Western Michigan University
Transportation Master Plan

Presentation of Survey Findings
For the Project Steering Committee

June 5, 2019
Participation

844 respondents

- 343 WMU Staff members
- 248 WMU Faculty
- 80 Undergraduate Students living off-campus
- 57 Undergraduate Students living on-campus
- 40 Graduate or PhD Students living off-campus
- 22 Community Members
- 18 WMU Alumni
- 12 Graduate or PhD Students living on-campus
- 23 Other (WMU retiree, Emerita faculty)
Primary Campus Destinations

842 Total Respondents
- 593 employees
- 225 students

Employee Campus Destination
- Main (West) Campus: 77%
- East Campus: 15%
- Other: 1%
- Parkview Campus: 6%
- Aviation Campus: 1%

Student Campus Destination
- Main (West) Campus: 69%
- East Campus: 7%
- Parkview Campus: 21%
- Other: 2%

Aviation Campus: 1%
Other: 1%
Primary Commute Modes

**Primary Commuting Mode Students**

- Drive Alone: 51%
- Kalamazoo Metro (Public Transportation): 10%
- I live on campus: 23%
- Walk: 6%
- Bicycle: 4%
- Carpool: 4%
- Other: 1%
- Off-campus Apartment Shuttle: 1%

**Primary Commuting Mode Employees**

- Drive Alone: 90%
- Kalamazoo Metro (Public Transportation): 1%
- I live on campus: 2%
- Walk: 2%
- Bicycle: 2%
- Carpool: 2%
- Other: 1%
Secondary Commute Modes

740 respondents: Majority of employees do not switch modes, More students use public transit as secondary mode

Secondary Commuting Mode to Campus - Students

- Drive alone: 9%
- Carpool: 14%
- Bicycle: 11%
- Walk: 17%
- Metro Kalamazoo: 9%
- Motorcycle/Scooter/Moped: 1%
- Uber/Lyft/Taxi: 5%
- Telecommute: 1%
- Off-campus Apartment Shuttle: 1%
- Other: 3%

I always travel by my primary mode: 29%

Secondary Commuting Mode to Campus - Employees

- Drive alone: 13%
- Carpool: 10%
- Bicycle: 8%
- Walk: 6%
- Metro Kalamazoo (Public Transportation): 2%
- Vanpool: 0%
- Uber/Lyft/Taxi: 1%
- Telecommute: 5%
- Other: 3%

I always travel by my primary mode: 51%
Zip code of Commute Origin

Top 10 most-frequent zip codes of origin (701 of 816 responses)

Three most-frequent zip codes cover:
- 89% of Full-Time Students
- 81% of Part-Time Employees
- 59% of Full-Time Employees
- 55% of Part-Time Students
Commute Travel Times

744 respondents:

- Students have a shorter commute
- Majority of employee's commutes take between 11-30 minutes
- 13% of employees commute longer than 30 minutes

Commuting time to Main Campus – Students

- 4% 0-5 min
- 14% 5-10 min
- 5% 11-30 min
- 49% 31-45 min
- 5% 46-60 min
- 1% Longer than 1 hour

Commuting time to Main Campus – Employees

- 4% 0-5 min
- 29% 5-10 min
- 54% 11-30 min
- 9% 31-45 min
- 2% 46-60 min
- 2% Longer than 1 hour
Arrival Times

723 responses

Arrival peak between 8AM-9AM

*105 respondents answered 9PM as their typical arrival time, but this number is so high I got the suspicion that this is probably a typo and hence these are added to the 9 AM count (next survey we could let participants choose from a list of half-hour time-periods instead of open format, and not make it 24hr clock – confusing)
Departure Times

722 responses

5 PM – 5:30PM Peak
Arrival Times

723 responses

Arrival peak between 8AM-9AM
Departure Times

722 responses

5 PM – 5:30PM Peak
Frequency of Main Campus Commutes

742 responses

Commuting Days per Week

- **I do not commute to the Main Campus**
  - Employees: 7%
  - Students: 8%
  - All Respondents: 8%

- **1 day**
  - Employees: 4%
  - Students: 2%
  - All Respondents: 5%

- **2 days**
  - Employees: 4%
  - Students: 2%
  - All Respondents: 5%

- **3 days**
  - Employees: 6%
  - Students: 6%
  - All Respondents: 6%

- **4 days**
  - Employees: 4%
  - Students: 5%
  - All Respondents: 6%

- **5 or more days**
  - Employees: 11%
  - Students: 16%
  - All Respondents: 16%

- **5 days**
  - Employees: 6%
  - Students: 6%
  - All Respondents: 6%

- **5 or more days**
  - Employees: 62%
  - Students: 64%
  - All Respondents: 64%
Frequency of Main Campus Trips

742 responses

Employees tend to make fewer trips, but students average commute is shorter
Resident Students

Do you have a car on-campus?

- Yes: 51%
- No: 49%

If so, how often do you use it?

- Every day: 32%
- A few times a week: 57%
- A few times a month: 4%
- About once a week: 7%

What types of trips do you typically use your car for?

- Travel to another WMU campus: 8%
- Visit Family/Friends: 19%
- Travel to work: 15%
- Recreation: 14%
- Dining: 18%
- Shopping: 21%
- Other: 3%
On-Campus travel

798 responses

Mode of Travel between Campus destinations throughout the day

- Walk: 60%
- Drive and re-park: 27%
- Bronco Transit (Shuttle): 6%
- Bicycle: 4%
- Other: 2%
- Uber/Lyft/Taxi: 0%
- Motorcycle/Scooter/Moped: 0%

Use of Lyft/Uber for campus travel and access

- Never: 86%
- Occasionally (once/month): 3%
- Rarely (once/semester): 9%
- Regularly (once/week): 2%
On-Campus travel

798 responses

Students: Mode of Travel between Campus destinations throughout the day

- Walk: 59%
- Drive and re-park: 20%
- Bronco Transit (Shuttle): 9%
- Bicycle: 9%
- Uber/Lyft/Taxi: 10%
- Other: 2%
- Never: 0%
- Occasionally (once/month): 12%
- Rarely (once/semester): 6%
- Regularly (once/week): 27%

Employee Mode of Travel between Campus destinations throughout the day

- Walk: 60%
- Drive and re-park: 27%
- Bronco Transit (Shuttle): 6%
- Bicycle: 4%
- Other: 2%
- Never: 93%
- Occasionally (once/month): 1%
- Rarely (once/semester): 6%
- Regularly (once/week): 0%
Travel Between Campuses

Do you regularly travel between Main Campus and other WMU Campuses?

- Yes: 33%  
- No: 67%

Primary Mode of Travel for Trips between Campuses

- Drive alone: 74%  
- Bronco Transit (Shuttle): 11%  
- Carpool: 6%  
- Other: 3%  
- Bicycle: 3%  
- Walk: 2%  
- Uber/Lyft/Taxi: 1%  
- Kalamazoo Metro: 1%
Survey Results: Parking

N=793

Usual Parking Location around Main Campus

- WMU permitted lot: 75%
- WMU permitted garage: 14%
- I do not drive to campus: 8%
- Other: 2%
- On City streets outside campus: 1%
- On-street on-campus: 0%
- City public parking lot/garage: 0%
- Private parking lot/garage: 0%
Parking Tradeoffs

N=714

Students

I am satisfied with my parking location and rate 43%
I would park farther from my destination for a lower rate 40%
I would pay more to park closer to my destination 17%

Employees

I am satisfied with my parking location and rate 85%
I would pay more to park closer to my destination 9%
I would park farther from my destination for a lower rate 6%

Score - Least (0) to Most Important (5)

Location
Ease of finding a space
Safety/Security
Price
Type of Parking...
Which Bronco Transit Route do you use?

- Do not use Bronco Transit: 77%
- Gold Route: 7%
- Brown Route: 6%
- Parkview Route: 6%
- Oakland Route: 4%
- Aviation Route: 1%
Transit

N=747

Students: Which Bronco Transit Route do you use?

- Do not use Bronco Transit: 36%
- Gold Route: 20%
- Brown Route: 17%
- Parkview Route: 17%
- Oakland Route: 8%
- Aviation Route: 1%

Employees: Which Bronco Transit Route do you use?

- Do not use Bronco Transit: 94%
- Gold Route: 1%
- Brown Route: 1%
- Parkview Route: 1%
- Oakland Route: 1%
- Aviation Route: 0%
Transit

N=747

Would any of the following make it more likely for you to use Kalamazoo Metro?

- Better understanding of where it goes: 22%
- Additional routes/stops that serve my trip origin and destinations: 17%
- Real-time arrival information on a sign at stops: 17%
- More frequent service: 16%
- Shorter trip travel time: 10%
- More reliability: 10%
- Other: 8%
## Transit

**N=747**

**Students: Would any of the following make it more likely for you to use Kalamazoo Metro?**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better understanding of where it goes</td>
<td>14%</td>
</tr>
<tr>
<td>Additional routes/stops that serve my trip origin and destinations</td>
<td>16%</td>
</tr>
<tr>
<td>Real-time arrival information on a sign at stops</td>
<td>17%</td>
</tr>
<tr>
<td>More frequent service</td>
<td>20%</td>
</tr>
<tr>
<td>Shorter trip travel time</td>
<td>13%</td>
</tr>
<tr>
<td>More reliability</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Employees: Would any of the following make it more likely for you to use Kalamazoo Metro?**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better understanding of where it goes</td>
<td>24%</td>
</tr>
<tr>
<td>Additional routes/stops that serve my trip origin and destinations</td>
<td>18%</td>
</tr>
<tr>
<td>Real-time arrival information on a sign at stops</td>
<td>17%</td>
</tr>
<tr>
<td>More frequent service</td>
<td>15%</td>
</tr>
<tr>
<td>Shorter trip travel time</td>
<td>8%</td>
</tr>
<tr>
<td>More reliability</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>
Potential to Increase Cycling

N=766

Use of Biking as a means of getting to Campus

- I never bike and won’t consider biking for commuting to campus: 55%
- I’m interested in biking, but I currently do not: 29%
- I bike to campus sometimes: 11%
- I bike to campus regularly or everyday: 5%

Factors affecting choice to bike

- Not significant
- Somewhat significant
- Very significant
- Extremely significant
Potential to Increase Cycling

N=766

### Students: Use of Biking as a means of getting to Campus

<table>
<thead>
<tr>
<th>Habit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I never bike and won't consider biking</td>
<td>38%</td>
</tr>
<tr>
<td>I'm interested in biking, but I currently do not</td>
<td>40%</td>
</tr>
<tr>
<td>I bike to campus sometimes</td>
<td>14%</td>
</tr>
<tr>
<td>I bike to campus regularly or everyday</td>
<td>8%</td>
</tr>
</tbody>
</table>

### Employees: Use of Biking as a means of getting to Campus

<table>
<thead>
<tr>
<th>Habit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I never bike and won't consider biking</td>
<td>62%</td>
</tr>
<tr>
<td>I'm interested in biking, but I currently do not</td>
<td>25%</td>
</tr>
<tr>
<td>I bike to campus sometimes</td>
<td>9%</td>
</tr>
<tr>
<td>I bike to campus regularly or everyday</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Factors affecting choice to bike

- Not significant
- Somewhat significant
- Very significant
- Extremely significant
Quality of Campus Walking

N=758

Quality of Walking Experience on Campus

- Poor: 4%
- Okay: 21%
- Neutral: 21%
- Good: 44%
- Awesome: 10%
# Awareness of TDM programs

748 respondents

3 out of 4 respondents do not know about BroncoBikes

### Awareness of TDM Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>I have used this</th>
<th>I know about this but don’t use it</th>
<th>I don’t know about this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Bronco Transit Campus Shuttles</td>
<td>27%</td>
<td>59%</td>
<td>14%</td>
</tr>
<tr>
<td>Free Kalamazoo Metro Bus for Students/Faculty/Staff</td>
<td>23%</td>
<td>52%</td>
<td>25%</td>
</tr>
<tr>
<td>Public Safety Walking Escorts (Between 6 PM - 6 AM)</td>
<td>3%</td>
<td>66%</td>
<td>31%</td>
</tr>
<tr>
<td>On-campus Safe Ride Program (between 8 PM - 6 AM)</td>
<td>5%</td>
<td>58%</td>
<td>37%</td>
</tr>
<tr>
<td>Open Bike Shop at the Bicycle Resource Hub</td>
<td>6%</td>
<td>39%</td>
<td>55%</td>
</tr>
<tr>
<td>Student 15% Amtrak Discount on Midwest travel</td>
<td>6%</td>
<td>23%</td>
<td>71%</td>
</tr>
<tr>
<td>BroncoBikes Bike Rental Program</td>
<td>6%</td>
<td>23%</td>
<td>76%</td>
</tr>
</tbody>
</table>
Awareness of TDM programs

748 respondents

### Students: Awareness of TDM Programs

- **Free Bronco Transit Shuttles**: 69% used, 28% know but don’t use, 4% don’t know
- **Free Kalamazoo Metro Bus Pass**: 56% used, 36% know but don’t use, 8% don’t know
- **SafeRide Driving Escort**: 17% used, 38% know but don’t use, 25% don’t know
- **SafeRide Walking Escort**: 6% used, 65% know but don’t use, 30% don’t know
- **Open Bike Shop**: 13% used, 44% know but don’t use, 44% don’t know
- **Student 15% Amtrak Discount**: 21% used, 25% know but don’t use, 54% don’t know
- **BroncoBikes**: 4% used, 24% know but don’t use, 72% don’t know

### Employees: Awareness of TDM Programs

- **Free Bronco Transit Shuttles**: 15% used, 69% know but don’t use, 16% don’t know
- **Free Kalamazoo Metro Bus Pass**: 14% used, 56% know but don’t use, 30% don’t know
- **SafeRide Driving Escort**: 2% used, 67% know but don’t use, 31% don’t know
- **SafeRide Walking Escort**: 2% used, 59% know but don’t use, 39% don’t know
- **Open Bike Shop**: 4% used, 38% know but don’t use, 58% don’t know
- **BroncoBikes**: 1% used, 22% know but don’t use, 77% don’t know