



Traffic Analysis Report

Sierra Rd (18750890)

Organization: **Plymouth Township, PA**

This report analyzes Avg. Speed for Sierra Rd (18750890) during 2025-12. The data is aggregated and without specific hourly breakdowns, using direction 'Aggregated'.

Road Segment ID	18750890
Location	Montgomery, Pennsylvania
Road Class	Local (class 5)
Length	0.10 miles
Road Name	Sierra Rd
Speed Limit	25 MPH
Speed Limit Source	Custom



Overview

This report analyzes Avg. Speed for Sierra Rd (18750890) during 2025-12. The data is aggregated and without specific hourly breakdowns, using direction 'Aggregated'.

Report Metrics

SPEED LIMIT 25 MPH	// DIFF
Average	18 / -7
50th	19 / -6
85th	24 / -1
95th	25 / 0



Trends & Summary

The analysis of traffic speed data for Sierra Rd during December 2025 reveals several noteworthy trends based on the heatmap and time series data.

Average Speed Insights

The average speed recorded along Sierra Rd is 18 MPH, which is significantly below the posted speed limit of 25 MPH. This indicates a consistent trend of slower traffic, with the 50th percentile speed at 19 MPH and the 85th percentile speed at 24 MPH. The data suggests that while most vehicles are traveling below the speed limit, a small percentage are still exceeding it.

Day of the Week Patterns

The average speeds vary slightly across different days of the week:

- **Highest Average Speed:** Sundays (22 MPH)
- **Lowest Average Speed:** Wednesdays (16 MPH)

This pattern indicates that traffic may be lighter on Sundays, allowing for higher speeds, while mid-week traffic congestion could be contributing to slower speeds on Wednesdays.

Time of Day Analysis

The heatmap categorizes average speeds into seven periods throughout the day:1. **Overnight (1):** Average speed of 19 MPH2. **Early Morning (2):** Average speed of 20 MPH3. **AM Peak (3):** Average speed of 17 MPH4. **Midday (4):** Average speed of 18 MPH5. **Early Afternoon (5):** Average speed of 19 MPH6. **PM Peak (6):** Average speed of 18 MPH7. **Evening (7):** Average speed of 18 MPH

The AM Peak period shows the lowest average speed at 17 MPH, indicating increased congestion during morning rush hours. Conversely, the Early Morning period sees the highest average speed at 20 MPH, suggesting less traffic during these hours.

Summary of Trends

Overall, the data indicates that traffic speeds on Sierra Rd are generally below the speed limit, with notable variations by day and time. The highest speeds occur on Sundays, while mid-week traffic appears to slow down significantly, particularly during the AM Peak. This information can be crucial for future traffic management strategies and infrastructure planning.



Trends

Average Speed Breakdown

7	18	19	18	17	19	15	17
6	18	19	19	19	18	18	18
5	19	18	18	18	18	19	18
4	18	18	19	19	19	18	19
3	17	19	17	19	18	18	20
2	22	20	17	20	20	20	21
1	19	19	18	16	21	17	19
	Sun	Mon	Tue	Wed	Thu	Fri	Sat

Day of Week

PERIOD LEGEND

- 1 Overnight: 12:00am-3:59am
- 2 Early Morning: 4:00am-6:59am
- 3 AM Peak: 7:00am-9:59am
- 4 Midday: 10:00am-12:59pm
- 5 Early Afternoon: 1:00pm-3:59pm
- 6 PM Peak: 4:00pm-6:59pm
- 7 Evening: 7:00pm-11:59pm



Traffic Analysis Report

Sierra Rd (18750890)

Organization: **Plymouth Township, PA**

This report analyzes AAHT for Sierra Rd (18750890) during 2025-12. The data is aggregated and without specific hourly breakdowns, using direction 'Aggregated'.

Road Segment ID	18750890
Location	Montgomery, Pennsylvania
Road Class	Local (class 5)
Length	0.10 miles
Road Name	Sierra Rd
Speed Limit	25 MPH
Speed Limit Source	Custom



Overview

This report analyzes AAHT for Sierra Rd (18750890) during 2025-12. The data is aggregated and without specific hourly breakdowns, using direction 'Aggregated'.

Report Metrics

88 Vehicles / Hour
AAHT



Trends & Summary

The traffic volume data for Sierra Rd in December 2025 reveals notable patterns in vehicle flow throughout the week, segmented by hourly trends. The analysis indicates a clear variation in traffic volume across different days and times, which can inform future traffic management strategies.

Daily Traffic Patterns

- **Weekday vs. Weekend:** Traffic volumes are significantly higher on weekdays compared to weekends. The peak day for traffic is Thursday, with an average of 183 vehicles per hour during the early afternoon (Period 5). In contrast, Sunday shows the lowest average volume, particularly in the early morning hours.
- **Peak Days:** The data indicates that Tuesday and Wednesday also experience high traffic volumes, averaging around 91 vehicles per hour during the AM peak (Period 3). This suggests that mid-week days are critical for traffic management.

Hourly Trends

- **Morning and Afternoon Peaks:** The AM peak (Period 3) shows a substantial increase in traffic, peaking at 105 vehicles per hour on Tuesday and Wednesday. The early afternoon (Period 5) also sees high volumes, particularly on Thursdays, indicating a potential rush hour effect as commuters return home.
- **Overnight and Evening Trends:** Overnight traffic (Period 1) remains low, averaging around 21 vehicles per hour on Sundays and slightly higher on weekdays. The evening period (Period 7) shows a moderate increase, with Friday and Saturday evenings experiencing the highest volumes, suggesting increased recreational travel during weekends.

Summary of Average Volumes

- The overall average hourly traffic (AAHT) is recorded at 88 vehicles per hour, with the highest average observed on Thursdays during the early afternoon. This trend highlights the need for targeted traffic management during peak hours, particularly on weekdays.
- The data also indicates that traffic volumes are generally consistent across the week, with slight fluctuations that suggest commuter patterns and recreational travel influences.

In conclusion, the analysis of traffic volume trends on Sierra Rd indicates significant weekday peaks, particularly on Thursdays and during the AM and early afternoon periods. Understanding these patterns can aid in optimizing traffic flow and enhancing road safety measures.



Trends

Volume Hourly Breakdown

7	60	56	68	61	85	81	94
6	111	151	170	176	176	168	145
5	133	156	160	163	183	157	152
4	109	77	80	81	76	100	123
3	42	95	105	105	100	81	48
2	19	36	39	33	40	38	19
1	21	15	18	21	18	20	23
	Sun	Mon	Tue	Wed	Thu	Fri	Sat

Day of Week

PERIOD LEGEND

- 1 Overnight: 12:00am-3:59am
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