

***Economic Impact of the
Champaign-Urbana Mass Transit District
Phase 1: Direct Benefits***

Submitted to:
Champaign-Urbana Mass Transit District, Illinois

December 18, 2015

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Champaign-Urbana, Illinois

TABLE OF CONTENTS

| | |
|--|-----------|
| Executive Summary | 1 |
| Why Look at Economic Impacts?..... | 2 |
| Summary of the Direct Annual Economic Benefits of CUMTD | 3 |
| <i>Figure 1. Summary of Direct Annual Economic Benefits.....</i> | <i>3</i> |
| Summary of Funding Leverage by CUMTD | 3 |
| Other Economic Impacts | 4 |
| Service Area and Regions Analyzed | 5 |
| <i>Figure 2. Map of Champaign-Urbana Mass Transit District (CUMTD) Service Area.....</i> | <i>5</i> |
| <i>Figure 3. Map of Champaign County.....</i> | <i>6</i> |
| <i>Figure 4. Map of Champaign-Urbana Metropolitan Statistical Area (MSA).....</i> | <i>7</i> |
| Description of the Transit System | 8 |
| Overview of the System | 8 |
| <i>Figure 5. Annual CUMTD Ridership</i> | <i>9</i> |
| Fiscal Picture..... | 11 |
| Funding Sources | 11 |
| <i>Figure 6. CUMTD Operating Revenues by Source (FY2014).....</i> | <i>12</i> |
| <i>Figure 7. CUMTD Capital Funding Sources (FY10-FY20).....</i> | <i>14</i> |
| Operating Expenditures..... | 15 |
| <i>Figure 8. CUMTD (FY2014) Expenditure Summary.....</i> | <i>15</i> |
| <i>Figure 9. Payroll by Place of CUMTD Employee Residence.....</i> | <i>16</i> |
| <i>Figure 10. CUMTD (FY2014) Annual Operating Expenditures for Purchased Goods and Services (Non-Payroll) by Location.....</i> | <i>17</i> |
| Jobs Created and Sustained by CUMTD..... | 18 |
| Jobs at CUMTD | 18 |
| <i>Figure 11. Current Number of Jobs.....</i> | <i>18</i> |
| <i>Figure 12. Current Number of Jobs by City of Residence</i> | <i>18</i> |
| <i>Figure 13. Payroll by Place of CUMTD Employee Residence.....</i> | <i>19</i> |
| <i>Figure 14. CUMTD Jobs and Income</i> | <i>20</i> |
| Jobs Created by CUMTD Purchases | 21 |
| <i>Figure 15. CUMTD Construction and Capital Expenditures, FY2010 - FY2020</i> | <i>22</i> |
| Other Economic Impacts..... | 23 |
| <i>Figure 16. CUMTD Contract Cost per Student for Champaign and Urbana School Districts.....</i> | <i>23</i> |
| <i>Figure 17. Champaign and Urbana School District Transportation Costs.....</i> | <i>24</i> |
| <i>Figure 18. Sample of Illinois Large School District Transportation Costs</i> | <i>24</i> |



Summary of Direct Annual Economic Impacts..... 26
Figure 19. Summary of Annual Direct Economic Impacts..... 26

Next Steps 27

Appendix 28
 IMPLAN Definitions 28



EXECUTIVE SUMMARY

TischlerBise is under contract with the Champaign-Urbana Mass Transit District (CUMTD) to conduct an **Economic Impact Analysis** of the system. As a major enterprise in its own right, the District contributes to the local and regional economy in a variety of ways—as a major employer, a buyer of goods and services, a sponsor of construction projects, and a generator of (indirect) tax revenues. This report examines CUMTD’s direct economic contribution to the regional economy in the following areas:

- **Jobs** – Represents the number of direct full- and part-time jobs associated with CUMTD operations and construction. The analysis includes estimated jobs at CUMTD, direct jobs as a result of CUMTD spending, and jobs as a result of construction spending. Construction estimates include an analysis of past and future spending on capital projects.
- **Income** – Income consists of wages and salaries paid to CUMTD employees as well as income generated from other direct impacts.
- **Direct Spending** – Direct spending is the amount of money CUMTD spends annually on goods and services within the region as well as local construction projects and/or vehicles. This direct spending results in additional employment in the region.
- **Other Impacts** – CUMTD provides services that result in cost savings for other entities.

This report is the first in a two-phase study. Phase 1 is an analysis and report on **direct benefits to the local economy** from CUMTD. Phase 2 will be an analysis and report on **indirect and induced benefits** to the economy from CUMTD activities.

WHY LOOK AT ECONOMIC IMPACTS?

Economic impact analysis is a process to evaluate the economic benefit of an entity or industry on a defined geographic location—either with regard to its presence, expansion, or contraction. The key components of any economic impact analysis are typically measured by increases in personal income, value added (or gross regional product), business output, and/or job creation. It identifies **direct impacts**, that is, the actual number of employees of the entity or industry as well as the jobs supported by the spending of the entity/industry itself. In addition, direct impacts can be generated through other spending such as from visitors. Direct effects are also measured in personal income, gross regional product, and business output.

An economic impact analysis also evaluates the “spin-off” or “multiplier” effects that direct spending has on the location in terms of jobs, labor income, and total economic output or activity through what is referred to as **indirect** and **induced** effects. That is, income received by suppliers of goods and services is then used to buy goods and services from other local companies (**indirect effects**). Additionally, household income is used in part to buy goods and services within the local region, which creates other economic benefits (**induced effects**). In summary, the total effects are the result of direct impacts as well as the recirculation of income throughout the local economy. ***The main objective is to quantify the impacts of the economic driver to determine the benefits that are realized in an area that would not otherwise occur.***

An economic impact analysis is place-specific. That is, the results will vary depending on the region being evaluated. The general methodology is that funds circulate in the economy until they are “leaked out” of the area under study. Therefore, the larger the geographic area, there is a greater likelihood of “capturing” the impacts.

The general approach and methodology employed for this study are:

- TischlerBise conducted interviews and collected data from CUMTD and other sources as well as conducted primary and secondary research.
- This information was synthesized and analyzed to reveal trends and direct economic impacts on the Champaign-Urbana region.
- The analysis of some direct effects was conducted using IMPLAN. IMPLAN is an input-output model, which tracks the interdependence among various producing and consuming sectors of an economy. IMPLAN is one of several commercial models used for economic impact analysis (others include REMI and RIMS II).

This report includes only the direct economic impacts from CUMTD. Phase 2 will include indirect impacts (the impact of local industries buying goods and services from other local industries) and induced impacts (the impact of the recirculation of income through household spending patterns causing further local economic activity).

SUMMARY OF THE DIRECT ANNUAL ECONOMIC BENEFITS OF CUMTD

CUMTD jobs, purchase of goods and services, and capital improvement projects generate a direct annual economic benefit of almost \$35 million and 432 jobs.

Figure 1. Summary of Direct Annual Economic Benefits

| | <i>Economic Benefit (\$)</i> | <i>Employment (Jobs)</i> |
|---|------------------------------|--------------------------|
| CUMTD DIRECT LOCAL ANNUAL ECONOMIC IMPACTS | | |
| CUMTD Employment | \$16,500,000 | 350 Jobs |
| Purchase of Local Goods and Services | \$12,300,000 | 44 Jobs |
| Average Annual Local Capital Expenditures* | \$6,000,000 | 38 Jobs |
| ANNUAL DIRECT ECONOMIC BENEFIT | \$34,800,000 | 432 Jobs |

* 10-year total expenditures are annualized.

Cumulatively over a ten-year period—to account for ongoing and longer-term capital improvement projects, **CUMTD will generate almost \$60 million in additional direct local public investment and create an additional 385 local jobs.**

SUMMARY OF FUNDING LEVERAGE BY CUMTD

CUMTD is funded from local, state, and federal sources as well as users of the system. Local funding is from property taxes assessed within the service district. State and federal funding is primarily from grants. CUMTD has been successful in leveraging local tax dollars to fund operations and capital improvements.

- **For every \$1 in property taxes received annually for operations, CUMTD generates \$4.43 in external funding.**
- **For every \$1 in property taxes for capital improvement projects, CUMTD receives a projected \$5.23 from non-local public sources.**

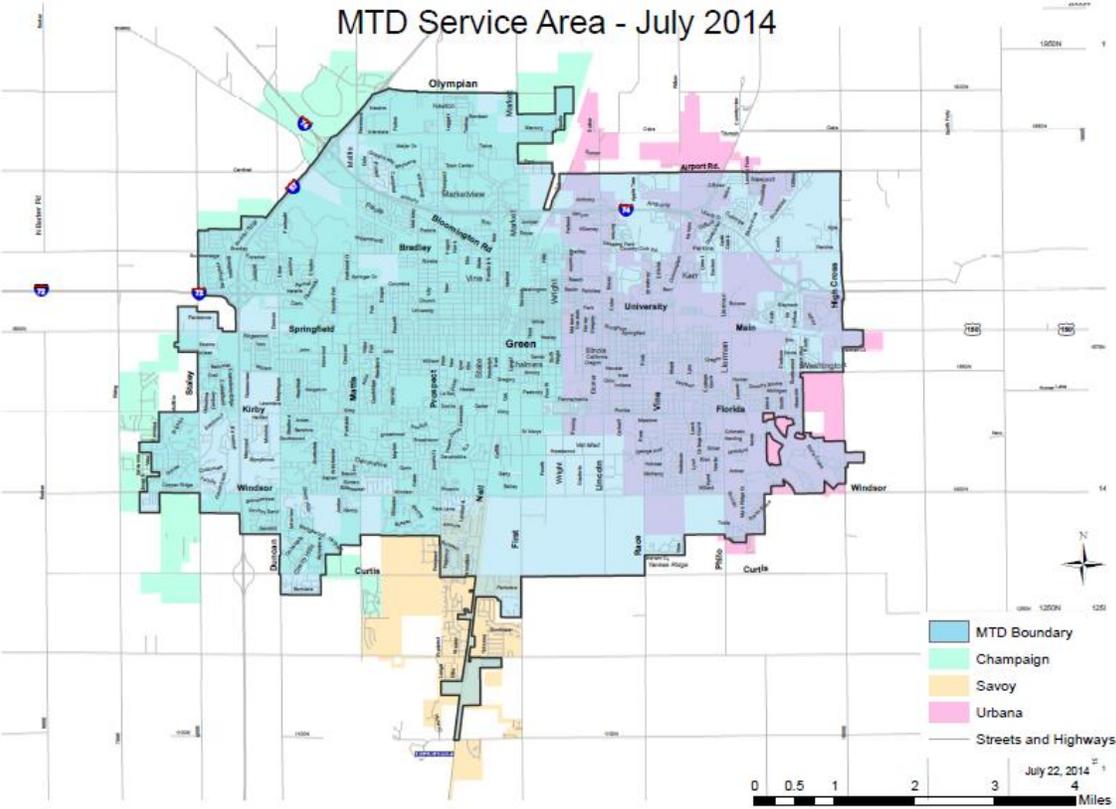
OTHER ECONOMIC IMPACTS

CUMTD's contracted service for Champaign and Urbana school districts ***saves the school districts and its taxpayers an estimated total of \$1.4 million per year in transportation costs.***

SERVICE AREA AND REGIONS ANALYZED

Several regions are used in this analysis to describe the economic impact CUMTD has in the community. This section provides definitions and maps of those regions for reference.

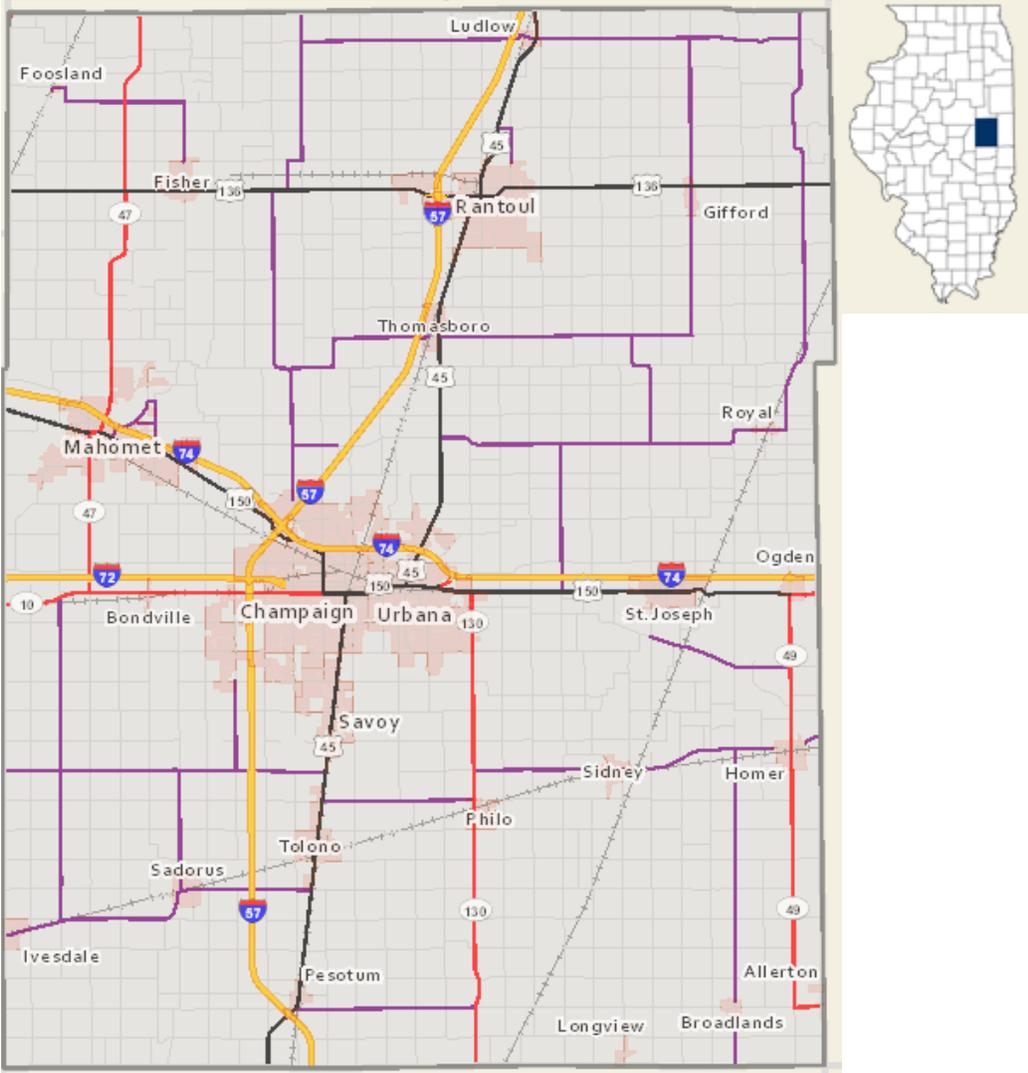
Figure 2. Map of Champaign-Urbana Mass Transit District (CUMTD) Service Area



Source: CUMTD

The CUMTD service area is wholly located within Champaign County.

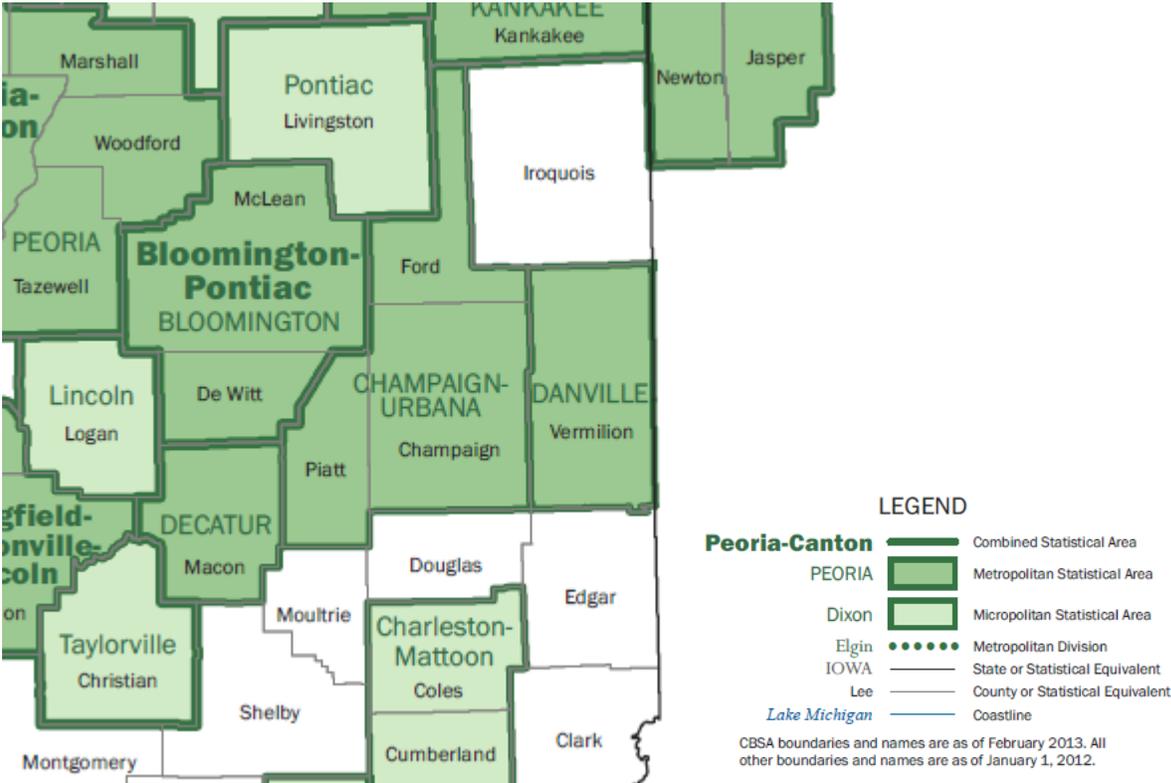
Figure 3. Map of Champaign County



Source: Champaign County GIS Consortium

Champaign County is part of the Champaign-Urbana Metropolitan Statistical Area (MSA) (also referred to as “Metro Region” in the study). The MSA includes the counties of Champaign, Ford, and Piatt.

Figure 4. Map of Champaign-Urbana Metropolitan Statistical Area (MSA)



Source: U.S. Census

DESCRIPTION OF THE TRANSIT SYSTEM

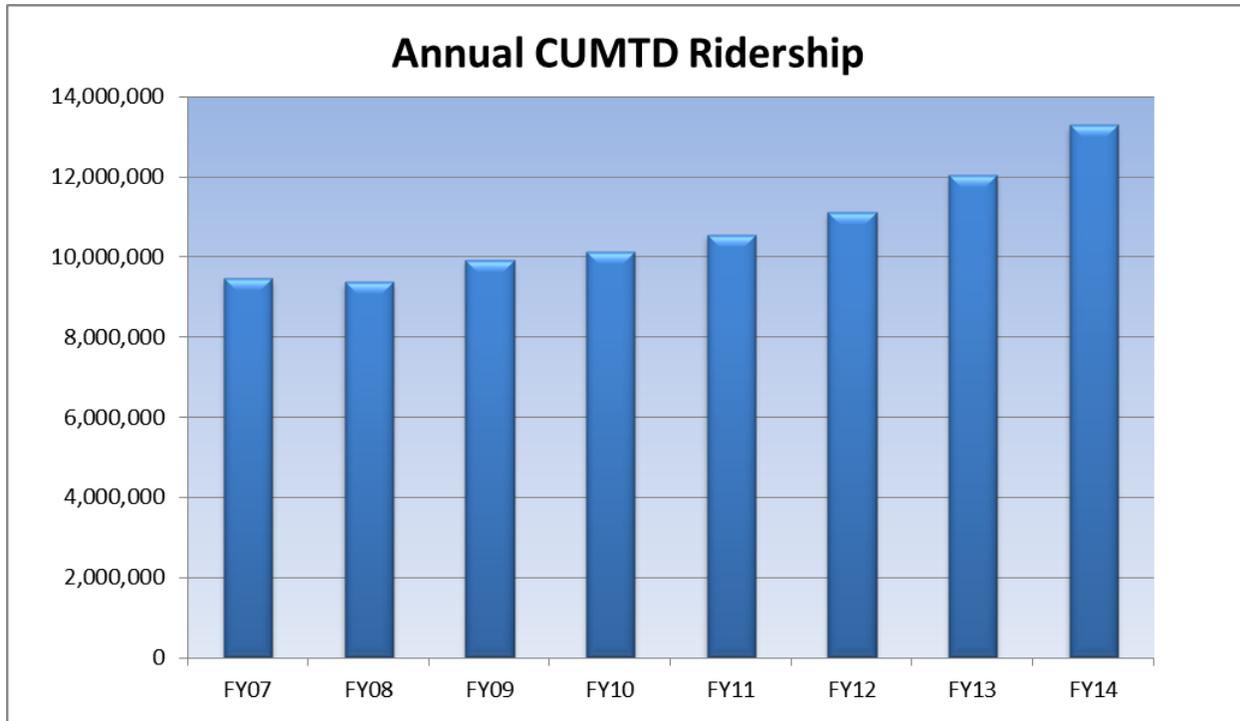
OVERVIEW OF THE SYSTEM

The Champaign-Urbana Mass Transit District (CUMTD) offers comprehensive bus transit services to the cities of Champaign, Urbana, and Savoy as well as the University of Illinois. The University contracts with CUMTD to provide universal access to all University students and staff. In addition, CUMTD provides contract service to Champaign Unit 4 School District and Urbana School District #116, the two school districts serving Champaign, Urbana, and Savoy. At over 13 million rides per year, the system has seen increases in ridership over the last seven years.

Annual ridership has increased 28.6 percent since 2009, which exceeds the Champaign-Urbana Urbanized Area Transportation Study (CUUATS) target of a 5 percent increase of transit ridership by 2014.¹

¹ Champaign-Urbana Urbanized Area Transportation Study (CUUATS) Long-Range Transportation Plan (LRTP), *Choices 2035: 2013 Report Card*, p 36.

Figure 5. Annual CUMTD Ridership



Source: CUMTD

In the Champaign-Urbana urbanized area, commuting by transit has steadily increased over the last decade and a half. In 2000, 6.8 percent of the region's workforce used transit to commute to work. By 2011, that figure had climbed to 9.1 percent with a slight decrease to 8.2 percent in 2012 (in part due to a change in the American Community Survey's definition of public transportation).² This compares favorably to the United States average of only 5 percent transit use in 2012.³

CUMTD anticipates usage will continue to grow as the system will "take advantage of the propensity towards transit in young population groups."⁴ The 2014 CUMTD Strategic Plan documents an increase in not only commuting ridership but weekend/non-peak usage as well. Per the Strategic Plan, this offers the District the ability to grow ridership while making good use of existing vehicles and infrastructure.

In addition, development patterns in the CUMTD service area support transit use. Approximately 93 percent of residential development in the service area is within a quarter mile of a bus route. This has increased by approximately 4 percent since 2009.⁵

² CUUATS LRTP, *Choices 2035: 2013 Report Card*, p.25.

³ 2012 American Community Survey, 1-Year Estimates

⁴ CUMTD, Strategic Plan 2014.

⁵ CUUATS LRTP, *Choices 2035: 2013 Report Card*, p.36.

CUMTD is an economic engine in its own right, not only creating and maintaining jobs but generating economic impact through the purchase of goods and services and construction of capital improvements.

In addition, transit systems provide other economic benefits such as:

- Reduced public costs for road maintenance due to fewer single occupancy vehicles on the roads.⁶
- Reduced public costs for road capacity improvements due to fewer trips on the roads.
- Reduced private costs for vehicle ownership and maintenance.
- Reduced demand for parking.

⁶ National surveys of transit users have found that if the transit system were not available, 24 percent of users would drive alone, 22 percent would carpool, and 10 percent would take a taxi. The remaining users would walk or not make the trip. (American Public Transportation Association, *Economic Impact of Public Transportation Investment*, 2014 Update.) The availability of transit removes those vehicle trips from existing roadways thus reducing maintenance costs. However, it should be noted that heavier weight vehicles such as buses affect roadway conditions and the need for maintenance, however, studies have found that maintenance costs attributable to buses account for only 2 to 3 percent of total maintenance costs brought about by vehicular traffic (albeit with the caveat that local roads are more negatively impacted than system-level roads with the case studies varying by type of community). (Boilé, Maria, Preethi Narayanan, and Kaan Ozbay, "Impact of Buses on Highway Infrastructure: Case Study for New Jersey State," *Transportation Research Record* 1841, Paper No. 03-4223.) To address this impact, CUMTD has been successful in obtaining approximately \$16 million in federal funding to repair and replace core roads for communities served by CUMTD.

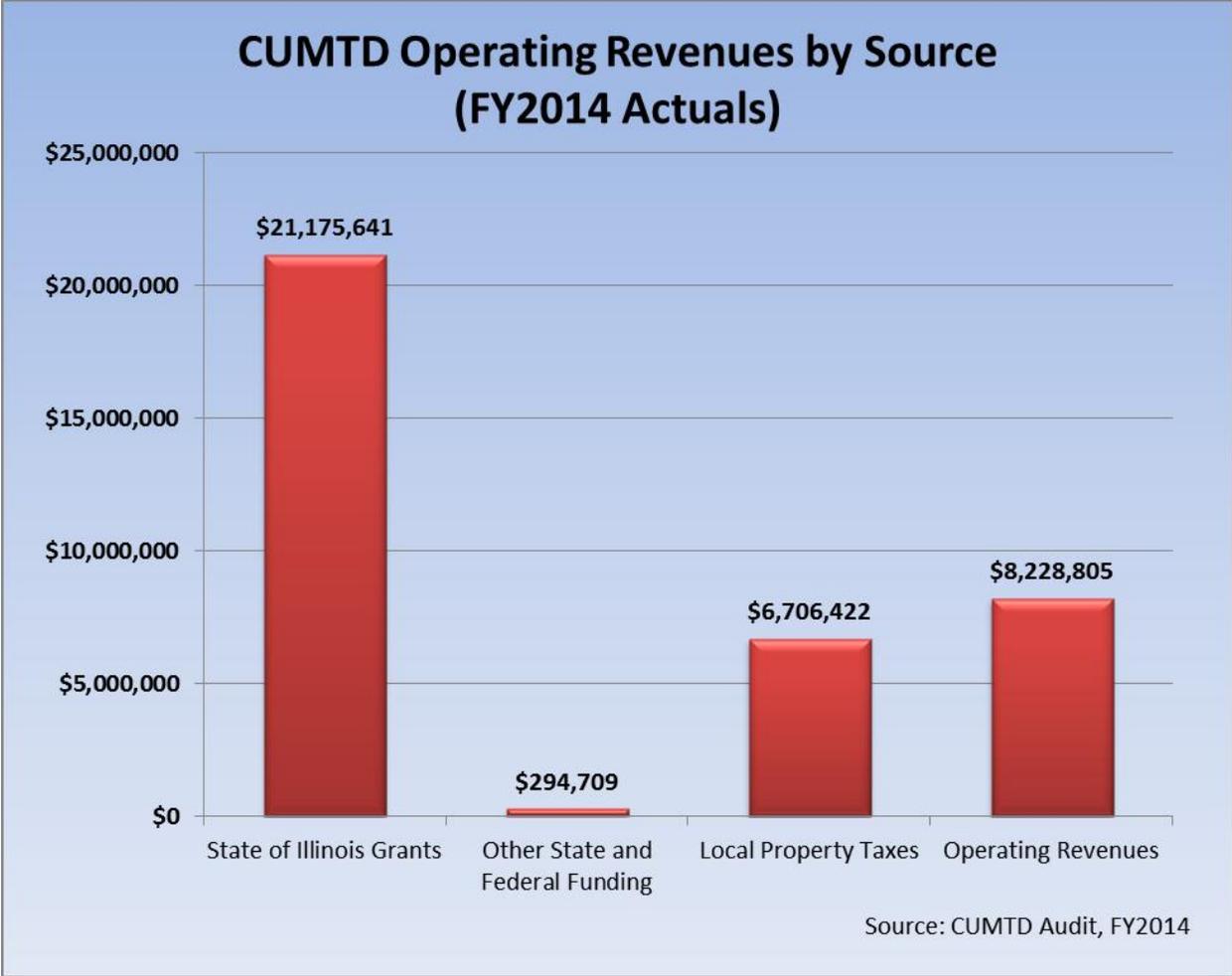
FISCAL PICTURE

FUNDING SOURCES

CUMTD has a variety of funding sources with the majority coming from non-local sources. For Fiscal Year 2014, \$6.7 million (18 percent) of the system’s funding comes from local property taxes. The majority of the system’s funding comes from State of Illinois dedicated transit grant funds at \$21.2 million, or almost 60 percent.⁷

⁷ CUMTD receives 65 percent of eligible expenditures from the State. Eligible expenditures are those that are specifically related to the provision of public transit therefore when other “non-eligible” expenditures are included in the total, the resulting share of funding is slightly lower at 60 percent.

Figure 6. CUMTD Operating Revenues by Source (FY2014)



\$1 Local Taxes = \$4.43 State and Other Revenues

Note: FY14 included \$943,170 in capital grants not shown here; capital discussed separately.
Source: CUMTD FY14 Audit; TischlerBise analysis

In Fiscal Year 2014, for every \$1 in local property taxes, CUMTD receives \$4.43 in external funding on average.

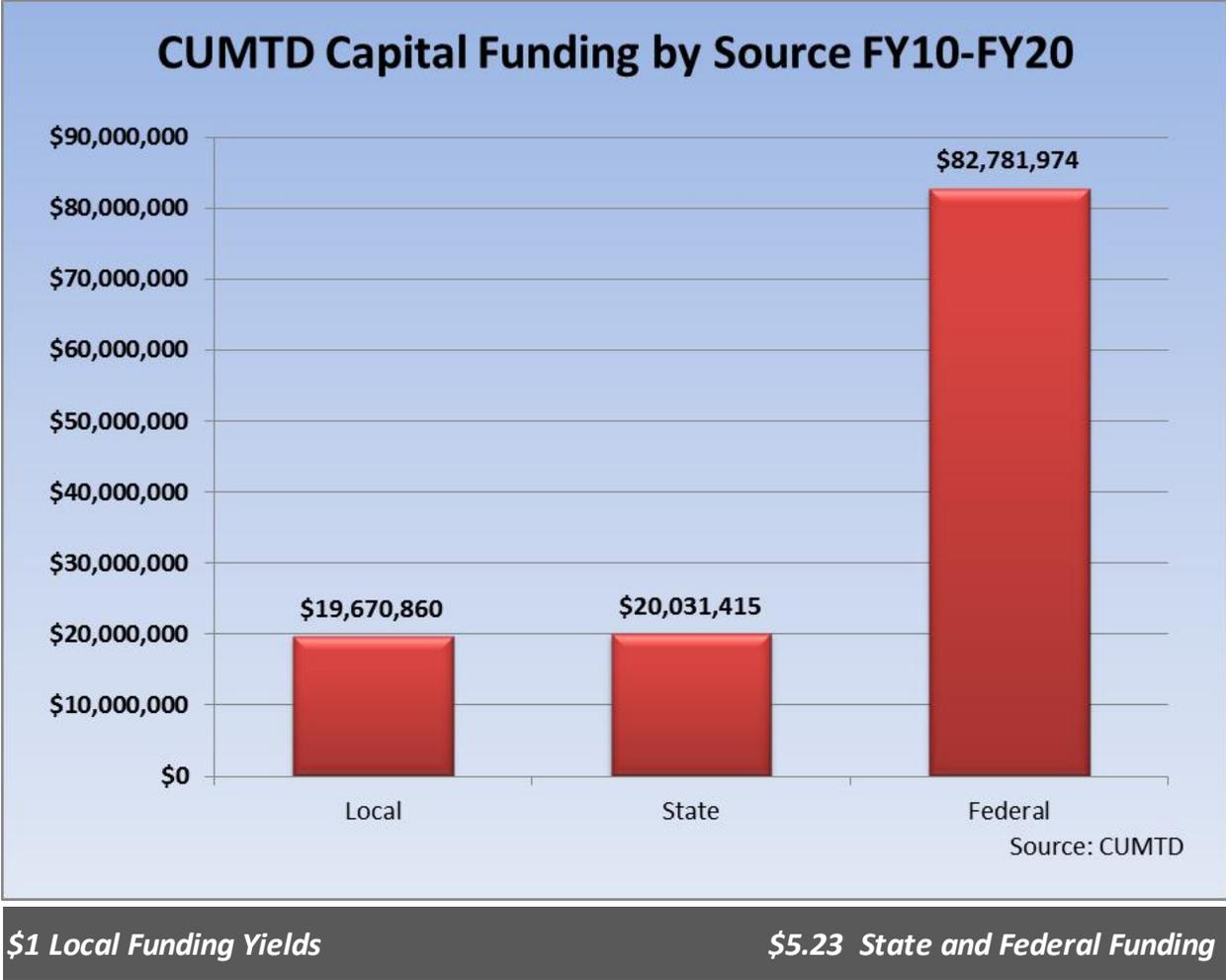
CUMTD receives 58 percent of its revenue from the State of Illinois from the Downstate Illinois Public Transportation Act (DIPTA). In 1982, the Illinois General Assembly passed the DIPTA to provide financial assistance to downstate Illinois mass transit systems. Within the DIPTA, the General Assembly created a separate fund, apart from the Illinois General Fund as a mechanism to provide this financial assistance. The DIPTA is funded through a formula that is based on monthly sales tax revenue, and these funds are transferred each month from the Illinois General Fund to the Downstate Public Transportation Fund (DPTF). The DPTF is administered by the Illinois Department of Transportation (IDOT). Prior to each fiscal year, CUMTD submits a grant request to IDOT for operating assistance that is paid out of the DPTF.

Capital Funding Sources

Capital improvement projects are supported by local and non-local funding. Because CUMTD has capital projects that are funded and built over several years with funding from a variety of sources, this report shows capital funding separately from annual revenue sources depicted in Figure 3. The intent is to illustrate the level of non-local funding received by CUMTD to improve the transit system. A ten-year time period is used because of the long-term nature of CUMTD capital improvement projects many of which are multi-year and may be current in 2015 but extend into the future.

As shown below, \$19.7 million (16 percent) of capital expenditures from Fiscal Year 2010 through Fiscal Year 2020 are anticipated to be funded with local sources. In other words, 84 percent of capital funding is from outside sources, or almost \$103 million.

Figure 7. CUMTD Capital Funding Sources (FY10-FY20)



Source: CUMTD; TischlerBise analysis

This results in a projected⁸ \$5.23 from non-local public sources for every \$1 of property taxes invested in capital projects.⁹ In other words, CUMTD receives over five times its investment of local property tax dollars.

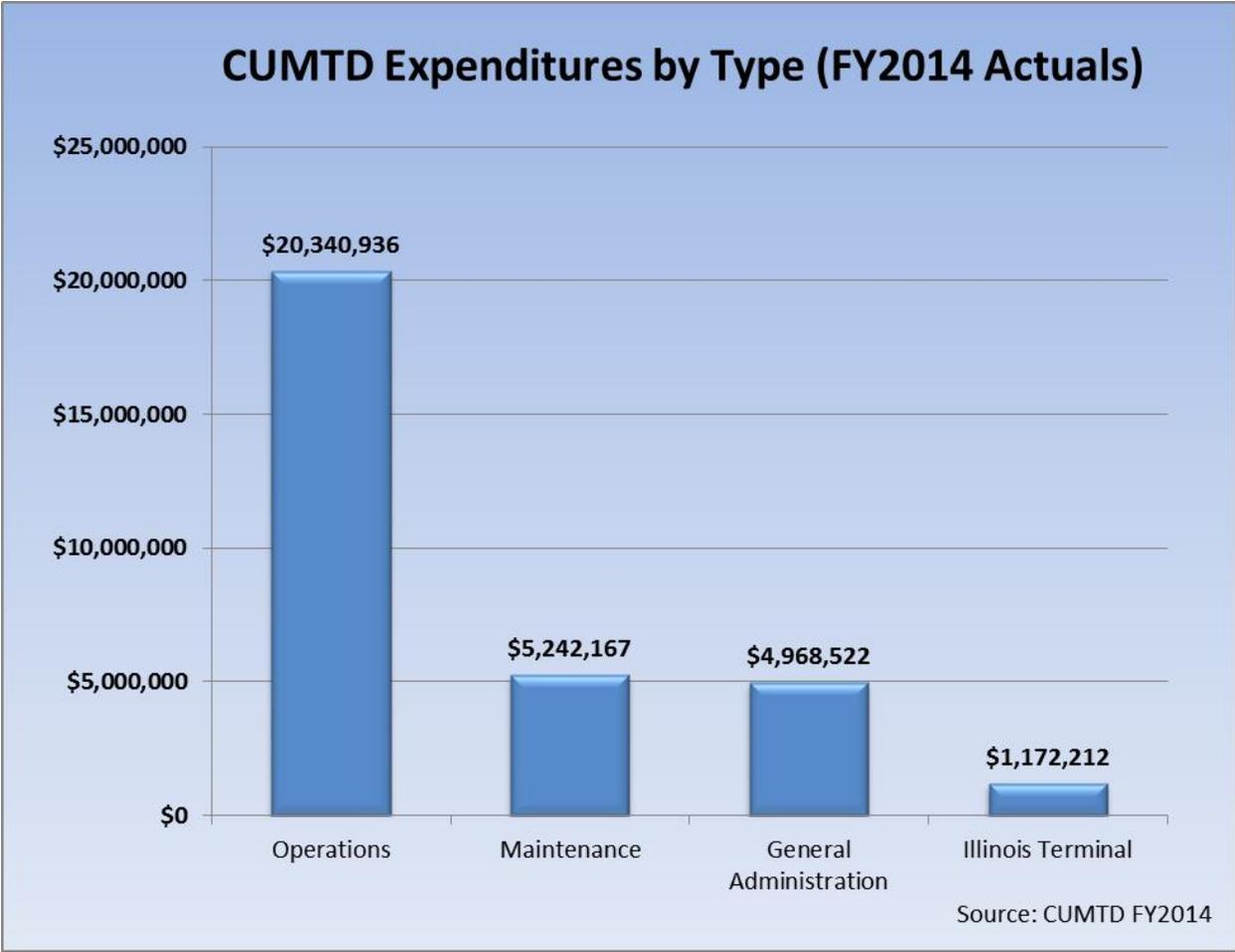
⁸ Because the analysis includes projected future funding, this is a projection.
⁹ In addition, future CUMTD capital projects are likely to produce an additional \$40 to \$60 million in direct private investment resulting in an additional \$2.00 to \$3.00 return on \$1.00 in property taxes.

OPERATING EXPENDITURES

Expenditures made by CUMTD have an economic impact on the communities it serves. This section details the types of expenditures made and where those dollars are spent.

Total expenditures for CUMTD in Fiscal Year 2014 were approximately \$32 million.¹⁰ The majority of the expenditures are in operations. Detail for Fiscal Year 2014 is provided below.

Figure 8. CUMTD (FY2014) Expenditure Summary



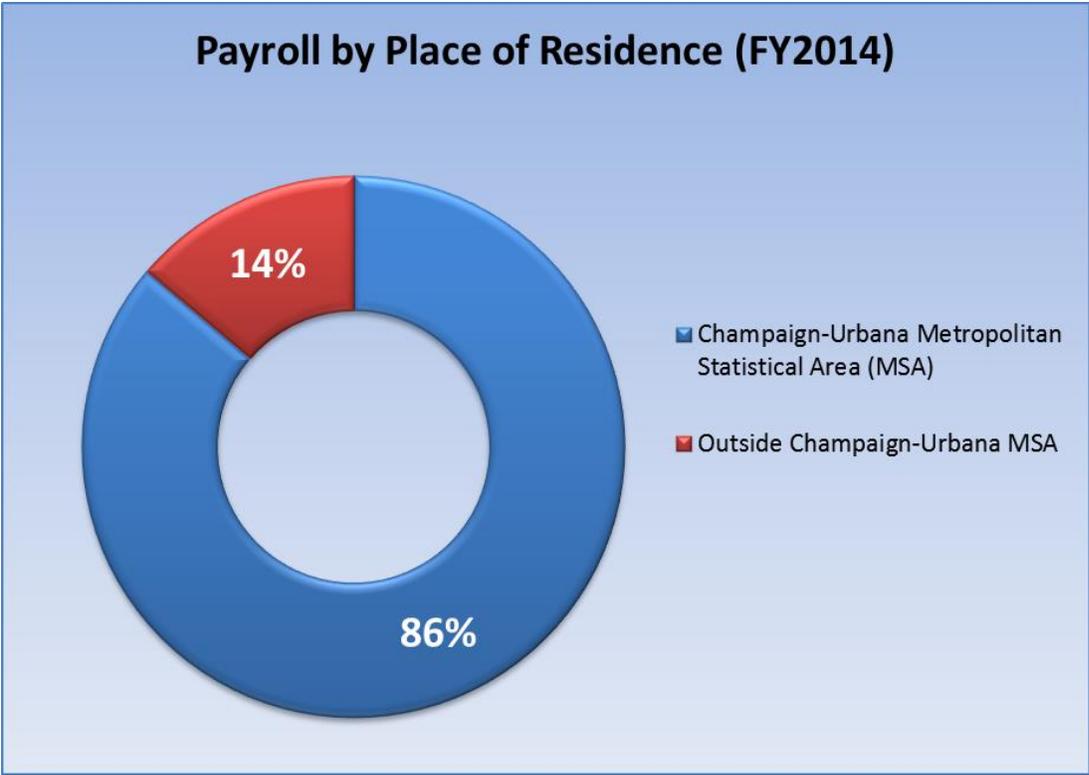
¹⁰ Depreciation is shown in the audit (at \$6.8 million) to provide an indication of annual capital requirements, however because CUMTD does not fund depreciation, the cost is not included in this analysis.

Payroll Expenditures

CUMTD had an annual payroll of approximately \$16.5 million in Fiscal Year 2014. Income paid to employees who live locally is available to be spent at local businesses. Direct income within the Champaign-Urbana Metropolitan Statistical Area (MSA)¹¹ is approximately \$13.8 million annually for active employees and an additional \$444,000 for retirees for Fiscal Year 2014.

Approximately 86 percent of CUMTD’s payroll is paid to employees who live in the Champaign-Urbana region. An additional \$2 million per year (13 percent) is paid to employees that live outside the Metro area.

Figure 9. Payroll by Place of CUMTD Employee Residence



| | Annual Payroll (FY14) | |
|--|-----------------------|-------------|
| Champaign-Urbana Metropolitan Statistical Area (MSA) | \$14,227,689 | 86% |
| Outside Champaign-Urbana MSA | \$2,277,044 | 14% |
| TOTAL | \$16,504,732 | 100% |

Champaign-Urbana MSA includes Champaign, Ford, and Piatt Counties.

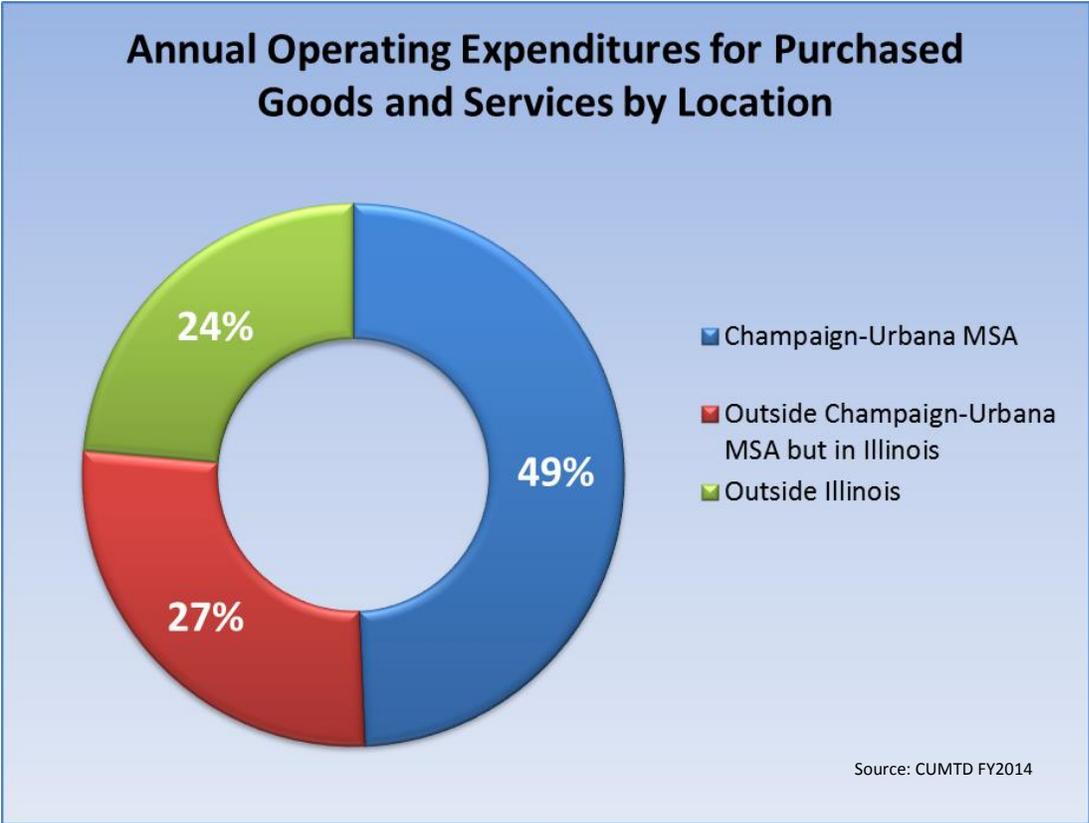
Source: CUMTD; TischlerBise analysis

¹¹ The Champaign-Urbana Metropolitan Statistical Area (MSA) includes the counties of Champaign, Ford, and Piatt.

Operating Expenditures for Purchased Goods and Services (Non-Payroll)

In addition to the economic benefit to the community from jobs at CUMTD, additional economic benefit is generated in the region due to expenditures by CUMTD for operations and capital improvements. In Fiscal Year 2014, CUMTD spent approximately \$27 million on non-payroll expenditures such as the purchase of goods and services to operate the system. Of that amount, approximately \$13 million, or almost 50 percent, was spent within the Champaign-Urbana Metro area at local businesses.

Figure 10. CUMTD (FY2014) Annual Operating Expenditures for Purchased Goods and Services (Non-Payroll) by Location



Annual Operating Expenditures for Purchased Goods and Services (Non-Payroll) (FY14)

| | | |
|--|---------------------|-------------|
| Champaign-Urbana Metropolitan Statistical Area (MSA) | \$13,244,975 | 49% |
| Outside Champaign-Urbana MSA but in Illinois | \$7,274,093 | 27% |
| Outside Illinois | \$6,337,694 | 24% |
| TOTAL | \$26,856,762 | 100% |

Champaign-Urbana MSA includes Champaign, Ford, and Piatt Counties.
 Source: CUMTD; TischlerBise analysis

JOBS CREATED AND SUSTAINED BY CUMTD

JOBS AT CUMTD

CUMTD currently has 350 full-time and part-time employees. **Nearly 90 percent of CUMTD personnel reside in the Champaign-Urbana Metropolitan Statistical Area.**

Figure 11. Current Number of Jobs

| | # of Employees | % |
|--|----------------|-------------|
| Champaign-Urbana Metropolitan Statistical Area (MSA) | 305 | 87% |
| Outside Champaign-Urbana MSA but in Illinois | 45 | 13% |
| TOTAL | 350 | 100% |

Source: CUMTD; TischlerBise analysis

Looking closer within the Metropolitan Statistical Area (MSA)—specifically in the CUMTD service area, a total of 232 active employees reside in Champaign, Urbana, and Savoy comprising 66 percent of total employees. This provides added economic benefit due to expenditures made by local households in the local economy (to be covered in Phase 2 of this study).

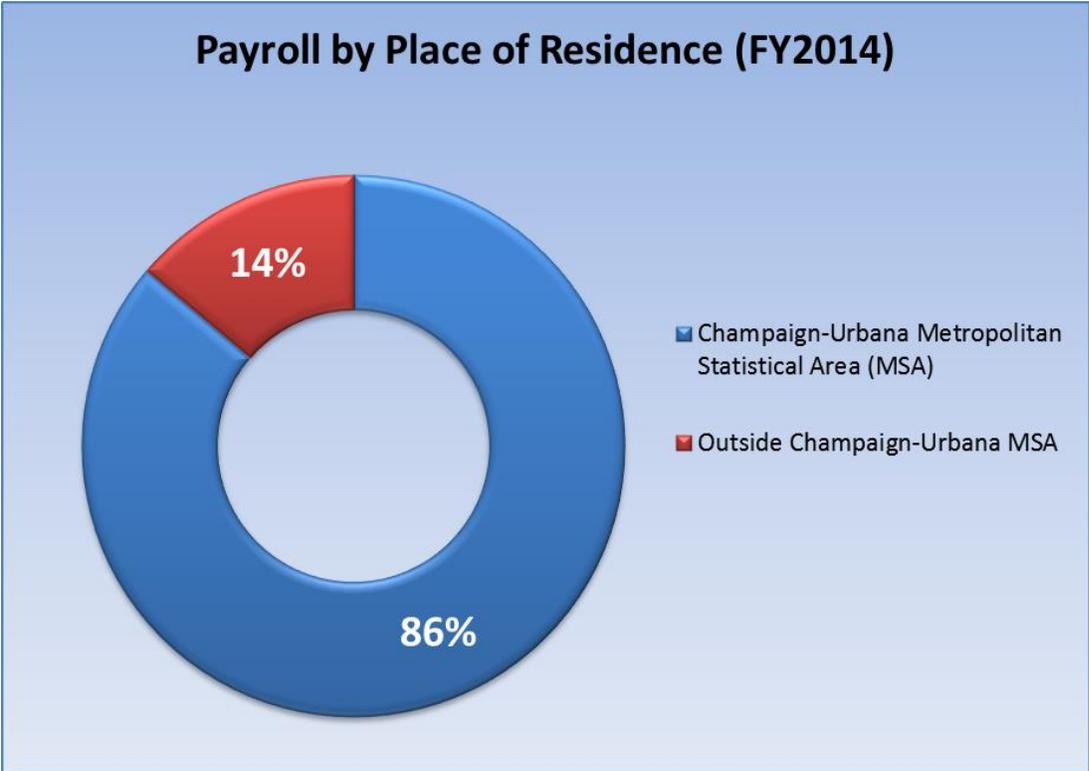
Figure 12. Current Number of Jobs by City of Residence

| City | # of Employees | % |
|---------------------|----------------|-------------|
| Champaign | 130 | 37% |
| Urbana | 90 | 26% |
| Mahomet | 19 | 5% |
| Rantoul | 15 | 4% |
| St. Joseph | 14 | 4% |
| Savoy | 12 | 3% |
| Tolono | 11 | 3% |
| All Others | 59 | 17% |
| TOTAL ACTIVE | 350 | 100% |

Source: CUMTD; TischlerBise analysis

As noted above, income paid to CUMTD employees within the Champaign-Urbana MSA is approximately \$14.2 million annually as of Fiscal Year 2014. **This reflects 86 percent of the labor income paid by CUMTD.** This income adds to the economic benefit in the region, which will be discussed in Phase 2 of the study.

Figure 13. Payroll by Place of CUMTD Employee Residence



| | Annual Payroll (FY14) | |
|--|-----------------------|-------------|
| Champaign-Urbana Metropolitan Statistical Area (MSA) | \$14,227,689 | 86% |
| Outside Champaign-Urbana MSA | \$2,277,044 | 14% |
| TOTAL | \$16,504,732 | 100% |

Champaign-Urbana MSA includes Champaign, Ford, and Piatt Counties.
 Source: CUMTD; TischlerBise analysis

CUMTD is a service organization with the majority of jobs in Operations—which includes both full-time and part-time employment. Almost 75 percent of total jobs are in Operations.

Average salaries are shown below in Figure 14. An average salary for a full-time operations employee, which includes management, supervisors, operators, and clerical staff, is approximately \$54,000 reflecting the opportunities for jobs at a living wage that in turn support local businesses and other jobs that will be further revealed in Phase 2 of the Economic Impact Study.

Figure 14. CUMTD Jobs and Income

| <i>Types of Job</i> | <i>Number of Employees</i> | <i>%</i> | <i>Gross Income (FY14)</i> | <i>Avg. Salary Per Job*</i> |
|-------------------------|----------------------------|-------------|----------------------------|-----------------------------|
| General Administration | 19 | 5% | \$1,269,890 | \$77,200 |
| Illinois Terminal | 13 | 4% | \$375,013 | \$28,800 |
| Maintenance | 58 | 17% | \$2,475,727 | \$42,700 |
| Operations: Full-Time | 161 | 46% | \$9,747,345 | \$53,900 |
| Operations: Part Time | 85 | 24% | \$1,955,047 | \$31,200 |
| Rural Transit Operators | 14 | 4% | \$42,829 | \$20,000 |
| TOTAL | 350 | 100% | \$15,865,851 | \$45,300 |

* Adjusted where applicable to reflect earnings for full-year employment

Source: CUMTD; TischlerBise analysis

JOBS CREATED BY CUMTD PURCHASES

Jobs and Economic Impact from Purchased Goods and Services (Non-Payroll Expenditures)

In addition to the jobs at CUMTD, additional jobs are created in the community from CUMTD's purchase of goods and services from local businesses. TischlerBise obtained accounting information about the types of expenditures and the location of those expenditures. Using the IMPLAN model, an estimate of direct output can be determined for this analysis. IMPLAN is an input-output economic model that tracks the interdependence of producing and consuming sectors of the economy.¹²

CUMTD spends approximately \$27 million on purchased goods and services (non-payroll expenditures) each year. Of that amount, approximately \$12.3 million is spent annually on goods and services from firms located in Champaign County.¹³ These ongoing purchases, in turn, create and sustain jobs in the local economy. Using IMPLAN, the local economic impact of these purchases can be estimated.

Based on this level of local spending and the types of purchases made by CUMTD, it is estimated that an additional 44 jobs are directly supported in Champaign County, generating \$2.04 million in labor income and approximately \$7.2 million in direct annual economic output¹⁴ to the local economy.

Jobs and Economic Impact from Capital Improvement Expenditures

Another area of direct economic impact is from one-time capital expenditures over a given period of time. CUMTD has invested—and has future plans to invest—approximately \$122.5 million in capital improvements within the service area from 2010 to 2020. A ten-year period is examined to capture fluctuations in spending. **(It should be noted that as projections go further into the future (e.g., FY19 and FY 20), there is less certainty regarding projects and funding sources; hence the lack of identified non-local funding in the year 2020.)**

The highest level of expenditure to date was in Fiscal Year 2011 when systemwide upgrades were made to facilities and shelters and hybrid buses were purchased.¹⁵ As shown, the majority of funding for these

¹² The IMPLAN Model is short for "Impacts for Planning," and is developed by Minnesota Implan Group (MIG) (2013, Version 3.1.1001.12). Data is for Champaign County, Illinois, 2013.

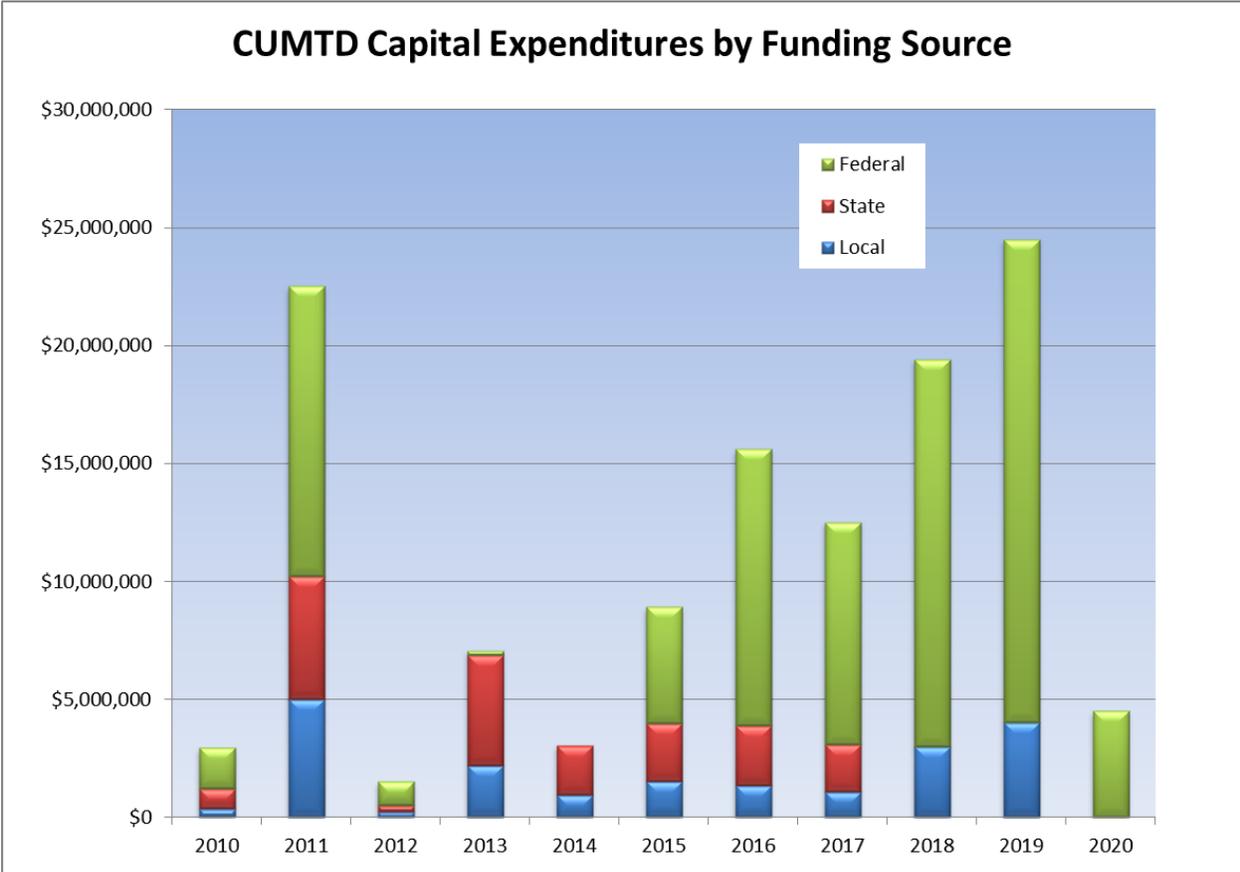
¹³ This figure reflects ongoing, annual expenditures with one-time capital expenditures taken out and analyzed separately in the next section.

¹⁴ Economic output is the value of goods and services generated locally as a result of this spending.

¹⁵ Of the amount shown in FY 2011, approximately \$12 million was from the federal government and was used to purchase hybrid buses.

improvements is from federal and state sources. Past, current, and projected future capital expenditures are shown below in Figure 15.

Figure 15. CUMTD Construction and Capital Expenditures, FY2010 - FY2020



Total 10-year investment—including projected future expenditures—is \$122.5 million. Of that amount, approximately \$60 million has been or is planned to be spent to purchase goods and services from local companies on materials, professional services, construction, and installation. This level of investment creates direct economic impacts, benefiting the region. Using the IMPLAN model, it is estimated that **CUMTD’s \$60 million in local expenditures on construction projects and capital improvements generates 385 direct jobs in the County, resulting in additional labor income of \$25 million.** This direct benefit also creates indirect and induced economic benefits to be analyzed in Phase 2 of this study, which will round out the overall economic impact of CUMTD.

OTHER ECONOMIC IMPACTS

CUMTD provides services that result in cost savings for other entities, namely the University of Illinois and the two local school districts. It is beyond the scope of this assignment¹⁶ to identify cost savings to the University given the integrated nature of the CUMTD system with the University and the challenge in identifying truly comparable situations elsewhere. However, it *is* feasible to estimate the cost savings to the local school districts.

CUMTD provides transportation to middle and high school students who attend Champaign Unit 4 School District and Urbana School District #116 for a contract price negotiated between CUMTD and each school district. The cost per student for the CUMTD contract to each school district for school year 2014-2015 is shown below:

Figure 16. CUMTD Contract Cost per Student for Champaign and Urbana School Districts

| <i>School Districts Served by CUMTD</i> | <i>2014-15 CUMTD Contract \$</i> | <i>MS/HS Students (Grades 6-12)^</i> | <i>\$/student</i> |
|---|--------------------------------------|--|-------------------|
| Champaign Unit 4 School District | \$318,825 | 4,750 | \$67 |
| Urbana School District #116 | \$163,957 | 2,070 | \$79 |
| Totals/Weighted Average | \$482,782 | 6,820 | \$71 |

[^]Champaign enrollment from: Illinois State Board of Education 2014-2015; Urbana specified in CUMTD contract.

In addition to the contract cost paid to CUMTD, each district has its own transportation program to transport elementary school students. Each school district's total transportation budget (elementary transportation and the CUMTD contract cost) is shown below along with total district enrollment and the resulting average cost per student.

¹⁶ The limitation here could be the difficulty in estimating a cost for an alternative transit scenario that separates the University from the City.

Figure 17. Champaign and Urbana School District Transportation Costs

| <i>School Districts Served by CUMTD</i> | <i>District Transportation Budget FY15*</i> | <i>Total Enrollment[^]</i> | <i>Cost per Student</i> |
|---|---|-------------------------------------|-------------------------|
| Champaign Unit 4 School District | \$5,453,000 | 9,830 | \$555 |
| Urbana School District #116 | \$1,935,250 | 4,330 | \$447 |
| Totals/Weighted Average | \$7,388,250 | 14,160 | \$522 |

* School District FY15 Budgets (rounded)

[^]Illinois State Board of Education 2014-2015 (rounded) [PK-12 Enrollment]

As shown above, approximately 50 percent of Champaign and Urbana school district enrollment is served by CUMTD (6,820 out of 14,160) at a cost of only 7 percent (\$482,782 out of \$7.4 million) of total Transportation budgets.

TischlerBise investigated other comparable school districts for transportation operating costs to derive an average cost per student in districts without access to public transit as in Champaign-Urbana. As shown below, weighted average costs range from \$620 to \$640 per student. (The low end includes Bloomington Public Schools District, with transportation service expenditures indicated as privately contracted.) We show weighted average costs with and without the Bloomington District because their cost per student is so much lower than the others. This provides a range from a lower cost per student (with Bloomington) to a higher cost per student (without Bloomington).

Figure 18. Sample of Illinois Large School District Transportation Costs

| <i>Sample Large School Districts</i> | <i>District Transportation Budget FY15*</i> | <i>Total Enrollment[^]</i> | <i>Cost per Student</i> |
|--|---|-------------------------------------|-------------------------|
| McLean County Unit District No. 5 (Normal) | \$9,200,000 | 13,560 | \$678 |
| Bloomington Public Schools District 87** | \$2,640,000 | 5,420 | \$487 |
| Springfield School District 186 | \$9,590,000 | 15,040 | \$638 |
| Decatur School District 61 | \$5,773,000 | 9,130 | \$632 |
| Danville School District 118 | \$3,295,000 | 5,990 | \$550 |
| Totals/Weighted Average (w/Bloomington) | \$30,498,000 | 49,140 | \$621 |
| Totals/Weighted Average (w/o Bloomington) | \$27,858,000 | 43,720 | \$637 |

* School District FY15 Budgets

[^]Illinois State Board of Education 2014-2015 (rounded) [PK-12 Enrollment]

** Costs are for contract services

Given the above findings, the annual operating cost savings to the Champaign and Urbana school districts from using CUMTD's transportation can be estimated at approximately **\$100 per student**.¹⁷

If the districts were not using CUMTD, this would translate to **additional annual costs for each district** as follows:

- **\$983,000 for Champaign Unit 4 School District;** and
- **\$433,000 for Urbana School District #116.**

Therefore, CUMTD's contracted service for the local school districts saves the school districts and its taxpayers an estimated total of over \$1.4 million per year in transportation costs. In addition, CUMTD operations are supported by non-local funding, which augments the level of subsidy provided to the school districts served by CUMTD.

¹⁷ The cost saving is calculated as the difference between \$621 average cost per student for comparable districts minus \$522 average cost per student for Champaign and Urbana School Districts, or \$100 (rounded) per student.

SUMMARY OF DIRECT ANNUAL ECONOMIC IMPACTS

On an annual basis, CUMTD generates \$34.8 million in annual direct economic benefit to the region and directly supports 432 jobs.

Figure 19. Summary of Annual Direct Economic Impacts

| | <i>Economic Benefit (\$)</i> | <i>Employment (Jobs)</i> |
|---|------------------------------|--------------------------|
| CUMTD DIRECT LOCAL ANNUAL ECONOMIC IMPACTS | | |
| CUMTD Employment | \$16,500,000 | 350 Jobs |
| Purchase of Local Goods and Services | \$12,300,000 | 44 Jobs |
| Average Annual Local Capital Expenditures* | \$6,000,000 | 38 Jobs |
| ANNUAL DIRECT ECONOMIC BENEFIT | \$34,800,000 | 432 Jobs |

* 10-year total expenditures are annualized.

Cumulatively over a ten-year period—to account for ongoing and longer-term capital improvement projects, **CUMTD will generate almost \$60 million in additional direct local public investment and create an additional 385 local jobs.** In addition, future CUMTD capital projects are likely to produce an additional \$40 to \$60 million in direct private investment, which in turn will create additional economic impacts in the community.

NEXT STEPS

As noted elsewhere, direct economic impacts are only part of the economic impact story with indirect and induced economic benefits also important to convey. The Phase 2 analysis may include but not be limited to:

- A. Indirect and induced economic benefits from local employment
- B. Indirect and induced economic benefits from local purchase of goods and services and capital projects
- C. Comparison of Vehicle Miles of Travel due to CUMTD/transit availability
- D. Estimate of reduced road maintenance costs as well as the level of outside funding secured by CUMTD to address impacts on local roads
- E. Capacity for redevelopment due to transit access
- F. Impacts as a result of not having the university contract
- G. Potential increase in school district costs if CUMTD bus service were not available

APPENDIX

IMPLAN DEFINITIONS

This section provides definitions for IMPLAN modeling terms, as provided by IMPLAN Corporation.¹⁸

Direct Effect

The set of expenditures applied to the predictive model (i.e., I/O multipliers) for impact analysis. It is a series (or single) of production changes or expenditures made by producers/consumers as a result of an activity or policy. These initial changes are determined by an analyst to be a result of this activity or policy. Applying these initial changes to the multipliers in an IMPLAN model will then display how the region will respond, economically to these initial changes.

Indirect Effect

The impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money leaks from the local economy, either through imports or by payments to value added. The impacts are calculated by applying Direct Effects to the Type I Multipliers.

Induced Effect

The response by an economy to an initial change (direct effect) that occurs through re-spending of income received by a component of value added. IMPLAN's default multiplier recognizes that labor income (employee compensation and proprietor income components of value added) is not a leakage to the regional economy. This money is recirculated through the household spending patterns causing further local economic activity.

Input- Output (I/O) Analysis

A type of applied economic analysis that tracks the interdependence among various producing and consuming sectors of an economy. More particularly, it measures the relationship between a given set of demands for final goods and services and the inputs required to satisfy those demands. (Bureau of Economic Analysis)

Labor Income

All forms of employment income, including Employee Compensation (wages and benefits) and Proprietor Income.

¹⁸ Minnesota Implan Group (MIG), 2013.

Output

Output represents the value of industry production. In IMPLAN these are annual production estimates for the year of the data set and are in producer prices. For manufacturers this would be sales plus/minus change in inventory. For service sectors production = sales. For Retail and wholesale trade, output = gross margin and not gross sales.

Value Added

The difference between an industry's, or an establishment's, total output and the cost of its intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). Value added consists of compensation of employees, taxes on production and imports less subsidies (formerly indirect business taxes and nontax payments), and gross operating surplus (formerly "other value added") (BEA).