

# NM502 Traffic Congestion and Zipper Merge

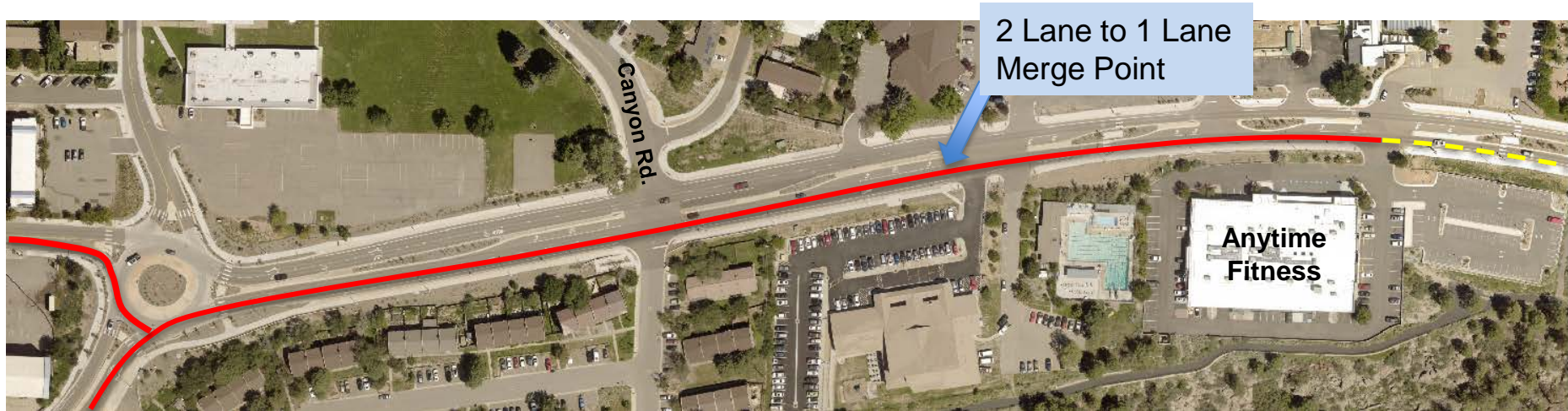
## Transportation Board

Incorporated County of Los Alamos  
Public Works Department

June 1, 2023

# What is the Issue?

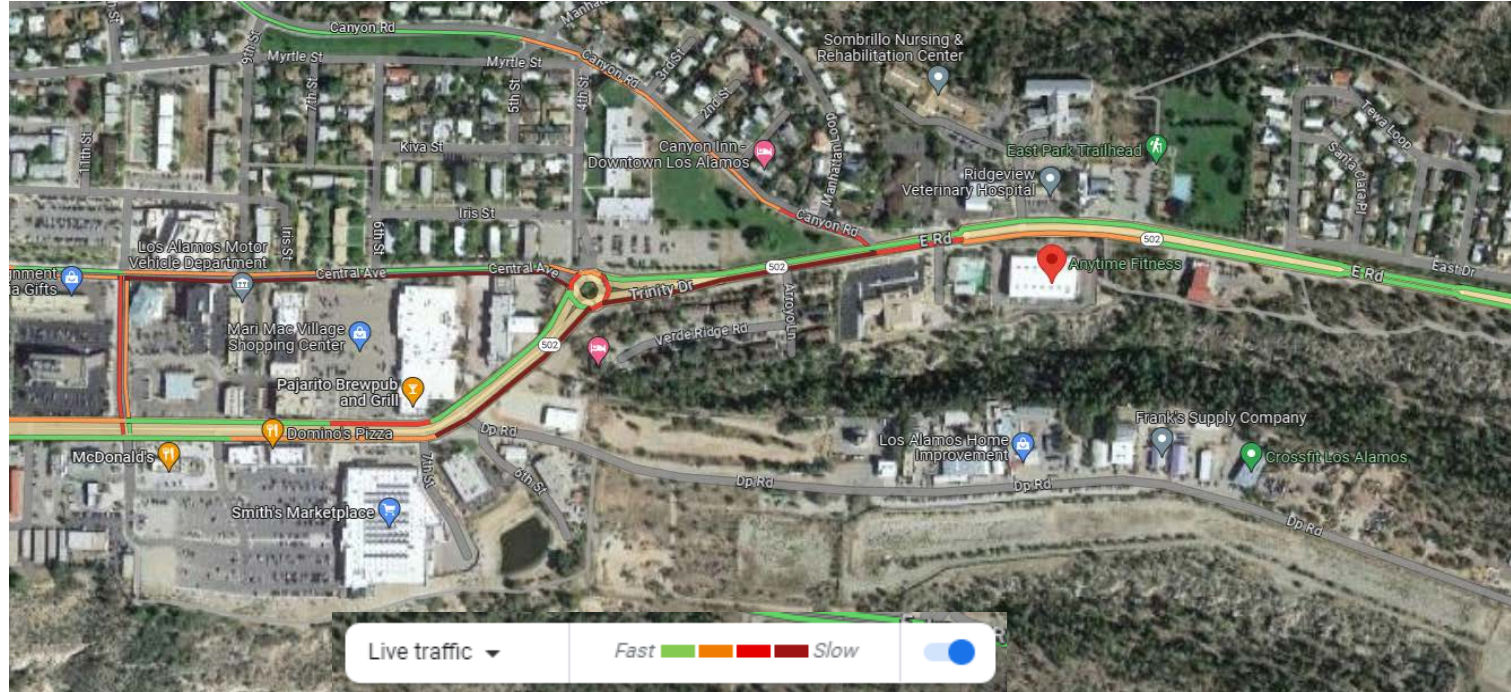
- NM502 Congestion increased earlier this year during Afternoon Peak Period (4:30 – 5:30)
- Roadway merges from 2 lanes down to 1 lane.
- Traffic backs up from Anytime Fitness Driveway (195 E. Rd) thru Roundabout and along Trinity Dr. and Central Ave.



Area of Congestion and Traffic Slow Down

# What is the Issue?

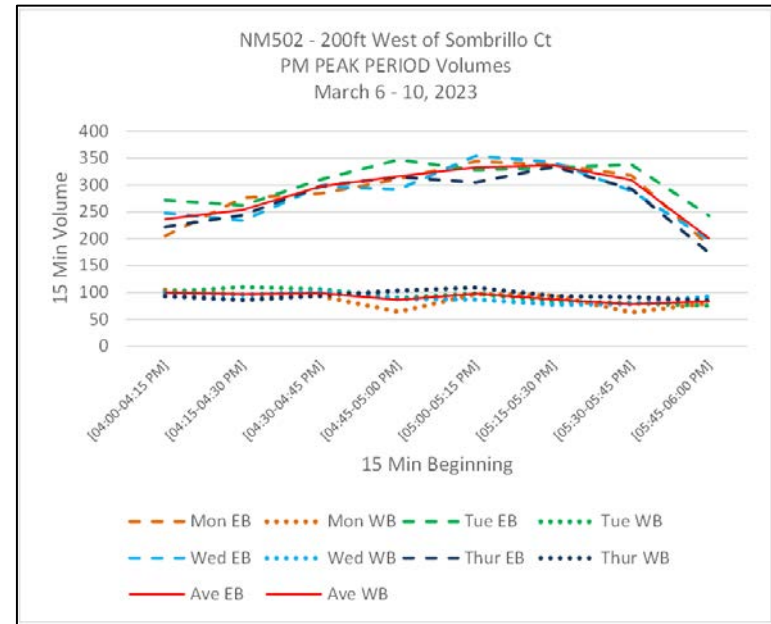
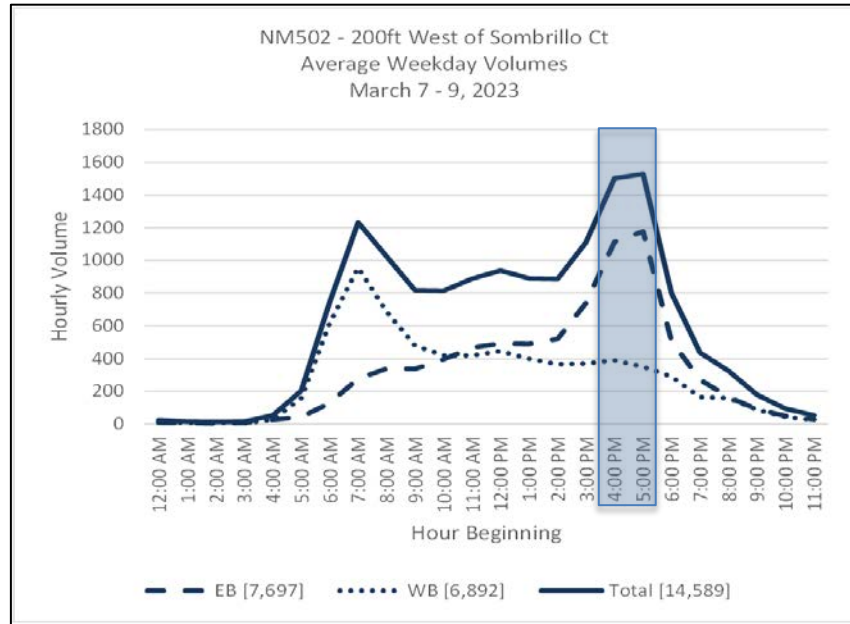
- Google Live Traffic Conditions – Wednesday May 24 @ 5:28PM



# What has Changed?

Increased Traffic during Afternoon Peak Period Eastbound (EB) Traffic Volumes due to:

- Additional Traffic Diverting from Truck Route due to NM4/Jemez Rd Construction
- Possible Changes in LANL and other Businesses Work Schedules (Reduction in Telecommuting)
- Additional construction projects across County





# How can we Increase Capacity?

- **Congestion is exacerbated by the following conditions and driver behaviors:**
  - Merging too soon after exiting the roundabout.
  - Stopping/Slowing to let vehicles exit Anytime Fitness Driveway
  - Stopping/Slowing for pedestrians crossing at crosswalks



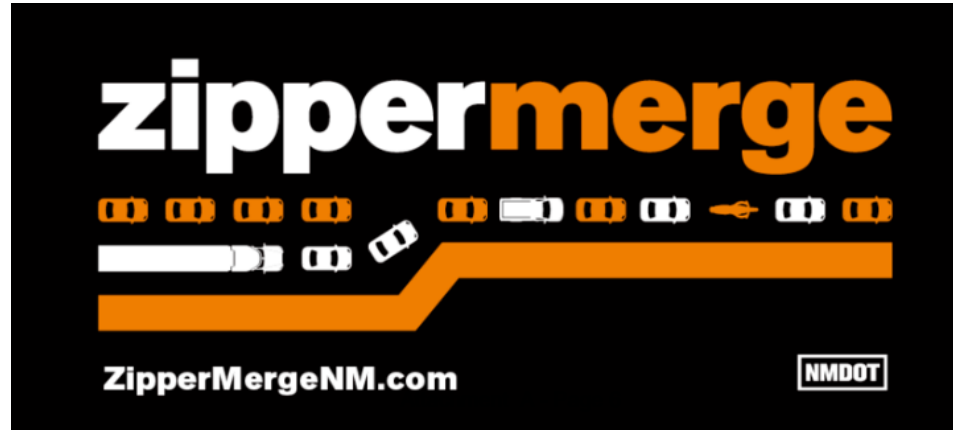
Attachment A - Page 5

# Zipper Merge

- Commonly deployed in Construction Zones when there is a lane closure

When a lane is closed in a construction zone, a zipper merge occurs when motorists use both lanes of traffic until reaching the defined merge area, and then alternate in “zipper” fashion into the open lane.

A zipper merge is a more efficient way for traffic to proceed towards a construction zone. It reduces differences in speeds between two lanes. It also reduces the overall length of a traffic backup by as much as 40 percent. Besides reducing congestion, it also creates a sense of fairness since all lanes are moving at the same rate.



# Zipper Merge Applied to NM502

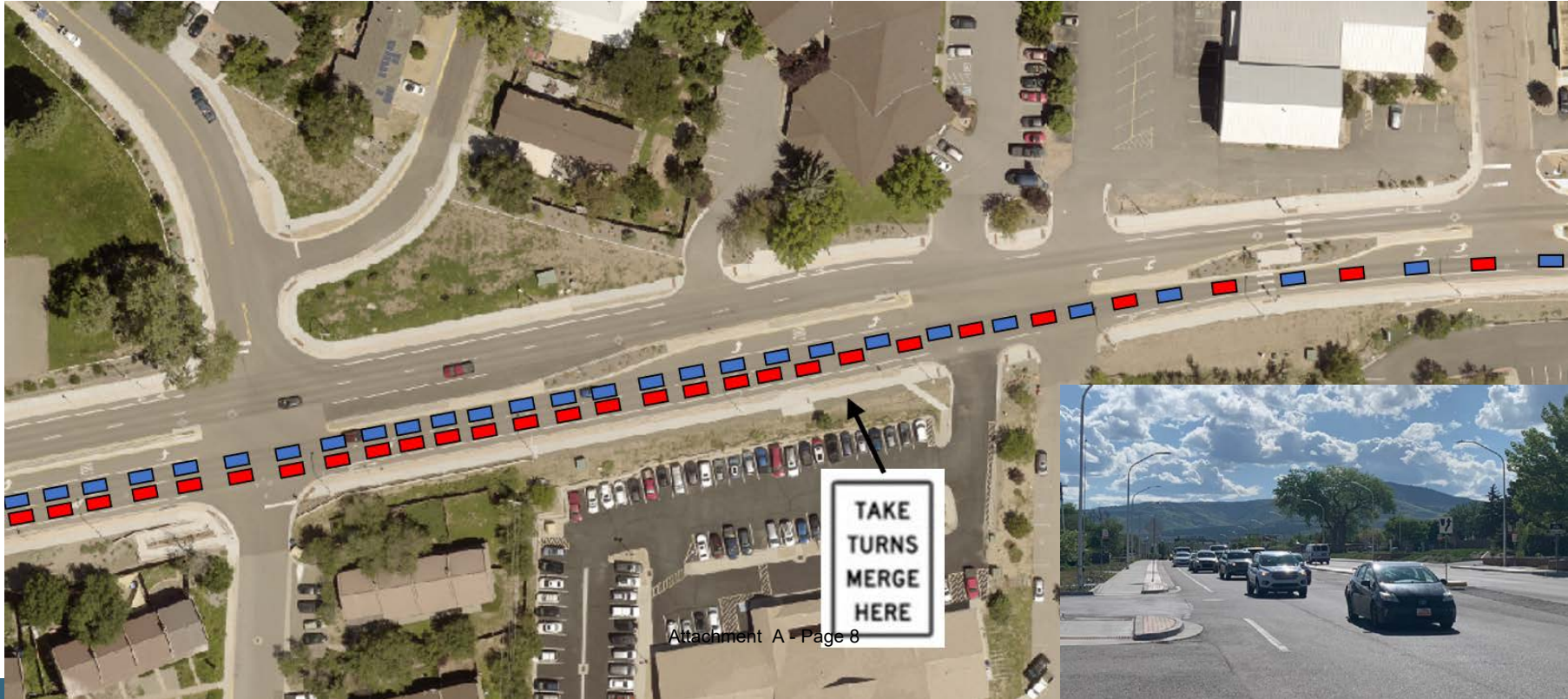
- FHWA Finalizing Study on Signage for Non-Construction Merge Situations
- Requires Public Educational Outreach (Press Release and Coordination with LANL PIO)
- Additional signage installed to encourage driver behavior/





# Zipper Merge Applied to NM502

- Monitoring Before and After Impacts





# Questions?



# THANK YOU!

The Public Works Department staff thanks you for taking time out of your busy schedule to participate in the design and construction of this important public project!