

**Date:** May 9, 2018  
**To:** ITP Board  
**From:** Kevin Wisselink / Planning Department  
**Subject:** FEBRUARY 2018 RIDERSHIP AND PRODUCTIVITY REPORT

### BACKGROUND

February 2018 ridership was down across the board. The Silver Line continues to be the one fixed route that is continually showing improvement from FY 2017.

### RIDERSHIP SUMMARY

#### **February 2018 compared to February 2017**

##### Total Ridership by Category:

- Routes 1 – 44 ridership (600,058) decreased **7.4%** (-47,641)
- Contracted/Specialized Service ridership (336,381) decreased **9.8%** (-36,744)
- Demand-Response ridership (29,256) increased **0.2%** (50)
- **Total Ridership (965,695) decreased 8.0% (-84,335)**

##### Daily Averages:

- Average Weekday total ridership (42,974) decreased **8.1%** (-3,767)
- Average Weekday evening ridership (5,492) decreased **9.9%** (-606)
- Average Saturday ridership (13,114) decreased **11.9%** (-1,773)
- Average Sunday ridership (6,127) decreased **7.4%** (-490)

#### **Fiscal Year 2018 compared to Fiscal Year 2017**

##### Total Ridership by Category:

- Routes 1 – 44 ridership (3,078,207) decreased **6.8%** (-223,334)
- Contracted/Specialized Service ridership (1,578,792) decreased **7.9%** (-134,706)
- Demand-Response ridership (148,621) decreased **0.1%** (-162)
- **Total Ridership (4,805,620) decreased 6.9% (-358,202)**

##### Daily Averages:

- Average Weekday total ridership (40,564) decreased **6.0%** (-2,593)
- Average Weekday evening ridership (5,110) decreased **10.2%** (-580)
- Average Saturday ridership (12,675) decreased **10.3%** (-1,456)
- Average Sunday ridership (5,982) decreased **7.6%** (-493)

ROUTE PERFORMANCE SUMMARY (Routes 1-44 Only)

February 2018 fixed-route system performance increased compared to February 2017 (contracted services not included). The fixed-route summary is as follows:

- Average passengers per hour (**21.7**) decreased **5.0%** (-0.6 points)
- Average passengers per mile (**1.75**) decreased **5.0%** (-0.7 points)
- Average farebox recovery percent (**28.2%**) decreased 2.9% (-0.4 points)
- Average daily passengers (**20,878**) decreased **7.5%** (-3.8 points)
- **Monthly system performance (85.6 points) decreased 6.2% (-5.7 points)**
- **FY 2018 system performance (83.2 points) decreased 5.9% (-5.2 points) compared to FY 2017**

**Monthly Fixed-Route Point Summary**

|                                    | FY 18      | FY 17      | FY 18         | FY 17         |               | %             |
|------------------------------------|------------|------------|---------------|---------------|---------------|---------------|
|                                    | <u>Avg</u> | <u>Avg</u> | <u>Points</u> | <u>Points</u> | <u>Change</u> | <u>Change</u> |
| Avg Passengers per Hour per Route: | 21.7       | 22.8       | <b>10.8</b>   | <b>11.4</b>   | -0.6          | -5.0%         |
| Avg Passengers per Mile per Route: | 1.75       | 1.84       | <b>13.4</b>   | <b>14.1</b>   | -0.7          | -5.0%         |
| Avg Fare-box Recovery % per Route: | 28.2%      | 29.0%      | <b>14.1</b>   | <b>14.5</b>   | -0.4          | -2.9%         |
| Avg Daily Fixed-Route Passengers:  | 20,878     | 22,570     | <b>47.5</b>   | <b>51.3</b>   | -3.8          | -7.5%         |
| <b>February Total:</b>             |            |            | <b>85.6</b>   | <b>91.3</b>   | <b>-5.7</b>   | <b>-6.2%</b>  |
| <b>Year Average:</b>               |            |            | <b>83.2</b>   | <b>88.4</b>   | <b>-5.2</b>   | <b>-5.9%</b>  |

- **16 of 23 (69.6%) fixed-routes performed within the average range (within one standard deviation of the system mean)**
- **The Silver Line performed above standard (greater than 66.7% above the system mean)**
- Route 1 – Division, Route 2 – Kalamazoo, Route 4 Eastern and Route 9 – Alpine performed one standard deviation above the system mean
- Route 17 – Woodland/Airport performed one standard deviation below the system mean
- **Route 19—Michigan Crosstown performed below standard (less than 66.7% below the system mean)**

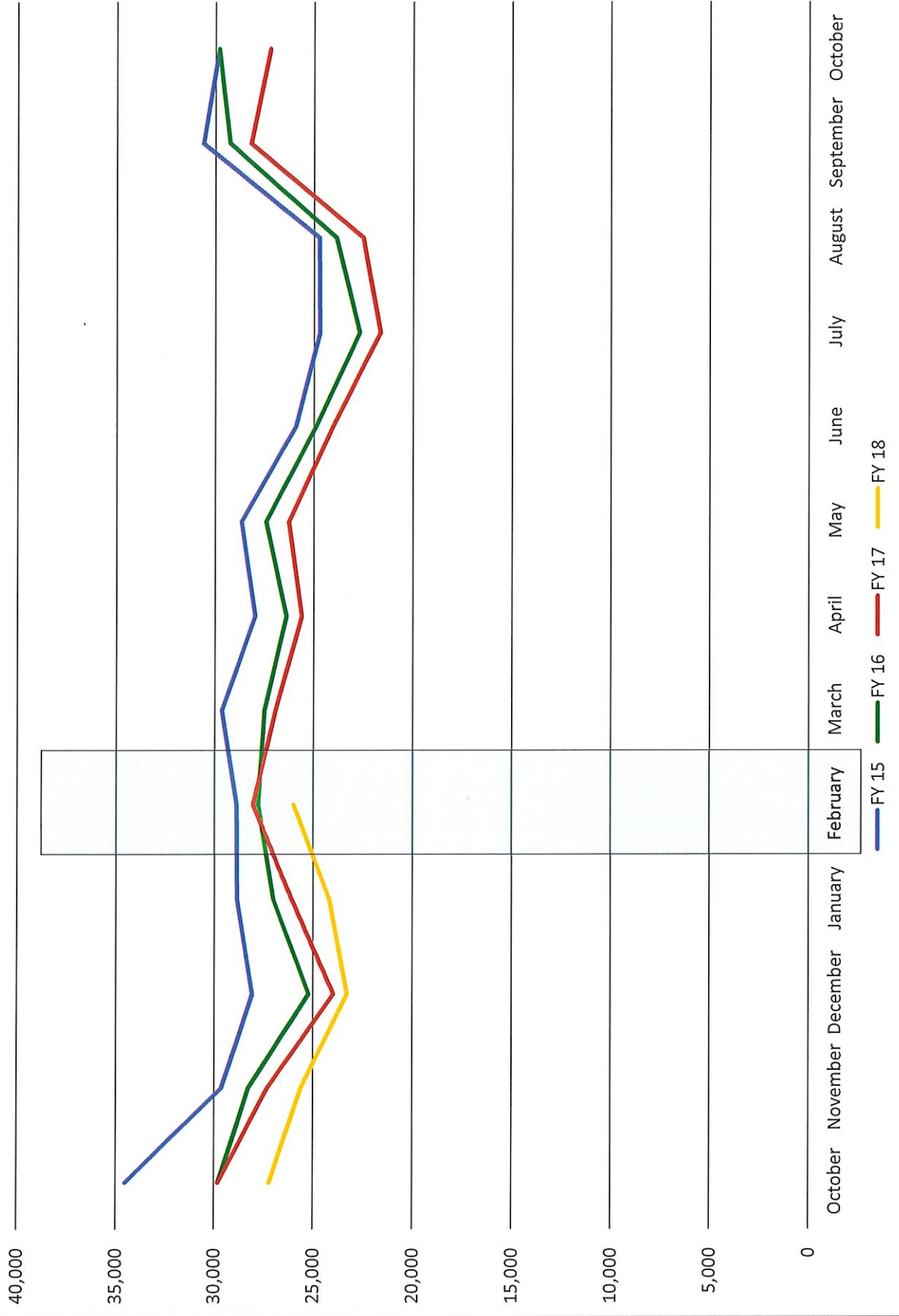
February 2018 Fixed Route Ridership Change: **-7.9%**  
 February 2018 Total Ridership Change: **-9.1%**

**Change in service days from February 2018 to February 2017**

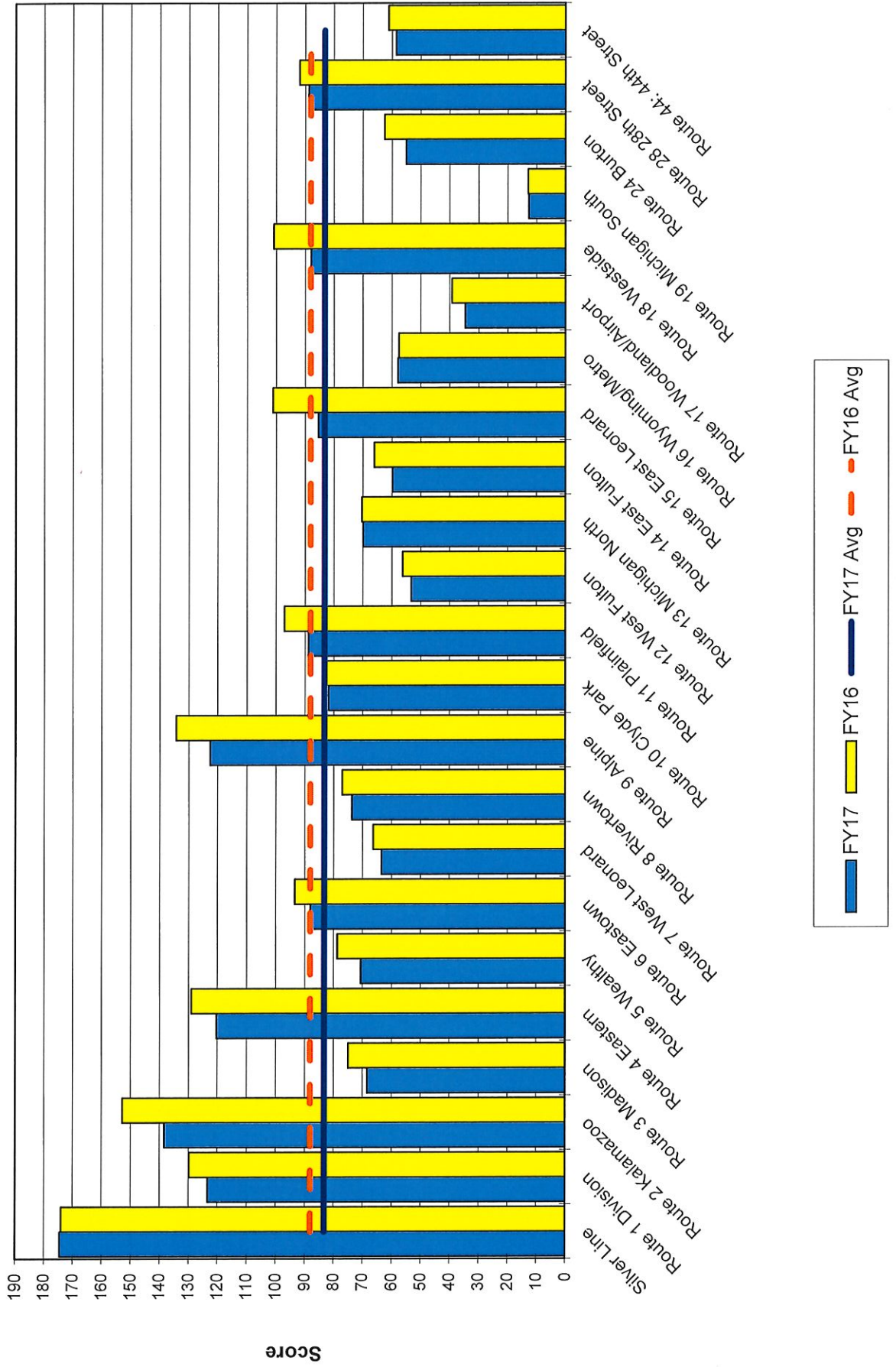
|                         | FY 2018 | FY 2017 | Change |
|-------------------------|---------|---------|--------|
| Total Service Weekdays  | 20      | 20      | 0      |
| Total Service Saturdays | 4       | 4       | 0      |
| Total Service Sundays   | 4       | 4       | 0      |

Attached is a graphical summary of the system and individual fixed-route performance

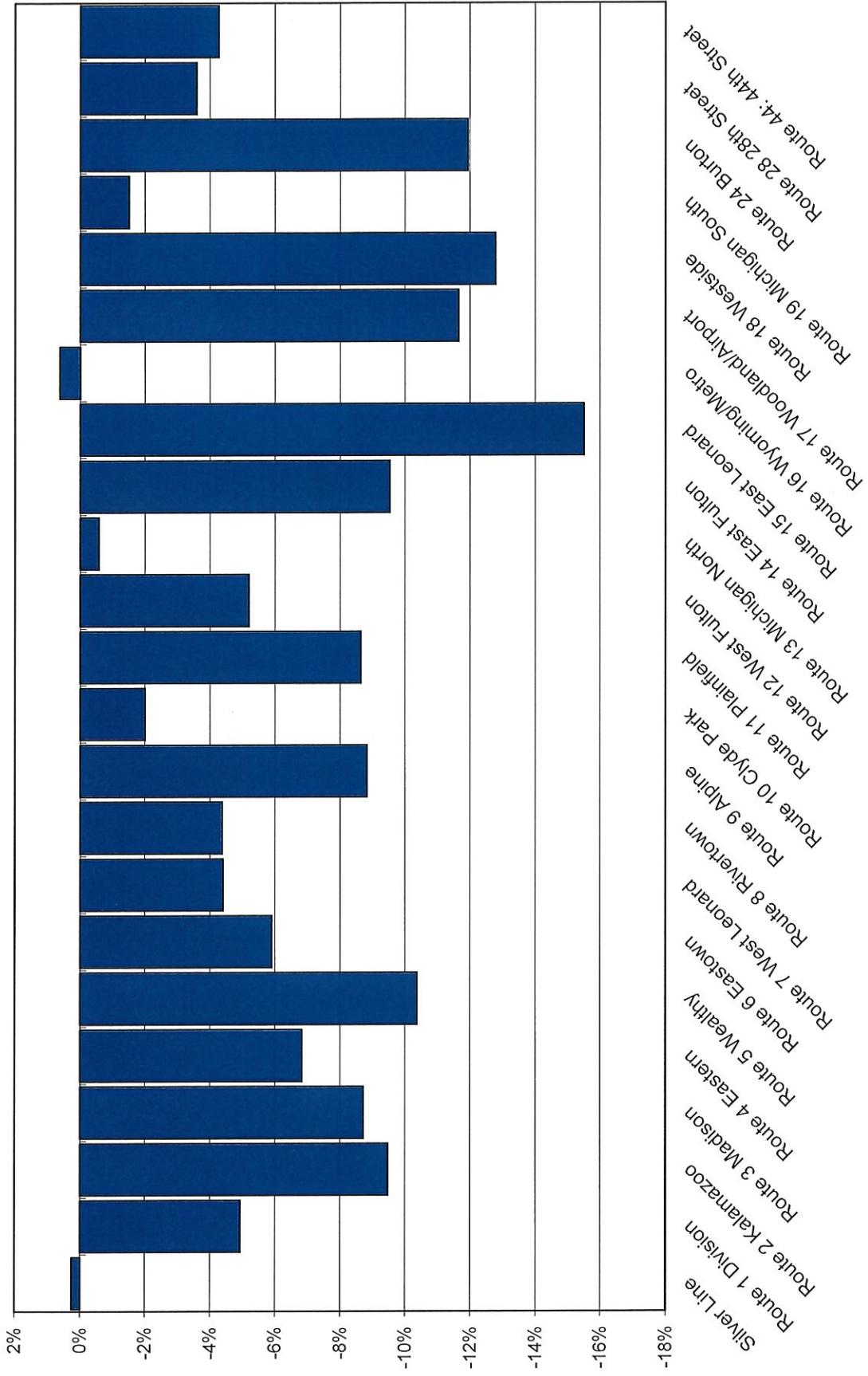
# Monthly Weekday Average Ridership History



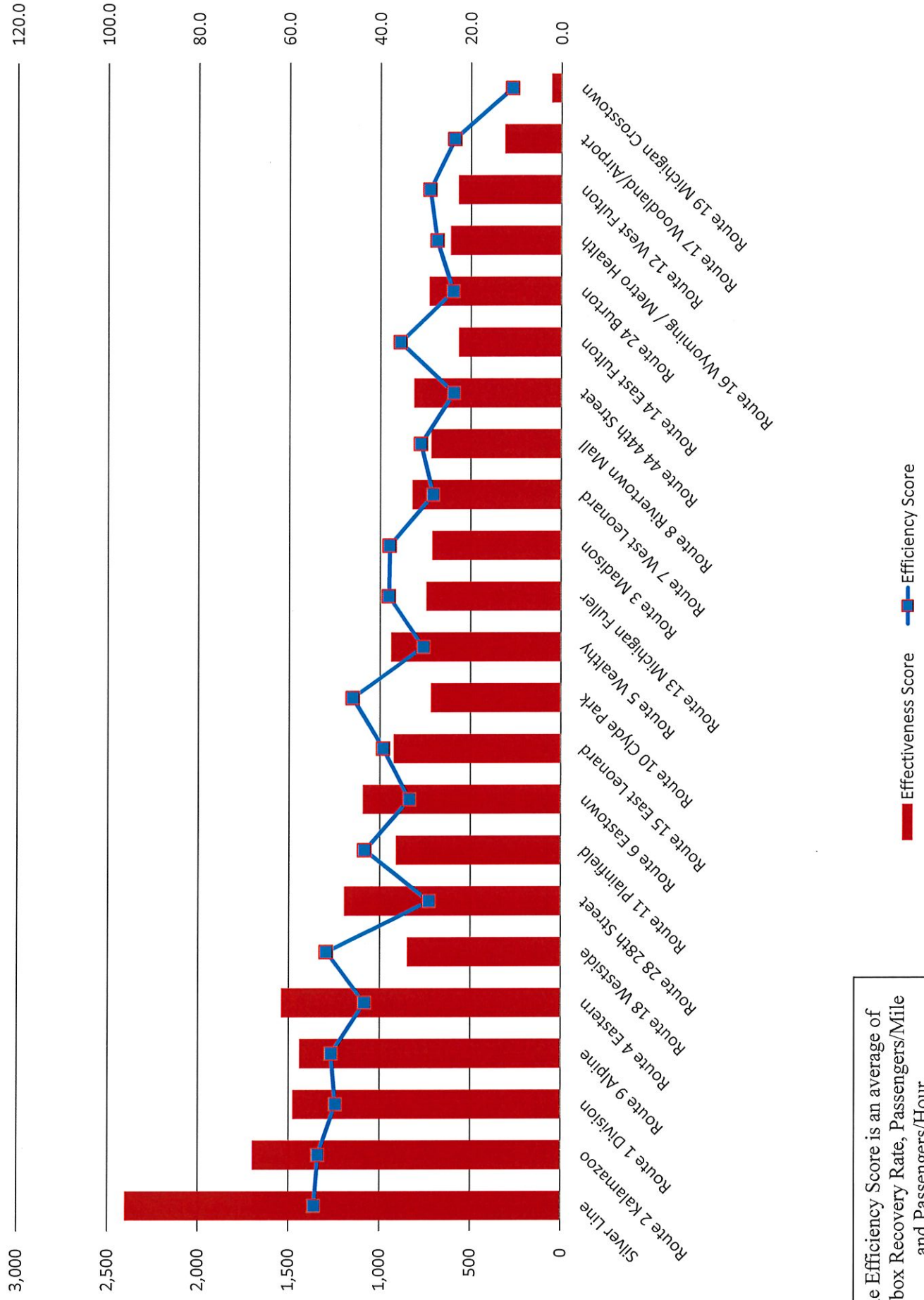
Fixed-Route Scoring Summary: February 2018 Compared to February 2017



Percent Change by Route: February 2018 Compared to Compared February 2017



# Fixed Route Efficiency Score and Ridership Levels - February 2018



The Efficiency Score is an average of Farebox Recovery Rate, Passengers/Mile and Passengers/Hour.

February 2018 Ridership Report  
Ridership by Fare Category

|  | February<br>2018 | February<br>2017 | Actual<br>Change | % Change     |
|--|------------------|------------------|------------------|--------------|
| <b>Regular Route Summary</b>                               |                  |                  |                  |              |
| \$1.75 Cash Fare   | 70,643           | 72,755           | -2,112           | -2.9%        |
| \$1.75 Adult One-Ride Ticket                               | 8,673            | 9,161            | -488             | -5.3%        |
| \$1.35 Adult Ticket  | 34,263           | 34,468           | -205             | -0.6%        |
| \$1.05 Student Ticket, Aquinas, Calvin and Kendall Tickets | 90,025           | 104,855          | -14,830          | -14.1%       |
| \$0.85 Senior / Disabled Ticket and Cash                   | 21,213           | 21,382           | -169             | -0.8%        |
| \$47 Regular and \$30 Reduced 31-Day Month Pass            | 111,187          | 133,676          | -22,489          | -16.8%       |
| \$3.50 One-Day Pass  | 27,488           | 28,904           | -1,416           | -4.9%        |
| \$16.00 Seven-Day Pass                                     | 14,447           | 14,894           | -447             | -3.0%        |
| Spectrum Health Employee Pass                              | 4,988            | 3,899            | 1,089            | 27.9%        |
| Free ADA   | 9,789            | 8,928            | 861              | 9.6%         |
| GVSU Students on Routes 1-44                               | 12,832           | 14,155           | -1,323           | -9.3%        |
| Miscellaneous Fare   | 27,888           | 25,616           | 2,272            | 8.9%         |
| Transfers  | 99,344           | 107,307          | -7,963           | -7.4%        |
| Silver Line  | 67,278           | 67,699           | -421             | -0.6%        |
| <b>Total Regular Route Ridership</b>                       | <b>600,058</b>   | <b>647,699</b>   | <b>-47,641</b>   | <b>-7.4%</b> |

**Contracted/Specialized Services Summary**

|                                   |                |                |                |              |
|-----------------------------------|----------------|----------------|----------------|--------------|
| DASH                              | 33,442         | 29,579         | 3,863          | 13.1%        |
| GRCC Shuttle                      | 17,564         | 19,271         | -1,707         | -8.9%        |
| GVSU Campus Connector             | 139,470        | 151,593        | -12,123        | -8.0%        |
| GVSU Off-Campus Shuttle           | 62,132         | 69,063         | -6,932         | -10.0%       |
| GVSU South Campus Express         | 79,598         | 99,536         | -19,939        | -20.0%       |
| FSU                               | 1,110          | 639            | 471            | 73.7%        |
| Vanpools                          | 3,066          | 3,444          | -378           | -11.0%       |
| <b>Total Contracted Ridership</b> | <b>336,381</b> | <b>373,125</b> | <b>-36,744</b> | <b>-9.8%</b> |

**Demand Response Summary**

|  |               |               |           |             |
|--|---------------|---------------|-----------|-------------|
| GO!Bus (does not include PASS)             | 28,797        | 28,647        | 150       | 0.5%        |
| PASS North Ridership (Including Transfers) | 219           | 278           | -59       | -21.2%      |
| PASS SE Ridership (Including Transfers)    | 166           | 204           | -38       | -18.6%      |
| PASS SW Ridership (Including Transfers)    | 74            | 77            | -3        | -3.9%       |
| <b>Total Demand Response Ridership</b>     | <b>29,256</b> | <b>29,206</b> | <b>50</b> | <b>0.2%</b> |

|                           | 2018      | 2016      | Change   | YTD Change |
|---------------------------|-----------|-----------|----------|------------|
| Total Service Weekdays    | 20        | 20        | 0        | -1         |
| Total Service Saturdays   | 4         | 4         | 0        | -1         |
| Total Service Sundays     | 4         | 4         | 0        | 2          |
| Total Holidays            | 0         | 0         | 0        | 0          |
| <b>Total Service Days</b> | <b>28</b> | <b>28</b> | <b>0</b> | <b>0</b>   |
| <b>Total Days</b>         | <b>28</b> | <b>28</b> | <b>0</b> | <b>0</b>   |

|  |                |                |                |               |
|--|----------------|----------------|----------------|---------------|
| Total Weekday Fixed-Route Ridership                            | 749,640        | 812,863        | -63,223        | -7.8%         |
| Total Weekday Evening Fixed-Route Ridership                    | 109,836        | 121,946        | -12,110        | -9.9%         |
| <b>Total Weekday and Weekday Evening Fixed-Route Ridership</b> | <b>859,476</b> | <b>934,809</b> | <b>-75,333</b> | <b>-8.1%</b>  |
| Total Saturday Fixed-Route Ridership                           | 52,455         | 59,547         | -7,092         | -11.9%        |
| Total Sunday Fixed-Route Ridership                             | 24,508         | 26,468         | -1,960         | -7.4%         |
| Avg Weekday Daytime Fixed-Route Ridership                      | 37,482         | 40,643         | -3,161         | -7.8%         |
| Avg Weekday Evening Fixed-Route Ridership                      | 5,492          | 6,097          | -606           | -9.9%         |
| <b>Avg Weekday and Weekday Evening Fixed-Route Ridership</b>   | <b>42,974</b>  | <b>46,740</b>  | <b>-3,767</b>  | <b>-8.1%</b>  |
| <b>Avg Saturday Fixed-Route Ridership</b>                      | <b>13,114</b>  | <b>14,887</b>  | <b>-1,773</b>  | <b>-11.9%</b> |
| <b>Avg Sunday Fixed-Route Ridership</b>                        | <b>6,127</b>   | <b>6,617</b>   | <b>-490</b>    | <b>-7.4%</b>  |

|  | 2017              | 2016              | Change          | % Change     |
|--|-------------------|-------------------|-----------------|--------------|
| Fixed-Route Ridership Month to Date                    | 600,058           | 647,699           | -47,641         | -7.4%        |
| Contracted/Specialized Service Ridership Month to Date | 336,381           | 373,125           | -36,744         | -9.8%        |
| Demand Response Ridership Month to Date                | 29,256            | 29,206            | 50              | 0.2%         |
| <b>Total Monthly Ridership</b>                         | <b>965,695</b>    | <b>1,050,030</b>  | <b>-84,335</b>  | <b>-8.0%</b> |
|  | 2018              | 2016              | Change          | % Change     |
| Fixed-Route Ridership Year to Date                     | 3,078,207         | 3,301,541         | -223,334        | -6.8%        |
| Contracted/Specialized Service Ridership Year to Date  | 1,578,792         | 1,713,498         | -134,706        | -7.9%        |
| Demand Response Ridership Year to Date                 | 148,621           | 148,728           | -107            | -0.1%        |
| <b>Total Ridership Year to Date</b>                    | <b>4,805,620</b>  | <b>5,163,767</b>  | <b>-358,147</b> | <b>-6.9%</b> |
| <b>Projected Annual Ridership</b>                      | <b>10,211,687</b> | <b>10,972,730</b> | <b>-761,043</b> | <b>-6.9%</b> |

# February 2018 Productivity Report

| Fixed-Route Services            | Passengers per Bus Hour | Passengers per Bus Mile | Farebox Recovery % | Efficiency Score | Daily Passengers | Effectiveness Score | Total Score | Distance from Mean | Current Rank | FY 2017 Rank | Change | Total Passengers | Peak Frequency |
|---------------------------------|-------------------------|-------------------------|--------------------|------------------|------------------|---------------------|-------------|--------------------|--------------|--------------|--------|------------------|----------------|
| Silver Line                     | 31.2                    | 2.32                    | 41.6%              | 54.3             | 2,403            | 120.1               | 174.4       | 103.9%             | 1            | 1            | 0      | 67,278           | 10             |
| Route 2 Kalamazoo               | 28.3                    | 2.74                    | 36.5%              | 53.5             | 1,696            | 84.8                | 138.4       | 61.7%              | 2            | 2            | 0      | 47,498           | 15             |
| Route 1 Division                | 27.3                    | 2.16                    | 38.9%              | 49.7             | 1,475            | 73.7                | 123.4       | 44.3%              | 3            | 4            | 1      | 41,288           | 15             |
| Route 9 Alpine                  | 25.0                    | 2.81                    | 36.1%              | 50.6             | 1,438            | 71.9                | 122.5       | 43.2%              | 4            | 3            | -1     | 40,255           | 15             |
| Route 4 Eastern                 | 23.0                    | 1.93                    | 33.9%              | 43.3             | 1,538            | 76.9                | 120.2       | 40.6%              | 5            | 5            | 0      | 43,066           | 15             |
| Route 18 Westside               | 28.5                    | 2.61                    | 34.8%              | 51.7             | 846              | 42.3                | 94.0        | 9.9%               | 6            | 7            | 1      | 20,298           | 30             |
| Route 28 28th Street            | 16.6                    | 1.16                    | 23.8%              | 29.1             | 1,194            | 59.7                | 88.8        | 3.8%               | 7            | 6            | -1     | 33,419           | 15             |
| Route 11 Plainfield             | 23.5                    | 1.98                    | 32.8%              | 43.3             | 909              | 57.5                | 88.8        | 3.8%               | 8            | 8            | 0      | 25,458           | 15             |
| Route 6 Eastown                 | 18.1                    | 1.72                    | 22.3%              | 33.5             | 1,092            | 54.6                | 88.0        | 2.9%               | 9            | 10           | 1      | 30,568           | 15             |
| Route 15 East Leonard           | 21.1                    | 2.00                    | 26.7%              | 39.3             | 923              | 46.1                | 85.4        | -0.1%              | 10           | 9            | -1     | 25,839           | 15             |
| Route 10 Clyde Park             | 26.8                    | 2.68                    | 35.6%              | 46.0             | 717              | 35.9                | 81.8        | -4.3%              | 11           | 11           | 0      | 20,085           | 30             |
| Route 5 Wealthy                 | 16.6                    | 1.42                    | 22.4%              | 30.4             | 938              | 48.9                | 77.3        | -8.6%              | 12           | 12           | 0      | 22,502           | 15             |
| Route 13 Michigan Fuller        | 21.1                    | 1.85                    | 26.6%              | 38.1             | 742              | 37.1                | 75.2        | -12.1%             | 13           | 15           | 2      | 17,819           | 15             |
| Route 3 Madison                 | 24.1                    | 1.43                    | 29.8%              | 37.9             | 711              | 35.5                | 73.5        | -14.1%             | 14           | 14           | 0      | 17,062           | 30             |
| Route 7 West Leonard            | 16.9                    | 1.11                    | 22.5%              | 28.3             | 820              | 41.0                | 69.3        | -19.0%             | 15           | 16           | 1      | 19,672           | 15             |
| Route 8 Riverfront Mall         | 18.3                    | 1.29                    | 23.9%              | 31.0             | 717              | 35.9                | 66.9        | -21.8%             | 16           | 13           | -3     | 20,085           | 30             |
| Route 44 44th Street            | 12.6                    | 0.94                    | 20.5%              | 23.8             | 812              | 40.6                | 64.3        | -24.8%             | 17           | 17           | 0      | 19,479           | 30             |
| Route 14 East Fulton            | 19.0                    | 1.81                    | 24.2%              | 35.5             | 566              | 28.3                | 63.8        | -25.4%             | 18           | 18           | 0      | 13,577           | 30             |
| Route 24 Burton                 | 12.8                    | 0.99                    | 19.8%              | 23.9             | 728              | 36.4                | 60.3        | -29.5%             | 19           | 19           | 0      | 17,464           | 30             |
| Route 16 Wyoming / Metro Health | 15.7                    | 1.17                    | 21.2%              | 27.4             | 611              | 30.6                | 58.0        | -32.2%             | 20           | 21           | 1      | 17,111           | 30             |
| Route 12 West Fulton            | 16.3                    | 1.53                    | 18.2%              | 29.0             | 558              | 28.4                | 57.4        | -32.9%             | 21           | 20           | -1     | 13,634           | 30             |
| Route 17 Woodland/Airport       | 14.0                    | 0.98                    | 17.9%              | 23.5             | 311              | 15.6                | 39.1        | -54.3%             | 22           | 22           | 0      | 6,227            | 30             |
| Route 19 Michigan Cross-town    | 5.2                     | 0.44                    | 9.7%               | 10.8             | 54               | 2.7                 | 13.5        | -84.2%             | 23           | 23           | 0      | 1,687            | 30             |
| <b>System Summary</b>           | <b>21.5</b>             | <b>1.73</b>             | <b>28.0%</b>       |                  | <b>949</b>       |                     | <b>85.5</b> | n/a                |              |              |        | <b>580,771</b>   |                |

| Contracted/Specialized Services | Passengers per Bus Hour | Passengers per Bus Mile | Farebox Recovery % | Efficiency Score | Daily Passengers | Effectiveness Score | Total Score | Distance from Mean | Current Rank | FY 2014 Rank | Change | Total Passengers | Peak Frequency |
|---------------------------------|-------------------------|-------------------------|--------------------|------------------|------------------|---------------------|-------------|--------------------|--------------|--------------|--------|------------------|----------------|
| GVSU Campus Connector           | 37.0                    | 1.99                    | n/a                | 52.5             | 4,981            | 249.1               | 301.6       | n/a                | n/a          | n/a          | n/a    | 139,470          | 7              |
| GVSU South Campus Express       | 53.0                    | 5.93                    | n/a                | 110.2            | 3,980            | 199.0               | 309.1       | n/a                | n/a          | n/a          | n/a    | 79,598           | 10             |
| GVSU Off-Campus                 | 55.1                    | 7.12                    | n/a                | 125.3            | 3,107            | 155.3               | 280.6       | n/a                | n/a          | n/a          | n/a    | 62,132           | 10             |
| GVSU CHS Express                | n/a                     | n/a                     | n/a                | n/a              | n/a              | n/a                 | n/a         | n/a                | n/a          | n/a          | n/a    | n/a              | 5              |
| GRCC Shuttle                    | 65.9                    | 16.64                   | n/a                | 242.2            | 4,391            | 219.6               | 461.8       | n/a                | n/a          | n/a          | n/a    | 17,564           | 10             |
| DASH South                      | n/a                     | n/a                     | n/a                | n/a              | 0                | 0.0                 | n/a         | n/a                | n/a          | n/a          | n/a    | 0                | 5              |
| DASH West                       | 25.2                    | 3.99                    | n/a                | 68.9             | 1,484            | 74.2                | 133.0       | n/a                | n/a          | n/a          | n/a    | 29,677           | 5              |
| DASH North                      | 4.1                     | 0.33                    | n/a                | 9.3              | 188              | 9.4                 | 18.7        | n/a                | n/a          | n/a          | n/a    | 3,765            | 20             |
| FSU                             | 5.3                     | 0.14                    | n/a                | 5.8              | 56               | 2.8                 | 8.6         | n/a                | n/a          | n/a          | n/a    | 1,110            | 120            |
| <b>Total System Summary</b>     | <b>37.11</b>            | <b>2.84</b>             |                    |                  |                  |                     |             |                    |              |              |        | <b>333,315</b>   |                |

The range of values comprising approximately 68% of the samples above and below the mean

Routes with scores greater than 66.7% above the mean

Routes with scores between 1 standard deviation above the mean and 66.7% above the mean

Routes with scores within 1 standard deviation above the mean

Routes with scores with +/- 12.5% of the mean

Routes with scores within 1 standard deviation below the mean

Routes with scores between 1 standard deviation below the mean and 66.7% below the mean

Routes with scores greater than 66.7% below the mean

Farebox includes GRPS services