

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE: 29
	SPS WIM ID: 29AA00
	DATE (mm/dd/yyyy) 4/29/2020

**SITE CALIBRATION INFORMATION**

1. DATE OF CALIBRATION {mm/dd/yy} 4/29/20

2. TYPE OF EQUIPMENT CALIBRATED: Both

3. REASON FOR CALIBRATION: LTPP Validation

4. SENSORS INSTALLED IN LTPP LANE AT THIS SITE (Select all that apply):

a. <u>Inductance Loops</u>	c. <u></u>
b. <u>Quartz Piezo</u>	d. <u></u>

5. EQUIPMENT MANUFACTURER: IRD iSINC

**WIM SYSTEM CALIBRATION SPECIFICS**

6. CALIBRATION TECHNIQUE USED: Test Trucks

Number of Trucks Compared:	<u>2</u>
Number of Test Trucks Used:	<u>2</u>
Passes Per Truck:	<u>22</u>

Type	Drive Suspension	Trailer Suspension
Truck 1: <u>9</u>	<u>air</u>	<u>air</u>
Truck 2: <u>9</u>	<u>air</u>	<u>air</u>
Truck 3: <u></u>	<u></u>	<u></u>

7. SUMMARY CALIBRATION RESULTS (expressed as a %):

Mean Difference Between -

Dynamic and Static GVW:	<u>3.1%</u>	Standard Deviation:	<u>2.2%</u>
Dynamic and Static Single Axle:	<u>0.9%</u>	Standard Deviation:	<u>2.9%</u>
Dynamic and Static Double Axles:	<u>3.5%</u>	Standard Deviation:	<u>2.5%</u>

8. NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED: 3

9. DEFINE SPEED RANGES IN MPH:

	Low		High	Runs
a. <u>Low</u>	-	<u></u>	to <u></u>	<u>16</u>
b. <u>Medium</u>	-	<u></u>	to <u></u>	<u>15</u>
c. <u>High</u>	-	<u></u>	to <u></u>	<u>13</u>
d. <u></u>	-	<u></u>	to <u></u>	<u></u>
e. <u></u>	-	<u></u>	to <u></u>	<u></u>

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE: 29 SPS WIM ID: 29AA00 DATE (mm/dd/yyyy) 4/29/2020
--	---

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED)

#VALUE! #VALUE!

11. IS AUTO- CALIBRATION USED AT THIS SITE?

No

If yes , define auto-calibration value(s):

**CLASSIFIER TEST SPECIFICS**

12. METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:

Manual

13. METHOD TO DETERMINE LENGTH OF COUNT:

Number of Trucks

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

FHWA Class 9:	<u>0.0</u>	FHWA Class	<u>5</u>	-	<u>0.0</u>
FHWA Class 8:	<u>0.0</u>	FHWA Class	<u>6</u>	-	<u>0.0</u>
		FHWA Class		-	
		FHWA Class		-	

Percent of "Unclassified" Vehicles: 0.0%

Test Truck Run Set - Pre

Person Leading Calibration Effort:

Dean Wolf

Contact Information:

Phone: 717-975-3550

E-mail: [dwolf@ara.com](mailto:dwolf@ara.com)

ENTERED BY CO:  
19/MAR/2020

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE: 29 SPS WIM ID: 29AA00 DATE (mm/dd/yyyy) 4/30/2020
--	---

### SITE CALIBRATION INFORMATION

1. DATE OF CALIBRATION {mm/dd/yy} 4/30/20
2. TYPE OF EQUIPMENT CALIBRATED: Both
3. REASON FOR CALIBRATION: LTPP Validation
4. SENSORS INSTALLED IN LTPP LANE AT THIS SITE (Select all that apply):
- a. Inductance Loops c.
- b. Quartz Piezo d.
5. EQUIPMENT MANUFACTURER: IRD iSINC

### WIM SYSTEM CALIBRATION SPECIFICS

6. CALIBRATION TECHNIQUE USED: Test Trucks
- Number of Trucks Compared: 2
- Number of Test Trucks Used: 2
- Passes Per Truck: 21
- |          | Type     | Drive Suspension | Trailer Suspension |
|----------|----------|------------------|--------------------|
| Truck 1: | <u>9</u> | <u>air</u>       | <u>air</u>         |
| Truck 2: | <u>9</u> | <u>air</u>       | <u>air</u>         |
| Truck 3: | <u></u>  | <u></u>          | <u></u>            |

7. SUMMARY CALIBRATION RESULTS (expressed as a %):

Mean Difference Between -

Dynamic and Static GVW:	<u>-1.5%</u>	Standard Deviation:	<u>1.9%</u>
Dynamic and Static Single Axle:	<u>-2.6%</u>	Standard Deviation:	<u>2.2%</u>
Dynamic and Static Double Axles:	<u>-1.3%</u>	Standard Deviation:	<u>2.3%</u>

8. NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED: 3

9. DEFINE SPEED RANGES IN MPH:

		Low		High	Runs
a.	<u>Low</u>	<u>59.0</u>	to	<u>62.7</u>	<u>12</u>
b.	<u>Medium</u>	<u>62.8</u>	to	<u>66.4</u>	<u>13</u>
c.	<u>High</u>	<u>66.5</u>	to	<u>70.0</u>	<u>16</u>
d.	<u></u>	<u></u>	to	<u></u>	<u></u>
e.	<u></u>	<u></u>	to	<u></u>	<u></u>

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE: 29 SPS WIM ID: 29AA00 DATE (mm/dd/yyyy) 4/30/2020
--	---

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED)

#VALUE! #VALUE!

11. IS AUTO- CALIBRATION USED AT THIS SITE?

No

If yes , define auto-calibration value(s):

**CLASSIFIER TEST SPECIFICS**

12. METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:

Manual

13. METHOD TO DETERMINE LENGTH OF COUNT:

Number of Trucks

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

FHWA Class 9:	<u>0.0</u>	FHWA Class	<u>5</u>	-	<u>0.0</u>
FHWA Class 8:	<u>0.0</u>	FHWA Class	<u>6</u>	-	<u>0.0</u>
		FHWA Class		-	
		FHWA Class		-	

Percent of "Unclassified" Vehicles: 0.0%

Test Truck Run Set - Post

Person Leading Calibration Effort:

Dean Wolf

Contact Information:

Phone: 717-975-3550

E-mail: [dwolf@ara.com](mailto:dwolf@ara.com)

**ENTERED BY CO:**  
**19/MAR/2020**

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE: 29 SPS WIM ID: 29AA00 DATE (mm/dd/yyyy) 12/2/2020
--	---

### SITE CALIBRATION INFORMATION

1. DATE OF CALIBRATION {mm/dd/yy} 12/2/20
2. TYPE OF EQUIPMENT CALIBRATED: Both
3. REASON FOR CALIBRATION: LTPP Validation
4. SENSORS INSTALLED IN LTPP LANE AT THIS SITE (Select all that apply):
- a. Inductance Loops c.
- b. Quartz Piezo d.
5. EQUIPMENT MANUFACTURER: IRD iSINC

### WIM SYSTEM CALIBRATION SPECIFICS

6. CALIBRATION TECHNIQUE USED: Test Trucks
- Number of Trucks Compared: 2
- Number of Test Trucks Used: 2
- Passes Per Truck: 21
- | Type              | Drive Suspension | Trailer Suspension |
|-------------------|------------------|--------------------|
| Truck 1: <u>9</u> | <u>1 - Air</u>   | <u>1 - Air</u>     |
| Truck 2: <u>9</u> | <u>1 - Air</u>   | <u>1 - Air</u>     |
| Truck 3: <u></u>  | <u></u>          | <u></u>            |

### 7. SUMMARY CALIBRATION RESULTS (expressed as a %):

Mean Difference Between -

Dynamic and Static GVW:	<u>0.3%</u>	Standard Deviation:	<u>2.4%</u>
Dynamic and Static Single Axle:	<u>1.0%</u>	Standard Deviation:	<u>2.2%</u>
Dynamic and Static Double Axles:	<u>0.2%</u>	Standard Deviation:	<u>2.8%</u>

### 8. NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED: 3

### 9. DEFINE SPEED RANGES IN MPH:

	Low		High	Runs
a. <u>Speed Point 1</u>	<u>58.0</u>	to	<u>62.0</u>	<u>12</u>
b. <u>Speed Point 2</u>	<u>62.1</u>	to	<u>66.1</u>	<u>18</u>
c. <u>Speed Point 3</u>	<u>66.2</u>	to	<u>70.0</u>	<u>12</u>
d. <u></u>	<u></u>	to	<u></u>	<u></u>
e. <u></u>	<u></u>	to	<u></u>	<u></u>

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE:	29
	SPS WIM ID:	29AA00
	DATE (mm/dd/yyyy)	12/2/2020

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 2617 2617

11. IS AUTO- CALIBRATION USED AT THIS SITE? No

If yes , define auto-calibration value(s):

**CLASSIFIER TEST SPECIFICS**

12. METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:

Manual

13. METHOD TO DETERMINE LENGTH OF COUNT: Number of Trucks

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

FHWA Class 9:	<u>0.0</u>	FHWA Class	<u>5</u>	-	<u>0.0</u>
FHWA Class 8:	<u>17.0</u>	FHWA Class	<u>          </u>	-	<u>          </u>
		FHWA Class	<u>          </u>	-	<u>          </u>
		FHWA Class	<u>          </u>	-	<u>          </u>

Percent of "Unclassified" Vehicles: 0.0%

Test Truck Run Set: Post

Person Leading Calibration Effort: Dean J. Wolf, ARA

Contact Information: Phone: 717-975-3550

E-mail: [dwolf@ara.com](mailto:dwolf@ara.com)

**ENTERED BY CO:**  
**19/MAR/2020**

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE: 29 SPS WIM ID: 29AA00 DATE (mm/dd/yyyy) 12/1/2020
--	---

### SITE CALIBRATION INFORMATION

1. DATE OF CALIBRATION {mm/dd/yy} 12/1/20
2. TYPE OF EQUIPMENT CALIBRATED: Both
3. REASON FOR CALIBRATION: LTPP Validation
4. SENSORS INSTALLED IN LTPP LANE AT THIS SITE (Select all that apply):
- a. Inductance Loops c.
- b. Quartz Piezo d.
5. EQUIPMENT MANUFACTURER: IRD iSINC

### WIM SYSTEM CALIBRATION SPECIFICS

6. CALIBRATION TECHNIQUE USED: Test Trucks
- Number of Trucks Compared: 2
- Number of Test Trucks Used: 2
- Passes Per Truck: 21
- |          | Type     | Drive Suspension | Trailer Suspension |
|----------|----------|------------------|--------------------|
| Truck 1: | <u>9</u> | <u>1 - Air</u>   | <u>1 - Air</u>     |
| Truck 2: | <u>9</u> | <u>1 - Air</u>   | <u>1 - Air</u>     |
| Truck 3: | <u></u>  | <u></u>          | <u></u>            |

7. SUMMARY CALIBRATION RESULTS (expressed as a %):

Mean Difference Between -

Dynamic and Static GVW:	<u>6.4%</u>	Standard Deviation:	<u>2.8%</u>
Dynamic and Static Single Axle:	<u>6.8%</u>	Standard Deviation:	<u>3.1%</u>
Dynamic and Static Double Axles:	<u>6.3%</u>	Standard Deviation:	<u>3.9%</u>

8. NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED: 3

9. DEFINE SPEED RANGES IN MPH:

			Low		High	Runs
a.	<u>Speed Point 1</u>	-	<u>59.0</u>	to	<u>61.0</u>	<u>10</u>
b.	<u>Speed Point 2</u>	-	<u>61.1</u>	to	<u>66.0</u>	<u>22</u>
c.	<u>Speed Point 3</u>	-	<u>66.1</u>	to	<u>69.0</u>	<u>10</u>
d.	<u>                    </u>	-	<u>                    </u>	to	<u>                    </u>	<u>                    </u>
e.	<u>                    </u>	-	<u>                    </u>	to	<u>                    </u>	<u>                    </u>

<b>Traffic Sheet 16</b> <b>LTPP MONITORED TRAFFIC DATA</b> <b>SITE CALIBRATION SUMMARY</b>	STATE CODE:	29
	SPS WIM ID:	29AA00
	DATE (mm/dd/yyyy)	12/1/2020

10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) 2765 2765

11. IS AUTO- CALIBRATION USED AT THIS SITE? No

If yes , define auto-calibration value(s):

**CLASSIFIER TEST SPECIFICS**

12. METHOD FOR COLLECTING INDEPENDENT VOLUME MEASUREMENT BY VEHICLE CLASS:

Manual

13. METHOD TO DETERMINE LENGTH OF COUNT: Number of Trucks

14. MEAN DIFFERENCE IN VOLUMES BY VEHICLES CLASSIFICATION:

FHWA Class 9:	<u>0.0</u>	FHWA Class	<u>5</u>	-	<u>0.0</u>
FHWA Class 8:	<u>0.0</u>	FHWA Class	<u>          </u>	-	<u>          </u>
		FHWA Class	<u>          </u>	-	<u>          </u>
		FHWA Class	<u>          </u>	-	<u>          </u>

Percent of "Unclassified" Vehicles: 0.0%

Test Truck Run Set: Pre

Person Leading Calibration Effort: Dean J. Wolf, ARA

Contact Information: Phone: 717-975-3550

E-mail: [dwolf@ara.com](mailto:dwolf@ara.com)

**ENTERED BY CO:**  
**19/MAR/2020**