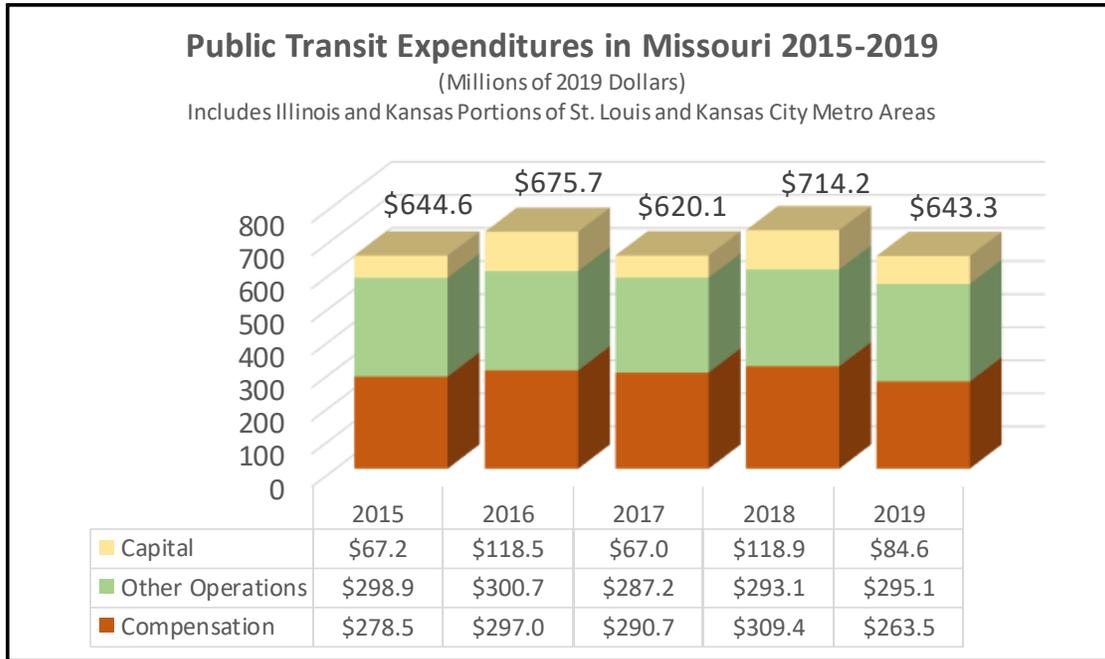


Job counts at transit agencies show a bit more erratic pattern, as illustrated on the next graph. Employment trends do not correspond to the downward ridership trends. While the projected employment for 2019 is certainly below 2015, employment has both risen and fallen over the last five years.



Constant-dollar expenditures, too, have been erratic in the last five years, as shown below, and not reflective of the downward trend in ridership. Overall spending by the transit agencies in 2019 (projected) is about the same as in 2015, but there have been both ups and downs in between. Most of that uneven spending pattern

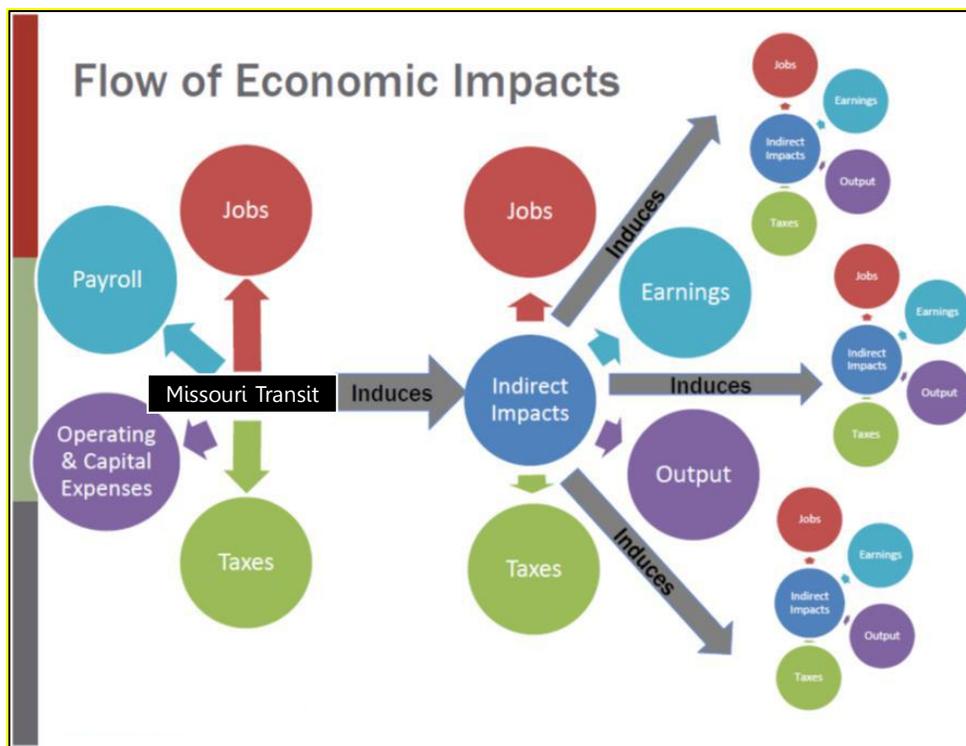
seems to be explained by annual variations in capital spending, though employee compensation had been relatively strong until 2019 when employee earnings are projected to decline to their lowest point over the five years.



4.0 Multiplier Effects: How They Work

When a person or an organization spends money, that money immediately becomes income for someone else. The recipient of that income is then free to spend their money and that spending becomes income for others. When this spending and re-spending process is confined to a fixed geographic area (such as the state of Missouri), the amount that is spent during each round of re-spending declines within that geography. That is because some of the spending by individuals and organizations inevitably “leaks” from the geographic area. For instance, a transit district might buy vehicles from another state or even another country. Employees of the transit districts spend some of their money on vacations out of state or even out of the country.

Eventually, all of the initial spending disappears from the subject geographic area, though the specific timing on that leakage depends on many factors, not least of which is how much there is to buy within the geographic area and how strong the economy is to encourage spending, or discourage it.



As depicted above, the operation of public transit systems in Missouri triggers a “direct” round of spending (left side of diagram) by the transit agencies for employees, capital improvements, non-labor operations, and even taxes, though taxes were not a subject of the survey for this report since the transit agencies, themselves, are essentially tax-exempt.¹² This direct spending generates a first round of multiplier effects (middle of the diagram) and further rounds of multiplier effects (right side).

¹² Still, the payment of taxes becomes income, or revenue, for the taxing jurisdictions which, in turn, spend that money for their employees and operations. Again, the money is spent and re-spent, so even government contributes to the multiplier effects. Later in this report, estimated state income and sales taxes paid by employees are described.

Because Missouri is a fixed geographic area and there are “leakages” of spending during each round of re-spending, it is possible to estimate the multiplier effects within the state that are initiated by, say, an annual spending routine of the transit districts.

The federal government’s extensive database of economic information is the source of “multiplier coefficients” applicable in each county of the United States or for groups of contiguous counties such as states or metropolitan areas. This database, known as the Regional Input-Output Multiplier System (RIMS), is managed and routinely updated by the U.S. Bureau of Economic Analysis (www.BEA.gov) within the U.S. Department of Commerce. Multiplier coefficients are available for a wide range of industry sectors. These multipliers essentially demonstrate how big an impact that spending within one industry (in this case, the “transit and ground transportation” industry) benefits the rest of the Missouri economy and a host of other sectors.

For instance, spending in the transit sector also benefits the legal services sector and various manufacturing sectors, both within Missouri and elsewhere. RIMS provides multipliers based on ever changing and ever growing economic data provided to BEA through many sources. And essentially all of that data is coded by county, so BEA is able to determine the economic links between various industry sectors within counties.

For the current study, multipliers were obtained for the state of Missouri, details of which are presented in the next section of the report. The



A SUCCESS STORY FROM OATS IN JEFFERSON COUNTY: BROCK GUSMAN

Brock Gusman has been a long-time rider of JC Transit, which is owned and operated by OATS Transit. Since 1998, he has worked at *Feed My People*, a not-for-profit food pantry located in High Ridge, Missouri. Brock is working on his 21st year of employment and rides JC Transit daily to get to work at the Food Pantry.

Thanks to the Next Step for Life program, he has been involved in many activities and had several opportunities in the community in which he lives.

In 2011, he was honored to be able to participate in the Special Olympics World Games in Greece. He came home with two bronze medals in the Bogi competition—one for the singles match, the second for the doubles match.

Brock, pictured to the left, is a Global Messenger for Special Olympics, speaking at numerous clubs and events. He’s proud of his many accomplishments through Special Olympics, including the “*Over The Edge*” fundraiser. He repelled 19 stories over the edge of the Lumiere Place in downtown St. Louis, and 13 stories from the Capital Hotel in Jefferson City. In January 2019, he was inducted into the Special Olympics Hall of Fame.

Brock is now a proud homeowner. He attributes much of his success and community involvement to OATS. “None of this would be possible if it wasn’t for the service that I receive from OATS,” he said. “If it wasn’t for them providing reliable, affordable transportation, it would be impossible for me to have the quality of life and independence I have.”

Left: Brock Gusman

multipliers help to estimate indirect and induced¹³ economic impacts. As detailed later, for instance, the \$675.0 million in average annual collective spending by the 19 respondents to this report's survey triggers another \$1.18 million in additional economic activity (sales, transactions, etc.) within the state, for an overall net multiplier of 1.75.¹⁴

In addition to multipliers for the state, multipliers were also obtained for several of the transit providers responding to the survey who requested separate economic impact calculations for their service areas. These areas and their multiplier effects are discussed in the next section of the report.

St. Louis Metro Transit Passenger Profile: **MERCI**

Merci has been using Metro Transit since she was 13 years old. It has been an important part in the story of her life and, today, it's helping to fulfill that next chapter: college. Each day, Merci gets dropped off at the Fairview Heights MetroLink Station. From there, she boards an eastbound Red Line train to the College Station. Merci is a freshman at Southwestern Illinois College and is studying general education to prepare her for a move to another university in the future.



Merci relies on Metro Transit to get around the bi-state region. Fortunately, she has a lot of experience with the transit system — on both sides of the Mississippi River. “When I was in St. Louis, I would catch the #61 Chambers,” she said. “I caught that one a lot. Over here, I catch the #17 Carlyle Plaza-17th Street, the #1 Main Street-State Street, and the #16 St Clair Square.”

Merci enjoys having someone else do the driving. She advises, however, that those who are new to Metro Transit to still always stay alert. Sometimes, it's the little things that can lead you astray. “Make sure you pay attention to what is on top of the train or bus, because it will take you the wrong way if you're not paying attention!” Merci said. “I've done that before.”

¹³ Indirect effects are those triggered by the industry sector under study—in this case, the transit industry. Induced effects are those triggered by the spending by employees of their wages and salaries paid by the transit industry to support their households. In this report, indirect and induced effects are lumped together for simplicity in presentation, though their impacts are calculated separate in the Excel model.

¹⁴ Within this added economic activity are supported another 12,050 jobs in the state with average annual household earnings of \$30,700. This is the impact of just the transit operations and capital expenditures. It excludes further impacts triggered by spending in the state's economy by transit riders—spending, that is, that can be attributed to their transit rides.

5.0 Multiplier Effects in Missouri and Selected Sub-Areas

As noted earlier, survey responses were entered into a spreadsheet-based mathematical model in order to analyze both direct and indirect/induced impacts in the economy. Separate summary impact tables were created within the model for all of the “economic geographies” requested for this study. This section of the report describes these impacts in some detail for the state of Missouri and in lesser detail for the various sub-areas of the state. The lesser detail is only because the table formats are the same as for the state, so an understanding of how to read and interpret the state table will enable the reader to more quickly grasp the findings for each sub-area.

Economic Impacts in Missouri (Table 1)

The 19 respondents to the survey for this report spent about \$675.0 million in an average year between 2015 and 2019. These expenditures are shown on the “Direct Spending” line of columns 1, 2, and 3 of Table 1.

- \$91.2 million goes toward capital expenditures (13.5%).
- \$295.0 million pays for non-labor operations (43.7%).
- \$288.8 million pays employees (42.8%).

In addition, transit riders in Missouri spent another \$600.5 million in an average year that can be attributed to their transit rides for expenditures 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 \$1,275.6 million (or \$1.28 billion).

These are the numbers that trigger multiplier, or re-spending, effects throughout the state’s economy.

The second data line of Table 1 shows the number of transit rides in an average year for the 19 survey respondents: 60,053,900. Not shown is the average annual spending per rider: \$11.24 for the expenditures of the transit agencies plus \$10.00 for each ride as spent by the riders themselves.

Table 1: ECONOMIC IMPACT OF PUBLIC TRANSIT IN THE STATE OF MISSOURI (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	\$ 91,239,000	\$ 295,013,000	\$ 288,832,000	\$ 600,539,000	\$ 1,275,623,000
<i>Annual Average Number of Transit Rides</i>					60,053,900
Multipliers					
Output	2.13	2.11	1.26	2.03	1.88
Earnings	0.65	0.71	0.35	0.63	0.58
Employment	14.03	26.93	9.75	21.03	19.35
ADDED ECONOMIC IMPACT IN MISSOURI					
Output	\$ 194,120,000	\$ 621,297,000	\$ 363,380,000	\$ 1,218,753,000	\$ 2,397,550,000
Earnings	\$ 59,214,000	\$ 208,722,000	\$ 102,102,000	\$ 375,740,000	\$ 745,778,000
Indirect Jobs Held by Missouri Residents	1,280	7,950	2,820	12,630	24,680
TOTAL ECONOMIC IMPACT IN THE STATE OF MISSOURI					
Output	\$ 285,359,000	\$ 916,310,000	\$ 652,212,000	\$ 1,819,292,000	\$ 3,673,173,000
Earnings					\$ 1,034,610,000
Direct Jobs in Transit in Missouri					4,500
Total Direct Jobs in Missouri Plus Indirect Jobs Held by Missouri Residents (annual average 2015-2019)					29,180
Average Annual Earnings per Direct Transit Job					\$ 64,200
Average Annual Earnings per Indirect Multiplier Job					\$ 30,200
Multiplier Definitions:					
Output:	Total dollar change in the Missouri economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in Missouri due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by Missouri residents per \$1,000,000 of added output.				

A SUCCESS STORY FROM OATS IN CAMDEN COUNTY: SIOBHAN MORAY

Siobhan Moray is a Camden County resident and a single mother of two. She works at a local McDonald's as a manager. Siobhan is very independent, but she is unable to drive due to her Cerebral Palsy. In the past, she has relied on friends and family as her primary sources of transportation. Two years ago she started riding OATS Transit, and she has been a different woman ever since. Various aspects of her life have improved, including her job and relationship with her children. Siobhan describes herself now as more mobile and more available. "My boss says I've done so much better the last two years," Siobhan said. "I'm not constantly worrying how I'm going to get to work, and I'm more confident."

Siobhan rides at least five days a week for work transportation. OATS Transit also provides transportation for her medical appointments and shopping. "It's a blessing," Siobhan said. "There are days I'm like 'I need x, y, z' or my kids need something, so I just give them a call and they help out."



Siobhan with
OATS driver,
Larry.

Gaining more mobility and independence has been great for Siobhan. She maintains great relationships with her drivers and always feels that her feedback is valued. "They actually care about their riders," Siobhan said. "It's definitely above and beyond."

The next set of numbers are the multipliers obtained from the federal government for economic sectors relating to the particular spending categories. The "Goods and Services" spending in column 2, for instance, relies on multipliers for the *transit and ground passenger transportation* sector.¹⁵ There is no finer-grained sector for public transit primarily because of the limitations of the economic data. In other words, the spending by the transit agencies for non-labor operations (which is titled here "goods and services") is multiplied in the Missouri economy through the *transit and ground passenger transportation* sector.

Multipliers for capital improvement spending (column 1), on another hand, 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.

Similarly, the multipliers that best depict how employees will spend their money (column 3) in the Missouri economy are from the *households* sector.

Thus, the direct spending by the transit agencies themselves to support their missions are best tracked through three direct sectors of the state'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 per ride.

These nine sectors were then 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 then used as statistical weights to

¹⁵ For this analysis, Type II multiplier coefficients are utilized from the Regional Input-Output Multiplier System (RIMS). There are 64 Type II sectors.

determine an overall set of multipliers, shown on Table 1, for the rider spending category. The nine sectors and their percentages are:

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 on Table 1 in column 4 represented a weighted average of the above nine sectors as they apply in the state of Missouri.

There are three multipliers in each spending category: output, household earnings, and employment.

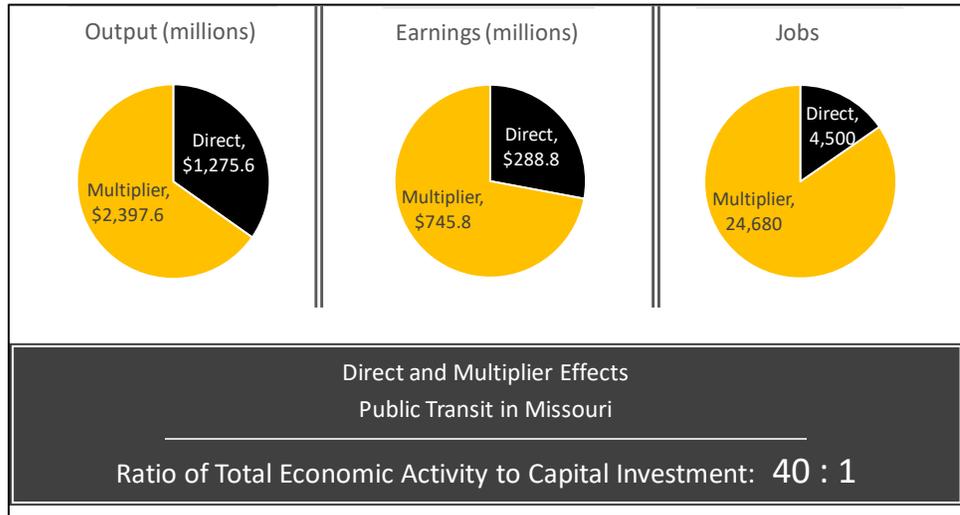
1. The first is the “output” multiplier. It is the overall economic activity multiplier. It is multiplied by the direct spending to determine overall indirect spending that the state’s economy should expect to be supported by the rounds of re-spending triggered by the initial spending. Thus, for example, the annual average of \$91.2 million in capital improvements is multiplied by 2.13 to determine that the additional impact in Missouri should be \$194.1 million, shown on the rows just below the multiplier coefficients.
2. The second multiplier is for added “household earnings.” It, too, is multiplied by the initial direct spending to determine added earnings for Missourians that should result from the initial spending. Under capital improvements, this amounts to \$91.2 million in spending x 0.65 to result in \$59.2 million that will end up as household earnings during the re-spending rounds.
3. The third multiplier is for jobs supported because of the multiplier effects. The multiplier is actually “jobs per million dollars in initial spending.” So, the \$91.2 million in initial capital improvements must first be divided by one million (= 91.2), then multiplied by 14.03 to determine that the initial capital improvements spending will help support about 1,280 additional jobs in the Missouri economy. These jobs may be in a great many sectors. The largest job benefits will be in the construction sector, of course. 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 the various forms of initial spending are shown in column 5 under the subtitle “Added Economic Impact in Missouri.” This shows that additional economic output in the state within most or all other sectors, would reach almost \$2.40 billion because of the initial annual spending. Of this added economic output, \$745.8 million would become added earnings for households in Missouri and there would be 24,680 additional jobs supported in the state. Dividing jobs by earnings indicates that the average multiplier job would be paid \$30,200 per year, a figure shown further down Table 1.

Adding the direct spending to the multiplier effects yields the section of the table labeled “Total Economic Impact in the State of Missouri.” With all the spending by the transit agencies, by their riders, and the multiplier effects, **the transit sector triggers some \$3.67 billion in statewide economic activity per average year. This activity supports \$1.03 billion in household earnings and 29,180 jobs** (the sum of the 4,500 jobs within the transit agencies themselves plus the multiplier jobs). As shown just below those numbers, the average transit worker in the state is paid \$64,200 in wages or salaries while the average multiplier job is paid

\$30,200. The much lower amount for multiplier jobs is primarily attributable to multiplier effects in lower paying sectors like retailing and many services.

A final and important indicator of the economic impact of *investment* in public transit is the ratio between capital improvements spending and the overall economic activity that results in the economy. In Missouri as a whole, the annual average capital investment in transit facilities between 2015 and 2019 was \$91.2 million. This resulted in overall economic activity within the state of \$3.67 billion. Thus, each dollar in capital investment helped to generate some \$40.00 in overall economic activity, a ratio of 40-to-1.

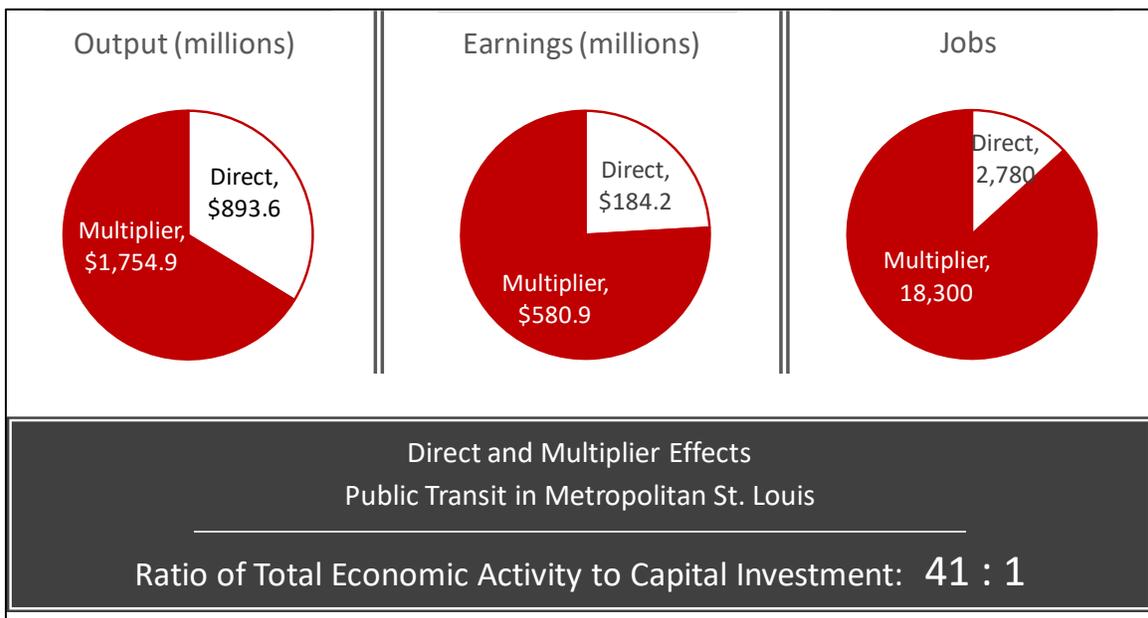


Economic Impacts in Metropolitan St. Louis (Table 2)

Economic impacts triggered within the bi-state metropolitan area of St. Louis are dominated by the operations of Metro St. Louis/Bi-State Development. But contributing to this economic impact is also the operations of the St. Clair County Transit District on the Illinois side of the metro area as well as some of the operations of OATS Transit. These combined impacts are shown on Table 2.

Together, the public transit services in metropolitan St. Louis generate \$893.6 million in direct spending (top of column 5) and employ 2,780 people on an average annual basis. This spending triggers multiplier effects of another \$1.75 billion in economic activity within the 15-county metro area, \$580.9 million in added household earnings, and 18,300 additional jobs. In the metro area, the ratio of total economic impact to capital investment is 41-to-1.

Table 2 ECONOMIC IMPACT OF PUBLIC TRANSIT IN THE ST. LOUIS 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	\$ 64,198,000	\$ 236,387,000	\$ 184,207,000	\$ 408,840,000	\$ 893,632,000
<i>Annual Average Number of Transit Rides</i>					<i>40,884,000</i>
Multipliers					
Output	2.11	2.34	1.27	2.04	1.96
Earnings	0.68	0.81	0.38	0.67	0.65
Employment	12.87	32.63	9.15	19.75	20.48
ADDED ECONOMIC IMPACT IN THE ST. LOUIS METRO AREA					
Output	\$ 135,516,000	\$ 552,271,000	\$ 233,409,000	\$ 833,675,000	\$ 1,754,871,000
Earnings	\$ 43,719,000	\$ 191,048,000	\$ 70,901,000	\$ 275,200,000	\$ 580,868,000
Indirect Jobs Held by St. Louis Metro Area Residents	830	7,710	1,690	8,070	18,300
TOTAL ECONOMIC IMPACT IN THE ST. LOUIS METRO AREA					
Output	\$ 199,714,000	\$ 788,658,000	\$ 417,616,000	\$ 1,242,515,000	\$ 2,648,503,000
Earnings					\$ 765,075,000
Direct Jobs in Transit in the St. Louis Metro Area					2,780
Total Direct Jobs in Metro Area Plus Indirect Jobs Held by Metro Area Residents					21,080
Average Annual Earnings per Direct Transit Job					\$ 66,300
Average Annual Earnings per Indirect Multiplier Job					\$ 31,700
Multiplier Definitions:					
Output:	Total dollar change in the St. Louis metro area economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in metropolitan St. Louis due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by metropolitan St. Louis residents per \$1,000,000 of added output.				

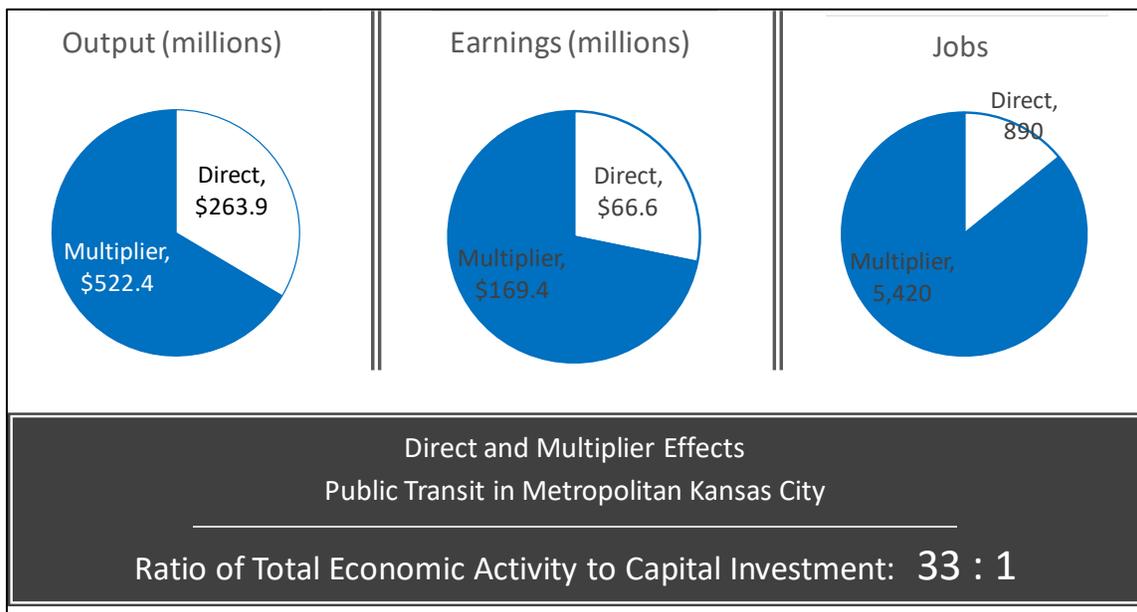


Economic Impacts in Metropolitan Kansas City (Table 3)

Economic impacts triggered within the bi-state metropolitan area of Kansas City are dominated by the operations of the Kansas City Area Transportation Authority. But contributing to this economic impact are also the operations of Ray County Transportation, OATS Transit, and EITAS. These combined impacts are shown on Table 3.

Together, the public transit services in metropolitan Kansas City generate \$263.9 million in direct spending (top of column 5) and employ 890 people on an average annual basis. This spending triggers multiplier effects of another \$522.4 million in economic activity within the metro area, \$169.4 million in added household earnings, and 5,420 additional jobs. In the Kansas City area, the ratio of total economic impact to capital investment is 33-to-1.

Table 3 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
<i>Annual Average Number of Transit Rides</i>					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.				

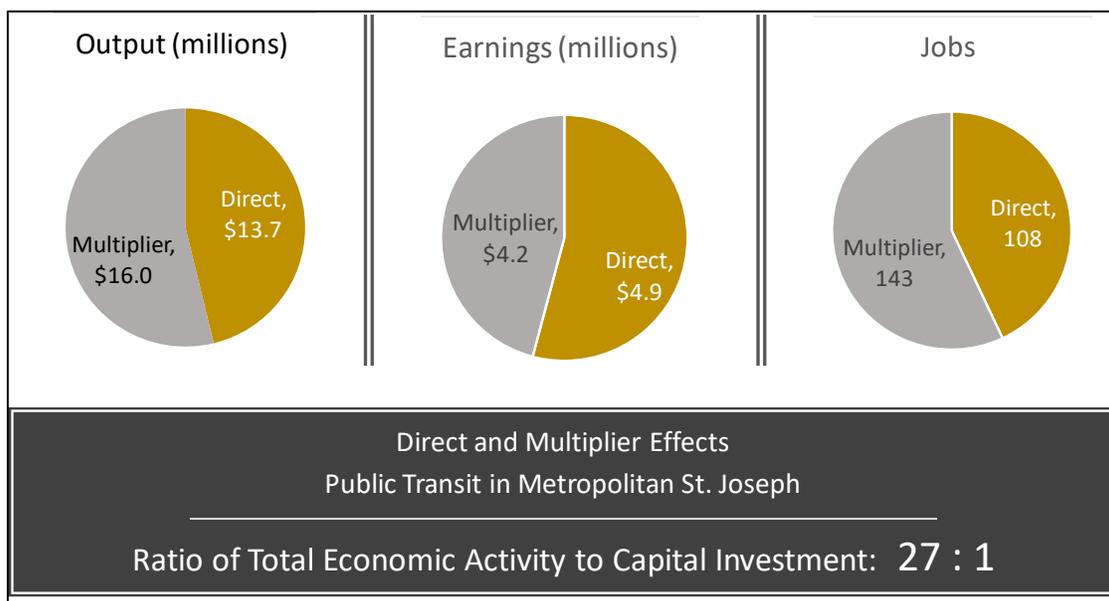


Economic Impacts in Metropolitan St. Joseph (Table 4)

Economic impacts triggered within the St. Joseph metropolitan area are initiated by the operations of “The Ride” within city government in St. Joseph and by OATS. These combined impacts are shown on Table 4.

Together, the public transit services in metropolitan St. Joseph generate \$13.7 million in direct spending (top of column 5) and employ 108 people on an average annual basis. This spending triggers multiplier effects of another \$16.0 million in economic activity within the metro area, \$4.15 million in added household earnings, and 143 additional jobs. In the St. Joe area, the ratio of total economic impact to capital investment is 27-to-1.

Table 4 ANNUAL ECONOMIC IMPACT OF PUBLIC TRANSIT IN THE ST. JOSEPH 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	\$ 1,102,000	\$ 2,439,000	\$ 4,899,000	\$ 5,308,000	\$ 13,748,000
<i>Annual Average Number of Transit Rides</i>					530,800
Multipliers					
Output	1.43	1.53	0.65	1.41	1.16
Earnings	0.32	0.43	0.16	0.37	0.30
Employment	6.74	17.88	4.48	13.75	10.40
ADDED ECONOMIC IMPACT IN THE ST. JOSEPH METRO AREA					
Output	\$ 1,576,600	\$ 3,741,200	\$ 3,190,700	\$ 7,504,000	\$ 16,013,000
Earnings	\$ 357,600	\$ 1,038,000	\$ 772,600	\$ 1,982,000	\$ 4,150,000
Indirect Jobs Held by St. Joseph Metro Area Residents	7	44	22	70	143
TOTAL ECONOMIC IMPACT IN THE ST. JOSEPH METRO AREA					
Output	\$ 2,678,600	\$ 6,180,200	\$ 8,089,700	\$ 12,812,000	\$ 29,761,000
Earnings					\$ 9,049,000
Direct Jobs in Transit in the St. Joseph Metro Area					108
Total Direct Jobs in Metro Area Plus Indirect Jobs Held by Metro Area Residents					251
Average Annual Earnings per Direct Transit Job					\$ 45,400
Average Annual Earnings per Indirect Multiplier Job					\$ 29,000
Multiplier Definitions:					
Output:	Total dollar change in the St. Joseph metro area economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in metropolitan St. Joseph due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by metropolitan St. Joseph residents per \$1,000,000 of added output.				

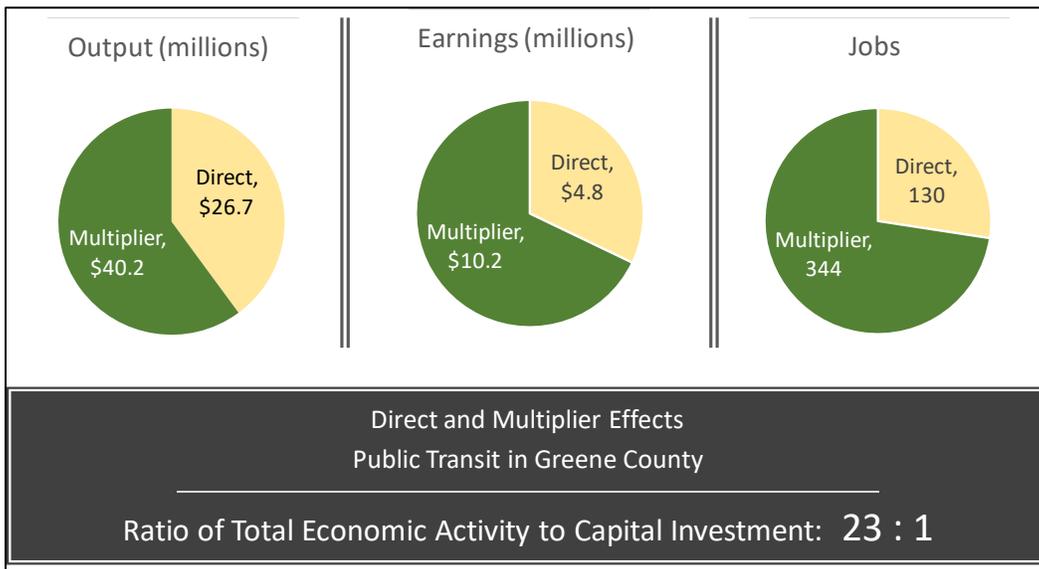


Economic Impacts in Greene County (Springfield) (Table 5)

Economic impacts triggered within Greene County (serving primarily the city of Springfield) emanate primarily from operations of “The Bus” within the City Utilities department and by OATS. These combined impacts are shown on Table 5.

Together, the public transit services in Greene County generate \$26.7 million in direct spending (top of column 5) and employ 130 people on an average annual basis. This spending triggers multiplier effects of another \$40.2 million in economic activity within the metro area, \$10.2 million in added household earnings, and 344 additional jobs. In Greene County, the ratio of total economic impact to capital investment is 23-to-1.

Table 5 ANNUAL ECONOMIC IMPACT OF PUBLIC TRANSIT IN GREENE COUNTY, MISSOURI (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	\$ 2,918,000	\$ 5,352,000	\$ 4,831,000	\$ 13,570,000	\$ 26,671,000
<i>Annual Average Number of Transit Rides</i>					1,357,020
Multipliers					
Output	1.63	1.65	0.89	1.64	1.51
Earnings	0.38	0.42	0.22	0.43	0.38
Employment	8.09	16.85	6.28	15.03	12.90
ADDED ECONOMIC IMPACT IN GREENE COUNTY					
Output	\$ 4,766,300	\$ 8,823,300	\$ 4,307,800	\$ 22,268,000	\$ 40,165,000
Earnings	\$ 1,108,500	\$ 2,269,200	\$ 1,048,300	\$ 5,780,000	\$ 10,206,000
Indirect Jobs Held by Greene County Residents	24	90	30	200	344
TOTAL ECONOMIC IMPACT IN GREENE COUNTY					
Output	\$ 7,684,300	\$ 14,175,300	\$ 9,138,800	\$ 35,838,000	\$ 66,836,000
Earnings				\$ 15,037,000	
Direct Jobs in Transit in Greene County					130
Total Direct Jobs in Greene County Plus Indirect Jobs Held by Other Greene County Residents					474
Average Annual Earnings per Direct Transit Job					\$ 37,200
Average Annual Earnings per Indirect Multiplier Job					\$ 29,700
Multiplier Definitions:					
Output:	Total dollar change in the Greene County economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in Greene County due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by Greene County residents per \$1,000,000 of added output.				

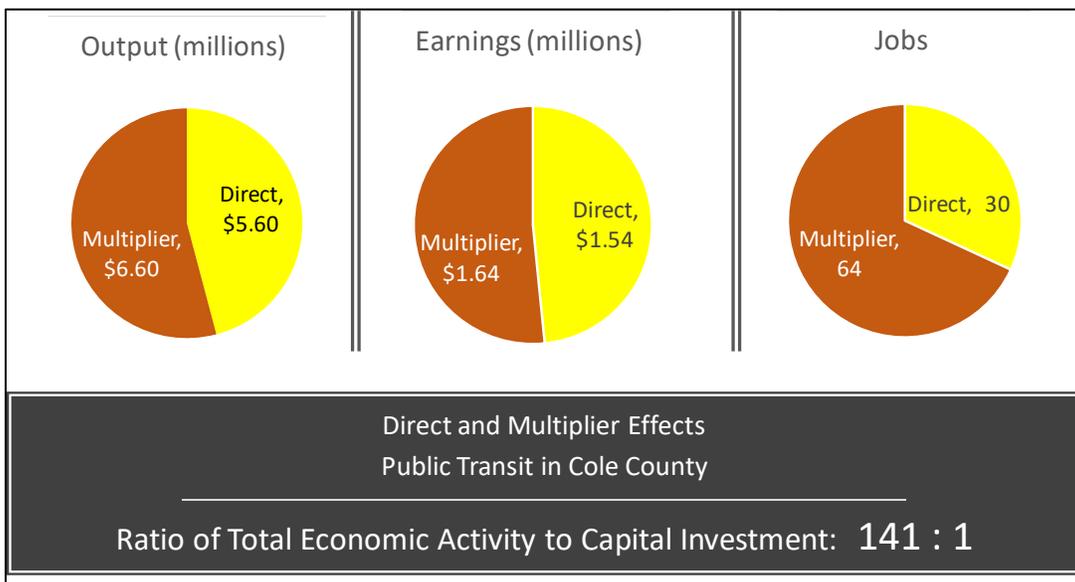


Economic Impacts in Cole County (Jefferson City) (Table 6)

Economic impacts triggered within Cole County (serving primarily the city of Jefferson City) emanate from operations of JeffTran. These impacts are shown on Table 6.

JeffTran’s services in Cole County generate \$5.60 million in direct spending (top of column 5) and employ 30 people on an average annual basis. This spending triggers multiplier effects in the county of another \$6.60 million in economic activity, \$1.64 million in added household earnings, and 64 additional jobs. In Cole County, the ratio of total economic impact to capital investment is 141-to-1.

Table 6 ANNUAL ECONOMIC IMPACT OF JEFFTRAN PUBLIC TRANSIT IN COLE COUNTY, MISSOURI (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	\$ 86,200	\$ 1,058,400	\$ 1,536,600	\$ 2,914,000	\$ 5,595,200
<i>Annual Average Number of Transit Rides</i>					<i>291,400</i>
Multipliers					
Output	1.42	1.45	0.62	1.37	1.18
Earnings	0.30	0.39	0.14	0.34	0.29
Employment	6.25	16.30	3.96	12.39	11.44
ADDED ECONOMIC IMPACT IN COLE COUNTY					
Output	\$ 122,400	\$ 1,538,800	\$ 945,600	\$ 3,990,000	\$ 6,597,000
Earnings	\$ 26,100	\$ 410,100	\$ 220,300	\$ 980,000	\$ 1,637,000
Indirect Jobs Held by Cole County Residents	1	17	6	40	64
TOTAL ECONOMIC IMPACT IN COLE COUNTY					
Output	\$ 208,600	\$ 2,597,200	\$ 2,482,200	\$ 6,904,000	\$ 12,192,200
Earnings				\$ 3,174,000	
Direct Jobs in Transit in Cole County					30
Total Direct Jobs in Cole County Plus Indirect Jobs Held by Other Cole County Residents					94
Average Annual Earnings per Direct Transit Job					\$ 51,200
Average Annual Earnings per Indirect Multiplier Job					\$ 25,600
Multiplier Definitions:					
Output:	Total dollar change in the Cole County economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in Cole County due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by Cole County residents per \$1,000,000 of added output.				



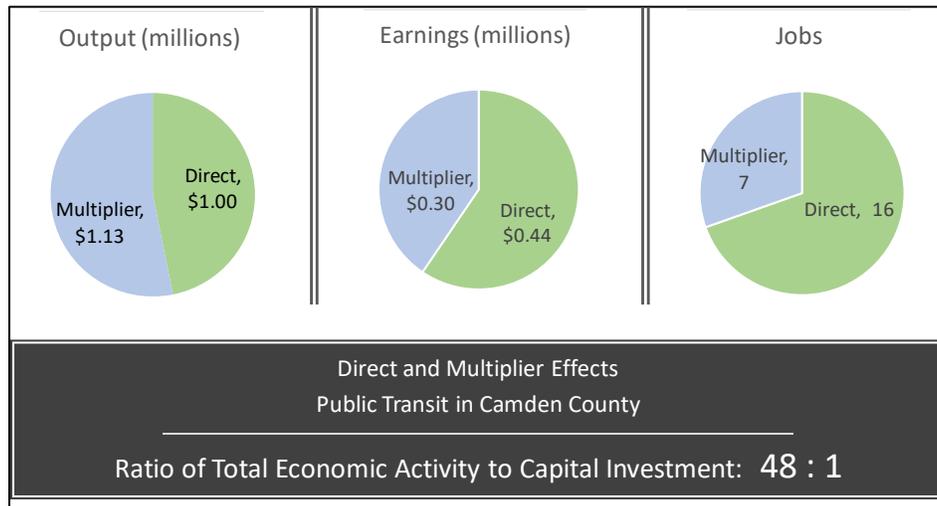
Economic Impacts in Camden County (Lake of the Ozarks) (Table 7)

OATS Transit requested that this study enumerate the economic impacts of its operations in two specific counties:* Camden County, shown here on Table 7, which covers much of the area of the Lake of the Ozarks, and Jefferson County, shown on the next page.

OATS's services in Camden County generate \$998,300 in direct spending (top of column 5) and employ 16 people on an average annual basis. This spending triggers multiplier effects in the county of another \$1.13 million in economic activity, \$300,000 in added household earnings, and seven additional jobs. In Camden County, the ratio of total economic impact to capital investment is 48-to-1.

* OATS operates in most of Missouri's counties and its impacts are estimated and combined within several of the other sub-areas of the state described on previous pages. But OATS requested special attention for its operations in Camden and Jefferson Counties.

Table 7 ANNUAL ECONOMIC IMPACT OF OATS TRANSIT IN CAMDEN COUNTY, MISSOURI (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	\$ 44,700	\$ 223,100	\$ 440,500	\$ 290,000	\$ 998,300
<i>Annual Average Number of Transit Rides</i>					29,000
Multipliers					
Output	1.43	1.47	0.73	1.44	1.13
Earnings	0.32	0.44	0.17	0.38	0.30
Employment	7.15	19.08	5.75	14.45	7.01
ADDED ECONOMIC IMPACT IN CAMDEN COUNTY					
Output	\$ 63,800	\$ 327,900	\$ 322,700	\$ 419,000	\$ 1,133,000
Earnings	\$ 14,400	\$ 98,400	\$ 76,900	\$ 110,000	\$ 300,000
Indirect Jobs					
Held by Camden County Residents	-	4	3	-	7
TOTAL ECONOMIC IMPACT IN CAMDEN COUNTY					
Output	\$ 108,500	\$ 551,000	\$ 763,200	\$ 709,000	\$ 2,131,300
Earnings					\$ 741,000
Direct Jobs in Transit Held By Camden County Residents					16
Total Direct Jobs in Camden County Plus Indirect Jobs Held by Other Camden County Residents					23
Average Annual Earnings per Direct Transit Job					\$ 27,500
Average Annual Earnings per Indirect Multiplier Job					\$ 42,900
Multiplier Definitions:					
Output:	Total dollar change in the Camden County economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in Camden County due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by Camden County residents per \$1,000,000 of added output.				

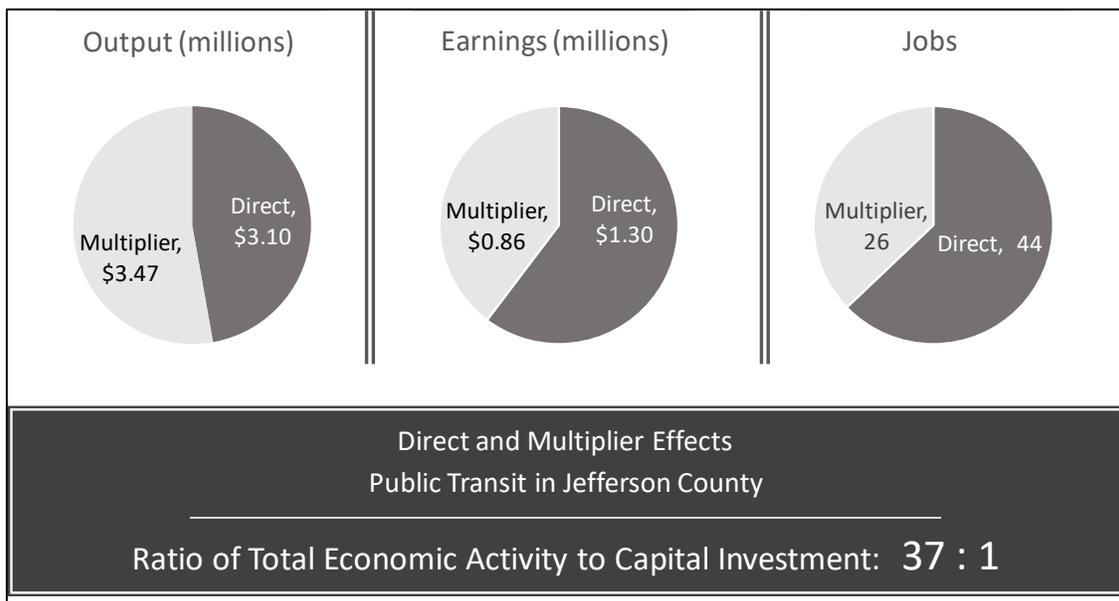


Economic Impacts in Jefferson County (subset of Metro St. Louis) (Table 8)

OATS Transit requested that this study enumerate the economic impacts of its operations in two specific counties: Jefferson County, shown here, which is part of the St. Louis metropolitan area, and Camden County, shown on the previous page.

OATS's services in Jefferson County generate \$3.10 million in direct spending (top of column 5) and employ 44 people on an average annual basis. This spending triggers multiplier effects in the county of another \$3.47 million in economic activity, \$858,000 in added household earnings, and 26 additional jobs. In Jefferson County, the ratio of total economic impact to capital investment is 37-to-1.

Table 8 ANNUAL ECONOMIC IMPACT OF OATS TRANSIT IN JEFFERSON COUNTY, MISSOURI (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	\$ 178,500	\$ 532,900	\$ 1,302,700	\$ 1,088,000	\$ 3,102,100
<i>Annual Average Number of Transit Rides</i>					108,800
Multipliers					
Output	1.52	1.49	0.67	1.40	1.12
Earnings	0.32	0.41	0.15	0.35	0.28
Employment	6.79	17.70	4.62	13.04	8.38
ADDED ECONOMIC IMPACT IN JEFFERSON COUNTY					
Output	\$ 271,700	\$ 793,800	\$ 878,500	\$ 1,528,000	\$ 3,472,000
Earnings	\$ 57,100	\$ 221,000	\$ 199,700	\$ 380,000	\$ 858,000
Indirect Jobs Held by Jefferson County Residents	1	9	6	10	26
TOTAL ECONOMIC IMPACT IN JEFFERSON COUNTY					
Output	\$ 450,200	\$ 1,326,700	\$ 2,181,200		\$ 6,574,100
Earnings					\$ 2,161,000
Direct Jobs in Transit Held By Jefferson County Residents					44
Total Direct Jobs in Jefferson County Plus Indirect Jobs Held by Other Jefferson County Residents					70
Average Annual Earnings per Direct Transit Job					\$ 29,600
Average Annual Earnings per Indirect Multiplier Job					\$ 33,000
Multiplier Definitions:					
Output:	Total dollar change in the Jefferson County economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in Jefferson County due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by Jefferson County residents per \$1,000,000 of added output.				

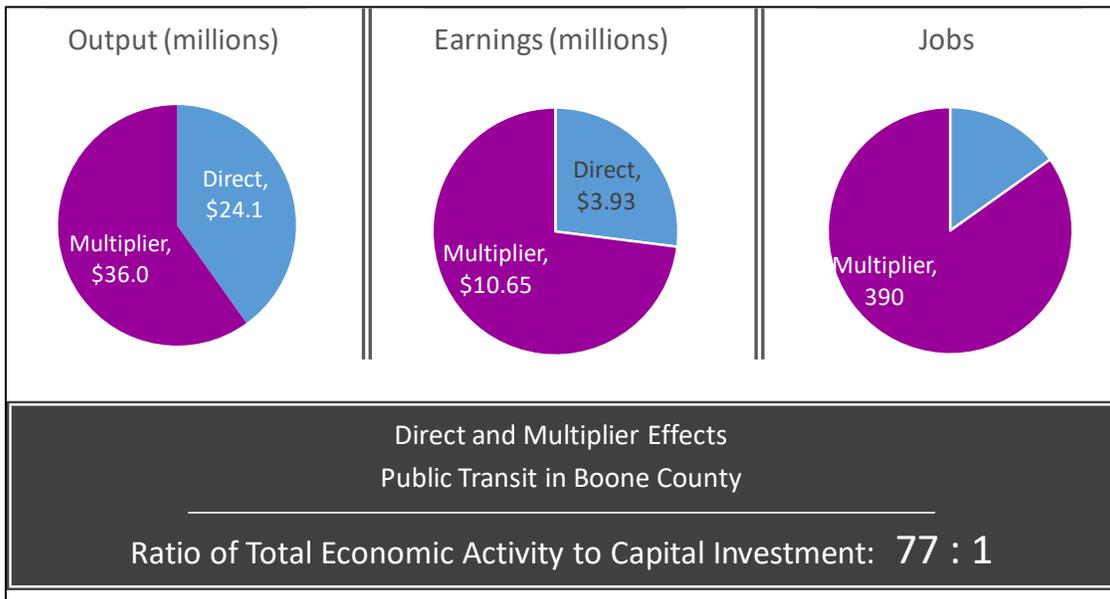


Economic Impacts in Boone County (same as Metro Columbia) (Table 9)

The City of Columbia operates the GoCoMo public transit system, though the multipliers apply to all of Boone County as shown on Table 9.

GoCoMo's services in Boone County generate \$24.1 million in direct spending (top of column 5) and employ 70 people on an average annual basis. This spending triggers multiplier effects in the county of another almost \$36.0 million in economic activity, \$10.6 in added household earnings, and 390 additional jobs. In Boone County, the ratio of total economic impact to capital investment is 77-to-1.

Table 9 ECONOMIC IMPACT OF PUBLIC TRANSIT IN BOONE COUNTY, MISSOURI (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	\$ 774,200	\$ 4,961,500	\$ 3,932,100	\$ 14,386,000	\$ 24,053,800
Annual Average Number of Transit Rides					1,438,600
Multipliers					
Output	1.61	1.55	0.87	1.64	1.50
Earnings	0.46	0.41	0.25	0.50	0.44
Employment	10.02	18.52	7.53	18.37	16.21
ADDED ECONOMIC IMPACT IN BOONE COUNTY					
Output	\$ 1,246,000	\$ 7,704,000	\$ 3,422,000	\$ 23,589,000	\$ 35,961,000
Earnings	\$ 354,000	\$ 2,040,000	\$ 990,000	\$ 7,262,000	\$ 10,646,000
Indirect Jobs Held by Boone County Residents	10	90	30	260	390
TOTAL ECONOMIC IMPACT IN BOONE COUNTY					
Output	\$ 2,020,200	\$ 12,665,500	\$ 7,354,100	\$ 37,975,000	\$ 60,014,800
Earnings					\$ 14,578,000
Direct Jobs in Transit in Boone County					70
Total Direct Jobs in Boone County Plus Indirect Jobs Held by Boone County Residents					460
Average Annual Earnings per Direct Transit Job					\$ 56,200
Average Annual Earnings per Indirect Multiplier Job					\$ 27,300
Multiplier Definitions:					
Output:	Total dollar change in Boone County economy due to expenditures by the transit industry.				
Earnings:	Total dollar change in earnings of households in Boone County due to expenditures by the transit industry.				
Employment:	Total change in the number of jobs held by Boone County residents per \$1,000,000 of added output.				



6.0 Missouri State Tax Revenues from Transit Impacts

An estimate of the tax revenue benefits for the state government treasury can be made based on the strong statistical correlation between personal income and individual income taxes, and between individual income taxes and other major tax categories.

In this case, the fundamental independent variable is the amount of household earnings (i.e., personal income) that the direct and multiplier impacts generate in the state from the operations of public transit providers and the spending by transit riders that is attributable to their rides. As Table 1 of this report indicates, total household earnings based on annual average operations of the transit agencies is \$1.03 billion dollars.

Table 9, on the next page, shows how personal income in Missouri relates to actual tax collections by state government. Using the average annual personal income of Missourians for the years 2013 through 2016, and based on annual tax collections for the same period,¹⁶ 2.68 percent of personal income becomes individual income taxes. This is not the same as the tax rate. The tax rate in Missouri is higher than 2.68 percent, but not all income is taxed. The figures on Table 9 represent a “gross effect” on all income based on actual collections.

Thus, Table 10 shows that the household earnings impact of public transit in an average year should generate \$27.8 million in individual income tax collections for state government. This is 2.68 percent of these household earnings.

Other major state revenue sources include corporate income and sales taxes. There is a strong correlation between individual income taxes and both of these taxes. Based on that relationship, annual operations of Missouri’s public transit providers should generate about \$1.3 million in corporate taxes (not from the transit agencies which would be tax-exempt but from multiplier effects on tax-paying corporations) and \$13.7 million in sales taxes for state government.¹⁷ Finally, the statistical correlations continue regarding all other taxes collected by the state and the sum of the individual, corporate, and sales taxes.

In sum, the average annual operations and ridership of the public transit providers in Missouri help to support \$48.8 million each year to support state government. Another \$12.6 million is generated in local sales taxes reimbursed by the state to cities and counties.

Missouri state government imparts \$1.75 million per year to public transit providers to support their operations. In return, the economic impact of transit generates \$48.8 million in tax collections. The state’s “investment,” therefore, spawns a return of some \$27.90 in tax revenues for every \$1.00 spent on transit by state government.

¹⁶ The latest year in this series is 2016 because that is the latest fiscal year for which comprehensive tax collection information from the Missouri Department of Revenue was available at the time of this report.

¹⁷ Table 10 also references sales tax collections by the state which are then reimbursed to local governments. Other than a small fee for such collections, these taxes—while important to local governments—do not accrue to the state treasury.

Table 9: Average Missouri State Taxes Collected, Fiscal Years 2013-2016		
Individual Income Tax	\$ 7,288,780,000	2.68% of personal income in MO
Corporate Income Tax	\$ 485,400,000	6.66% of individual income taxes
Sales and Use Taxes (State)	\$ 3,605,310,000	49.46% of individual income taxes
Other Taxes*	\$ 1,585,240,000	13.93% of three taxes above
Sales and Use Taxes (Local)	\$ 3,319,230,000	45.54% of individual income taxes
Total Collections	\$ 16,283,960,000	6.00% of total state personal income
State Personal Income	\$ 271,579,875,000	

Sources: Missouri Department of Revenue; U.S. Bureau of Economic Analysis.
 *Cigarette, Financial Institutions, Fuel, Insurance, and Other taxes.

Table 10: Missouri State Taxes From Direct and Multiplier Effects of Public Transit		
Individual Income Tax	\$ 27,767,000	2.68% of direct & indirect earnings triggered by the public transit sector
Corporate Income Tax	\$ 1,333,000	6.66% of individual income taxes triggered by indirect earnings from public transit
Sales and Use Taxes (State)	\$ 13,735,000	49.46% of individual income taxes triggered by public transit's economic impacts
Other Taxes*	\$ 5,967,000	13.93% of the three taxes above
Sales and Use Taxes (Local)	\$ 12,645,000	45.54% of individual income taxes triggered by public transit's economic impacts
Total Collections	\$ 61,447,000	1.67% of total economic impact from public transit in Missouri
Total Collections Just State Government	\$ 48,802,000	1.33% of total economic impact from public transit in Missouri
Investment by State Government in Public Transit per Year		\$ 1,750,000
State Tax Revenue from Transit per State Investment Dollar (ratio)		27.9

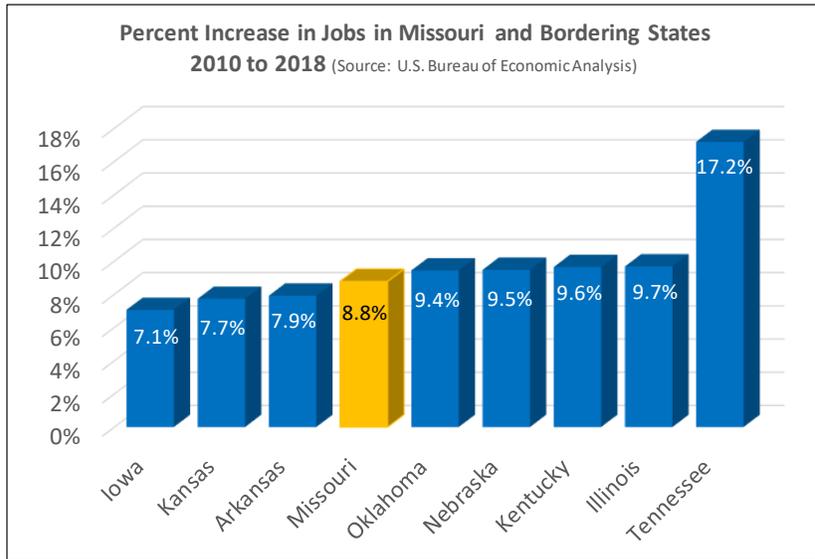
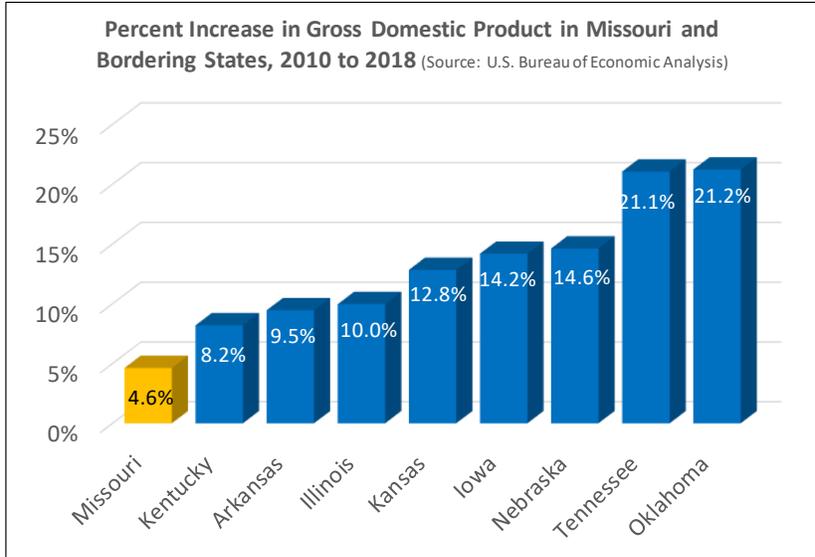
The \$1.75 in state government investment in public transit is equivalent to 29 cents for each resident of Missouri based on Census Bureau estimates of the state's population in 2018. The accompanying map of Missouri and its eight bordering states reflects 2017 data obtained from the American Association of State Highway and Transportation Officials, or AASHTO. This shows that Missouri state government spent and average of 34 cents per capita, which is the lowest of the nine states depicted though very close to Kentucky. While Illinois is a bit of an anomaly at over \$190.00 of state investment per capita, Missouri is still under 30 percent of the per capita funding in Arkansas, the third lowest on the map and less than a quarter of Oklahoma's spending.



It is notable, therefore, that Missouri also has the slowest rate of growth in its state gross domestic product among the adjoining states since the end of the Great Recession and only the fourth highest rate of increase in jobs in the state since the Recession. Missouri's rate of job growth is only about half of Tennessee's rate of growth, a state that spends 16 times as much per capita on public transit as Missouri. Moreover, Tennessee ranks second in GDP growth at a rate more than 4½ times that of Missouri.

While a strict correlation between transit spending and state economic conditions may not be as exact as these figures suggest (there are likely to be many other factors involved), it is readily observed that the annual state government investment for public transit is woefully underfunding the immense potential to significantly increase economic benefits of transit throughout the state.

State funding is, in fact, a missing ingredient for most agencies. In recent years, service cuts have occurred at many agencies, including GoCoMo and JeffTran in the middle of the state, due to lack of funding. This has a further negative effect by not enabling the local transit agencies sufficient matching funds to attract federal support which would bring back many tax dollars to the state that may be going elsewhere. Transit is certainly having a tremendous impact in Missouri, but even a modest increase in state funding could exponentially change the game for the return benefits.



Appendix A: Questionnaire Used in the Survey of Missouri Transit Providers

FIRST PAGE OF QUESTIONNAIRE GOES HERE

SECOND PAGE OF QUESTIONNAIRE GOES HERE

THIRD PAGE OF QUESTIONNAIRE GOES HERE

FOURTH PAGE OF QUESTIONNAIRE GOES HERE

FIFTH AND LAST PAGE OF QUESTIONNAIRE GOES HERE

Appendix B: Brief Profiles of Survey Respondents

Bi-State Development/Metro St. Louis

<https://www.metrostlouis.org/>

Bi-State Development (BSD) is a dynamic and multi-faceted resource for economic development in the St. Louis region.



Since 1950, we have partnered with private and public organizations on hundreds of projects that have created thousands of jobs on both sides of the Mississippi River.

BSD operates with a focus on making a positive impact on the region and the nation, better connecting the bi-state area to the rest of the world. We are impacting neighborhoods, large and small, in Illinois and in Missouri, with investments that are shaped by our unique perspective of the region and its potential and anchored by the work of our enterprises.

Metro is the St. Louis metropolitan region's public transportation system, which includes MetroLink, a 46-mile, 38-station light rail system; MetroBus, a 400-vehicle bus fleet with a service area of about 600 square miles; and Metro Call-A-Ride, a wheelchair lift-equipped paratransit service.

Metro is an industry leader in operations and on-time performance, and is internationally recognized for its comprehensive maintenance and asset management program. A driver of economic development, more than \$7.9 billion in commercial development has been completed or is currently under construction within a half-mile radius of MetroLink stations since 2011.

Kansas City Area Transportation Authority

<http://www.kcata.org/>

The Kansas City Area Transportation Authority connects people to opportunities through safe, reliable public transportation. KCATA is a bi-state agency charged with serving the transportation and development needs of the Kansas City region.



OATS Transit

<https://www.oatstransit.org/>

Our Mission:

Enhancing quality of life by providing safe, caring & reliable transportation services.



Our Services:

- Deviated-Fixed Routes
- Medical & Dialysis Transportation
- Disability Programs
- Intercity Express Routes
- Rural General Public
- Senior Transportation
- Veteran Hospitals & Clinics
- Other Services

What types of services do you offer?

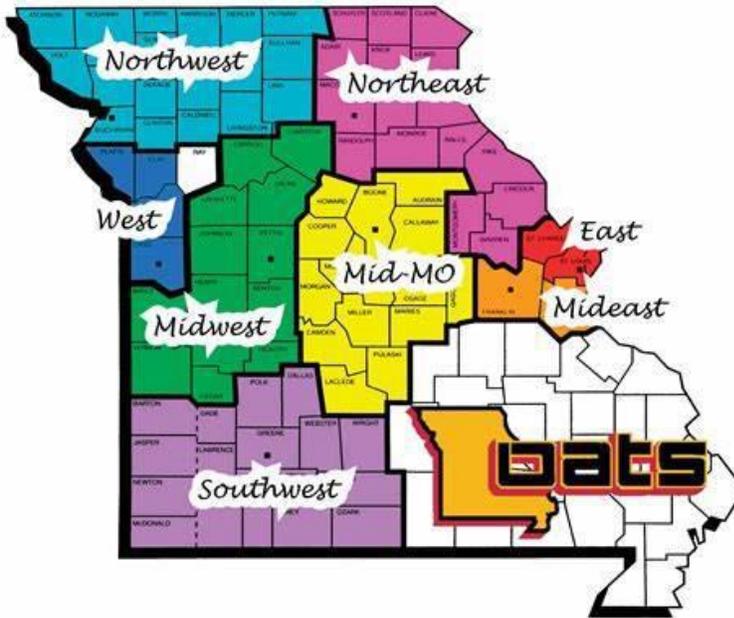
Depending on the county, we offer door-to-door service or have pick-up points along the way. We also contract with a number of agencies to provide service to their clients. Most buses are wheelchair accessible, but we need to know this in advance to ensure we don't over-book the available seating. You can find our [Riders Rules of Conduct here](#). They will provide you with more details about your service and what to expect.

Where do you offer service?

To determine your service area, refer to our [Bus Schedules here](#). Click on the County you reside in. From there you can see what service is available in your county and if it fits your needs. In some areas we have Express Routes that run from smaller towns into larger cities.

What are your days/hours of operation?

Standard days of service are weekdays Monday through Friday, with some routes operating on weekends and after hours. Hours of service will vary depending the county you reside in. Depending on the bus or route you are riding, you will need to allow extra time for your service. OATS Transit is a share-ride service, meaning you will be riding with others who have different destinations than yours.



How do I schedule a ride?

Each county has a contact phone number listed which you can see at the top of each [schedule](#). If you are unsure who to call, call OATS Transit Home Office at 888-875-6287 and we can connect you to your local office. If you have never ridden the bus before, you may be asked a few questions such as any needs you may have, your pick-up address, contact information, etc.

If you have Missouri Medicaid and are calling to schedule transportation to a medical appointment, you will need to call the 800 number on the back of your card as this service is not scheduled directly with OATS Transit.

When should I call?

Some routes require a 7-10 day advanced notice, while others are much shorter. The schedule will tell you if advance notice is required. This is necessary so we have planning time to ensure we have a bus and driver available.

How much does it cost to ride with OATS Transit?

If you want to see the cost to ride in your county, refer to our [Bus Schedules here](#). Some routes have set fares while other routes are donation based as they may be covered by agencies like the Area Agency on Aging. When you call to schedule service be sure to ask about fares. We also have fare cards available for many of our routes.

Eitas

<https://www.eitas.org>

About Us

As a statutorily-created taxing authority of Jackson County, Missouri, we provide funding and services for Jackson County citizens with developmental disabilities.



Our History

In 1969 a state statute was enacted that allowed the citizens of Missouri counties to vote on a tax levy to support various local services for individuals with developmental disabilities. The tax levy passed and the state boards created became commonly known as “SB 40 Boards” after the Senate Bill that created them. The voters of Jackson County approved adopting a “SB 40 Board” in 1976, and eitas’ first Board of Directors was appointed in 1977. First known as the Jackson County Board of Services for the Developmentally Disabled, the Board voted in 2007 to change the name to Developmental Disability Services of Jackson County – eitas. In 2018, the Board approved a new logo and the organization name was shortened to just eitas.

Our initial charter was to provide supports for sheltered workshops and residential group homes for the persons who were employed by workshops, but since 1976, the needs and supports for individuals have tremendously changed. Over the years, the SB 40 statutes (Missouri Revised Statutes 205.968 to 205.972) have been modified several times to allow for these changes. Today we support a variety of services and programs, in addition to employment and residential services, that benefit thousands of people each year.

Our Mission

Our mission is to support individuals with developmental disabilities and their families with services that respect their choices, increase their opportunities, encourage their independence, and assist their inclusion in all aspects of the community.

Our Value Statements

At eitas we:

will advocate for a wide range of services and funding to meet the needs of persons with developmental disabilities.

will promote a culture of inclusion and individualized supports.

will support individuals with developmental disabilities through cutting-edge programs and empowered staff and providers.

will provide the highest quality of supports and services by listening to the people it supports and the people who know them best.

will support people to be active, full members of their communities.

will be a Missouri leader in developing, supporting and furthering a community free of attitudinal and physical barriers and where persons with developmental disabilities participate in the full, rich life of their community without fear and prejudice.

will conduct itself with integrity, propriety and honesty in carrying out the Board's mission, values and responsibilities.

will seek to insure the health, safety, and quality of life for the persons we support through proactive oversight of the programs we fund.

will, whenever possible, leverage its resources to enhance funding and forge local, state and federal partnerships to expand available funding and services for individuals with developmental disabilities.

Transportation

Safe, reliable transportation for persons with developmental disabilities has always been recognized as being critical in supporting self-independence and integration into their communities. In 1992, we began our transportation service. Today we transport over 500 individuals each day to and from their workplaces throughout Jackson County. Additionally, we provide specialized weekend and evening transportation. In 2012, through a grant from the Missouri Department of Transportation (MoDOT), we were able to begin an "advance call" program for eligible individuals living in eastern Jackson County where public transportation was not available.

From the very beginning, our transportation services have been committed to providing professional, safe and reliable transportation. Our drivers are trained and monitored in accordance with federal standards, and in addition to learning the proper rules of the road - they are trained in CPR, first aid, proper lifting techniques and Gentle Teaching. Each driver undergoes in-depth background checks, as well as screening for alcohol and drug use.

Safety is key to our success and our fleet of buses are maintained in our own garage and by our own team of mechanics. Buses are also equipped with on-board monitoring through video and audio recording devices and can be tracked by GPS in real-time.

Unfortunately, funding and the number of buses and routes available may limit our ability to always meet the transportation needs of everyone who is eligible. For information about eligibility for transportation, please contact our Intake and Information Unit at 816-363-2000.

City of St. Joseph: The Ride

<http://www.stjoemo.info/310/St-Joseph-Transit-The-Ride>

St. Joseph Transit "The Ride" services eight fixed routes that encompass the city limits of St. Joseph and Elwood, Kansas. Curb-to-curb route deviations are available, on a scheduled or walk-on basis, to all users of the transit system regardless of ability. The following services are available at the transit administrative office:

- Ticket books and monthly passes
- Half-fare photo identification cards (seniors 60 years and older and disabled persons)
- Bus route, schedule, and general information
- [Schedule deviations](#)
- Jefferson Lines tickets

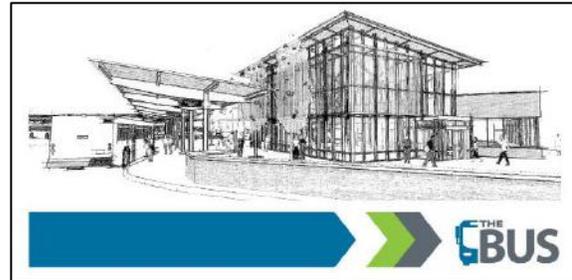


City Utilities of Springfield: The Bus

<https://www.cutransit.net/>

CU Transit Services

City Utilities has operated the public transit system for the City of Springfield since 1945. Our transit system offers both fixed day and evening routes, and a para-transit service (Access Express) that provides rides to passengers who require additional resources to facilitate their bus travel.



JeffTran

<http://www.jeffersoncitymo.gov/government/transit/>

Since 1974, the City of Jefferson's Transit Division (otherwise known as **JEFFTRAN**) has offered fixed-route public transit service along with Handi-Wheels, an origin-to-destination transit service for special needs populations.



Cape Girardeau County Transit Authority

<https://www.cgcta.com/>

Cape Girardeau County Transit Authority is committed to providing quality transportation services in Cape Girardeau County and Southeast MO. Count on us for a variety of transportation services. We provide demand-response transit in the form of taxi services. We provide a fixed route bus service that operates within the city limits of Cape Girardeau.

With our Transit Sponsorship Program, local businesses and organizations can use the advertising space on our transit authority vehicles. The sponsorship revenue will be used to replace old vehicles and expand our fleet. Contact us or visit our office in Cape Girardeau, MO.



City of Columbia – GoCoMo Transit

<https://www.gocomotransit.com/>



“The purpose was to provide transportation where there was a need,” Ray Beck, the man responsible for overseeing and establishing the City-owned transit system in Columbia, said. His legacy began over 50 years ago in 1965. Beck says the goal should always be to improve the system and “keep the buses clean, reliable and timely.” These values have held strong over time and have guided and shaped Columbia’s public bus service into what it is today.

Prior to the City’s involvement with the public bus system, Columbia’s bus service was privately run by Glenn E. Watson. Known as The Columbia Municipal Bus Lines, Watson’s fleet was comprised of around three or four small buses and ran from 1939 to 1965. After operating at a deficit for several years and failing to turn things around financially, Watson approached the City of Columbia in the Spring of 1965. Unable to land a subsidy to continue operating the Bus Lines, Watson eventually proposed the City take over the bus service.

Due to the bus system’s lack of profit margin, the City was initially very reluctant and tabled the issue. However, in August of 1965, after surveying the public and determining that there was in fact a demand for the buses, the Columbia City Council created a new transportation division within the Public Works Department. Beck, a Public Works employee at the time, was put in charge of the new division and given a 30-day deadline to make all necessary arrangements to run a successful transit system.

“It was a big challenge to start the bus system as quick as we did,” Beck said. “We didn’t have any buses. We didn’t have any drivers. We didn’t have any route layouts. We didn’t have anything.”

Beck turned to the Missouri Bi-State Development Agency, the company in charge of the St. Louis bus system at the time, for some much needed advice and assistance. Bi-State obliged and provided the City with temporary buses, training personnel and a route consultant.

On September 9, 1965, the Columbia bus system was born. The fledgling service featured an orbital pulse style route system that used Ninth Street and Broadway as the original transfer point with rates of 15 cents per ride. Football service, student shuttles and additional routes were added as demand from the Columbia public grew. Over the next decades, the bus service continued to grow and adapt to the public’s needs, eventually garnering an annual ridership of over one million.

In more recent years, however, the City became increasingly aware a change was needed in order to continue providing the public with the reliable transit service established in earlier times. According to Rob Davis, a retired Para-Transit bus driver, the old orbital pulse style route system needed to adapt to maintain efficiency. “Traffic was getting so bad that there was no way the old system could work. Buses were getting further and further behind in the afternoons; they had to make a change.”

This change came in the form of a challenge from City Manager Mike Matthes, who implored transit staff to come up with a plan to revitalize and improve upon the existing bus system. In 2013, the improvement plan introduced a new networked route system with routes circulating customers into core connector routes that promised to better serve the Columbia public.

On February 17, 2014, Columbia City Council approved the staff’s project, effectively introducing the new route system. While the transition from the Columbia Transit orbital pulse routes to the new networked system was not entirely without its hiccups, much of the public has appreciated and embraced the efforts made.

Cindy Mustard, former Executive Director of the Voluntary Action Center, a local nonprofit social service agency that has worked with the transit system to help more than 5,000 low-income candidates have bus passes in order to become more independent, has seen a noticeable improvement since the change. Prior to this reevaluation of the system, the transit officials “didn’t always listen to what the riders wanted,” Mustard said. “It was taking people a lot of time to get from Point A to B.” However, after the implementation of the new networked system, everything makes more sense for customers. “There’s more networking and a lot more bus stops.”

Mustard went on to say neighborhood routes better answer questions like “Where are the basic needs?” stating, “The City has come around to addressing these problems a lot better than they used to.” When describing how the public would be impacted if the bus system no longer existed, Mustard said, “It would be a lot more difficult for people to get to work or to that first job interview without buses. A lot of people would be stranded.”

Davis also agreed continuing public transit in Columbia should remain a priority, saying, “a lot of people think that a transit system should make money, but that’s not what it’s for. It’s an all encompassing type of thing that helps everyone.” Going on to say that Para-Transit passengers in particular “realize that it’s their lifeline to staying independent and getting to do what they want with their lives.”

Since its start in 1965 under the guidance and influence of transit staff, the Columbia bus system has managed to navigate countless changes and challenges. By continuously looking to the public for guidance and input, the system will continue to adapt in order to remain relevant and reliable for years to come.

City of Houston Bus Service

<https://houstonmo.org/about-us/bus-service/>



City of Houston Bus Route Schedule

Bus Stops				
Infinite Entertainment	8:40 a.m.	9:30 a.m.	12:45 p.m.	
Oak Hill at Family Services	8:43 a.m.	9:33 a.m.	12:47 p.m.	
Oak Hill at Plainview	8:45 a.m.	9:35 a.m.	12:49 p.m.	1:44 p.m.
Walnut and Grand	8:50 a.m.	9:40 a.m.	12:54 p.m.	1:49 p.m.
Texas County Library	8:51 a.m.	9:41 a.m.	12:55 p.m.	1:50 p.m.
Forbes Pharmacy	8:53 a.m.	9:43 a.m.	12:57 p.m.	1:52 p.m.
		9:44 a.m.		
Houston Senior Center	8:54 a.m.	12:30 p.m.	12:58 p.m.	1:53 p.m.
Ozark Terrace (Ozark Street)	8:55 a.m.	9:45 a.m.	12:59 p.m.	1:54 p.m.
Ozark and Hamrick	8:58 a.m.	9:50 a.m.	1:04 p.m.	1:55 p.m.
Skyview Terrace	9 a.m.	9:53 a.m.	1:06 p.m.	1:57 p.m.
Chestnut and Hamrick	9:03 a.m.	9:56 a.m.	1:10 p.m.	1:59 p.m.
Chestnut Terrace	9:05 a.m.	9:57 a.m.	1:11 p.m.	2 p.m.
Ozark Terrace (Mill Street)	9:06 p.m.	9:58 a.m.	1:12 p.m.	2:02 p.m.
Lakes Residential	9:08 a.m.	9:59 a.m.	1:15 p.m.	2:04 p.m.
Hawthorne and Bryan	9:10 a.m.	10 a.m.	1:18 p.m.	2:05 p.m.
Hamrick Terrace	9:15 a.m.	10:05 a.m.	1:20 p.m.	2:10 p.m.
Houston Apartments Hwy 17	9:18 a.m.	10:07 a.m.	1:22 p.m.	2:12 p.m.
Corner Express	9:19 a.m.	10:09 a.m.	1:25 p.m.	2:14 p.m.
		10:10 a.m.		
Wal-Mart	9:20 a.m.	12:35 p.m.	1:30 p.m.	2:15 p.m.

City of Mt. Vernon Taxi Service

<http://mtvernon-cityhall.org/index.cfm?content=33>

The Taxi Service is part of the Mt. Vernon Transportation Department. A cab runs from 8:15 a.m. to 4:00 p.m., Monday through Friday with a staggered lunch break from 12:00 p.m. to 1:00 p.m. This service is primarily for senior citizens and handicap citizens as a way to get around the city. Cost: \$1.00 per ride (one way).



We have a reduce fare pass for Senior Citizens (65 or older) or Handicap Citizens \$.50 per ride (one way). Ask one of your drivers or stop by City Hall for the forms, they can also be downloaded from this website.

The Taxi Service does not run in inclement weather or on holidays when City Hall is closed.

We now have two cabs running most days.

City of Nevada Fare Share Transportation Program

<https://nevadamo.gov/public-transportation/>

417-448-5500

Hours of Operation:

Monday-Friday 8:30am – 4:30pm

Closed on Holidays and During Inclement Weather

We accept cash fares or coupons. Coupons can be purchased at 110 S. Ash, by phone or through the mail. For more information call 417-448-5115.

Coupon Books:

4 Rides \$15.00

8 Rides \$30.00

16 Rides \$60.00

Fare Share Transportation Policies

- Rides provided within the city limits of Nevada.
- One coupon or cash fare is required for each stop. A drive-through shall be considered one stop.
- Children 6 years of age and younger may ride free with an adult.
- Attendants accompanying wheel chair bound customers may ride free.



City of Excelsior Springs Transportation Department

<https://cityofesmo.com/publicservices/index.php/transportation/>

The City of Excelsior Springs Transportation Department operates its service without regard to race, color, and national origin in accordance with Title VI of the Civil Rights Act.



Passengers with disabilities may request modifications to current service procedures to access our service. To make a request, please call 816-630-0754, Ext. 425 or [send an email](#). Please submit request at least the day before the trip.

Ride a Share Program

Some merchants/professionals participate in a "Ride a Share" program which provides the return trip fare from their location, Monday through Friday.

Participating Merchants:

- Excelsior Springs Hospital
- Price Chopper
- WalMart
- Family Vision
- North American Savings Bank

- Dr. Craven
- Excelsior Springs Clinic
- * *Bus service not available on Holidays*
- * *Service animals are allowed with required constraintment.*

City of Joplin

<http://www.joplinmo.org/365/Public-Transportation>

The City of Joplin began operating a demand-response transit system known as the Metro Area Public Transit System (MAPS) in 1997. During that first year of service, MAPS provided 58,630 rides to residents within our 105-square mile service area. Demand for our service has increased dramatically over the years. We provided 67,735 rides in 2006 and, in response, added the Sunshine Lamp Trolley in late 2007. Total rides provided in 2014 were 131,868.



Scott County Transportation Systems

<http://morides.org/need-ride/1349/scott-county-transit-system-inc/>

Transportation Provider: Scott County Transit System, Inc.

Address: 105 East Center, Sikeston, MO 63801

Provider's Phone Number: South 573-472-3030

Additional Service Information:

Type of Services: Medical, Social, Long Distance

Availability: Monday through Friday

Hours: 8:00 a.m. to 4:00 p.m.

Who Can Ride: Any Scott County resident

Wheelchair Accessible: Yes

Vehicles: Vans

Servicing Counties: Scott County



Southeast Missouri Transportation Service

<http://ridesmts.org/>



The mission of Southeast Missouri Transportation Service is to improve the quality of life of people through assisting their access to goods and services of society. Access/transportation will be of assistance in the prevention of institutionalization, improved opportunity to employment and training facilities participation, equal utilization of medical and other services.



Offering door-to-door transportation to everyone in 21 Missouri counties, SMTS, Inc. is one of Missouri's largest non-profit transportation providers. Handicap accessible vehicles allow for the comfortable, safe transportation of individuals in wheelchairs. Our staff is thoroughly trained and place the rider's safety first.



Passengers with disabilities may request modifications to current service procedures to access the service provided.

Appendix C: Sponsors of the Economic Impact Study



<https://cmt-stl.org/>



<https://www.aarp.org/stlouis>



<https://mopublictransit.org/>