Staff Summary

Part of TriMet’s compliance with FTA Circular 4702.1B *Title VI Requirements and Guidelines for Federal Transit Administration Recipients (Title VI Circular)* is ongoing performance monitoring across all service modes (bus, MAX, and WES). The Title VI Circular does not require monitoring for demand response service. Aligned with TriMet’s Business Plan, staff will conduct an annual review of resource and service distribution. The objective is to ensure there is an equitable distribution across TriMet’s system. The analysis in this report compared minority and/or low-income access to that of non-minority and/or higher income access across six service performance metrics for date compiled during Spring 2019:

1. **Service frequency and span** (revenue hours): TriMet evaluates the amount and distribution of revenue hours of service provided. The hours while in service include trip start to finish.

2. **On-time performance**: TriMet defines “on-time” as no more than five minutes late or one minute early. Measured at time points.

3. **Vehicle loads**: TriMet evaluates whether fixed-route buses or light rail vehicles are overcrowded by comparing the load/seat ratio to the maximum load factor for each vehicle type: bus (1.3), MAX (2.1), and WES (1.0).

4. **Service availability**: TriMet considers persons residing within one-half mile of bus stops and/or rail stations as having service available. Service availability is expressed as number and percentage of District-wide population and is determined by vehicle mode.

5. **Stop amenities**: TriMet analyzes the distribution of stop amenities in the TriMet system (shelters, seating, lighting, waste receptacles, etc.) in order to identify any potential disparities.

6. **Vehicle assignment**: TriMet assesses the vehicle assignment practices for fixed-route buses and light rail vehicles. The expectation is that the average age of vehicles on minority and/or low-income lines should be no more than the average age of vehicles on non-minority and/or higher income lines.
Title VI Service Performance Measure Rating Scale Rubric

The Title VI rating scale rubric ranges from “outstanding”, “good”, “fair”, “marginal” to “adverse impact”. To receive an “outstanding” score, access or service distribution for minority and low-income must be as good or better than non-minority and higher income for each measure. A performance finding within the 5% threshold is considered “good”. The target for TriMet’s Business Plan objective is within 5% or better. A greater than 5% but less than 10% difference equates to “fair”. Above the 10% threshold but within 20% would result in a “marginal” score. A marginal score would be flagged as a caution and area for improvement. Any measure that exceeds 20% would indicate “adverse impact” and would result in a system-wide disparate impact\(^1\)/disproportionate burden\(^2\) finding per the Federal Transit Administration. TriMet will work to improve service and access on an on-going basis to ensure TriMet’s equity targets are achieved and for compliance with TriMet’s board adopted Title VI Program.

\(^{1}\) A facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin.

\(^{2}\) A facially neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations.
### Minority vs. Non-minority Lines

#### Equity Metric: Service Standards

<table>
<thead>
<tr>
<th>Metric</th>
<th>&lt;=20% Difference</th>
<th>&lt;=10% Difference</th>
<th>&lt;=5% Difference</th>
<th>As good or better on minority lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Loads</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<td>Service Frequency &amp; Span</td>
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<td>Service Availability</td>
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<td>✔</td>
</tr>
</tbody>
</table>

*WES (a minority line) is the only commuter rail line, so it cannot be compared to other commuter rail lines. It is included as part of the overall system analysis.*

#### Equity Metric: Distribution of Amenities

<table>
<thead>
<tr>
<th>Metric</th>
<th>&lt;=20% Difference</th>
<th>&lt;=10% Difference</th>
<th>&lt;=5% Difference</th>
<th>As good or better on minority lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Lighting</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Elevators</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Digital Displays</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Shelters</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Signs, Maps and/or Schedules</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Waste Receptacles</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

3 A minority line is defined by the FTA as having at least one-third of its revenue vehicle hours in census block groups with above-average minority populations.
MINORITY vs. NON-MINORITY LINES PERFORMANCE RESULTS

Distribution of Amenities (See Exhibit A for full details)
- The percentage of stops containing each amenity on minority lines exceeds the percentage for non-minority lines in all categories examined with the exception of lighting, which is higher for non-minority lines (63 percent compared to 59 percent of stops), digital displays (2.7 percent compared to 2.3 percent of stops) and signs, maps and/or schedules (99 percent compared to 97 percent of stops).

Vehicle Loads (See Exhibit B for full details)
- Average load/seat ratios range from a low of 0.34 to a high of 1.15.
- All average loads by mode are below the maximum load factor for every time period.

Service Frequency & Span (See Exhibit C for full details)
- A slightly higher percentage of revenue hours of service are provided on minority bus lines than non-minority lines (51% vs. 49%, respectively).
- A greater percentage of revenue hours of service are provided on minority MAX lines than non-minority lines (79% vs. 21%, respectively).

On-time performance (OTP) (See Exhibit D for full details)
- Average OTP for minority bus lines is 1 percent higher than OTP for non-minority bus lines on Weekdays and Saturday. The Sunday average OTP is 1 percent lower for minority bus lines compared to non-minority bus lines.
- Average OTP for minority MAX lines is 4 percent lower than the OTP for the two non-minority MAX lines (Yellow and Orange) for Weekdays, Saturdays, and Sundays.

Vehicle Assignment (See Exhibit E for full details)
- The average age of vehicles on minority bus lines (6.6 years) is about 2% newer than the average age of vehicles on non-minority bus lines (6.7 years).
- The average age of vehicles on minority MAX lines (16.6 years) is about 10% newer than the average age of vehicles on non-minority MAX lines (18.2 years).
- For WES, TriMet does not maintain a detailed database of specific vehicles used for specific trips. The four main vehicles used for WES service were all built in 2007; the remaining two were built in 1952 and 1953, though they have been substantially refurbished, and are typically used as spares. WES is a minority line. Because it is the only commuter rail line in the region, there is no other line to compare with.

Service Availability (See Exhibit F for full details)
- A higher percentage of the TriMet district’s minority population lives within ½ mile of bus, MAX, and WES service compared to the district’s non-minority population.

Note:

See Exhibit G for a breakdown of Minority and Non-Minority Lines
### Equity Metric: Service Standards

<table>
<thead>
<tr>
<th>Metric</th>
<th>&lt;=20% Difference</th>
<th>&lt;=10% Difference</th>
<th>&lt;=5% Difference</th>
<th>As good or better</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle Loads</strong>&lt;br&gt;If the average load of low-income lines is above the maximum load factor, comparison to average load of non-low-income lines.&lt;br&gt;<strong>Bus</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>MAX</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Sys</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

### Equity Metric: Distribution of Amenities

<table>
<thead>
<tr>
<th>Metric</th>
<th>&lt;=20% Difference</th>
<th>&lt;=10% Difference</th>
<th>&lt;=5% Difference</th>
<th>As good or better on low-income lines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seating</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Lighting</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Elevators</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Digital Displays</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Shelters</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Signs, Maps and/or Schedules</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Waste Receptacles</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

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**Equity Metric: Service Standards**

<table>
<thead>
<tr>
<th>Metric</th>
<th>&lt;=20% Difference</th>
<th>&lt;=10% Difference</th>
<th>&lt;=5% Difference</th>
<th>As good or better</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle Loads</strong>&lt;br&gt;If the average load of low-income lines is above the maximum load factor, comparison to average load of non-low-income lines.&lt;br&gt;<strong>Bus</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>MAX</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Sys</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

**Service Frequency & Span**<br>Revenue hours of service provided on low-income vs. non-low-income lines.<br>**Bus** | ✔️ | ✔️ | ✔️ | ✔️ |
| **MAX** | ✔️ | ✔️ | ✔️ | ✔️ |
| **Sys** | ✔️ | ✔️ | ✔️ | ✔️ |

**On-Time Performance**<br>Average percent on-time for low-income vs. non-low-income lines.<br>**Bus** | ✔️ | ✔️ | ✔️ | ✔️ |
| **MAX** | ✔️ | ✔️ | ✔️ | ✔️ |
| **Sys** | ✔️ | ✔️ | ✔️ | ✔️ |

**Vehicle Assignment**<br>Average age of vehicles serving low-income vs. non-low-income lines.<br>**Bus** | ✔️ | ✔️ | ✔️ | ✔️ |
| **MAX** | ✔️ | ✔️ | ✔️ | ✔️ |
| **Sys** | ✔️ | ✔️ | ✔️ | ✔️ |

**Service Availability**<br>Percentage of low-income vs. non-low-income population within ½ mile of service.<br>**Bus** | ✔️ | ✔️ | ✔️ | ✔️ |
| **MAX** | ✔️ | ✔️ | ✔️ | ✔️ |
| **Sys** | ✔️ | ✔️ | ✔️ | ✔️ |

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WES (a low-income line) is the only commuter rail line, so it cannot be compared to other commuter rail lines. It is included as part of the overall system analysis. All MAX lines are low-income lines.

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4 Low-income is defined as households at or below 150% federal poverty. A low-income line is defined as having at least one-half of its revenue vehicle hours in census block groups with above-average low-income populations.
LOW-INCOME vs. HIGHER INCOME LINES PERFORMANCE RESULTS

Distribution of Amenities (See Exhibit A for full details)
• The percentage of stops containing each amenity on low-income lines exceeds the percentage for higher income lines in all categories examined with the exception of lighting, which is higher for higher income lines (64 percent compared to 59 percent of stops) and signs, maps, and/or schedules (99 percent compared to 97 percent of stops).

Vehicle Loads (See Exhibit B for full details)
• Average load/seat ratios range from a low of 0.39 to a high of 1.00.
• All average loads by mode are below the maximum load factor for every time period.

Service Frequency & Span (See Exhibit C for full details)
• A greater percentage of revenue hours of service are provided on low-income bus lines than higher income bus lines (76% vs. 24%, respectively).
• All MAX lines are considered low income.

On-time performance (See Exhibit D for full details)
• The average OTP for Weekdays and Saturday is comparable for both bus lines. Average OTP for low-income bus lines is 1% lower than the OTP for higher income bus lines for Sunday.
• All MAX lines are considered low income.

Vehicle Assignment (See Exhibit E for full details)
• The average age of vehicles on low-income bus lines (6.5 years) is about 6% newer than the average age of vehicles on higher income bus lines (6.8 years).
• All MAX lines are considered low-income. The average age is 17.4 years.
• For WES, TriMet does not maintain a detailed database of specific vehicles used for specific trips. The four main vehicles used for WES service were all built in 2007; the remaining two were built in 1952 and 1953, though they have been substantially refurbished, and are typically used as spares. WES is a low-income line.

Service Availability (See Exhibit F for full details)
• A higher percentage of the TriMet district’s low-income population lives within ½ mile of bus, MAX, and WES service compared to the district’s higher income population. Because it is the only commuter rail line in the region, there is no other line to compare with.

Note:
See Exhibit G for a breakdown of Low-Income and Higher Income Lines
**Exhibit A: Stop Amenities Tables**

<table>
<thead>
<tr>
<th>Category of Amenity</th>
<th>Pct. of Stops on Minority Lines</th>
<th>Pct. of Stops on Non-Minority Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating</td>
<td>38%</td>
<td>31%</td>
</tr>
<tr>
<td>Lighting</td>
<td>59%</td>
<td>63%</td>
</tr>
<tr>
<td>Elevators</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Digital Displays</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Shelters</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>Signs, Maps and/or Schedules</td>
<td>97%</td>
<td>99%</td>
</tr>
<tr>
<td>Waste Receptacles</td>
<td>16%</td>
<td>14%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category of Amenity</th>
<th>Pct. of Stops on Low-Income Lines</th>
<th>Pct. of Stops on Higher Income Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating</td>
<td>38%</td>
<td>29%</td>
</tr>
<tr>
<td>Lighting</td>
<td>59%</td>
<td>64%</td>
</tr>
<tr>
<td>Elevators</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Digital Displays</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Shelters</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>Signs, Maps and/or Schedules</td>
<td>97%</td>
<td>99%</td>
</tr>
<tr>
<td>Waste Receptacles</td>
<td>17%</td>
<td>12%</td>
</tr>
</tbody>
</table>
## Exhibit B: Vehicle Loads Tables

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Time Period</th>
<th>Load/Seat Ratio</th>
<th>Mean Load</th>
<th>Non-Minority Lines</th>
<th>Load/Seat Ratio</th>
<th>Mean Load</th>
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<tbody>
<tr>
<td><strong>Bus (28 or 39 seats)</strong></td>
<td>AM Peak</td>
<td>0.34</td>
<td>14.81</td>
<td>0.40</td>
<td>17.25</td>
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</tr>
<tr>
<td></td>
<td>Midday</td>
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<td>13.65</td>
<td>0.38</td>
<td>13.91</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PM Peak</td>
<td>0.47</td>
<td>16.48</td>
<td>0.49</td>
<td>17.92</td>
<td></td>
</tr>
<tr>
<td><strong>MAX Light Rail (128 seats)</strong></td>
<td>AM Peak</td>
<td>0.95</td>
<td>121.46</td>
<td>0.98</td>
<td>125.53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midday</td>
<td>0.68</td>
<td>87.83</td>
<td>0.50</td>
<td>67.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PM Peak</td>
<td>1.15</td>
<td>134.59</td>
<td>0.76</td>
<td>103.91</td>
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</tr>
<tr>
<td><strong>WES Commuter Rail (146 seats)</strong></td>
<td>AM Peak</td>
<td>0.41</td>
<td>39.00</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PM Peak</td>
<td>0.51</td>
<td>55.00</td>
<td>n/a</td>
<td>n/a</td>
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<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Time Period</th>
<th>Load/Seat Ratio</th>
<th>Mean Load</th>
<th>Low-Income Lines</th>
<th>Load/Seat Ratio</th>
<th>Mean Load</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus (28 or 39 seats)</strong></td>
<td>AM Peak</td>
<td>0.39</td>
<td>16.70</td>
<td>0.34</td>
<td>15.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midday</td>
<td>0.39</td>
<td>14.63</td>
<td>0.35</td>
<td>12.31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PM Peak</td>
<td>0.5</td>
<td>17.94</td>
<td>0.45</td>
<td>16.07</td>
<td></td>
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<tr>
<td><strong>MAX Light Rail (128 seats)</strong></td>
<td>AM Peak</td>
<td>0.96</td>
<td>123.09</td>
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<td>n/a</td>
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<td></td>
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<td>79.80</td>
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<td></td>
<td>PM Peak</td>
<td>1.00</td>
<td>122.32</td>
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</tr>
<tr>
<td><strong>WES Commuter Rail (146 seats)</strong></td>
<td>AM Peak</td>
<td>0.41</td>
<td>39.00</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
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<tr>
<td></td>
<td>PM Peak</td>
<td>0.51</td>
<td>55.00</td>
<td>n/a</td>
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<td></td>
</tr>
</tbody>
</table>
### Exhibit C: Revenue Hours Tables

<table>
<thead>
<tr>
<th>Mode of Service</th>
<th>Minority Lines</th>
<th>Non-Minority Lines</th>
<th>Difference; Minority to Non-Minority +/(-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>51%</td>
<td>49%</td>
<td>2</td>
</tr>
<tr>
<td>MAX Light Rail</td>
<td>79%</td>
<td>21%</td>
<td>58</td>
</tr>
<tr>
<td>WES Commuter Rail</td>
<td>100%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mode of Service</th>
<th>Low Income Lines</th>
<th>Higher Income Lines</th>
<th>Difference; Low Income to Higher Income +/(-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>76%</td>
<td>24%</td>
<td>52</td>
</tr>
<tr>
<td>MAX Light Rail</td>
<td>100%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>WES Commuter Rail</td>
<td>100%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
## Exhibit D: On-Time Performance Tables

### Avg. % On-Time (weighted)

<table>
<thead>
<tr>
<th>Mode of Service</th>
<th>Day</th>
<th>Minority Lines</th>
<th>Non-Minority Lines</th>
<th>Difference; Minority to Non-Minority +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus</strong></td>
<td>Weekday</td>
<td>90%</td>
<td>89%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>90%</td>
<td>89%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>92%</td>
<td>93%</td>
<td>(1)</td>
</tr>
<tr>
<td><strong>MAX Light Rail</strong></td>
<td>Weekday</td>
<td>91%</td>
<td>93%</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>88%</td>
<td>94%</td>
<td>(6)</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>92%</td>
<td>94%</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>WES Commuter Rail</strong></td>
<td>Weekday</td>
<td>96%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### Avg. % On-Time (weighted)

<table>
<thead>
<tr>
<th>Mode of Service</th>
<th>Day</th>
<th>Low Income Lines</th>
<th>Higher Income Lines</th>
<th>Difference; Low Income to Higher Income +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus</strong></td>
<td>Weekday</td>
<td>89%</td>
<td>89%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>89%</td>
<td>89%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>92%</td>
<td>93%</td>
<td>(1)</td>
</tr>
<tr>
<td><strong>MAX Light Rail</strong></td>
<td>Weekday</td>
<td>92%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>90%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>93%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>WES Commuter Rail</strong></td>
<td>Weekday</td>
<td>96%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### Exhibit E: Vehicle Assignment Tables

#### Avg. Age of Vehicles (Years)

<table>
<thead>
<tr>
<th>Mode of Service</th>
<th>Minority Lines</th>
<th>Non-Minority Lines</th>
<th>Difference; Minority to Non-Minority +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>6.6</td>
<td>6.7</td>
<td>(0.12)</td>
</tr>
<tr>
<td>MAX Light Rail</td>
<td>16.6</td>
<td>18.2</td>
<td>(1.58)</td>
</tr>
<tr>
<td>WES Commuter Rail</td>
<td>Primary: 13.0</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Spares: 67.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Avg. Age of Vehicles (Years)

<table>
<thead>
<tr>
<th>Mode of Service</th>
<th>Low Income Lines</th>
<th>Higher Income Lines</th>
<th>Difference; Low Income to Higher Income +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>6.5</td>
<td>6.8</td>
<td>(0.37)</td>
</tr>
<tr>
<td>MAX Light Rail</td>
<td>17.4</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>WES Commuter Rail</td>
<td>Primary: 13.0</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Spares: 67.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Exhibit F: Service Availability Table

#### Demographic Analysis of Proximity to TriMet Service (Percent)

<table>
<thead>
<tr>
<th>Demographic Analysis of Proximity to TriMet Service</th>
<th>TM District</th>
<th>Percent within 1/2* Mile of...</th>
<th>Frequent Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Totals (Raw Num)</td>
<td>Totals (Pct.)</td>
<td>Bus</td>
</tr>
<tr>
<td>Population Total (ACS 5 year estimate, 2013-2017)</td>
<td>1,590,996</td>
<td>100.0%</td>
<td>88.2%</td>
</tr>
<tr>
<td>Minority All Minorities**</td>
<td>463,940</td>
<td>29.2%</td>
<td>90.1%</td>
</tr>
<tr>
<td>Non-Minority White (Non-Hispanic)</td>
<td>1,127,057</td>
<td>70.8%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Population Total population with known income (ACS 5 year estimate, 2013-2017)**</td>
<td>1,568,502</td>
<td>100.0%</td>
<td>88.1%</td>
</tr>
<tr>
<td>Income Below 150% of Poverty Level</td>
<td>324,718</td>
<td>20.7%</td>
<td>93.6%</td>
</tr>
<tr>
<td>Income Above 150% of Poverty Level</td>
<td>1,243,784</td>
<td>79.0%</td>
<td>86.7%</td>
</tr>
</tbody>
</table>

**Sources:** Tri Met GIS, Metro Regional Land Information System, and US Census American Community Survey Tables: 2013 - 2017 (5-Year Estimates), Table B03002. Hispanic or Latino Origin By Race, and Table C17002. Ratio Of Income To Poverty Level In The Past 12 Months (Block Group Level Data)

To adjust for the fact that some census block groups are only partially within the TriMet Transit District, staff estimated the fraction of each block group's population within the transit district by calculating the percentage of residential address points that fell within the district. Staff then multiplied this address fraction by the Census counts to get the estimated TriMet District population. Staff used Oregon Metro's Master Address File (with non-residential and vacant addresses removed) as the address points for this analysis.

* Distance calculations based on March 2018 stop and station locations. Similar to the TriMet District level population estimates, we multiplied each block group's counts by the fraction of addresses within it that also fell within a half-mile buffer of a transit stop of the specified type.

** All Minorities include Black (non-Hispanic), Hispanic, Asian (non-Hispanic), Native American (non-Hispanic), Hawaiian Native and Pacific Islander (non-Hispanic), and Other (Including Mixed Race, non-Hispanic).

*** Population totals for the TriMet district vary between statistics for race and income/poverty in part due to the fact that the Census is a full count and the ACS is an extrapolation based on a sample, and in part because the ACS total excludes those whom poverty status is not determined.
## Exhibit G: Minority and Non-Minority Lines

<table>
<thead>
<tr>
<th>Minority Lines</th>
<th>Non-Minority Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Harold St</td>
<td>1-Vermont</td>
</tr>
<tr>
<td>11-Riverrgate/Marine Dr</td>
<td>12-Barbur/Sandy Blvd</td>
</tr>
<tr>
<td>155-Sunyaside</td>
<td>14-Hawthorne</td>
</tr>
<tr>
<td>19-Woodstock/Glisan</td>
<td>152-Milwaukie</td>
</tr>
<tr>
<td>20-Burnside/Stark</td>
<td>154-Willamette/Clackamas Heights</td>
</tr>
<tr>
<td>21-Sandy Blvd/223rd</td>
<td>156-Mather Rd</td>
</tr>
<tr>
<td>22-Parkrose</td>
<td>15-Belmont/NW 23rd</td>
</tr>
<tr>
<td>23-San Rafael</td>
<td>16-Front Ave/St Helens Rd</td>
</tr>
<tr>
<td>25-Glisan/Rockwood</td>
<td>17-Holgate/Broadway</td>
</tr>
<tr>
<td>272-PDX Night Bus</td>
<td>18-Hillside</td>
</tr>
<tr>
<td>2-Division</td>
<td>24-Fremont/NW 18th</td>
</tr>
<tr>
<td>42-Denney/Hall</td>
<td>291-Orange Night Bus</td>
</tr>
<tr>
<td>45-Garden Home</td>
<td>29-Lake/Webster Rd</td>
</tr>
<tr>
<td>46-North Hillsboro</td>
<td>30-Estacada</td>
</tr>
<tr>
<td>47-Main/Evergreen</td>
<td>31-Webster Rd</td>
</tr>
<tr>
<td>48-Cornell</td>
<td>32-Oatfield</td>
</tr>
<tr>
<td>4-Fessenden</td>
<td>33-McLoughlin/King Rd</td>
</tr>
<tr>
<td>52-Farmington/185th</td>
<td>34-Linwood/River Rd</td>
</tr>
<tr>
<td>53-Arctic/Allen</td>
<td>35-Macadam/Greeley</td>
</tr>
<tr>
<td>57-TV Hwy/Forest Grove</td>
<td>36-South Shore</td>
</tr>
<tr>
<td>59-Walker/Park Way</td>
<td>37-Lake Grove</td>
</tr>
<tr>
<td>62-Murray Blvd</td>
<td>38-Boones Ferry Rd</td>
</tr>
<tr>
<td>67-Bethany/158th</td>
<td>39-Lewis &amp; Clark</td>
</tr>
<tr>
<td>6-Martin Luther King Jr Blvd</td>
<td>43-Taylors Ferry Rd</td>
</tr>
<tr>
<td>72-Killingsworth/82nd Ave</td>
<td>44-Capitol Hwy/Mocks Crest</td>
</tr>
<tr>
<td>73-122nd Ave</td>
<td>50-Cedar Mill</td>
</tr>
<tr>
<td>74-162nd Ave</td>
<td>51-Vista</td>
</tr>
<tr>
<td>76-Beaverton/Tualatin</td>
<td>54-Beaverton-Hillsdale Hwy</td>
</tr>
<tr>
<td>78-Beaverton/Lake Oswego</td>
<td>55-Hamilton</td>
</tr>
<tr>
<td>79-Clackamas/Oregon City</td>
<td>56-Scholls Ferry Rd</td>
</tr>
<tr>
<td>80-Kane/TROUTdale Rd</td>
<td>58-Canyon Rd</td>
</tr>
<tr>
<td>81-Kane/257th</td>
<td>61-Marquam Hill/Beaverton</td>
</tr>
<tr>
<td>82-South Gresham</td>
<td>63-Washington Park/Arlington Hts</td>
</tr>
<tr>
<td>84-Powell Valley/Orient Dr</td>
<td>64-Marquam Hill/Tigard</td>
</tr>
<tr>
<td>87-Airport Way/181st</td>
<td>65-Marquam Hill/Barbur Blvd</td>
</tr>
<tr>
<td>88-Hart/198th</td>
<td>66-Marquam Hill/Hollywood</td>
</tr>
<tr>
<td>92-South Beaverton Express</td>
<td>68-Marquam Hill/Collins Cirde</td>
</tr>
<tr>
<td>96-Tualatin/I-5</td>
<td>70-12th/NE 33rd Ave</td>
</tr>
<tr>
<td>97-Tualatin-Sherwood Rd</td>
<td>71-60th Ave</td>
</tr>
<tr>
<td>9-Powell Blvd</td>
<td>75-Cesar Chavez/Lombard</td>
</tr>
<tr>
<td><strong>MAX Blue Line</strong></td>
<td>77-Broadway/Halsey</td>
</tr>
<tr>
<td><strong>MAX Green Line</strong></td>
<td>85-Swan Island</td>
</tr>
<tr>
<td><strong>MAX Red Line</strong></td>
<td><strong>MAX Orange Line</strong></td>
</tr>
<tr>
<td><strong>MAX Yellow Line</strong></td>
<td><strong>MAX Green Line</strong></td>
</tr>
<tr>
<td>WES Commuter Rail</td>
<td><strong>MAX Red Line</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX Orange Line</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX Yellow Line</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX Green Line</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX Red Line</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX Orange Line</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX Yellow Line</strong></td>
</tr>
</tbody>
</table>
## Exhibit H: Low-Income and Higher Income Lines

<table>
<thead>
<tr>
<th>Low Income Lines</th>
<th>Higher Income Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Harold St</td>
<td>59-Walker/Park Way</td>
</tr>
<tr>
<td>11-Rivergate/Marine Dr</td>
<td>62-Murray Blvd</td>
</tr>
<tr>
<td>155-Sunnyside</td>
<td>67-Bethany/158th</td>
</tr>
<tr>
<td>156-Mather Rd</td>
<td>6-Martin Luther King Jr Blvd</td>
</tr>
<tr>
<td>15-Belmont/NW 23rd</td>
<td>71-60th Ave</td>
</tr>
<tr>
<td>17-Holgate/Broadway</td>
<td>72-Killingsworth/82nd Ave</td>
</tr>
<tr>
<td>19-Woodstock/Glisan</td>
<td>73-122nd Ave</td>
</tr>
<tr>
<td>20-Burnside/Stark</td>
<td>74-162nd Ave</td>
</tr>
<tr>
<td>21-Sandy Blvd/223rd</td>
<td>75-Cesar Chavez/Lombard</td>
</tr>
<tr>
<td>22-Parkrose</td>
<td>76-Beaverton/Tualatin</td>
</tr>
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</tr>
<tr>
<td>25-Glisan/Rockwood</td>
<td>78-Beaverton/Lake Oswego</td>
</tr>
<tr>
<td>272-PDX Night Bus</td>
<td>79-Clackamas/Oregon City</td>
</tr>
<tr>
<td>291-Orange Night Bus</td>
<td>80-Kane/Troutdale Rd</td>
</tr>
<tr>
<td>2-Division</td>
<td>81-Kane/257th</td>
</tr>
<tr>
<td>35-Macadam/Greeley</td>
<td>82-South Gresham</td>
</tr>
<tr>
<td>37-Lake Grove</td>
<td>84-Powell Valley/Orient Dr</td>
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<td>42-Denney/Hall</td>
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<tr>
<td>44-Capitol Hwy/Mocks Crest</td>
<td>92-South Beaverton Express</td>
</tr>
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<td>45-Garden Home</td>
<td>93-Tigard/Sherwood</td>
</tr>
<tr>
<td>46-North Hillsboro</td>
<td>96-Tualatin/I-5</td>
</tr>
<tr>
<td>47-Main/Evergreen</td>
<td>97-Tualatin-Sherwood Rd</td>
</tr>
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<td>48-Cornell</td>
<td>9-Powell Blvd</td>
</tr>
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<td>MAX Blue Line</td>
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<td>MAX Red Line</td>
</tr>
<tr>
<td>53-Arctic/Allen</td>
<td>MAX Orange Line</td>
</tr>
<tr>
<td>54-Beaverton-Hillsdale Hwy</td>
<td>MAX Yellow Line</td>
</tr>
<tr>
<td>56-Scholls Ferry Rd</td>
<td>WES Commuter Rail</td>
</tr>
<tr>
<td>57-TV Hwy/Forest Grove</td>
<td>94-Pacific Hwy/Sherwood</td>
</tr>
</tbody>
</table>