

PERFORMANCE MEASUREMENTS REPORT

Illinois Statewide Public Transportation Plan

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PERFORMANCE MEASURES REPORT

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I. INTRODUCTION

Systematic performance measurement can provide objective assessments of current conditions, including successes, deficiencies, challenges, and trends. The most important use is the ability to compare performance over time by learning about the specific nuances of each agency and being able to identify true trends. Performance measures should reflect a broad range of relevant issues, yet be detailed enough to accurately identify areas needing improvement.

Any performance measures developed should be relevant, representative and related to specific policy objectives. Measures should be regularly monitored. The best measures are those that are relevant to agencies as well as well as the state and have been developed with a broad base of stakeholder support. The use of performance measures should be to guide improvement rather than used in a punitive manner.

For all fixed route figures in this report, National Transit Database (NTD) data is used from FY 2015, the last year of complete data provided to the NTD. Demand response figures are from FY 2016 and are culled from paper forms submitted to IDOT as part of these agencies' year end reporting.

II.PERFORMANCE MEASURE METHODOLOGY

A. Agency Groupings¹

All demand response agencies were first grouped together. However, since demand response agencies in the state do not all have the same service characteristics, the Statewide Public Transportation Plan steering committee suggested dividing the agencies in some manner in order to better compare their performance. The committee proposed the following divisions:

- · Number of Counties Served
- Population Density
- · Agency Type
- Average Miles per Trip

¹ SMART (Sangamon and Menard Counties) and Tri-County Transit (Jersey, Calhoun and Greene County) are too new to evaluate

After consultation with the interested parties, the average mile per trip measure was used. The agencies were divided to below and above this average (which is nine miles when rounded up). Those agencies above nine miles average trip length are labeled Long Trippers and those below average Short Trippers.

Twenty-two (22) Long Tripper agencies operate trips that average greater than nine miles:

- 1. Bond County Senior Center
- 2. Boone County Council on Aging
- 3. Bureau-Putnam Area Rural Transit
- 4. Central Illinois Public Transportation
- 5. CRIS Rural MTD
- 6. Dial A Ride
- 7. Fulton County
- 8. Henry County Public Transit
- 9. Jackson County MTD
- 10. Jo Daviess Transit
- 11. Lee-Ogle Transportation System
- 12. Logan-Mason County Public Transportation
- 13. McDonough County Public Transportation
- 14. Piatt County Public Transportation
- 15. Pretzel City Area Transit
- 16. RIDES
- 17. SHOWBUS
- 18. South Central Transit
- 19. TransVAC (Voluntary Action Center)
- 20. Warren Achievement Center
- 21. West Central MTD
- 22. Whiteside County Public Transportation

These agencies are a mix of multi-county agencies and single county agencies. Many of these agencies make many weekly scheduled demand response trips to urbanized areas outside their service areas.

Thirteen (13) Short Tripper agencies operate trips that average less than nine miles:

- 1. Carroll County Transit
- 2. Champaign County Rural Transportation System
- 3. CountyLink
- 4. Grundy Transit System
- 5. Hancock County Public Transportation
- 6. Kendall Area Transit
- 7. Macoupin County Public Transportation
- 8. Marshall-Stark Area Transportation
- 9. Monroe Randolph Transit District
- 10. RIM Rural Transit
- 11. Shawnee MTD
- 12. Stateline Mass Transit District
- 13. WE Care

Other than Shawnee MTD, none of these agencies serve more than two counties (which is logical, considering their average trip length is less than nine miles). They also generally have smaller service areas than the Long Trippers.

The five largest downstate cities have annual ridership in the range of 1.8 to 3.4 million and operating budgets of over \$7.5 million (and up to almost \$17.5 million). These will be classified as large cities. Medium cities are the next two largest agencies that have annual ridership in the range of 900,000 to 1.5 million and operating budgets of around \$5 million. Three systems stand out as especially small; in fact the cities they serve are not large enough to be classified as urban. Annual ridership ranges from 153,000 to almost 640,000 and the annual operating budgets range from just over \$1 million to just over \$2.5 million. These will be classified as small cities.

Suburban refers to the two agencies that operate in suburban St. Louis (Pace and Metra are part of the RTA service area are therefore not part of this study). These agencies are both in the same size range as the largest downstate systems in the state, carrying 2.8 million to almost 6.5 million riders and annual budgets of \$17 million to over \$56 million (the highest for a downstate system, by a wide margin).

University refers to the two systems which are primarily focused on carrying university students, with most of their funding coming from student fees, which go toward providing system-wide passes to all students. However, in all other ways, these systems are not comparable as their scale is completely different. Note that Huskie Lines and Saluki Express, which serve NIU and SIU students, respectively, are not included as they do not receive any money from the state.

Peers were picked using the Florida Transit Information System Urban iNTD peer choice data module². This module is informed by TCRP Report 141 "A Methodology for Performance Measurement and Peer Comparison in the Public Transportation Industry." Peers were chosen that operate in similar geographies, have a similar demographic profile, and serve a similar sized population as their Illinois counterparts.

Five (5) Large City agencies operate in the state:

- 1. Connect Transit (Bloomington-Normal)
- 2. CityLink (Peoria)
- 3. Rockford MTD
- 4. MetroLink (Moline-Rock Island)
- 5. Springfield MTD

MetroLink is the largest of these agencies. Peers of these agencies are METS (Evansville, IN), Fort Wayne (IN), Transpo (South Bend, IN), TARTA (Toledo, IN), and The E (Erie, PA).

Two (2) Medium City agencies operate in the state:

- 1. Decatur Public Transportation System
- 2. River Valley Metro (Kankakee)

Peers of these agencies are Bay Metro Transit (Bay City, MI), STARS (Saginaw, MI), City of Kenosha (WI), The Bus (Racine, WI), Sioux City Transit (Sioux City, IA), Rochester Public Transit (MN), Eau Claire Transit (WI), and MTU (La Crosse, WI).

Three (3) Small City agencies operate in the state:

- 1. Danville Mass Transit
- 2. Galesburg Transit
- 3. Quincy Transit

Peers of these agencies are Josephine County (Grants Pass, OR), Valley Transit (Walla Walla, WA), JETS (Jonesboro, AR), El Dorado County Transit (CA), St Mary's County Transit (MD), San Marcos Transit (TX) and Mankato Transit System (MN).

Two (2) Suburban agencies operate in the state:

- 1. MCT (Madison County)
- 2. St. Clair County Transit

² http://www.ftis.org/iNTD-Urban/tcrp_peers.aspx

Peers of these agencies are PCPT (Port Ritchey, FL), WRTA (Worcester, MA), TANK (Kentucky suburbs of Cincinnati, OH), METRO (OH), The Rapid (Grand Rapids, MD), LANTA (Allentown, PA), Broward County Transit (FL) and ART (Arlington, VA).

Two (2) University agencies operate in the state:

- 1. CUMTD (Champaign-Urbana)
- 2. Go West (McDonough County)

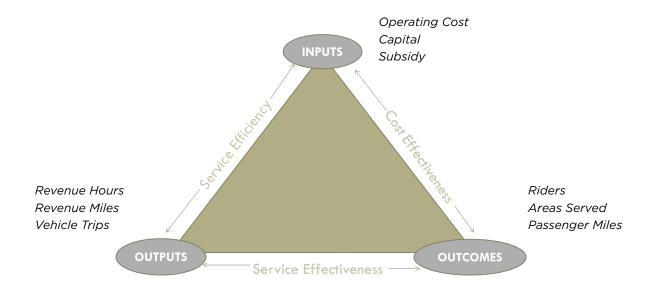
Peers of these agencies are RTS (Gainesville, FL), CityBus (Lafayette, IN), CATA (State College, PA), Star Metro (Tallahassee, FL), The Ride (Ann Arbor, MI), AppalCart (Boone, NC), City Bus (Stevens Point, WI), and the MET (Waterloo, IA).

B. Performance Measure Methodologies

Each of these groups was evaluated using two different performance measure constructs. The two types of measures reflect different aspects of service.

E<u><u>Miciency Measures</u>: Efficiency measures are useful for assessing management efficiency and the effectiveness of service delivery. They are frequently the types of measures that an agency will use to track their own performance over time. Three efficiency measures were selected to fully depict transit operations. These measures represent dimensions of cost efficiency, cost effectiveness, and service effectiveness. Figure 1 depicts the philosophy behind the efficiency measures.</u>

Figure 1: Efficiency Measures Concept



The efficiency measures used for this report are:

- Operating Cost per Revenue Hour (Service Efficiency)
- Trips per Revenue Hour (Service Effectiveness)
- Operating Cost per Trip (Cost Effectiveness)

Availability Measures: Availability measures is an entirely different way of measurement. Rather than looking at measures that reflect management decisions, availability measures assess and compare the amount of service provided in an area on a per capita basis. This often produces enlightening statistics when comparing across regions or comparing peer agencies elsewhere in the country. In some ways, availability measures can be viewed as a measure of policy in which the level of resources for transit in a community is reflected.

The availability measures used for this report are:

- Revenue Hours per Capita (Service Availability)
- Trips per Capita (Market Penetration)

Solvency Measures: Solvency measures refer to how sustainable an agency's finances and assets will be in the future. This measure is particularly useful for gauging how well current funding matches up to an agency's needs. Funding includes both fares and government funding. Capital assets include funding for vehicles, facilities, and fixed guideways. In order to smooth out peaks and valleys in capital funding, three years of funding (2014-2016) will be averaged for the investment measure.

The solvency measures used for this report are:

- Fare Revenue Shortfall per Passenger Trip (Subsidy)
- Farebox Recovery Ratio (Share)
- Capital Funding per Capita (Investment)

These measures will only be used for fixed route agencies.

III. DEMAND RESPONSE PERFORMANCE

A. Current Performance³

Every demand response operator is different because they face unique geographies, operating environments, funding situations, political support, and populations. Comparisons should therefore only be made between "like" services. Grouping Illinois demand response providers into Short Trippers (average revenue trip length less than nine miles) and Long Trippers (average revenue trip length less than nine miles) is an important initial step. Knowing each transit provider well is essential for appropriate interpretation of comparative information.

Regardless of caveats to the use of comparative data on transit providers, there is often value to looking at information about agencies in this way. Performance measures provide a way to better understand the transit agencies and allow for important comparisons between agencies within each group.

The remainder of this report focuses on a description of each group. Then, the availability measures for each transit agency in that group are presented. Finally, a table of efficiency measures for each agency is shown. In these tables, numbers bolded in **red** are the highest and those bolded in **purple** are the lowest.

As part of this analysis, the standard deviation method employed in the annual transit agency compliance reporting⁴ was used. Standard deviation was calculated for each metric to see how the agency is performing in comparison to other agencies. Any agency below one negative standard deviation (abbreviated in the charts below as "STD") is at the lowest end compared to other agencies and above one standard positive deviation is at the highest end.

Figures 2 and 3 show that the ridership each agency attracts generally tracks with the amount of operating money it spends, which lends credence to the old adage that you have to spend money to make "money" (in this case, attract riders).

One exception to the Long Trippers' pattern is West Central MTD, which spends almost the same amount of money as Central Illinois Public Transportation, but carries 30% more riders. SHOWBUS also shows a high operating expense per rider. On the other hand, both the Warren Achievement Center and LOTS do more with less, and carry more riders than the pattern would predict.

Providing shorter trips gives the Short Trippers less "bang for the buck" than the Long Trippers. Unlike the latter group, operating budgets of the Short Trippers tend to trend below ridership. North Central Area Transit (NCAT)—which includes a small "local" flex route system in Ottawa that provides a many short trips—and Macoupin County Public Transportation noticeably defy this pattern.

³ Source: Information provided to IDOT by the agencies for FY 2016

⁴ Conducted by RLS & Associates for IDOT

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Figure 2: Long Tripper Operating Budget versus Ridership

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Figure 3: Short Tripper Operating Budget versus Ridership

B. Efficiency Measures

Table 1: Long Tripper Efficiency Measures

| | Cost | Service | Service |
|------------------------------------------|------------------|--------------------|----------------------|
| | Effectiveness | Efficiency | Effectiveness |
| Agency | Cost per Trip | Cost per Rev Hr | Riders per Rev Hr |
| Bond County Senior Center | \$17.47 | \$ 69.92 | 4.00 |
| Boone County Council on Aging | \$12.07 | • | 4.03 |
| Bureau-Putnam Area Rural Transit | \$17.84 | \$ 47.30 | 2.65 |
| Carroll County Transit | \$23.80 | \$ 32.32 | 1.36 |
| Central Illinois Public Transportation | \$21.08 | \$ 43.74 | 2.07 |
| CRIS Rural MTD | \$18.19 | • | 4.40 |
| Dial A Ride | \$13.44 | \$ 56.85 | 3.92 |
| Fulton County | \$11.09 | \$ 85.16 | 7.68 |
| Henry County Public Transit | \$15.04 | \$ 49.61 | 3.30 |
| Jackson County MTD | \$20.98 | \$ 39.72 | 1.89 |
| lo Daviess Transit | \$18.19 | \$ 81.43 | 4.48 |
| Lee-Ogle Transportation System | \$9.77 | \$ 35.92 | 3.05 |
| Logan-Mason County Public Transportation | \$37.30 | \$ 35.00 | 2.04 |
| Piatt County Public Transportation | \$20.71 | \$ 35.17 | 1.70 |
| Pretzel City Area Transit | \$12.22 | \$ 28.30 | 2.32 |
| RIDES | \$14.59 | \$ 50.27 | 3.45 |
| SHOWBUS | \$19.53 | \$ 53.89 | 2.76 |
| South Central Transit | \$15.23 | \$ 74.19 | 4.87 |
| TransVAC (Voluntary Action Center) | \$18.32 | \$ 52.00 | 2.84 |
| Warren Achievement Center | \$9.30 | \$ 36.76 | 3.95 |
| West Central MTD | \$14.89 | \$ 38.14 | 2.56 |
| Whiteside County Public Transportation | \$17.73 | \$ 55.64 | 3.14 |

Table 2: Short Tripper Efficiency Measures

| | Cost | Service | Service |
|----------------------------------------------|---------------|------------|---------------|
| | Effectiveness | Efficiency | Effectiveness |
| | | | |
| | | Cost per | Riders per |
| Agency | Cost per Trip | Rev Hr | Rev Hr |
| Champaign County Rural Transportation System | \$27.52 | \$ 35.29 | 1.28 |
| CountyLink | \$41.46 | \$ 48.80 | 1.18 |
| Grundy Transit System | \$25.25 | \$ 47.81 | 1.89 |
| Hancock County Public Transportation | \$15.07 | \$ 27.54 | 1.83 |
| Kendall Area Transit | \$40.04 | \$ 68.35 | 1.71 |
| Macoupin County Public Transportation | \$18.69 | \$ 31.32 | 1.68 |
| Marshall-Stark Transportation | \$35.86 | \$ 36.27 | 1.01 |
| Monroe Randolph Transit District | \$61.83 | \$ 99.72 | 1.61 |
| North Central Area Transit | \$15.83 | \$ 34.58 | 2.18 |
| RIM Rural Transit | \$37.43 | \$ 83.03 | 2.22 |
| Shawnee MTD | \$23.48 | \$ 47.08 | 2.01 |
| WE Care | \$21.70 | \$ 40.04 | 1.85 |

Among Long Trippers, Warren Achievement Center provides the cheapest trips in Illinois; Pretzel City Area Transit costs the least per hour; and Fulton County has the most riders per hour (see Table 1). Among Short Trippers, Hancock County Public Transportation provides the cheapest trips in Illinois and costs the least per hour; and RIM Rural Transit has the most trips per hour (see Table 2). Monroe Randolph Transit District's costs are high. The Short Tripper agencies on the higher range of trips per revenue hour would be at the bottom of the range for the Long Tripper agencies.

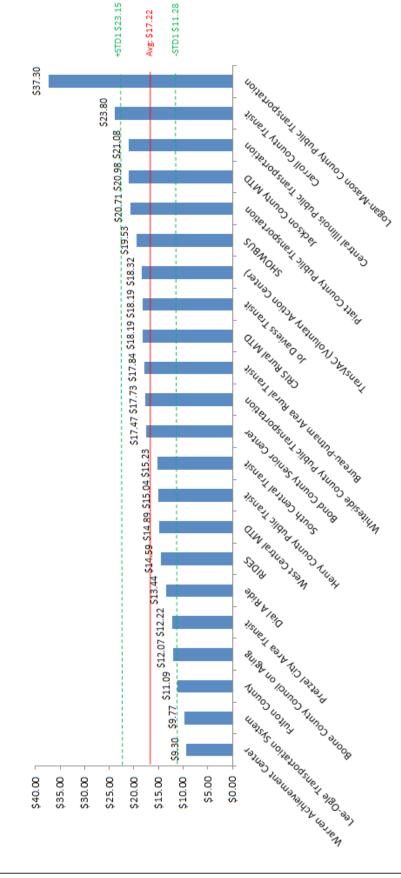
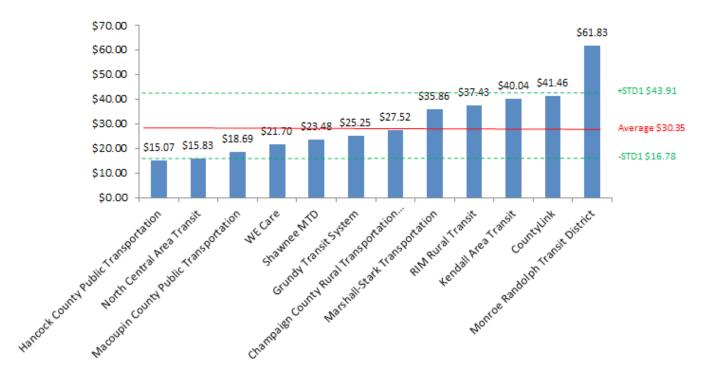


Figure 4: Long Tripper Cost Effectiveness Measures





Excellent Long Tripper performers are Warren Achievement Center and LOTS. The poorest performing Long Trippers are Carroll County Transit and Logan-Mason County Public Transportation (see Figure 4). NCAT and Hancock County, among Short Trippers, are excellent performers (see Figure 5). The poor performer in this group is Monroe Randolph Transit District, which had to shut down for a period of time in 2016 due to a suspension in state funding.

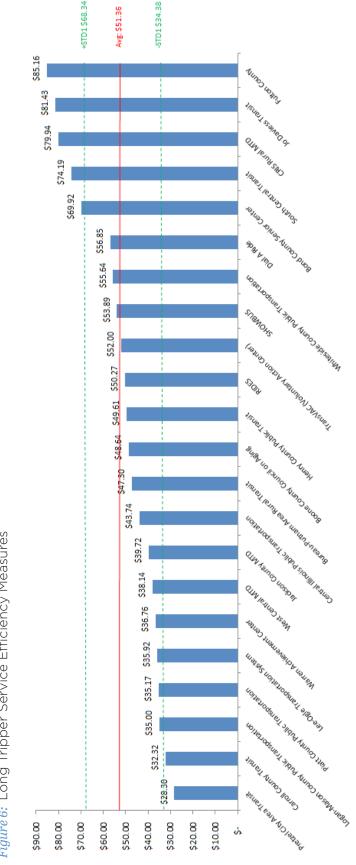


Figure 6: Long Tripper Service Efficiency Measures

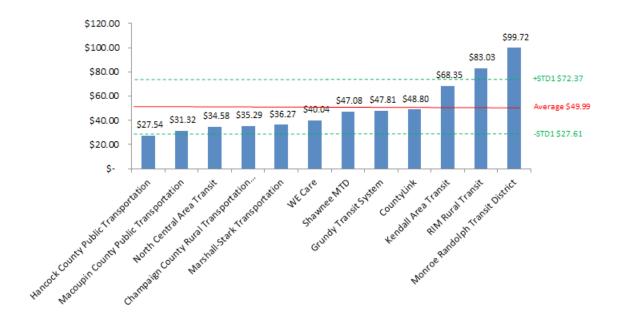
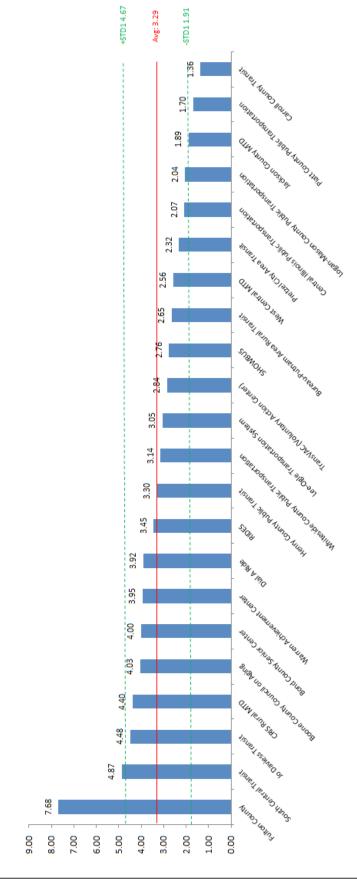


Figure 7: Short Tripper Service Efficiency Measures

Performers in this measurement ranking highest are Pretzel City Area Transit and Carroll County Transit. There are many more poor performers in this measure than the cost effectiveness measures; these poor performers include Bond County Senior Center, South Central Transit, CRIS Rural MTD, Jo Daviess Transit, and Fulton County (see Figure 6). Fulton County is an interesting case. Although Fulton County rates highly in the cost per ride measure (likely due to being highly effective in combining rides), their rides tend to last a long time compared to other agencies, which leads to a high cost per hour.

For the Short Trippers, the extremely high cost per hour (relative to other Small Tripper agencies) of RIM Rural Transit and the Monroe Randolph Transit District, skew the numbers somewhat for this measurement (see Figure 7). The latter two agencies rank lower compared to their peers; there are no especially high ranked agencies.

Figure 8: Long Tripper Service Effectiveness Measures 20



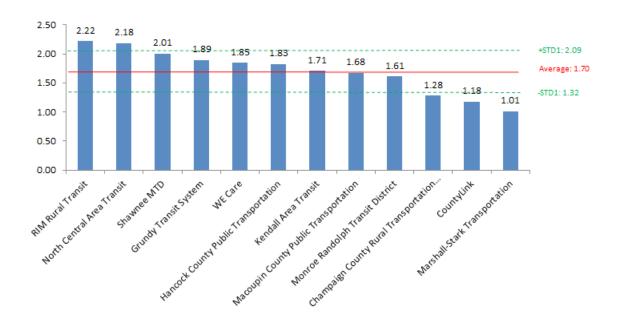


Figure 9: Short Tripper Service Effectiveness Measures

The highest ranking Long Tripper agencies in this measurement are Fulton County and South Central Transit (see Figure 8). Carroll County Transit and Piatt County Public Transportation both rank lowest in this category.

For Short Trippers, this measurement shows the closest grouping of all of the measurements, with a standard deviation of just 0.38 (see Figure 9). NCAT and RIM Rural Transit are excellent performers in this measurement. There are three lower ranked performers, but not excessively so: Marshall-Stark Transportation, CountyLink, and Champaign County Rural Transportation barely fall below one standard deviation.

C. Availability Measures

Table 3: Long Tripper Availability Measures

| | Market | Service |
|------------------------------------------|-------------|--------------|
| | Penetration | Availability |
| | Riders per | Rev. Hrs. |
| Agency | Capita | per capita |
| Bond County Senior Center | 2.33 | 0.58 |
| Boone County Council on Aging | 0.19 | 0.05 |
| Bureau-Putnam Area Rural Transit | 1.61 | 0.61 |
| Carroll County Transit | 0.72 | 0.53 |
| Central Illinois Public Transportation | 0.62 | 0.30 |
| CRIS Rural MTD | 1.32 | 0.23 |
| Dial A Ride | 0.71 | 0.28 |
| Fulton County | 0.84 | 0.11 |
| Henry County Public Transit | 0.90 | 0.27 |
| Jackson County MTD | 0.89 | 0.47 |
| Jo Daviess Transit | 1.90 | 0.43 |
| Lee-Ogle Transportation System | 1.06 | 0.41 |
| Logan-Mason County Public Transportation | 0.44 | 0.18 |
| Piatt County Public Transportation | 2.11 | 1.24 |
| Pretzel City Area Transit | 1.82 | 0.78 |
| RIDES | 2.17 | 0.63 |
| SHOWBUS | 0.89 | 0.32 |
| South Central Transit | 2.84 | 0.58 |
| TransVAC (Voluntary Action Center) | 0.36 | 0.13 |
| Warren Achievement Center | 3.22 | 0.82 |
| West Central MTD | 1.72 | 0.67 |
| Whiteside County Public Transportation | 0.80 | 0.25 |

Table 4: Short Tripper Availability Measures

| | | Service |
|----------------------------------------------|-------------|--------------|
| | Penetration | Availability |
| | | |
| | Riders per | Rev. Hrs. |
| Agency | Capita | per capita |
| Champaign County Rural Transportation System | 0.37 | 0.29 |
| CountyLink | 0.23 | 0.20 |
| Grundy Transit System | 0.33 | 0.17 |
| Hancock County Public Transportation | 0.73 | 0.40 |
| Kendall Area Transit | 0.19 | 0.11 |
| Macoupin County Public Transportation | 1.40 | 0.83 |
| Marshall-Stark Transportation | 0.33 | 0.33 |
| Monroe Randolph Transit District | 0.12 | 0.08 |
| North Central Area Transit | 0.54 | 0.25 |
| RIM Rural Transit | 0.23 | 0.10 |
| Shawnee MTD | 2.63 | 1.31 |
| WE Care | 0.44 | 0.24 |

Warren Achievement Center has the most riders per capita among Long Trippers in Illinois and Boone County Council on Aging, the least. Piatt County Public Transportation provides the most hours per capita and Fulton County provides the comparatively worst availability of all Long Trippers (see Table 3).

Shawnee MTD tops both the service penetration and service availability measures, despite having the largest service area of all their peer agencies (see Table 4). Monroe Randolph Transit District gets the lowest marks for these two measures because they had to suspend operations for part of 2016.

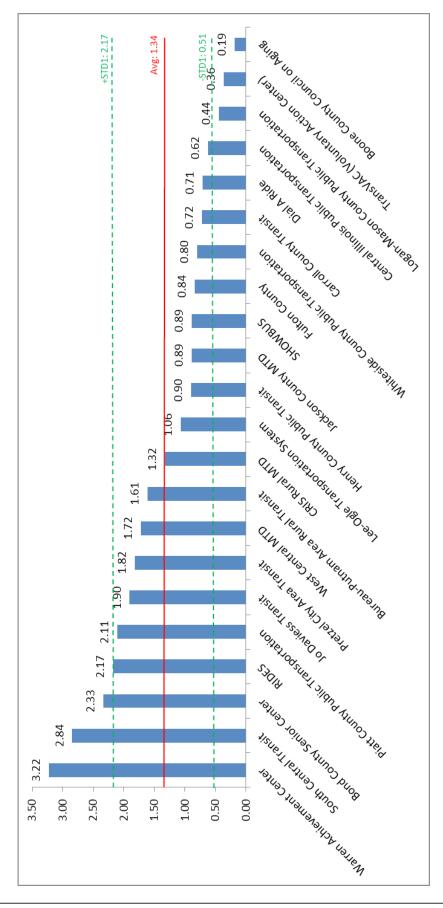


Figure 10: Long Tripper Market Penetration Measures

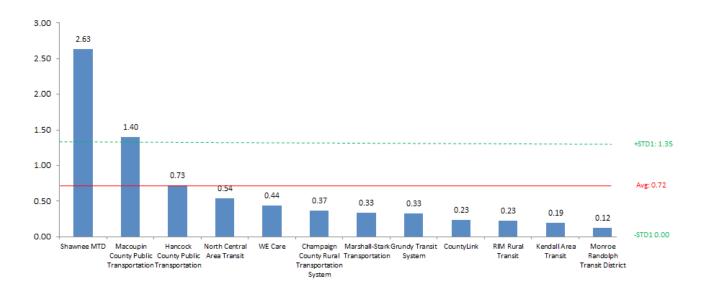


Figure 11: Short Tripper Market Penetration Measures

More agencies rank at the top of the range for Long Trippers than the bottom. SHOWBUS, Warren Achievement Center, South Central Transit, and Bond County Senior Center all rank highly for service penetration (see Figure 10). On the flipside, Boone County Council on Aging, TransVAC and Logan-Mason County Public Transportation rank lowest in this measure.

Shawnee MTD skews the numbers in this measure for Long Trippers, pushing the lower bound of the standard deviation to zero. Shawnee MTD (and Macoupin County, to a lesser extent) combines extensive local zone based service along with many longer intercounty routes. They have more intermediate alightings than other agencies (see Figure 11). These types of intercounty routes generally pick up all of their riders at various towns along the route and then drop all of them off at the end (generally a larger urban center). Kendall Area Transit and RIM Rural Transit suffer from the fact they operate in highly urbanized areas while Monroe Randolph Transit District has relatively miniscule market penetration.

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Figure 12: Long Tripper Service Availability Measures

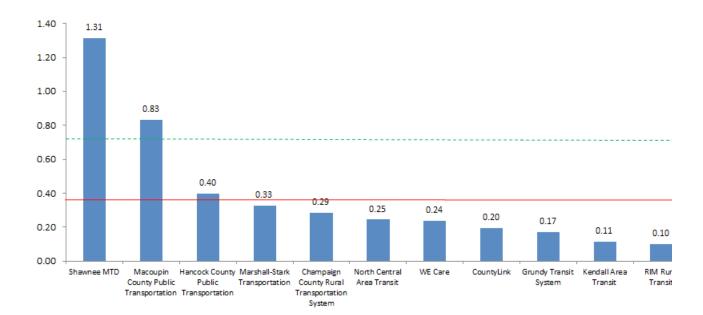


Figure 13: Short Tripper Service Availability Measures

An equal number of agencies are outside the range of one standard deviation (three), with Piatt County, Pretzel City Area Transit and Warren Achievement Center at the top of the range, and TransVAC, Boone County, and Fulton County bringing up the rear (see Figure 12). The same situation arises when we look at service availability. Shawnee's 1.31 service hours per capita far outweighs their peers, driving down the lower range of one standard deviation to 0 (see Figure 13). The service hours per capita measure closely tracks with the trips per capita measure.

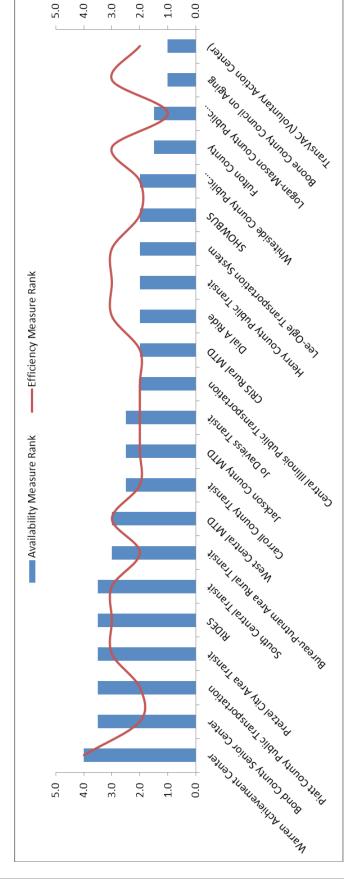


Figure 14: Long Tripper Availability Measures versus Efficiency Measures

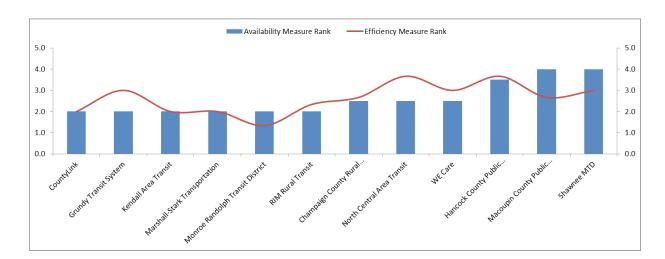


Figure 15: Short Tripper Availability Measures versus Efficiency Measures

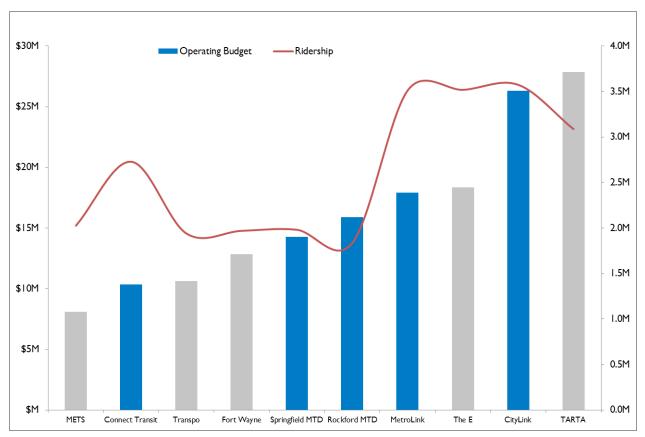
The Long Trippers tend to have more of a deviation between availability and efficiency than short trippers do (see Figures 14 and 15). The greatest deviation comes from those agencies at the lower end of the scale (Fulton County, Boone County Council on Aging and TransVAC) who are quite efficient, but at the cost of making their service less available.

IV. DEMAND RESPONSE PERFORMANCE

A. Current Performance⁵

Figure 16 shows that of the large city agencies, Springfield has the smallest gap between the operating budget and ridership, with Rockford showing a negative relationship between ridership and operating. Half of the Illinois medium city agencies compare quite favorably to their peers; in fact, Decatur has the second highest ridership of all of these agencies, despite being having one of the lowest operating budgets (see Figure 17). River Valley Metro's budget suffers from some of the express routes they operate into the Chicago MSA (especially the route to Midway) which carry few riders considering the miles travelled.





⁵ Source: Information provided to IDOT by the agencies for FY 2015

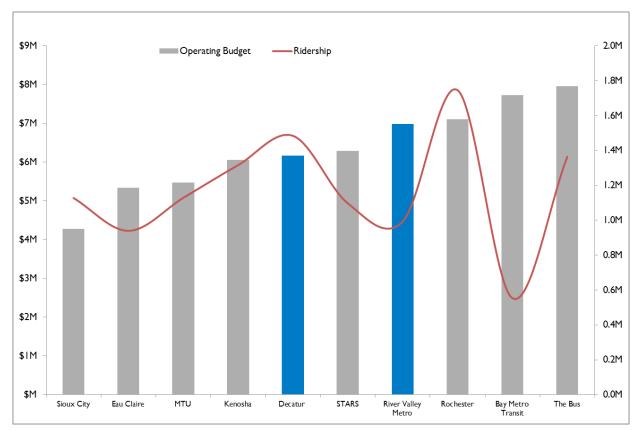


Figure 17: Medium City System Operating Budget versus Ridership

Unlike large city and medium city systems in Illinois, the small city systems tend to have the lowest operating budgets and ridership of their peers in other states. However, the amount they spend, compared to the amount of ridership they attract, is not out of line with their peers, although Mankato (on the high end), and El Dorado Transit (on the low end) are outliers here (see Figure 18).

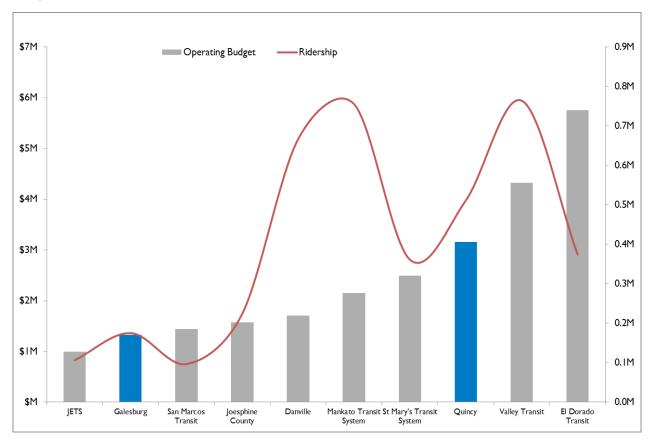


Figure 18: Small City System Operating Budget versus Ridership

The numbers for St Clair County⁶ (see Figure 19) are skewed by the fact it is the only one of these types of systems that funds a light rail system. The systems that have similar operating budgets as MCT (TANK and WRTA), have similar ridership totals, showing that this system compares favorably in its ratio of budget to ridership (especially considering that WRTA operates in Worcester, MA, a much denser service area).

⁶ St Clair County statistics are rolled into the MetroLink statistics; estimated by dividing the historical percentage of service/operating expense consumed by the county to the total for MetroLink and adding that to the total.

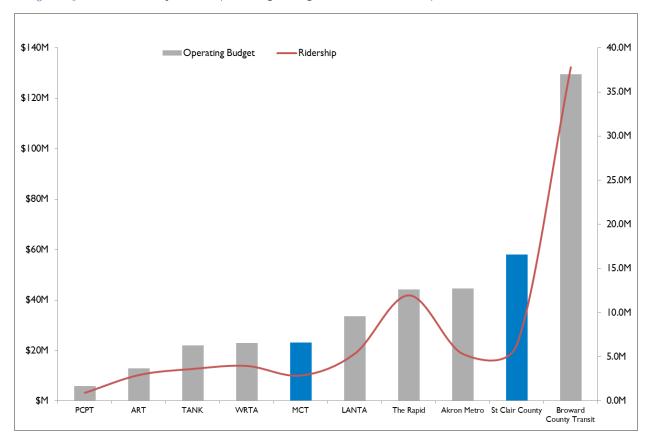


Figure 19: Suburban System Operating Budget versus Ridership

Despite the difference in scale of the Go West and CUMTD systems, they both perform better compared to their peers (see Figure 20). Go West carries more riders than both AppalCart (home to Appalachian State University) and the MET, despite spending significantly less money. The nearest peer to the University of Illinois based system in Champaign is The Ride from Ann Arbor (University of Michigan) which has a higher budget but carries many fewer riders (less than CATA, in fact, with a budget of about three times that agency).

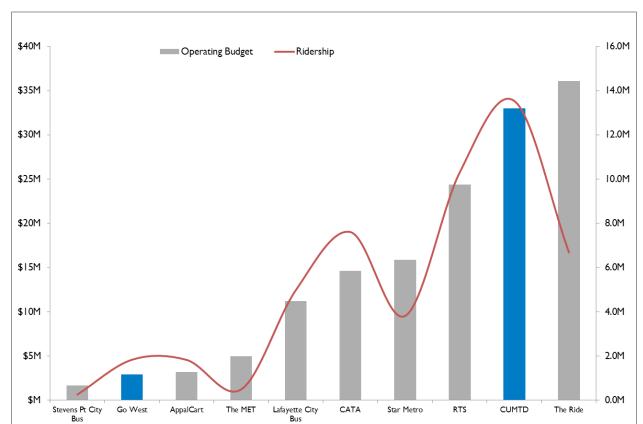


Figure 20: University System Operating Budget versus Ridership

B. Efficiency Measures

Table 5: Large City Systems Efficiency Measures

| · | Cost Effectiveness | Service Efficiency | Service Effectiveness |
|-----------------|--------------------|--------------------|-----------------------|
| | | Operating | |
| | | Expense per | Riders per Revenue |
| Agency | Cost per Trip | Hour | Hour |
| CitiLink | \$6.53 | \$101.01 | 15.50 |
| CityLink | \$6.08 | \$117.84 | 19.40 |
| Connect Transit | \$3.79 | \$88.17 | 23.30 |
| MetroLink | \$4.98 | \$103.29 | 20.70 |
| METS | \$4.00 | \$66.66 | 16.70 |
| Rockford MTD | \$8.65 | \$109.02 | 12.60 |
| Springfield MTD | \$6.95 | \$97.95 | 14.10 |
| TARTA | \$9.02 | \$67.33 | 7.50 |
| The E | \$5.21 | \$74.15 | 14.20 |
| Transpo | \$5.48 | \$90.78 | 16.60 |

Among Illinois agencies, Connect Transit offers trips at the cheapest cost and carries the most riders per hour. These numbers also compare well to peers. The same does not hold true with Rockford and Springfield, which come in the lowest in the cost per trip and riders per hour measures, respectively, and also come in near the bottom when compared to peers (TARTA, the transit agency in Toledo, OH is the lowest in these measures).

Table 6: Medium City Systems Efficiency Measures

| | Cost Effectiveness | Service Efficiency | Service Effectiveness |
|--------------------|--------------------|--------------------|-----------------------|
| | | Operating | |
| | | Expense per | Riders per Revenue |
| Agency | Cost per Trip | Hour | Hour |
| Bay Metro | \$13.96 | \$99.77 | 7.10 |
| Decatur | \$4.16 | \$75.78 | 18.20 |
| Eau Claire | \$5.68 | \$62.58 | 11.00 |
| Kenosha | \$4.50 | \$76.71 | 17.00 |
| MTU | \$4.84 | \$67.83 | 14.00 |
| River Valley Metro | \$6.96 | \$84.56 | 12.20 |
| Rochester | \$4.07 | \$81.41 | 20.00 |
| Sioux City | \$3.80 | \$74.31 | 19.60 |
| STARS | \$5.74 | \$120.09 | 20.90 |
| The Bus | \$5.67 | \$80.18 | 14.10 |

Decatur offers trips for the least expense and is near the bottom in expense per hour; STARS (Saginaw, MI) carries the most riders per hour. River Valley Metro rests near the middle of the pack in these measures (see Table 6). Among the peers, STARS is the least efficient system.

Table 7: Small City Systems Efficiency Measures

| | Cost Effectiveness | Service Efficiency | Service Effectiveness |
|--------------------------|--------------------|--------------------|-----------------------|
| | | Operating | |
| | | Expense per | Riders per Revenue |
| Agency | Cost per Trip | Hour | Hour |
| Danville | \$6.17 | \$ 52.19 | 20.35 |
| El Dorado Transit | \$15.37 | \$ 127.97 | 8.33 |
| Galesburg | \$2.85 | \$ 57.83 | 7.65 |
| JETS | \$2.56 | \$ 45.84 | 4.93 |
| Josephine County | \$7.56 | \$ 65.31 | 9.33 |
| Mankato Transit System | \$6.91 | \$ 82.01 | 28.78 |
| Quincy | \$14.89 | \$ 58.29 | 6.16 |
| San Marcos Transit | \$7.00 | \$ 22.55 | 1.51 |
| St Mary's Transit System | \$9.30 | \$ 51.42 | 7.44 |
| Valley Transit | \$5.65 | \$ 131.80 | 23.31 |

Most of the Illinois systems are not considered to be in urbanized areas, while all of their peers are. Unlike the large and medium city systems in Illinois, there are no significant outliers here. Most fall into the middle of the range of the peers (see Table 7). JETS (from Jonesboro, AR) the cheapest per trip; San Marcos Transit (south of Austin, TX) is the cheapest system to operate per hour; and the Mankato Transit System has the most riders per hour. El Dorado County (in the Sierra Nevada Mountains) is the least efficient system, most likely because of the challenging terrain and the fact that it is a county based system with a large percentage of trips operating as demand response trips.

Table 8: Suburban Systems Efficiency Measures

| | Cost Effectiveness | Service Efficiency | Service Effectiveness |
|-----------------|--------------------|--------------------|-----------------------|
| | | Operating | |
| | | Expense per | Riders per Revenue |
| Agency | Cost per Trip | Hour | Hour |
| Akron | \$102.07 | \$8.32 | 12.30 |
| ART | \$77.04 | \$4.27 | 18.10 |
| Broward County | \$86.32 | \$3.39 | 25.50 |
| LANTA | \$78.35 | \$6.24 | 12.60 |
| мст | \$89.49 | \$8.05 | 11.10 |
| PCPT | \$65.80 | \$6.48 | 10.20 |
| St Clair County | \$129.69 | \$5.38 | 24.10 |
| TANK | \$80.90 | \$6.04 | 13.40 |
| The Rapid | \$74.09 | \$3.70 | 20.00 |
| WRTA | \$100.91 | \$5.78 | 17.50 |

Since St. Clair County is the only one of these systems that funds light rail, the cost to operate (by trip and by hour) this system far exceeds its peers (see Table 8). However, that high funding cost does result in the second highest riders per revenue hour, behind Broward County (home to Fort Lauderdale, FL). Broward County is the least expensive system on a per hour basis, while PCPT (Pasco County, FL) is the least expensive per trip. Broward County also carries the most riders per hour.

Table 9: University Systems Efficiency Measures

| | Cost Effectiveness | Service Efficiency | Service Effectiveness |
|------------------------|--------------------|--------------------|-----------------------|
| | | Operating | |
| | | Expense per | Riders per Revenue |
| Agency | Cost per Trip | Hour | Hour |
| AppalCart | \$1.75 | \$48.13 | 27.53 |
| CATA | \$1.90 | \$74.77 | 39.30 |
| CUMTD | \$2.41 | \$109.05 | 45.20 |
| Go West | \$1.58 | \$44.12 | 27.90 |
| Lafayette City Bus | \$2.24 | \$79.31 | 35.30 |
| RTS | \$2.26 | \$69.65 | 30.80 |
| Star Metro | \$4.16 | \$65.48 | 15.70 |
| Stevens Point City Bus | \$6.37 | \$83.06 | 13.04 |
| The MET | \$9.99 | \$85.42 | 8.55 |
| The Ride | \$5.21 | \$98.54 | 18.90 |

Considering the high numbers of riders for such a small city, it is not surprising that Go West ranks has the least cost per trip and operating expense per hour (see Table 9). CUMTD has one of the highest operating expenses per hour, although they do carry the largest number of passengers among the peers, which translates to a reasonably low cost per trip. The MET (Waterloo, Iowa) is the least efficient system.

Figure 21: Large City System Cost Effectiveness Measures

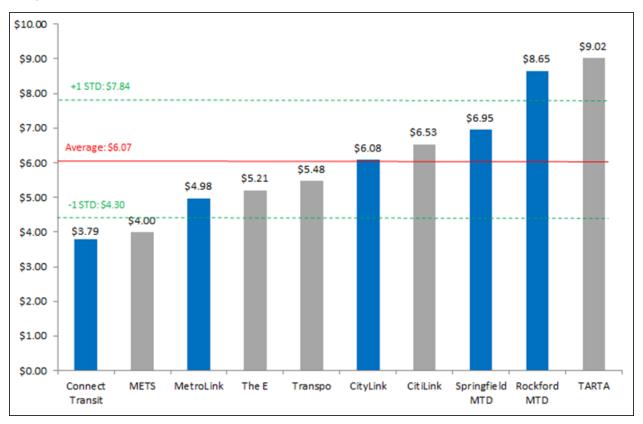
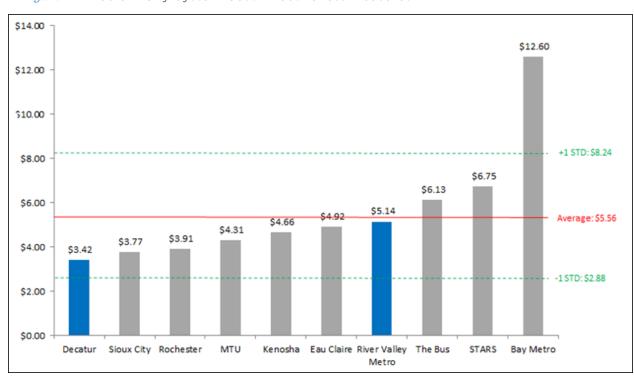


Figure 22: Medium City System Cost Effectiveness Measures





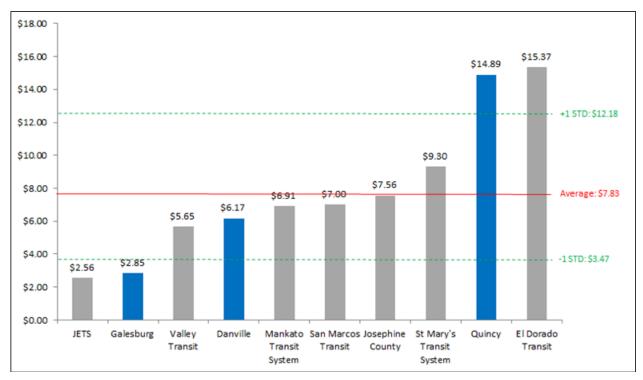
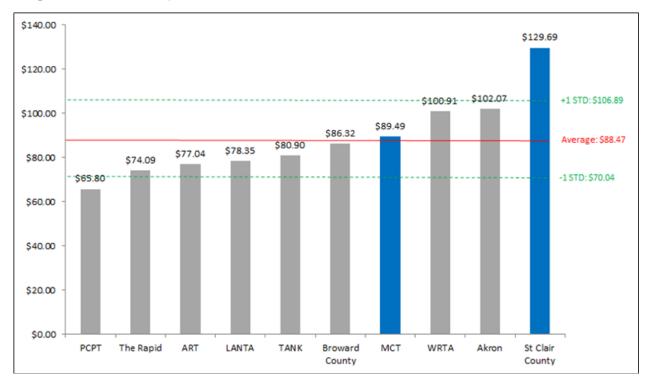


Figure 24: Suburban System Cost Effectiveness Measures



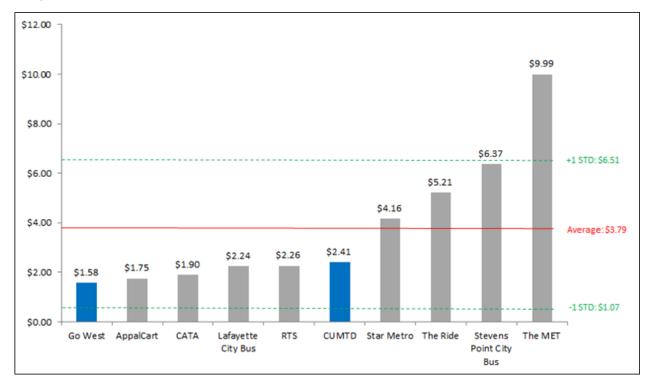
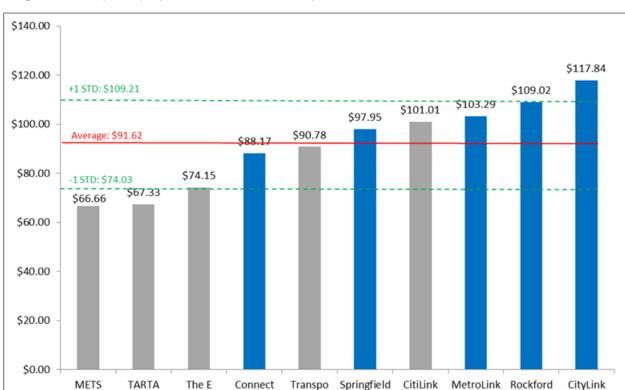


Figure 25: University System Cost Effectiveness Measures

Only St. Clair County ranks low on cost effectiveness measures; both Connect Transit and Galesburg rank highest in this measurement. All Illinois systems benefit from the fact that TARTA (Toledo, OH) costs so much per trip, as it drives the positive standard deviation upwards, which especially benefits Rockford and Springfield (see Figure 21). A much greater range of outcomes occur for the medium city than for the large city systems (see Figure 22), exemplified by the extremely high cost per trip of Bay Metro. Both Decatur and River Valley Metro fall below the peer average in this measure.

As the cities get smaller, the average cost per trip rises (due to more limited ridership and similar operating costs). For the cost effectiveness measurement measure, the range of outcomes also increases, reflecting the fact that peer systems become more dissimilar, due to the greater variance in service areas (countywide versus city-centric, for instance) and geographies (the flatlands of Central Illinois versus the rugged foothills of mountain ranges). Having said that, Quincy is ranked low in the cost effectiveness measurement (see Figure 23).

St. Clair County suffers from the fact many riders in the county travel via the relatively expensive MetroLink (light rail) system; their peers do not operate light rail systems, and instead rely on a mix of bus services (express, commuter, local) to transport their residents to nearby large cities (see Figure 24). Also take note that ART (in Arlington) benefits from WMATA service (both bus and rail) to take on the burden of costlier service, while they operate only some bus service. Madison County's industrial past which includes company towns built for now absent, large scale industries; extensive rail yards; and large tracts of land near St Louis that cannot be built on due to environmental contamination, puts MCT at a slight disadvantage relative to their peers, which operate in denser environments. Both Illinois university systems are below the peer average. The MET suffers somewhat in comparison to the other systems; the University of Northern lowa is in Cedar Falls, which is somewhat distant from the core service area in Waterloo (a medium sized city).



MTD

Transit

Figure 26: Large City System Service Efficiency Measures

MTD



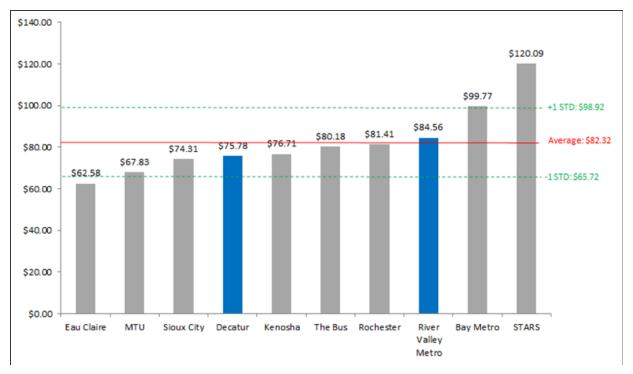


Figure 28: Small City System Service Efficiency Measures



Figure 29: Suburban System Service Efficiency Measures

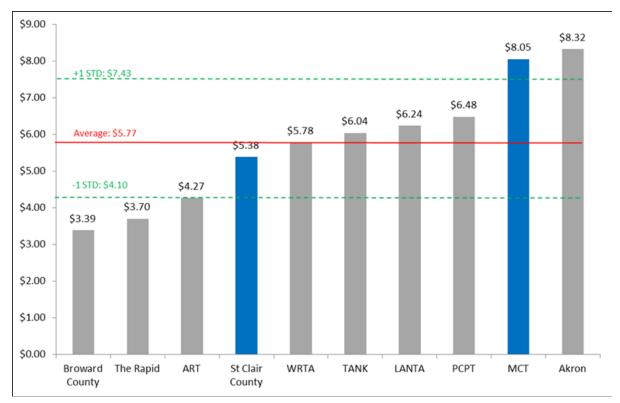
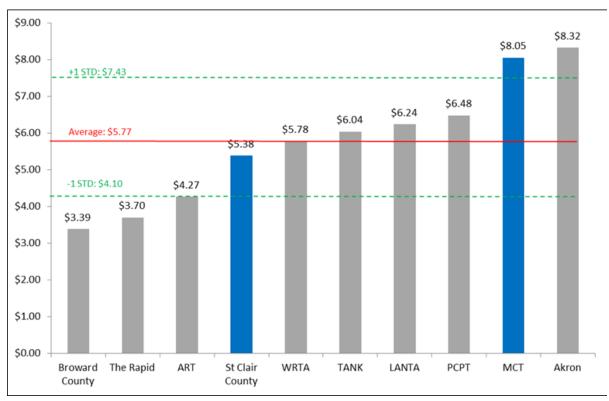


Figure 30: University System Service Efficiency Measures



For large city systems, Connect Transit, which is highly ranked for cost effectiveness, also ranks high for service efficiency. CityLink ranks poorly in this measure, despite ranking in the middle for the cost effectiveness measure. TARTA holds the extreme high and low ends of both of these measures (see Figure 26). The Illinois medium city systems perform better than their peers, with Decatur among the highest ranked (see Figure 27). There is a notable division between the higher and lower ranked small city systems. Quincy is part of the former group, while Galesburg is part of the latter (see Figure 28). Go West, with a small service area and a dense network of routes, is more service efficient than Champaign, which covers much larger area and has a focus other than just the university (see Figure 30).

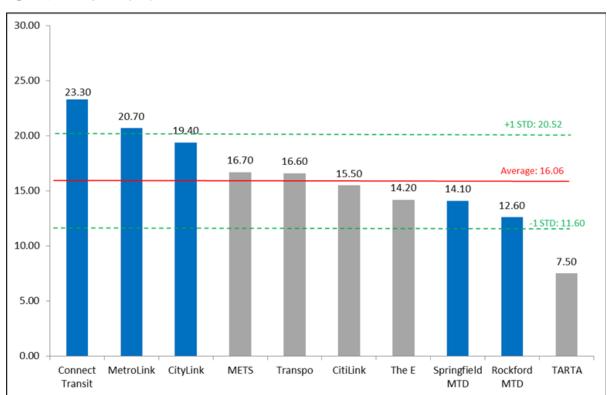


Figure 31: Large City System Service Effectiveness Measures



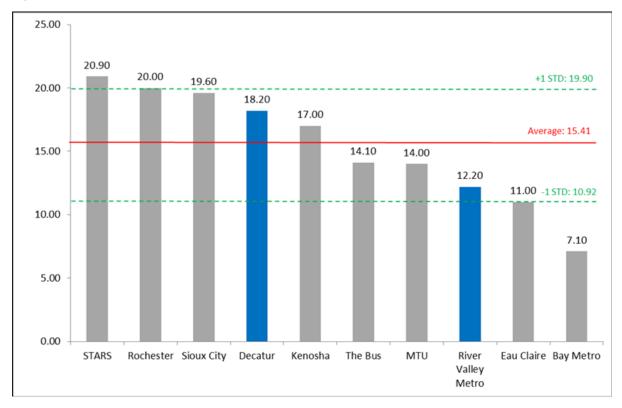
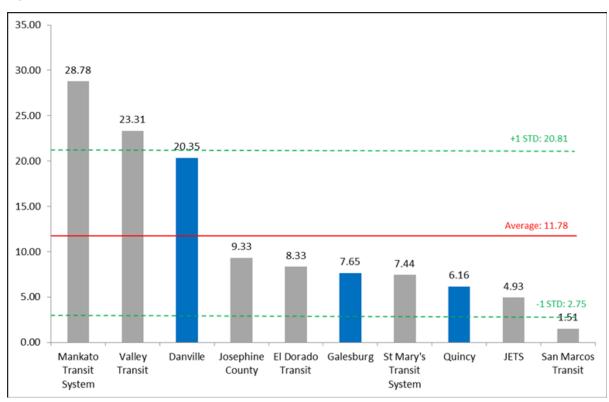


Figure 33: Small City System Service Effectiveness Measures





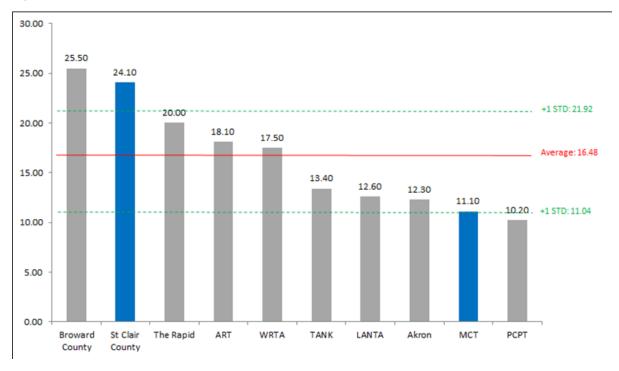
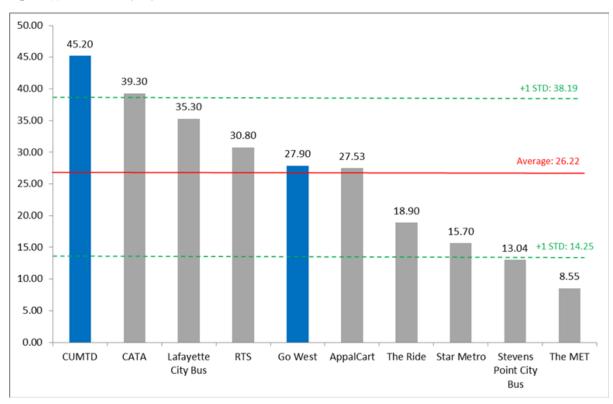


Figure 35: University System Service Effectiveness Measures



Illinois systems consistently perform well compared to their peers in the service effectiveness. Champaign, St. Clair County, MetroLink, and Connect Transit are all highly ranked; no transit agency is low ranked, with only Madison County Transit (MCT) coming close to dropping below one standard deviation.

C. Availability Measures

Table 10: Large City System Availability Measures

| | Market Penetration | Service Availability |
|-----------------|--------------------|----------------------|
| | | Revenue Hours |
| Agency | Trips per Capita | per Capita |
| CitiLink | 13.31 | 0.036 |
| CityLink | 13.00 | 0.068 |
| Connect Transit | 14.47 | 0.060 |
| MetroLink | 29.17 | 0.048 |
| METS | 16.47 | 0.060 |
| Rockford MTD | 8.07 | 0.079 |
| Springfield MTD | 16.02 | 0.071 |
| TARTA | 8.43 | 0.134 |
| The E | 18.53 | 0.070 |
| Transpo | 12.57 | 0.060 |

Table 11: Medium City System Availability Measures

| | Market Penetration | Service Availability |
|--------------------|--------------------|----------------------|
| | | Revenue Hours |
| Agency | Trips per Capita | per Capita |
| Bay Metro | 5.21 | 0.73 |
| Decatur | 20.32 | 1.11 |
| Eau Claire | 11.02 | 0.87 |
| Kenosha | 13.18 | 0.77 |
| MTU | 15.86 | 1.13 |
| River Valley Metro | 12.12 | 1.00 |
| Rochester | 16.76 | 0.84 |
| Sioux City | 9.24 | 0.47 |
| STARS | 5.48 | 0.26 |
| The Bus | 12.17 | 0.86 |

Rockford has the lowest trips per capita of any of the large city systems; this has as much do to with the particular geography of the city as it does for the transit system's performance (see Table 10). Rockford MTD "farms" out a part of its service area to Stateline Mass Transit, which only runs demand response trips. Many of its peers extend many more of their fixed routes into suburban areas. MetroLink, on the other hand, with its denser land use patterns (it serves three sizeable downtowns) and more extensive service span, provides the most trips per capita of any large city system. For the large city systems, the service hours per capita fall within a narrow range with the exception of TARTA (Toledo, OH).

For medium city systems, Decatur ranks at the top for both trips and revenue hours per capita (see Table 11).

Table 12: Small City System Availability Measures

| | Market Penetration | Service Availability |
|--------------------------|--------------------|----------------------|
| | | Revenue Hours |
| Agency | Trips per Capita | per Capita |
| Danville | 15.97 | 0.78 |
| El Dorado Transit | 2.02 | 0.24 |
| Galesburg | 5.49 | 0.72 |
| JETS | 1.42 | 0.29 |
| Joesphine County | 2.61 | 0.28 |
| Mankato Transit System | 18.11 | 0.63 |
| Quincy | 10.93 | 1.16 |
| San Marcos Transit | 1.56 | 1.03 |
| St Mary's Transit System | 3.21 | 0.43 |
| Valley Transit | 23.78 | 1.02 |

Valley Transit has the most trips per capita. Located in Walla Walla, WA, the agency benefits from a large migrant worker population to fill its buses. For Illinois small cities, Quincy and Danville compare well in the trips per capita measure, and Quincy has the highest revenue hours per capita.

Table 13: Suburban System Availability Measures

| | Market Penetration | Service Availability |
|-----------------|--------------------|----------------------|
| | | Revenue Hours |
| Agency | Riders per Capita | per Capita |
| ART | 13.53 | 0.75 |
| Broward County | 20.23 | 0.79 |
| LANTA | 11.02 | 0.88 |
| мст | 10.67 | 0.86 |
| METRO | 9.82 | 0.80 |
| PCPT | 4.13 | 0.41 |
| St Clair County | 24.31 | 1.01 |
| TANK | 13.01 | 0.97 |
| The Rapid | 24.78 | 1.24 |
| WRTA | 8.27 | 0.47 |

The Rapid (Grand Rapids, MI) has an advanced bus transit system, which includes a BRT line and state of the art fare and communication technology, has the highest revenue hours and riders per capita, although St. Clair County is not far behind. Pasco County Transit, which serves exurban Tampa-St Petersburg, runs their service in a low density county and brings up the rear in both of these measures.

Table 14: University System Availability Measures

| | Market Penetration | Service Availability |
|------------------------|--------------------|----------------------|
| | | Revenue Hours |
| Agency | Trips per Capita | per Capita |
| AppalCart | 33.92 | 1.23 |
| CATA | 72.90 | 1.86 |
| CUMTD | 108.63 | 2.40 |
| Go West | 56.71 | 2.03 |
| Lafayette City Bus | 37.11 | 1.05 |
| RTS | 62.82 | 2.04 |
| Star Metro | 23.50 | 1.49 |
| Stevens Point City Bus | 9.85 | 0.76 |
| The MET | 3.74 | 0.44 |
| The Ride | 31.48 | 1.66 |

Champaign-Urbana hosts a large university population within a relatively small urban area. In addition, on-campus parking is severely limited. While freshmen are required to live in dorms, most students live off campus. As the student population has increased over the years, the density of student housing has not increased; rather, large gated communities designed for students have been located on the fringes of the urban area, requiring students to take buses to class where they once walked. In addition, the student body has changed over this time period—foreign students make up a greater percentage of the university attendees, and these students are more likely to take transit than native-born students. These are some of the reasons for the extremely high trips per capita of this system. Despite being a fareless system and located in a small town (Macomb), Go West provides almost as many revenue hours per capita as Gainesville, a much bigger community with a much bigger university (University of Florida).

Figure 36: Large City System Market Penetration Measures

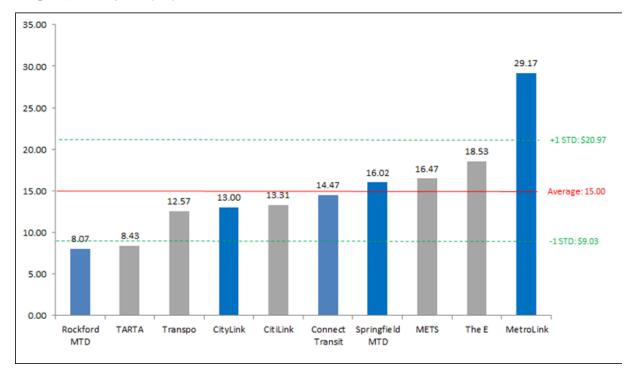


Figure 37: Medium City System Market Penetration Measures

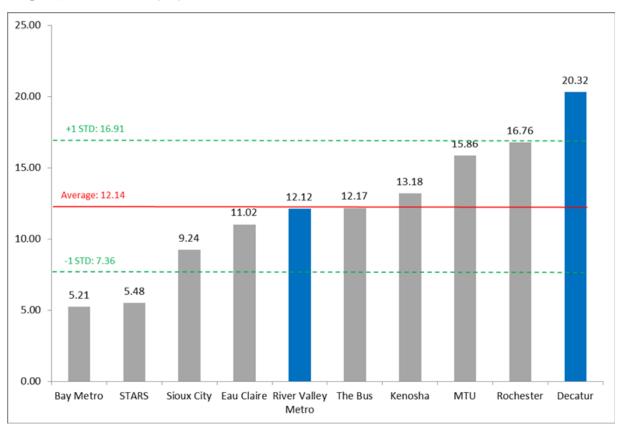


Figure 38: Small City System Market Penetration Measures

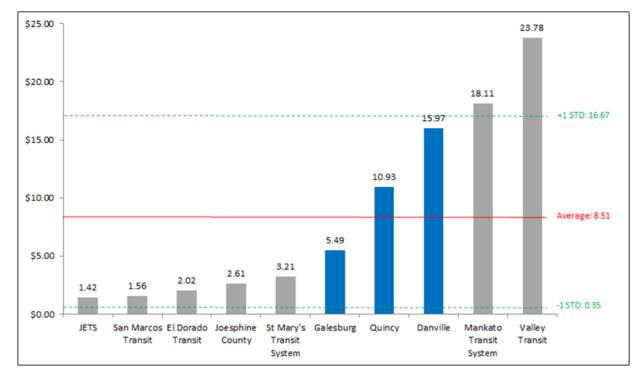
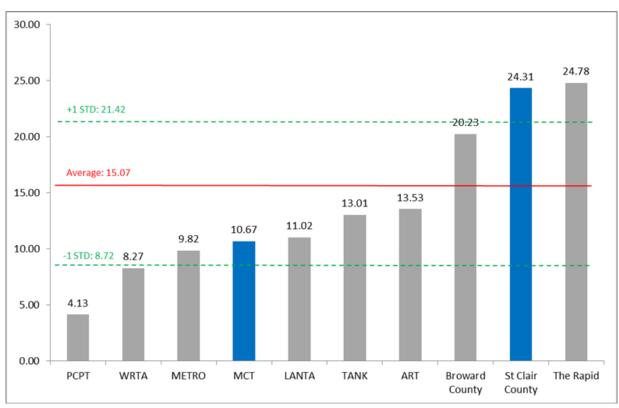


Figure 39: Suburban System Market Penetration Measures



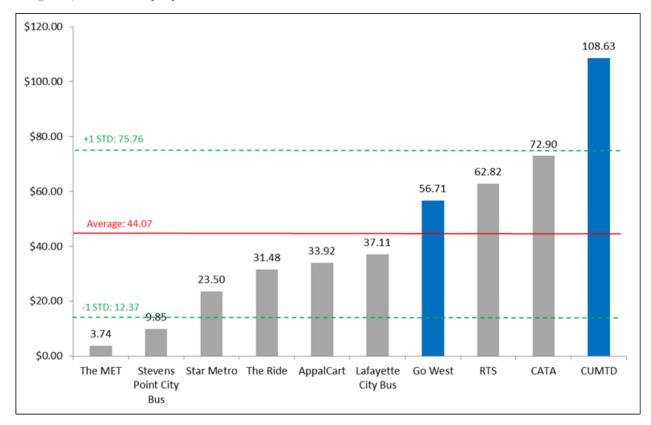


Figure 40: University System Market Penetration Measures

Illinois transit systems rank highly compared to their peers for market penetration measures. CUMTD, St Clair County, Decatur, and MetroLink all rank the highest for these measures, in some cases well above one standard deviation. Only Rockford MTD is low ranking.

Figure 41: Large City System Service Availability Measure

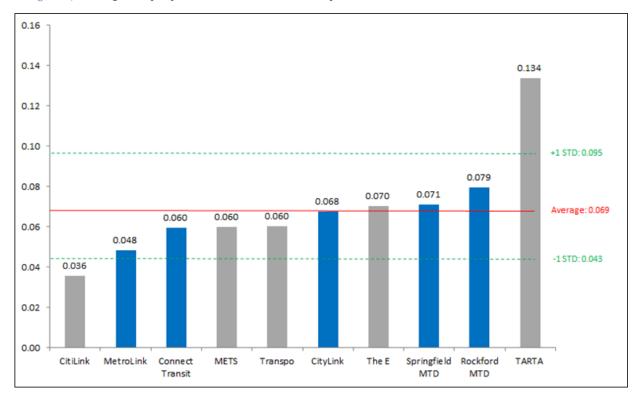


Figure 42: Medium City System Service Availability Measure

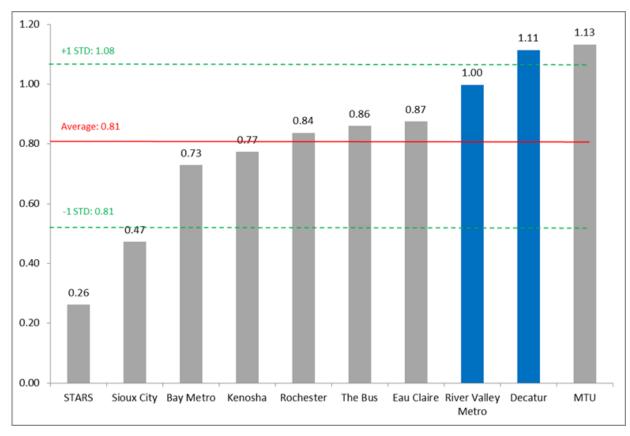


Figure 43: Small City System Service Availability Measure

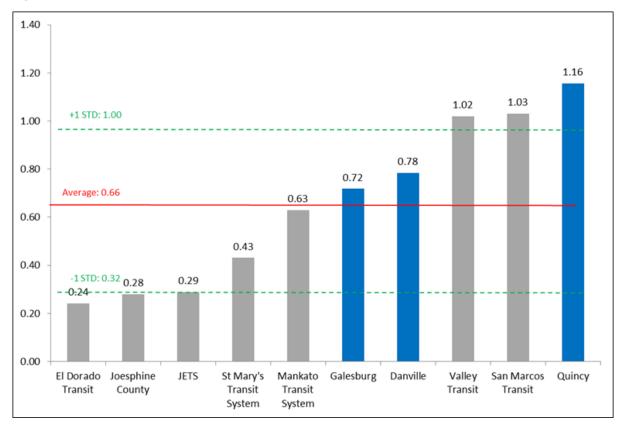
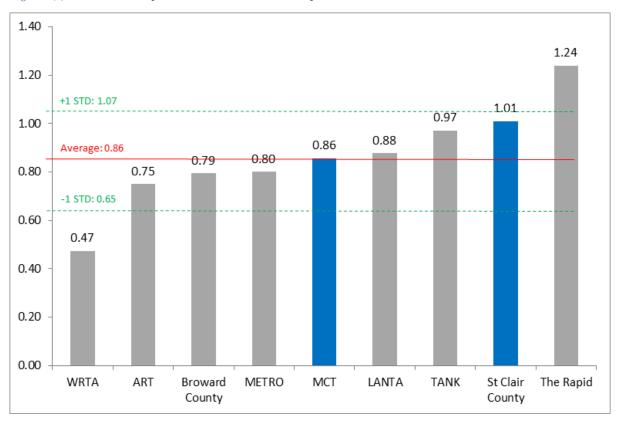


Figure 44: Suburban System Service Availability Measure



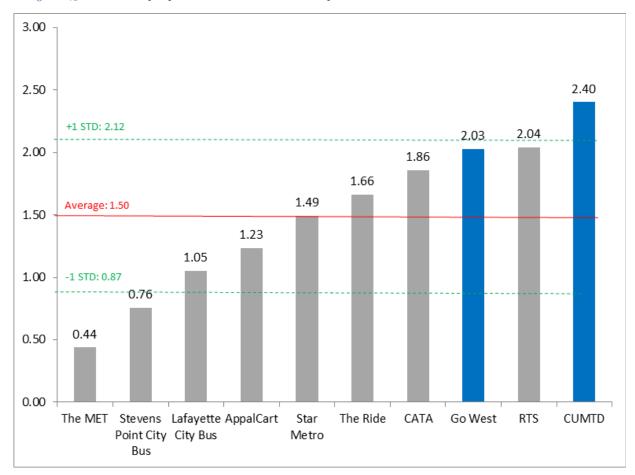


Figure 45: University System Service Availability Measure

Quincy, CUMTD, and Decatur all rank highly in the service availability measure. Only MetroLink and Connect Transit have less than average service availability—however, these two agencies still carry a better than average amount of riders per hour, meaning the lack of availability does not impact their ability to serve the public.

D. Solvency Measures

As a reminder, for the investment measures, the capital funding is averaged over three years. This measure may be skewed if an agency has recently bought a large number of buses or replaced a large number of shelters in an earlier three years period, for instance, which would not necessitate more recent high levels of investment.

Table 15: Large City System Solvency Measures

| | Subsidy | Share | Investment |
|-----------------|--------------------|----------------|-----------------|
| | Fare Revenue | Farebox | Capital Funding |
| Agency | Shortfall per Trip | Recovery Ratio | per Capita |
| CityLink | \$ 8.93 | 7.4% | \$ 4.77 |
| Rockford MTD | \$ 7.89 | 8.9% | \$ 2.82 |
| TARTA | \$ 6.93 | 23.2% | \$ 3.14 |
| Springfield MTD | \$ 6.55 | 9.1% | \$ 9.83 |
| MetroLink | \$ 4.76 | 6.8% | \$ 34.19 |
| Transpo | \$ 4.75 | 13.3% | \$ 9.19 |
| Connect Transit | \$ 4.52 | 13.9% | \$ 1.64 |
| The E | \$ 3.49 | 33.0% | \$ 21.75 |
| METS | \$ 3.08 | 23.1% | \$ 1.75 |
| CitiLink | \$ 2.49 | 16.1% | \$ 3.03 |

All Illinois large city agencies (with the exception of Connect Transit) have lower farebox recovery ratios than all peers outside the state. However, due to the relatively economical delivery of transit service, the fare revenue shortfalls hew closer to the peer average. MetroLink stands out for its high average capital funding over the past three years; Rockford and Connect Transit in comparison have done less investment.

Table 16: Medium City System Solvency Measures

| | Subsidy | Share | Investment |
|--------------------|--------------------|----------------|-----------------|
| | Fare Revenue | Farebox | Capital Funding |
| Agency | Shortfall per Trip | Recovery Ratio | per Capita |
| Bay Metro | \$ 12.71 | 9.0% | \$ 4.29 |
| Decatur | \$ 3.77 | 9.3% | \$ 0.50 |
| Eau Claire | \$ 4.63 | 18.5% | \$ 0.99 |
| Kenosha | \$ 4.01 | 12.9% | \$ 3.40 |
| MTU | \$ 4.01 | 17.3% | \$ 0.80 |
| River Valley Metro | \$ 6.62 | 5.8% | \$ 0.82 |
| Rochester | \$ 2.77 | 31.9% | \$ 10.52 |
| Sioux City | \$ 3.03 | 20.3% | \$ 1.04 |
| STARS | \$ 5.01 | 12.7% | \$ 0.76 |
| The Bus | \$ 4.77 | 18.2% | \$ 1.73 |

Much like the large cities, the medium city agencies lag behind their peers with farebox recovery. Rochester (MN) has the lowest fare revenue shortfall per trip, although Decatur has only a dollar more of shortfall due to their relatively robust ridership. Rochester also stands out for their robust capital funding compared to their population. Due to lower infrastructure needs (buses, shelters, signs), there is much less capital funding per person with these agencies. This is a trend that continues as the cities get smaller.

Table 17: Small City System Solvency Measures

| | Subsidy | Share | Investment |
|--------------------------|--------------------|----------------|-----------------|
| | Fare Revenue | Farebox | Capital Funding |
| Agency | Shortfall per Trip | Recovery Ratio | per Capita |
| Danville | \$ 3.34 | 13.7% | \$ 0.10 |
| El Dorado Transit | \$ 12.43 | 19.1% | \$ 1.12 |
| Galesburg | \$ 7.26 | 5.1% | \$ 1.90 |
| JETS | \$ 8.51 | 8.4% | \$ 1.26 |
| Joesphine County | \$ 6.09 | 9.8% | \$ - |
| Mankato Transit System | \$ 2.08 | 27.0% | \$ 0.29 |
| Quincy | \$ 5.98 | 3.0% | \$ - |
| San Marcos Transit | \$ 14.16 | 4.9% | \$ - |
| St Mary's Transit System | \$ 5.98 | 13.5% | \$ 0.05 |
| Valley Transit | \$ 5.39 | 4.7% | \$ 0.09 |

Peers from out of state (San Marcos, TX and El Dorado County, CA) perform much worse than in-state systems when it comes to fare revenue shortfalls per trip. Galesburg and Quincy bring up the rear in farebox recovery ratios, suggesting fares there may be too low (at 60 and 50 cents, respectively with students riding free in Quincy). Despite its low public "buy-in" in terms of fares, Galesburg has the highest capital funding per capita. Quincy has not spent any capital money the last three years, but that is not unusual among small city systems: Peer systems Josephine County (OR) and San Marcos (TX) have also not spent anything.

Table 18: Suburban System Solvency Measures

| | Subsidy | Share | Investment |
|-----------------|--------------------|----------------|-------------|
| | | | Capital |
| | Fare Revenue | Farebox | Funding per |
| Agency | Shortfall per Trip | Recovery Ratio | Capita |
| ART | \$ 32.27 | 27.0% | \$ 62.60 |
| Broward County | \$ 0.74 | 16.2% | \$ 1.72 |
| LANTA | \$ 3.82 | 11.8% | \$ 5.81 |
| MCT | \$ 13.99 | 9.9% | \$ 18.21 |
| METRO | \$ 1.79 | 26.4% | \$ 9.44 |
| PCPT | \$ 5.48 | 15.5% | \$ 1.13 |
| St Clair County | \$ 7.91 | 12.2% | \$ 1.17 |
| TANK | \$ 4.84 | 20.4% | \$ 7.15 |
| The Rapid | \$ 2.91 | 22.4% | \$ 8.89 |
| WRTA | \$ 4.87 | 15.9% | \$ 14.77 |

Arlington is a large outlier in all of these measures. It is the densest of all of the suburban areas served by these systems, thus invests much more heavily in its transit system, reflected by its high fare revenue shortfalls and capital funding per capita. St. Clair County's capital funding per capita is on par with the average for small city systems, rather than its peers. However, it is just a small part of the St. Louis Metro system, and is mostly rural, leading to less attention than the city proper.

Table 19: University System Solvency Measures

| | Subsidy | Share | Investment |
|------------------------|--------------------|----------------|-----------------|
| | Fare Revenue | Farebox | Capital Funding |
| Agency | Shortfall per Trip | Recovery Ratio | per Capita |
| AppalCart | \$ 1.74 | 0.2% | \$ 7.81 |
| CATA | \$ 0.88 | 54.4% | \$ 16.74 |
| CUMTD | \$ 1.94 | 20.4% | \$ 14.43 |
| Go West | \$ 1.57 | 0.3% | \$ 19.03 |
| Lafayette City Bus | \$ 1.75 | 21.9% | \$ 8.84 |
| RTS | \$ 1.02 | 57.0% | \$ 31.28 |
| Star Metro | \$ 2.73 | 34.4% | \$ 8.35 |
| Stevens Point City Bus | \$ 0.40 | 6.7% | \$ 18.58 |
| The MET | \$ 8.06 | 19.2% | \$ 1.55 |
| The Ride | \$ 4.44 | 17.6% | \$ 13.52 |

Both AppalCart and Go West are fareless systems; student fees pay for almost all of their operating costs. Students make up a larger majority of their ridership than their peers due to the size of the universities relative to their host communities. The MET (Waterloo-Cedar Falls, IA), which operates as much in a small city as in a university town environment, has the highest fare revenue shortfall. Both CUMTD and Go West have a robust capital funding program; RTS (Gainesville, FL) and CATA (State College, PA) have extremely high farebox recovery ratios. If student fees were factored in, CUMTD and Go West would likely approach over 50% in the farebox recovery ratio measure.

Figure 46: Large City System Subsidy Measure

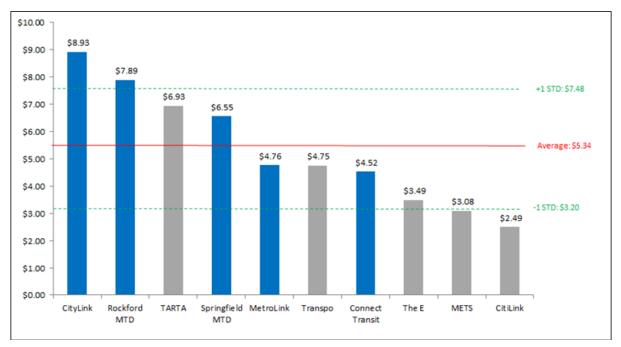


Figure 47: Medium City System Subsidy Measure

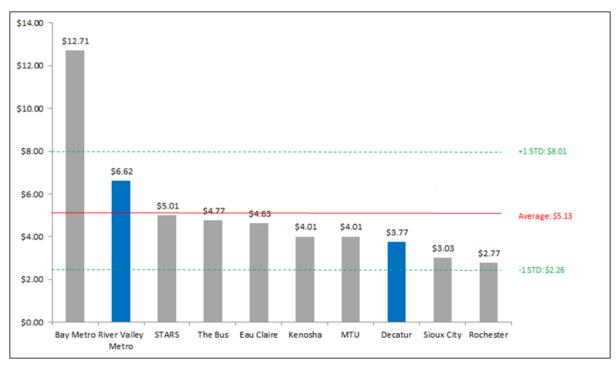


Figure 48: Small City System Subsidy Measure

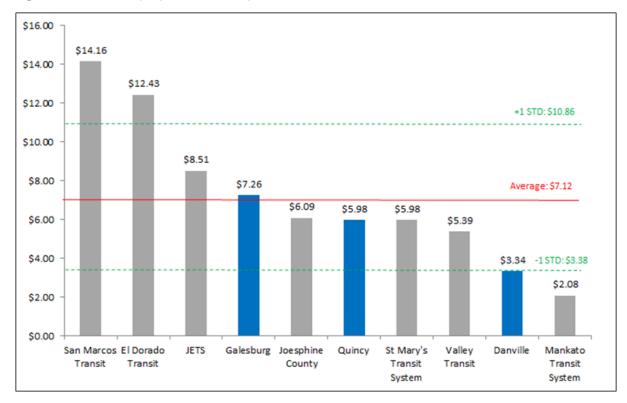
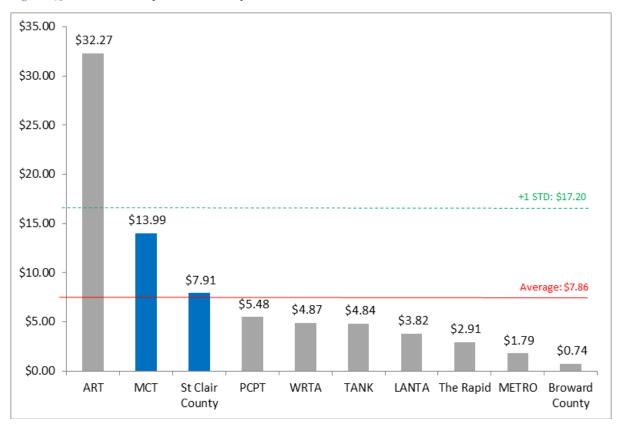


Figure 49: Suburban System Subsidy Measure



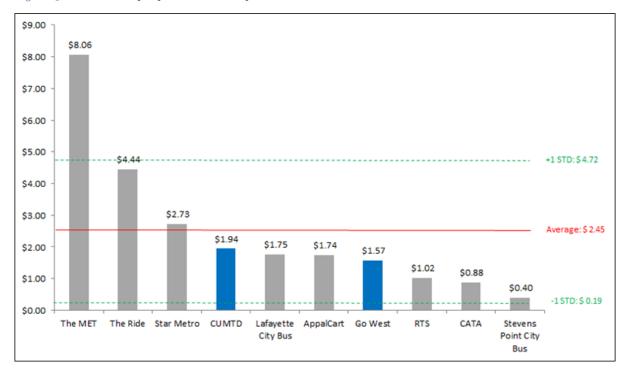


Figure 50: University System Subsidy Measure

CityLink is ranked low on the amount of subsidy provided per rider (on this measure the higher the number, the worse the measurement). Suburban, small city, and medium city systems all have such a wide difference between the highest and lowest measurements than no lower bound for the standard deviation is above zero, making it impossible for any system in these groupings to rank highly. Where a positive lower bound is possible, no Illinois transit systems rank high in comparison to their peers.

Figure 51: Large City System Share Measure

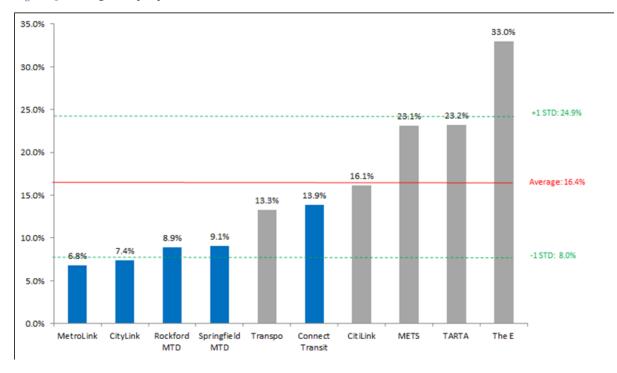


Figure 52: Medium City System Share Measure

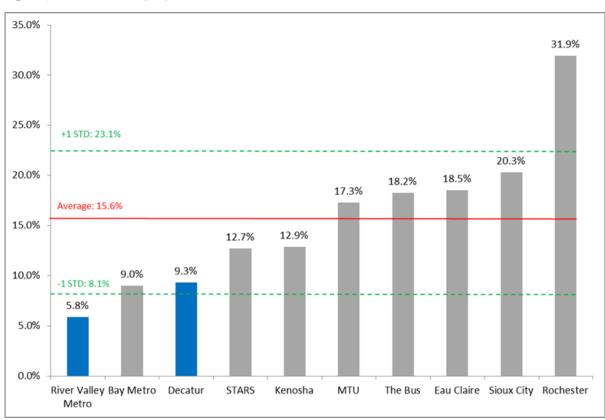


Figure 53: Small City System Share Measure

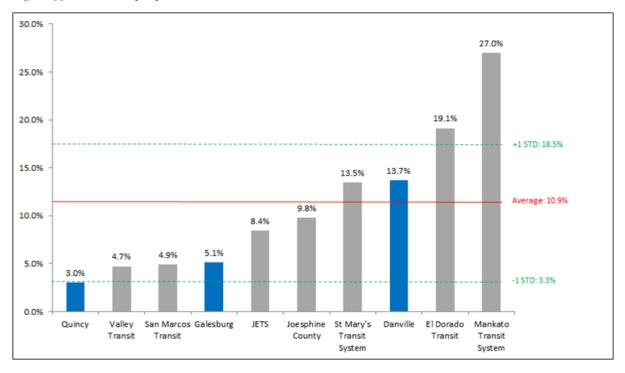
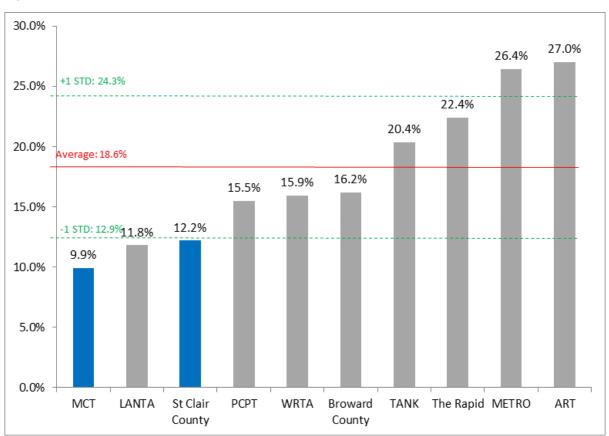


Figure 54: Suburban System Share Measure



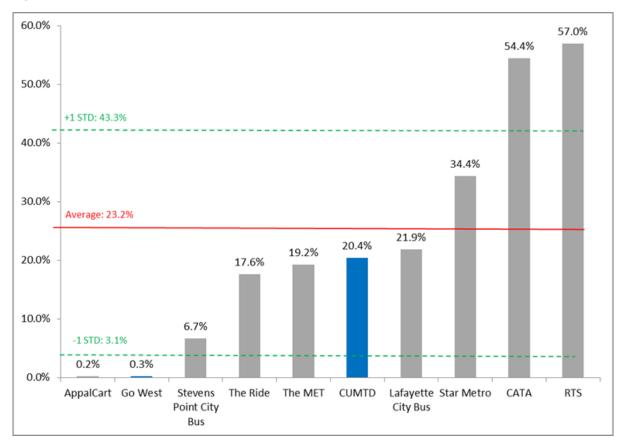
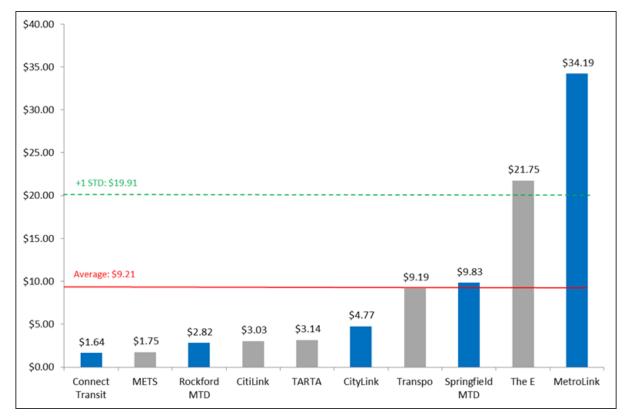
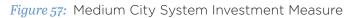


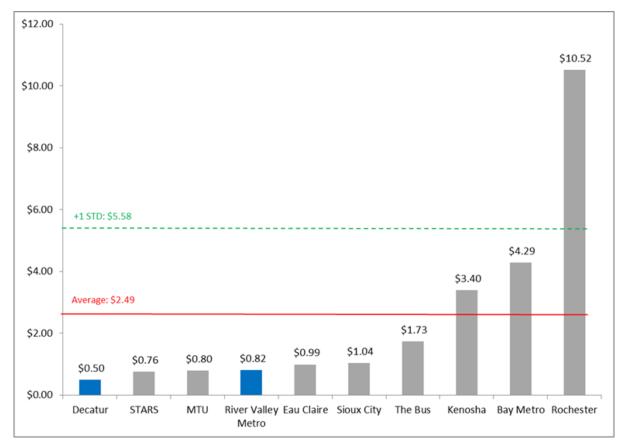
Figure 55: University System Share Measure

A significant number of Illinois transit agencies rank poorly compared to their peers in the share measure. Of the 14 fixed route agencies in the state, half (seven) are low ranked in this measure. None are highly ranked and only Danville is above average in the share measure.

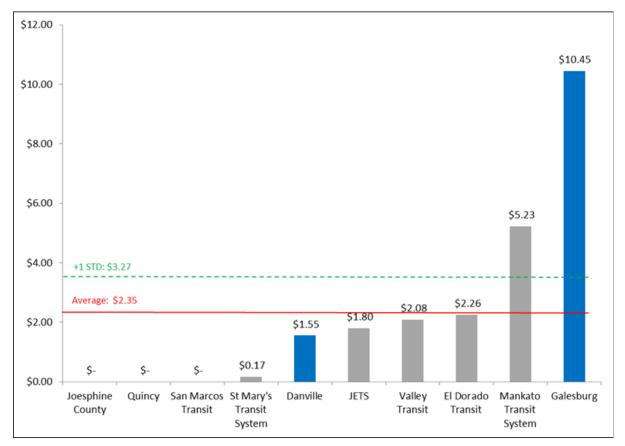




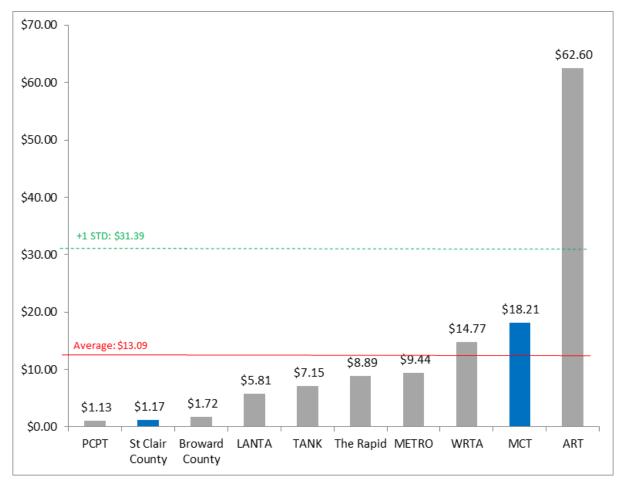












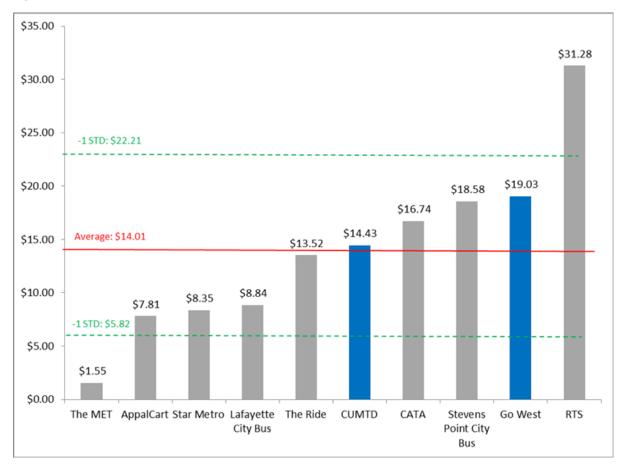


Figure 60: University System Investment Measure

University systems are the only transit groupings that have a narrow enough range to have a positive lower bound standard deviation, one of the reasons no Illinois system is low ranked in the investment measure. However, Quincy is the only Illinois transit system that has not invested any capital funds in its operation for the past three years. River Valley Metro (FY 2015) had one year without capital investment (FY 2015).

V. CONCLUSION

Tables 20 through 22 show how each agency fared overall in the efficiency measures, using a rating of one to four with one meaning the agency was at the lowest end and four meaning the agency was at the highest end compared to other agencies. The efficiency measures used are the following: Cost Effectiveness, Service Efficiency, and Service Effectiveness.

Table 20: Overall Long Tripper Efficiency Measure Comparison

| Agency | Efficiency Measure Rank |
|------------------------------------------|-------------------------|
| Warren Achievement Center | 4 |
| Fulton County | 3 |
| Boone County Council on Aging | 3 |
| RIDES | 3 |
| Henry County Public Transit | 3 |
| Lee-Ogle Transportation System | 3 |
| Pretzel City Area Transit | 3 |
| South Central Transit | 3 |
| Dial A Ride | 3 |
| West Central MTD | 3 |
| Bureau-Putnam Area Rural Transit | 2 |
| Central Illinois Public Transportation | 2 |
| Jo Daviess Transit | 2 |
| CRIS Rural MTD | 2 |
| Bond County Senior Center | 2 |
| Whiteside County Public Transportation | 2 |
| TransVAC (Voluntary Action Center) | 2 |
| SHOWBUS | 2 |
| Jackson County MTD | 2 |
| Piatt County Public Transportation | 2 |
| Carroll County Transit | 2 |
| Logan-Mason County Public Transportation | I |

Table 21: Overall Short Tripper Efficiency Measure Comparison

| Agency | Efficiency Measure Rank |
|----------------------------------------------|-------------------------|
| North Central Area Transit | 4 |
| Hancock County Public Transportation | 4 |
| Shawnee MTD | 3 |
| Grundy Transit System | 3 |
| WE Care | 3 |
| Macoupin County Public Transportation | 3 |
| Champaign County Rural Transportation System | 3 |
| RIM Rural Transit | 2 |
| Kendall Area Transit | 2 |
| CountyLink | 2 |
| Marshall-Stark Transportation | 2 |
| Monroe Randolph Transit District | 1 |

Table 22: Overall Fixed Route Efficiency Measure Comparison

| Agency | Efficiency Rank |
|--------------------|-----------------|
| Connect Transit | 4 |
| Go West | 3 |
| Danville | 3 |
| Decatur | 3 |
| Galesburg | 3 |
| MetroLink | 3 |
| CUMTD | 3 |
| St Clair County | 3 |
| River Valley Metro | 2 |
| CityLink | 2 |
| Quincy | 2 |
| Springfield MTD | 2 |
| MCT | 2 |
| Rockford MTD | 2 |

Tables 23 through 25 show how each agency fared overall in the availability measures, using a rating of one to four with one meaning the agency was at the lowest end and four meaning the agency was at the highest end compared to other agencies. The availability measures used are the following: Market Penetration and Service Availability.

Table 23: Overall Long Tripper Availability Measure Comparison

| Agency | Efficiency Measure Rank |
|------------------------------------------|-------------------------|
| Warren Achievement Center | 4 |
| Piatt County Public Transportation | 4 |
| Pretzel City Area Transit | 4 |
| RIDES | 4 |
| South Central Transit | 4 |
| Bond County Senior Center | 4 |
| West Central MTD | 3 |
| Bureau-Putnam Area Rural Transit | 3 |
| Carroll County Transit | 3 |
| Jackson County MTD | 3 |
| Jo Daviess Transit | 3 |
| Lee-Ogle Transportation System | 2 |
| SHOWBUS | 2 |
| Central Illinois Public Transportation | 2 |
| Dial A Ride | 2 |
| Henry County Public Transit | 2 |
| Whiteside County Public Transportation | 2 |
| CRIS Rural MTD | 2 |
| Logan-Mason County Public Transportation | 2 |
| Fulton County | 2 |
| TransVAC (Voluntary Action Center) | I |
| Boone County Council on Aging | I |

Table 24: Overall Short Tripper Availability Measure Comparison

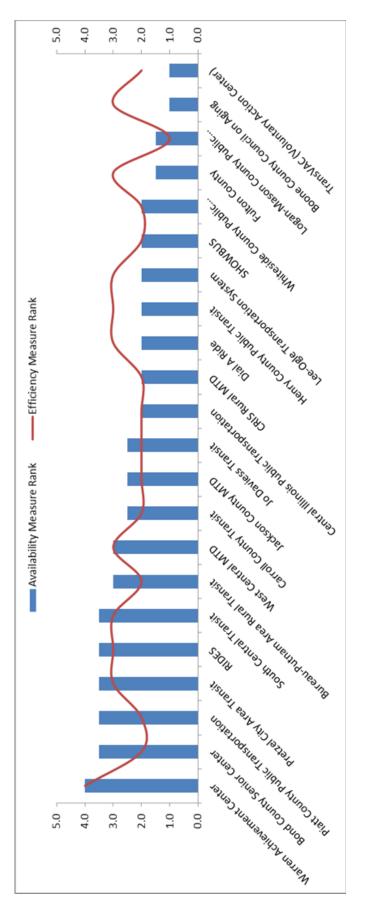
| Agency | Efficiency Measure Rank |
|----------------------------------------------|-------------------------|
| Shawnee MTD | 4 |
| Macoupin County Public Transportation | 4 |
| Hancock County Public Transportation | 4 |
| Champaign County Rural Transportation System | 3 |
| North Central Area Transit | 3 |
| WE Care | 3 |
| Marshall-Stark Transportation | 2 |
| CountyLink | 2 |
| Grundy Transit System | 2 |
| Kendall Area Transit | 2 |
| RIM Rural Transit | 2 |
| Monroe Randolph Transit District | 2 |

Table 25: Overall Fixed Route Availability Measure Comparison

| Agency | Availability Measure Rank |
|--------------------|---------------------------|
| Decatur | 4 |
| CUMTD | 4 |
| Danville | 4 |
| St Clair County | 4 |
| Springfield MTD | 3 |
| MetroLink | 3 |
| Quincy | 3 |
| Go West | 3 |
| River Valley Metro | 3 |
| Galesburg | 3 |
| мст | 3 |
| Rockford MTD | 2 |
| CityLink | 2 |
| Connect Transit | 2 |

an agency can focus on efficiency to the detriment of serving their entire service area. An agency can, for instance, neglect given the absence of vehicles during most of a day. The chart below shows which agencies have the best balance between that provide many long-distance out-of-service-area trips may also have difficulty in completely serving their service area There is always, however, a balance between efficiency and availability (see Figures 61 through 63). There is a danger that narder-to-serve areas (generally rural in nature) in favor of large towns in their service area. This can drive down the cost oer trip, but only because the costlier trips, with less likelihood of combined trips, are not served. In addition, agencies efficiency and availability.

Figure 61: Long Tripper Availability Measures versus Efficiency Measures



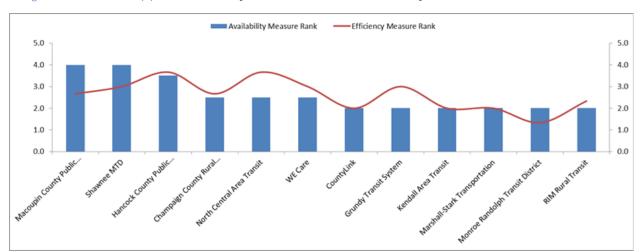


Figure 62: Short Tripper Availability Measures versus Efficiency Measures

Figure 63 shows little coordination between availability and efficiency measures. Only for the lowest ranked systems (MCT, Rockford MTD and CityLink) do the measures consistently track together.

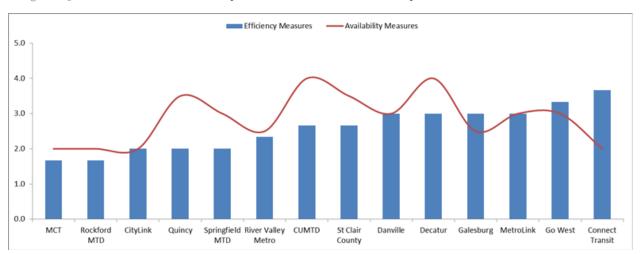


Figure 63: Fixed Route Availability Measures versus Efficiency Measures

Tables 26 shows how each fixed route agency fared overall in the solvency measures, using a rating of one to four with one meaning the agency was at the lowest end and four meaning the agency was at the highest end compared to other agencies.

Table 26: Overall Fixed Route Solvency Measure Comparison

| Agency | Solvency Rank |
|--------------------|---------------|
| Galesburg | 3 |
| MCT | 3 |
| MetroLink | 3 |
| Connect Transit | 2 |
| CUMTD | 2 |
| Decatur | 2 |
| Springfield MTD | 2 |
| St Clair County | 2 |
| Danville | 2 |
| Go West | 2 |
| Quincy | 2 |
| River Valley Metro | 2 |
| Rockford MTD | 2 |
| CityLink | I |

In general, Illinois fixed route agencies rank the lowest on the solvency measures and highest on the availability measures compared to their peers. For efficiency measures, they generally match their peers. There appears to sufficient supply of service in the state, but a need to attract more riders to the service in order to make the service run more efficiently. This especially true with many of the fixed route agencies which tend to cost more to run than their peers but aren't attracting the amount of ridership to make up for that cost.