

Drive-Through Operations – Staff Summary of Analysis from Jano Baghdanian & Associates

In recent years, there has been an increase in the development of fast-food restaurants with drive-through facilities and the conversion of smaller fast-food restaurants to include drive-through operations based on research conducted by QSR Magazine. This increase in fast-food pickup demand, combined with the expansion or conversion of existing restaurants, or the development of new restaurants has resulted in the following negative impacts:

- The shift to drive-through use, especially during high-demand periods (morning, lunch, and dinner), has increased traffic in alleys, on residential streets, and on minor and major thoroughfares.
- Negative effects on surrounding residential neighborhoods, including blocking roadways and driveways, disturbances caused by speeding vehicles, and accumulation of trash by unruly restaurant patrons.
- Limited storage capacity of the drive-through lanes and inadequate on-site parking for smaller fast-food restaurants and coffee shops results in backup of vehicles onto adjacent streets, blockage of traffic lanes and sidewalks, and obstruction to traffic circulation.

To address the above negative impacts associated with drive-through operations for restaurant and non-restaurant uses, staff engaged a traffic engineering consultant, Jano Baghdanian & Associates (“Consultant”), to develop design guidelines and procedures for evaluating businesses with drive-through operations. Through field observations, the Consultant evaluated 15 restaurant establishments with drive-through operations (fast-food restaurants and coffee shops) and 6 non-restaurant establishments with drive-through operations (banks, pharmacies) in the City of Glendale and adjacent cities. Overall, the results of the trip generation analysis of drive-throughs for restaurant and non-restaurant uses indicated that:

- The actual trip rate of a certain subset of restaurants with drive-through operations (those with very high popularity/demand) is 1.3 to 4.6 times higher than the ITE average trip rates during the morning, midday and afternoon commuter peak hours. Therefore, using the ITE rates for these types of restaurants could underestimate their trip generation and potential impacts.
- The calculated trip rates for coffee shops with seating are comparable to the ITE average rates. However, coffee shops that are approximately 1,000 square feet or less, AND do not offer indoor or outdoor seating, have calculated trip rates that are 2.1 to 4.2 times higher than the ITE average rates. Therefore, using the ITE rates for these types of coffee shops could underestimate their trip generation and potential impacts.
- For non-restaurant establishments with a drive-through (banks and pharmacies), the analysis indicated that few customers use the drive-through operations, and the ITE trip generation rates should be used to estimate the inbound and outbound project trips.

Based on trip generation data collected as well as queuing analysis of the sites studied, design guidelines will be developed to regulate drive-throughs for restaurant and non-restaurant uses, including establishing queueing capacities specific to the operational impacts of the business.