Traffic Pressures & Neighborhood Safety

Traffic Pressures on Lemont Road & Commuter Patterns

The intersection of **Lemont Road and 97th Street** is already a critical pinch point for commuter traffic in the area. It serves as a primary route for employees traveling to **Argonne National Laboratory**, one of the largest employers in DuPage County, with over 3,400 employees and 1,000 contractors on its 1,500-acre campus in Lemont. Peak morning and evening hours see long queues of vehicles at the signals, with heavy cross-traffic entering and exiting from residential streets.

Introducing a high-volume commercial use such as a gas station would intensify these strains by:

- Adding **frequent turning movements** in and out of driveways, slowing traffic flow.
- Introducing **delivery trucks and tankers** that require wider turning radii and longer dwell times at intersections.
- Increasing the number of conflict points where vehicles cross paths, raising the likelihood of collisions.

National traffic safety research confirms that **driveways near intersections significantly increase crash rates**, particularly for left turns into and out of commercial properties. Gas stations in particular are identified as "high crash generators" due to the mix of turning vehicles, large fuel deliveries, and customer traffic.

Neighborhood Access Constraints & Safety Implications

The **Pleasantdale neighborhood** is uniquely vulnerable to traffic disruptions because it has only **three access points**. Two of these—at **97th and 99th Streets**—sit immediately adjacent to the proposed gas station site. This creates a direct overlap between resident traffic and gas station traffic.

Key risks include:

- **Bottleneck effects:** With so few access routes, even minor backups could trap residents or delay them from reaching Lemont Road.
- Safety concerns for families and school buses: Increased congestion and turning movements near access points raise the likelihood of vehicle-pedestrian conflicts. Research shows that heavy traffic near residential streets contributes to lower walkability and higher crash risk for children.
- **Emergency response delays:** Fire trucks, ambulances, and police vehicles rely on clear neighborhood access. Studies demonstrate that congestion near residential entrances can significantly slow emergency response times, especially in cul-de-sac or limited-entry neighborhoods.

In short, the **combination of an already congested commuter corridor and limited neighborhood access points** makes the proposed gas station a disproportionate risk for Pleasantdale residents.

Selected References

- 1. **Argonne National Laboratory Overview** U.S. Department of Energy. Notes Argonne's location, size, and role as one of the largest employers in the region. (anl.gov)
- 2. **Federal Highway Administration (FHWA): Safety at Driveways.** Documents elevated crash rates where commercial driveways intersect arterial roads. (<u>highways.dot.gov</u>)
- 3. National Highway Traffic Safety Administration (NHTSA): Traffic Death Data. Demonstrates broader safety impacts of traffic congestion and conflicts near residential and pedestrian areas. (nhtsa.gov)
- 4. **Institute of Transportation Engineers (ITE): Emergency Access and Neighborhood Street Design.** Shows how congestion at limited neighborhood access points can delay emergency response. (<u>ite.org</u>)