

# **US-10 Business Route Buttles Street Road Diet**

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## Topics

- Corridor study presented March 27, 2017
- Preferred alternative
- Additional information obtained

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- Study Commissioned by MDOT
- Partnership with the City
- Other Recent Studies
  - Main Street Streetscape Study (City of Midland)
  - Downtown Midland Study (Momentum Midland)
- US-10 BR through City of Midland
  - Washington Street to US-10 BR/US-10 Interchange

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- Development of Project Goals
- Public Engagement
  - Steering Committee – 8/30/16
  - Stakeholder Committee – 12/2/15, 10/31/16
  - Public Information Meeting – 12/14/16
- Traffic Analysis
  - Existing Conditions
  - No Build (2040)
  - Crashes
- Transportation Improvement Alternatives Development & Analysis
  - Three alternatives
  - Comparison of Alternatives
  - Conversion to two-way traffic not feasible
- Selection of Preferred Alternative

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- Developed based on Stakeholder input
  1. Accommodate the design year (2040) traffic volumes
  2. Alleviate current and anticipated traffic congestion at intersections and along road segments
  3. Enhance safety and reduce crashes for all modes of transportation
  4. Increase connectivity to Downtown Midland & Discovery Square
  5. Improve non-motorized mobility and eliminate barriers for bicyclist/pedestrians with minimal impacts to traffic flow
  6. Context Sensitive Design
  7. Support economic development within the corridor

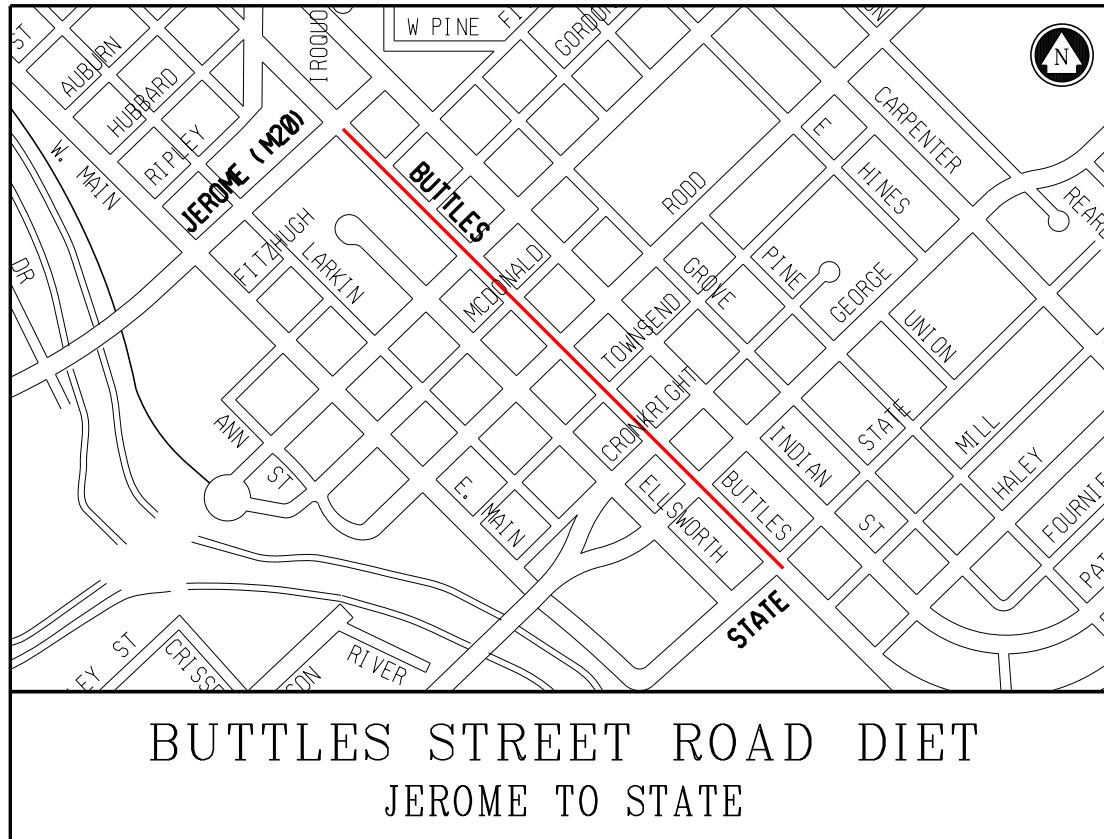
# US-10 Business Route Buttles Street Road Diet

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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

# US-10 Business Route Buttles Street Road Diet



# US-10 Business Route Buttles Street Road Diet

- Alternative 1 - Road Diet





# US-10 Business Route Buttles Street Road Diet

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- Alternative 1 – 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

# Non-Motorized Zone Options

## BIKE LANE ALTERNATIVES

## US-10 CORRIDOR PLAN MIDLAND, MICHIGAN

### BUFFERED BIKE LANE - PLANTED SEPARATOR



### BUFFERED BIKE LANE - PHYSICAL SEPARATOR



# Non-Motorized Zone Options

## BIKE LANE ALTERNATIVES

## US-10 CORRIDOR PLAN MIDLAND, MICHIGAN

### BUFFERED BIKE LANE - PAINTED SEPARATOR



### BUFFERED BIKE LANE - PAINTED PAVEMENT



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Additional information since presentation to Council in March

- Land use planning and community development considerations
- Two assessments of a lane reduction on Buttles Street
- Public Meeting held in September
- Representatives from the Michigan Department of Transportation are here to present the findings from the two assessments.

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## Land Use Planning and Community Development Considerations

- Master Plan Objectives
- Zoning Ordinance – Downtown Northside Overlay Design regulations
- Neighborhood Context

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- Two assessments of a lane reduction on Buttles Street
  - August
    - Data collected included volume and speed during peak travel time
  - November
    - Review for backup and delay at signalized intersections
- Public Meeting
  - Held in September to provide information from the first assessment and to gather additional public input on the road diet proposal

# US-10 Business Route Buttles Street Road Diet

- Assessment 1 – August 2017
  - Data collected for AM and PM peak travel times
  - AM Peak (lowest level of service observed for that time)

<b>Time</b>	<b>85% Speed (mph)</b>	<b>Level of Service</b>
6 am – 7 am	30	A
7 am – 8 am	27	B
8 am – 9 am	28	B
9 am – 10 am	30	A

- Observed Level of Service is in line with the Level of Service anticipated from the study model

# US-10 Business Route Buttles Street Road Diet

- Assessment 1 – August 2017
  - Data collected for AM and PM peak travel times
  - PM Peak (lowest level of service observed for that time)

<b>Time</b>	<b>85% Speed (mph)</b>	<b>Level of Service</b>
3 pm – 4 pm	29	B
4 pm – 5 pm	31	A
5 pm – 6 pm	30	A
7 pm – 8 pm	31	A

- Observed Level of Service is in line with the Level of Service anticipated from the study model



# US-10 Business Route Buttles Street Road Diet

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- Assessment 2 – November 2017
  - Data collected for backup and delay at signalized intersections
  - No delay was detected at the signalized intersections

# US-10 Business Route

## Buttles Street Road Diet

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- If City Council elects to pursue the preferred alternative, or road diet, MDOT has proposed to set up a long-term trial period.
- Long-term trial period, or pilot project includes delineation reducing the number of lanes to 2 between Jerome (M-20) and State Street
- Implementation of the road diet with monitoring of delay, backups and congestion
- Trial period to last approximately three years. Duration of the trial period is due to anticipated traffic pattern changes during the M-20 bridge reconstruction.

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- Resolution before you supports the concept of converting the three-lane section of US-10BR, Buttles Street, to a two-lane section, with the additional lane area being used for future improvements to the non-motorized network.

**End**