Major Findings (2001-2016)

Overall Ridership
  • Relatively flat

MAX Ridership
  • On peak up, off peak less so

Bus Ridership
  • Down for both on and off peak

No single factor explains trends

Strategies to respond
Total Ridership

Total, Bus & MAX

MAX Ridership

MAX Boardings

Poly. (MAX Weekends)  Poly. (MAX Peaks)  Poly. (MAX Off Peak)
Components of Bus Ridership Declines

Average Bus Ridership Losses
2008 to 2016

On Peak 20%

Weekend 40%

Off Peak 40%
Why?

Historical correlations
- Gas prices
- Employment
- Fares

Operational factors
- Service hours
- OTP
- Travel time

Other modes
- Car, Bike, Lyft/Uber, Walking

Demographic changes
- Housing & employment
Gas Prices & Weekly Bus

2001-2017

Poly. (Bus Weekly)  Poly. (Gas Price)
Ridership & Fares

Weekly Bus and MAX Ridership & Fares

- All Zone Fare
- Poly. (Bus Weekly)
- Poly. (MAX Weekly)
Fareless Square & Off Peak

Jan 2008 – Jan 2012

End of Fareless Square

Jan 08, Mar 08, May 08, Jul 08, Sep 08, Nov 08, Jan 09, Mar 09, May 09, Jul 09, Sep 09, Nov 09, Jan 10, Mar 10, May 10, Jul 10, Sep 10, Nov 10, Jan 11, Mar 11, May 11, Jul 11, Sep 11, Nov 11, Jan 12

Poly. (Bus Off Peak)Poly. (MAX Off Peak)
Free Rail & Off Peak

Sept 2010 – Sept 2014

End Free Rail

Poly. (Bus Off Peak)  Poly. (MAX Off Peak)
Bus and OTP 6mo Lag

Weekday Bus & OTP

Poly. (Bus Weekday)  Poly. (Weekday Bus OTP)
## Service Quality “Index”

<table>
<thead>
<tr>
<th>Route</th>
<th>Ridership Spring Boarding Ride Change '14-'16</th>
<th>Reliability Spring OTP '14-'16</th>
<th>Pass ups Spring Average Over Capacity '14-'16</th>
<th>Trip Time Spring Average Increase in Run Time '14-'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-Beaverton/Lake Oswego</td>
<td>-14%</td>
<td>80%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>75-Lombard/39th (Cesar Chavez)</td>
<td>-11%</td>
<td>81%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>44-Capitol Hwy/Mocks Crest</td>
<td>-10%</td>
<td>88%</td>
<td>13%</td>
<td>1%</td>
</tr>
<tr>
<td>52-Farmington/185th</td>
<td>-10%</td>
<td>82%</td>
<td>3%</td>
<td>4%</td>
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<tr>
<td>76-Beaverton/Tualatin</td>
<td>-10%</td>
<td>87%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>33-McLoughlin</td>
<td>-8%</td>
<td>76%</td>
<td>4%</td>
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<tr>
<td>56-Scholls Ferry Rd</td>
<td>-8%</td>
<td>79%</td>
<td>7%</td>
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<tr>
<td>72-Killingsworth/82nd</td>
<td>-8%</td>
<td>80%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>14-Hawthorne</td>
<td>-8%</td>
<td>83%</td>
<td>6%</td>
<td>-1%</td>
</tr>
<tr>
<td>70-12th Ave</td>
<td>-8%</td>
<td>86%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>71-60th Ave/122nd Ave</td>
<td>-8%</td>
<td>83%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>17-Holgate/NW 21st</td>
<td>-7%</td>
<td>80%</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>15-Belmont/NW 23rd</td>
<td>-7%</td>
<td>81%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>35-Macadam/Greeley</td>
<td>-7%</td>
<td>83%</td>
<td>9%</td>
<td>0%</td>
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<tr>
<td>4-Division/Fessenden</td>
<td>-7%</td>
<td>84%</td>
<td>20%</td>
<td>3%</td>
</tr>
<tr>
<td>62-Murray Blvd</td>
<td>-7%</td>
<td>86%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>19-Woodstock/Glisan</td>
<td>-7%</td>
<td>80%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>77-Broadway/Halsey</td>
<td>-6%</td>
<td>74%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>21-Sandy Blvd/223rd</td>
<td>-5%</td>
<td>88%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>9-Powell/Broadway</td>
<td>-4%</td>
<td>80%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>20-Burnside/Stark</td>
<td>-4%</td>
<td>80%</td>
<td>9%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Weekly Bus & Safety Approval

2001-2014

Bus Weekly | Approve Safety

40% | 90%
50% | 80%
60% | 70%
70% | 60%
80% | 50%
90% | 40%
100% |
Weekly Streetcar & Bus

2001-2016

Streetcar Wk dys

Bus Weekday

- 21,000

+ 12,000

2173 14,256 209,900 188,567
Bike Counts & Bus

2001 - 2015

Ave. Weekly Bus | bikes


1050000 | 1100000 | 1150000 | 1200000 | 1250000 | 1300000 | 1350000 | 1400000 | 1450000 | 1500000 | 1550000 | 1600000 | 1650000 | 1700000 | 1750000
TNCs & Bus

TNCs official launch in Portland

2012 2013 2014 2015 2016 2017

Bus Weekends Actual  Bus Peaks  Bus Off Peak Actual
Poly. (Bus Weekends Actual)  Poly. (Bus Peaks)  Poly. (Bus Off Peak Actual)
Assessed Housing Value Change from Fall 2001 to Fall 2016

Housing Value Change
Percent change in value of single family residential taxlots*
- 5% or less
- 5.1% to 10%
- 10.1% to 25%
- 25.1% to 50%
- 50.1% to 75%
- 75.1% to 100%
- 100.1% to 125%
- 125.1% or more

MAX & WES
Frequent Bus
Regular Bus
TriMet Service District

* Change in median area-normalized total assessed value for single family residential taxlots with their centroids in each 1/4-mile side hexagon. Taxlots with zero or null values were removed. Data credit: Metro RLIS.
Ridership Change from Fall 2001 to Fall 2016

Ridership Change
Change in total weekly ons and offs* from 2001 to 2016

- Loss over 1,000
- 999 to -100
- 99 to -10
- 9 to 0
- 1 to 10
- 11 to 100
- 101 to 1,000
- Gain over 1,000

- MAX & WES
- Frequent Bus
- Regular Bus
- TriMet Service District

* Stop data were aggregated to hexagons for display (1/4 mile per side)
Worst quartiles for home value increase and ridership decline from 2001 to 2016.
Where East Portlanders Work
Ridership Income

Ridership Average Income (not adjusted for inflation) A&A

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2001-2003 Ave</th>
<th>2014-2016 Ave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20,000-$39,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$40,000-$59,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$60,000-$99,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$100,000 or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Downtown Travel

Trips to Downtown Core

- AM Peak 7-9
- Midday 10-3
- PM Peak 4-6
- Night 7+
- Weekends

Fall_2004  Fall_2007  Fall_2016
Most Ride the Same as Last Year

2016 A&A

Non-riders
- 87% Same as previous year
- 5% Now riding more

Infrequent riders
- 77% Same as previous year
- 7% Now riding more

Occasional riders
- 69% Same as previous year
- 20% Now riding more

Regular riders
- 65% Same as previous year
- 14% Now riding more

Frequent riders
- 52% Same as previous year
- 15% Now riding more
- 15% Now riding less
- 13% Now riding less
- 5% Now riding less
Change in Trip Purpose vs Last Year

All trips (Multiple answers accepted) 2015 and 2016

- Recreation: 57%
- Work: 36%
- Shopping: 25%
- Personal business: 23%
- Go to the airport: 22%
- Medical appointments: 13%
- Visit friends/family: 11%
- School: 11%
Ridership and National Trends

Change in National vs TriMet Ridership
Interim Conclusions

- Light rail healthy
- Bus peak hour steady
- Off peak and weekend bus a concern
- Many factors at play
- Demography and geography
- Speed, convenience, reliability
Strategies

• Adding service to lower cost housing & connecting to job centers (SEP)
• Speeding travel & improving OTP (Enhanced Transit)
• Integrating services (e.g. Hop, TNCs, bike share)
• Customer research, marketing & incentives