



INNOVATIVE INTERCHANGES

Michigan Urban Diamond (MUD)



I-696 at Coolidge Highway, Oak Park, MI

AN MUD IS ALSO KNOWN AS:

- Median U-Turn (MUT) Interchange

What is an MUD?

- A grade-separated interchange design where left-turning motorists make a u-turn at an adjacent crossover to complete the desired movement
- The crossovers are parallel to the arterial and are accessed from one-way frontage roads (roads that are adjacent to the freeway)
- No left turns are permitted at the main intersection
- The crossover intersections can be signalized, stop controlled, or yield controlled

When should an MUD be considered?

- At locations with moderate to heavy through traffic volumes and low to moderate left-turn traffic volumes
- At locations with existing frontage roads
- In areas where access to properties and businesses adjacent to the freeway is important

What are the benefits of an MUD?

- **Improved safety:** Reduces the number of points where vehicles cross paths and decreases the potential for angle crashes
- **Increased efficiency:** Eliminates left-turn movements from the main intersection, allowing for fewer traffic signal phases, which reduces delay and increases capacity
- **Shorter wait times:** Fewer traffic signal phases means less time stopped at the main intersection

What are innovative interchanges?

Interchange designs where traffic movements are modified to improve safety, reduce delay, and increase efficiency.

Visit www.virginiadot.org/innovativeintersections to learn more.





Navigating a Michigan Urban Diamond (MUD)

