

# **US-10 Business Route Buttles Street Road Diet Traffic Data Report**

# Buttles Street Road Diet Traffic Data Report

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- In 2015 MDOT commissioned a corridor study of US-10 BR through City of Midland
  - Washington Street to US-10 BR/US-10 Interchange
- Partnership with the City
- Other Recent Studies
  - Main Street Streetscape Study (City of Midland)
  - Downtown Midland Study (Momentum Midland)

# Buttles Street Road Diet Traffic Data Report

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Corridor Study included:

- Public Engagement
  - Steering Committee
  - Stakeholder Committee
  - Public Information Meetings
- Traffic Analysis
  - Existing Conditions
  - No Build (2040)
  - Review of crashes

# Buttles Street Road Diet Traffic Data Report

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Corridor Study presented to City Council  
March 27, 2017

- Study presented improvement alternatives
  - Three alternatives identified
  - Comparison of alternatives
  - Presented the preferred alternative of a lane reduction, or road diet.

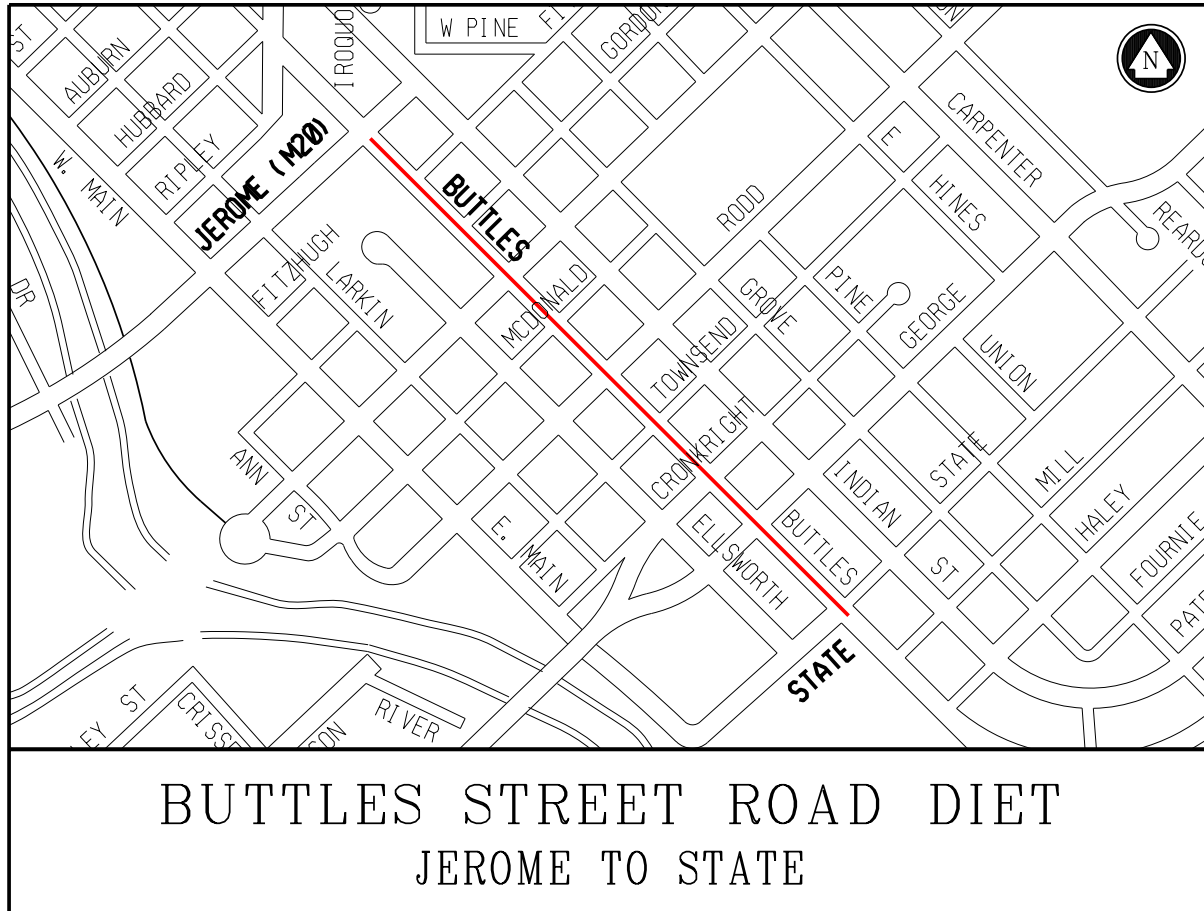
# Buttles Street Road Diet Traffic Data Report

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Proposal to focus on the Buttles Street from Jerome (M-20) to State Street

- Reduction in number of travel lanes
- Non-motorized zone signal upgrades, retiming
- Sidewalk connections
- Access Management
- Connection to Downtown Midland

# Buttles Street Road Diet Traffic Data Report



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- Preferred Alternative – Road Diet
  - Provide acceptable levels of traffic operations
  - Traffic calming
  - Low cost
  - Promote future development in the corridor
  - Increase the connection between the downtown area and surrounding neighborhoods
  - Improve pedestrian experience by reducing the number of lanes required to cross Buttles
  - Provide a non-motorized zone, with various options

# Buttles Street Road Diet Traffic Data Report

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- Two short term assessments of a lane reduction on Buttles Street previously completed
- August 28-30, 2017
  - Data collected included volume and speed during peak travel times
- November 6-13, 2017
  - Reviewed for backup and delay at signalized intersections



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- Traffic data from the previous assessments presented to City Council on December 18, 2017
- Also proposed a long term trial period to assess the lane reduction on Buttles Street
  - Assessment includes traffic data collection
    - Volume, speeds, delay and crashes

# Buttles Street Road Diet Traffic Data Report

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Long term trial period of road diet -

- May 14, 2018 traffic bollards and pavement markings were installed on Buttles Street, reducing the three lane road section to two lanes
- Traffic data collection began September 24, 2018

# Buttles Street Road Diet Traffic Data Report

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Long term trial period of road diet -

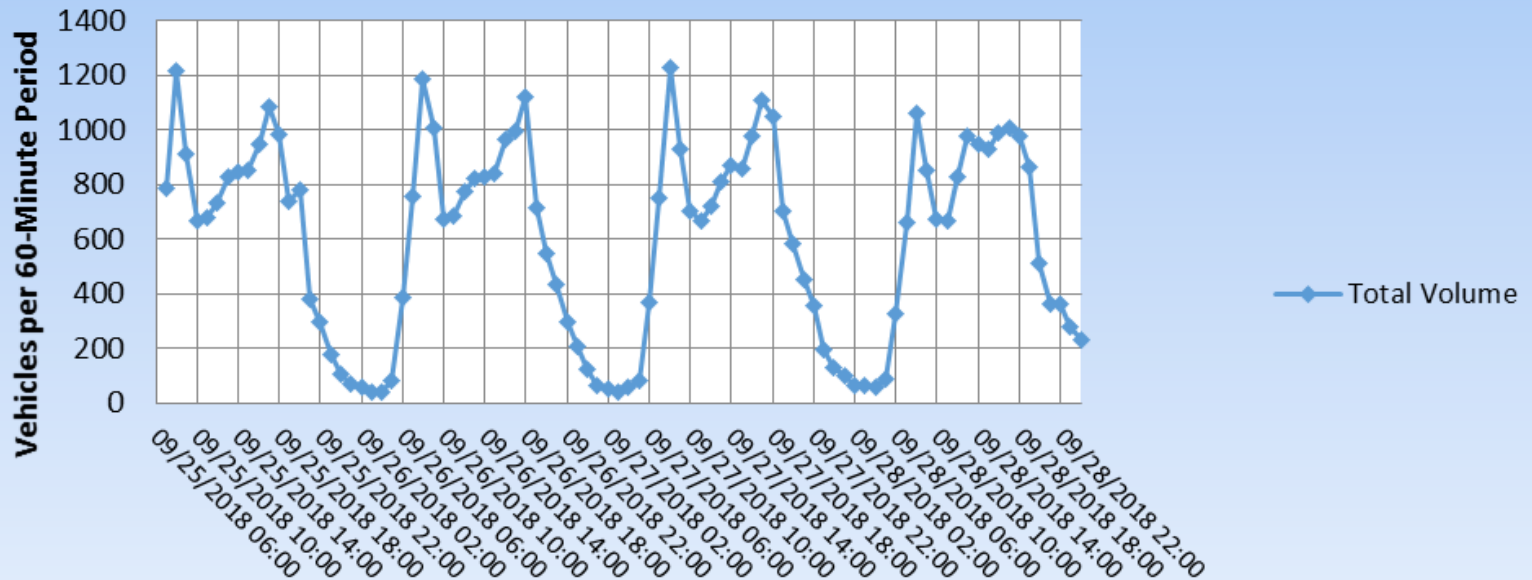
- Representatives from the Michigan Department of Transportation (MDOT) are here to present the traffic data collected as part of the long term trial period
- Resolution before you receives and files the traffic data report for the lane reduction on Buttles Street.

# Buttles Street Road Diet Traffic Data Report

## Total Volume

Tuesday, September 25, 2018 - Friday, September 28, 2018

Zone 1, Zone 2

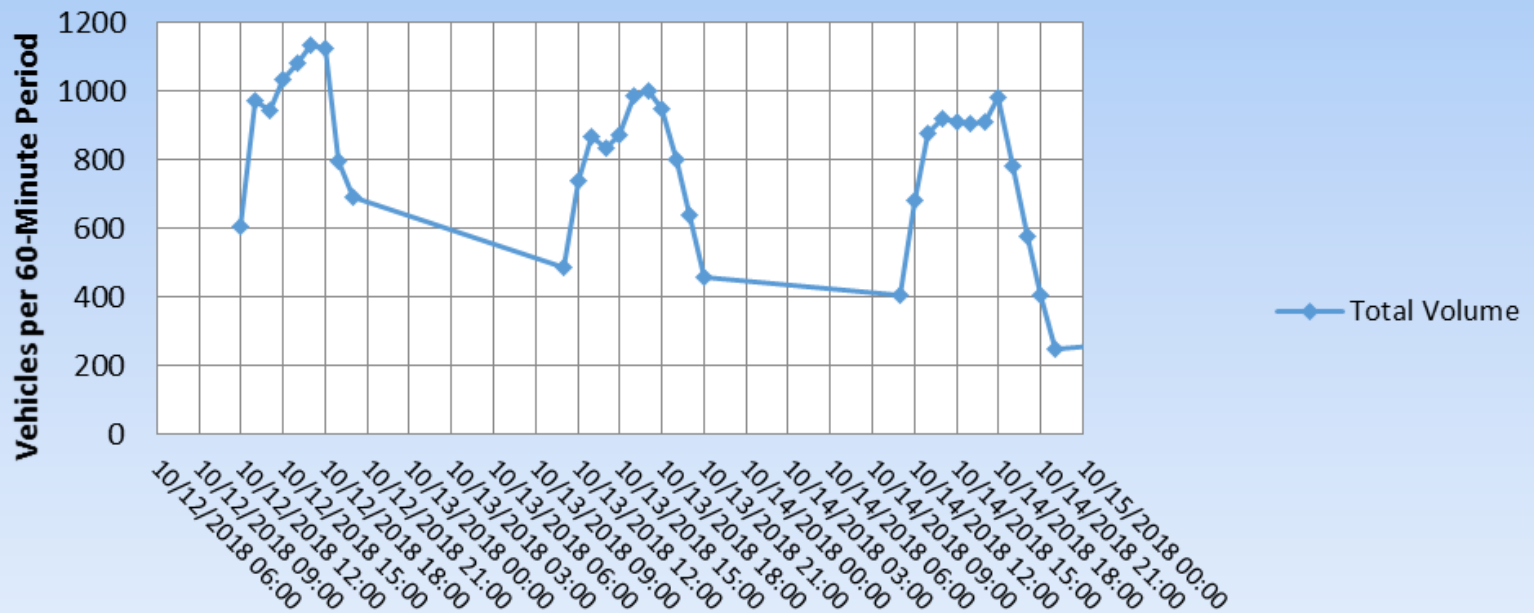


# Buttles Street Road Diet Traffic Data Report

## Total Volume

Friday, October 12, 2018 - Sunday, October 14, 2018

Zone 1, Zone 2

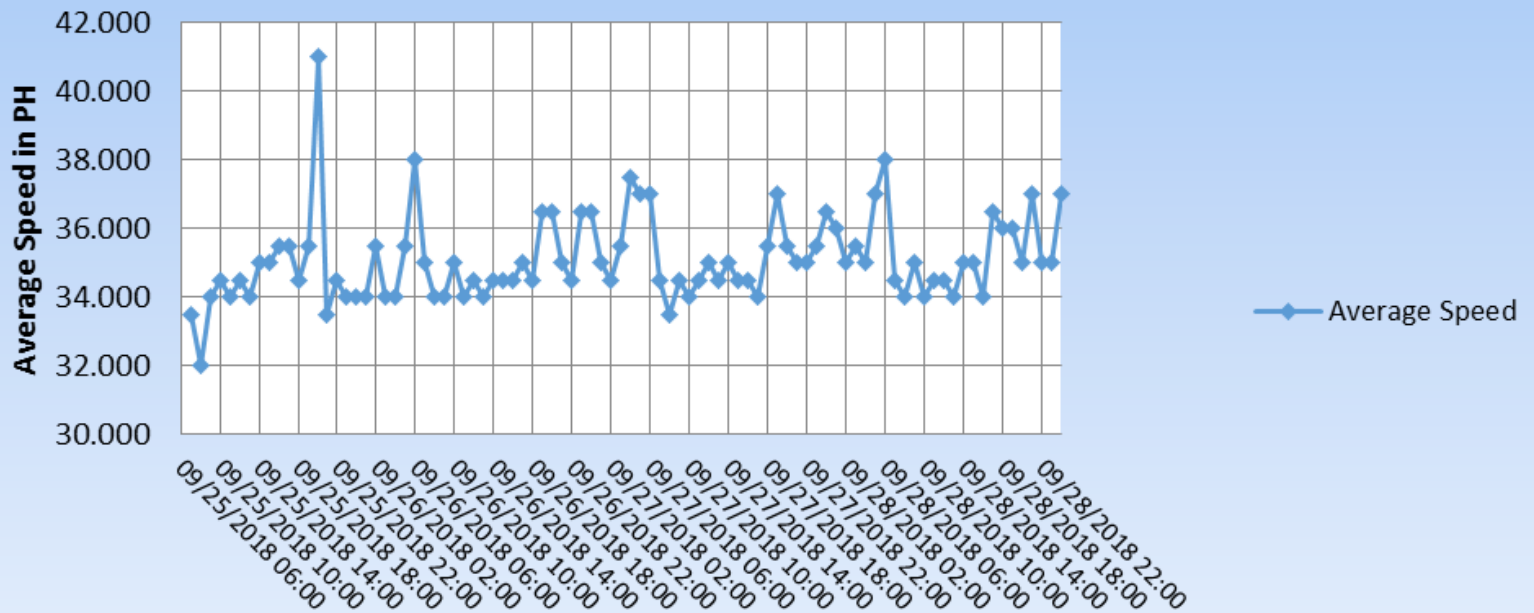


# Buttles Street Road Diet Traffic Data Report

## Average Speed

Tuesday, September 25, 2018 - Friday, September 28, 2018

Zone 1, Zone 2

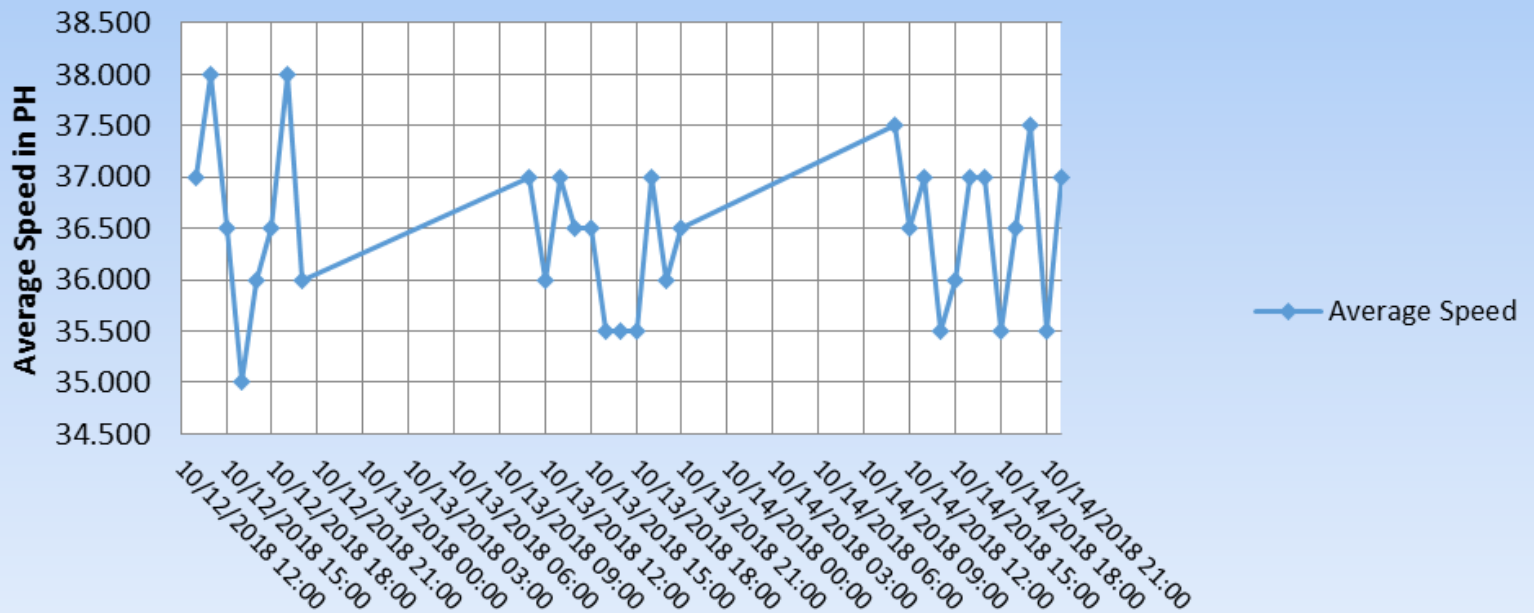


# Buttles Street Road Diet Traffic Data Report

## Average Speed

Friday, October 12, 2018 - 10/14/2018

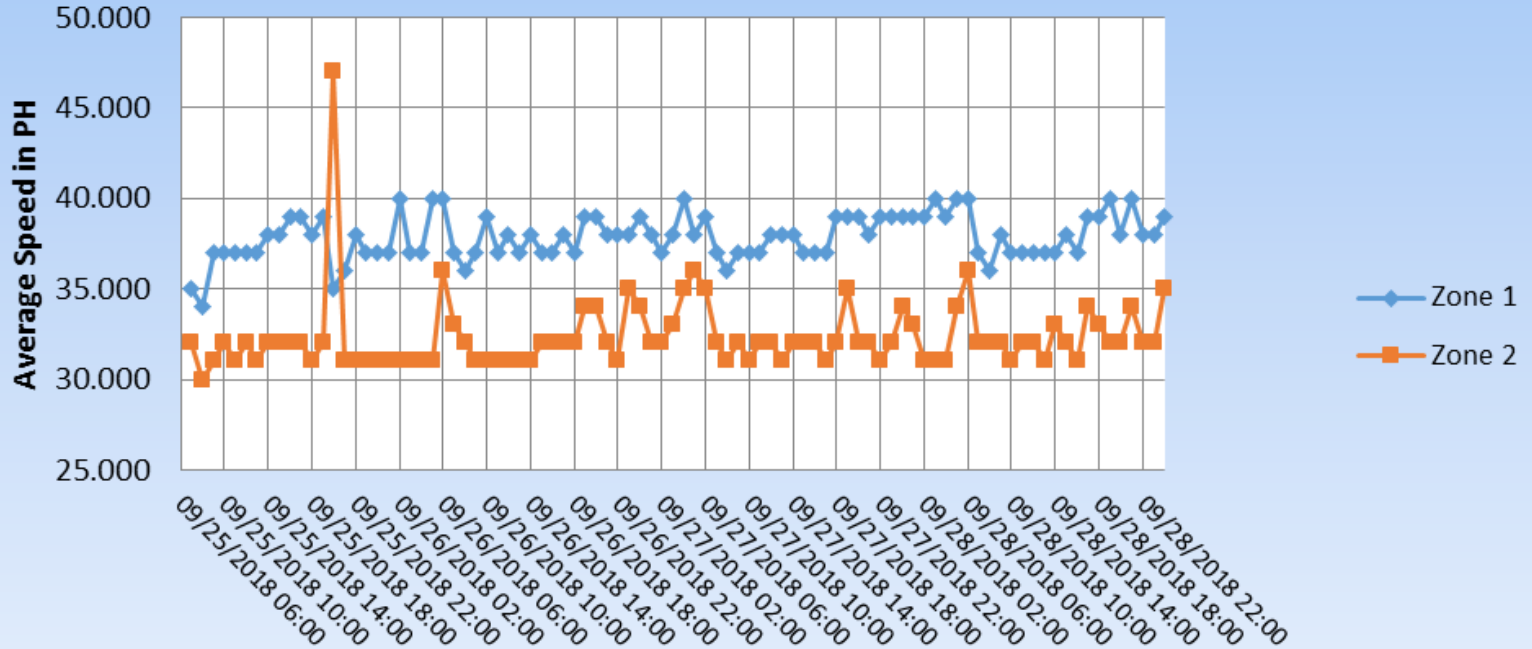
Zone 1, Zone 2



# Buttles Street Road Diet Traffic Data Report

## Speed

Tuesday, September 25, 2018 - Friday, September 28, 2018

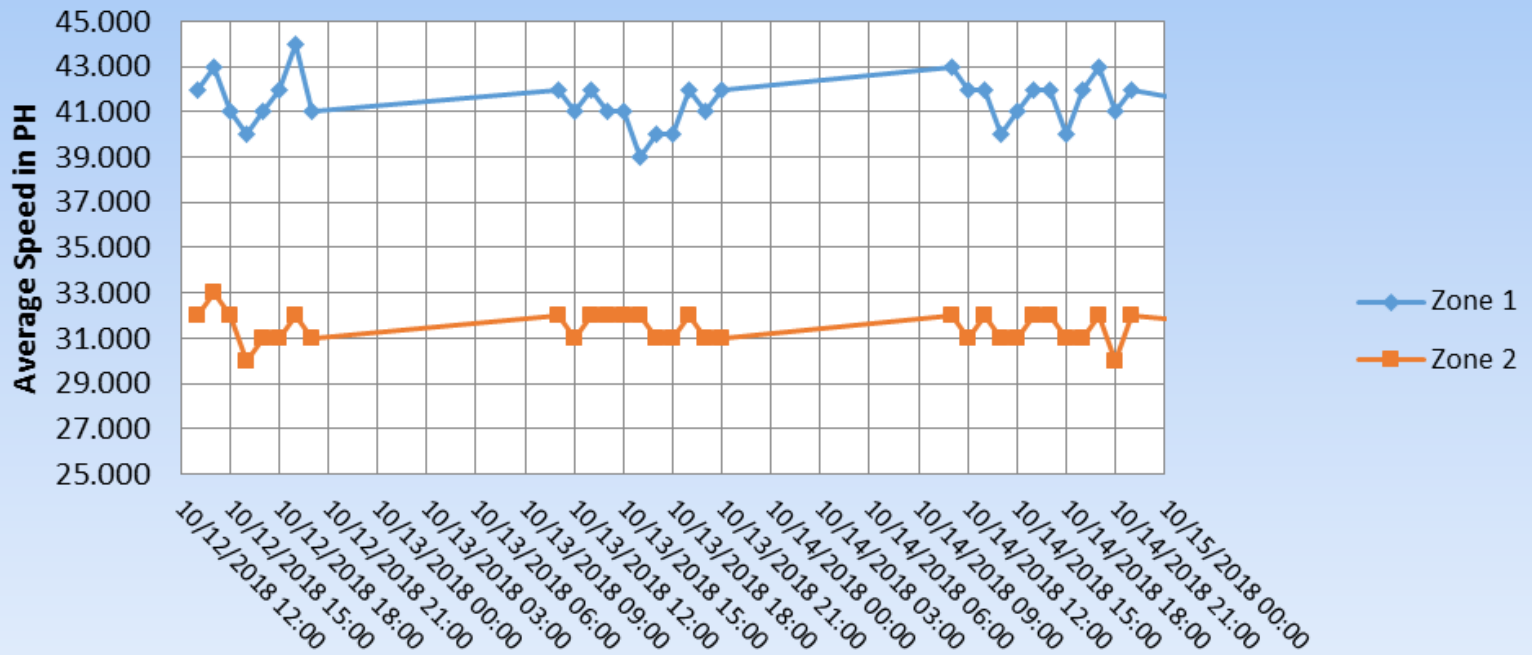




# Buttles Street Road Diet Traffic Data Report

## Speed

Friday, October 12, 2018 - Sunday, October 14, 2018



# Buttles Street Road Diet Traffic Data Report

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- Level of Service (LOS)
  - Measure of the restrictive effects of volume upon capacity
  - LOS is represented in a range from A to F
  - LOS of A is the least congested
  - LOS of D is generally acceptable
  - City of Midland targets LOS of C
- Traffic data collected shows that Buttles Street, in the road diet section is operating at a LOS of A.

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- Delay Study
  - Vehicle delay data was collected between September 24 and September 27, 2018
  - Delay study identifies the number of vehicles that are delayed at a signalized intersection for more than one cycle of the signal
  - During the November 2017 delay study, no vehicle delays were identified
  - During the September 2018 delay study, long queues were noted but no vehicle delays identified

# Buttles Street Road Diet Traffic Data Report

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## Long Term Trial Period:

- Observed LOS of A is in line with the LOS observed during the two short term assessments completed in 2017.
- Observed LOS of A is in line with the LOS anticipated from the traffic model developed for the corridor study.

# Buttles Street Road Diet Traffic Data Report

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## Crash Data:

- Collected and reviewed since implementation of the long term trial period (May to October 2018)
  - 15 crashes observed 2018
  - 9 crashes observed 2017
  - 12 crashes observed 2016

	Angle Straight	Misc Single Vehicle	Misc Multiple Vehicle	Rear End Straight	Side Swipe Same	Total
2018	7	1	0	5	2	15
2017	1	0	3	0	5	9
2016	5	0	1	2	4	12

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## Long Term Trial Period:

- Traffic data will continue to be collected this fall
- Traffic data will also be collected in spring 2019
- An assessment of the traffic data will be presented in spring of 2019

**End**