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# FAST FOOD, EASY WALKING:

PEDESTRIAN DESIGN STANDARDS FOR FAST FOOD  
DRIVE-THROUGHS IN CENTENNIAL, CO

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## INTRODUCTION AND PROBLEM STATEMENT

Since its incorporation on February 7, 2001, the City of Centennial has grown into a commercial and residential hub for people wanting a new suburban experience in the Denver Metropolitan Area. By 2005, the City had enacted spacing requirements that would mitigate any uncoordinated developmental efforts and unstandardized implementation across 29 square miles (about the area of Cleveland, Ohio) bordering cities such as Englewood, Greenwood Village, Aurora, and Littleton. As Centennial has grown into the sprawling suburb that it is today, neighboring communities boast greater dining options due to the comparative lack of zoning and design restrictions imposed by their municipalities. Plainly, the Centennial has placed stringent spacing and design standards on fast-food drive-throughs, which make it cumbersome, if not impossible to attract restaurant developers and therefore restaurant customers. As the fast-food business model continues to evolve by designing aesthetically appealing buildings, offering more nutritious options, and offering more diverse and enticing customer experiences, the persistent use of personal vehicles has not dissipated along with these changes. Additionally, fast-food drive-throughs have become verily a planner's dilemma where a city benefits from the revenue generated through instant gratification of a burger or a milkshake, while planning and design for all users serves the common good. Centennial planning staff continues to ponder whether the current standards serve their purpose productively enough to justify keeping them as they are, especially in a community that relies heavily on car travel but is actively trying to become more pedestrian-friendly.

For Centennial to compete with its neighbors, the City must continually work towards providing pedestrian and multimodal options to its constituents and visitors. Currently, the prevailing auto-dominant infrastructure in Centennial presents exceptional challenges in terms of establishing consistent forms of pedestrian infrastructure throughout the city, but especially on fast-food drive-through lots that favor the driver whether entering, exiting, or idling. Contemporarily, drive-throughs are becoming contrary to planning ideals, but there are several arguments that maintain that pedestrians

should have space to maneuver in any location, whether the space is designed to favor cars or not. Additionally, this project serves to help Centennial plan for future fast-food users in an environment that will still contain automobiles. Fast Food, Easy Walking is a call to action in working towards making Centennial a pedestrian-friendly place for drive-through customers.

## BACKGROUND

There are 22 fast-food drive-through establishments situated in Centennial across four distinct corridors: Arapahoe, County Line, Smoky Hill, and University. These restaurants range from the common McDonald's, Burger King, Taco Bell, and Starbucks to the more obscure regional outlet Slim Chickens and small-business Tata's Burritos. Given that these establishments are distributed all throughout the City of Centennial, many do not have similar street and site contexts, and therefore lack similar infrastructure to one another. All 22 fast-food drive-throughs leave some room for improvement through retrofits, and new developments will need to confine to standards that favor a wider range of users, especially pedestrians. The City of Centennial has found recent success, where the more recently a fast-food establishment has developed, the more pedestrian-friendly it is. However, developments established in the 20th century and the early 2000s must catch up to meet the current standards, let alone the ones Bronte and Matt propose. Fast-food restaurants are typically placed in areas with higher traffic to encourage a vast customer base traversing main arterial road and well-connected collectors. However, sound pedestrian design often posits that non-car users need space away from cars to feel safe and comfortable in any environment. The City has tasked Bronte and Matt with the challenge of balancing these competing ideologies to satisfy the needs of pedestrians while still giving drivers access to fast-food establishments.

The intended users of this comprehensive narrative report are mainly City of Centennial Planning Staff and appointed officials, specifically members of the Centennial Planning & Zoning Commission and the Community Development and Economic Development Departments, as well as other members of City

of Centennial Government, community members, and prominent stakeholders in development and public works. This project features six distinct tasks that accomplish the objectives proposed for this project.

The tasks are:

1. Review of relevant academic literature, plans, and ordinances to determine what "pedestrian-first" design looks like in automobile accessible environments.
2. Inventory and analysis of existing drive-through restaurants within Centennial.
3. Analyze and synthesize findings from Sections 1 and 2 to evaluate pedestrian comfort of drive-through restaurants in Centennial.
4. Proposed strategies and development standards for retrofitting existing drive-through restaurant uses to increase pedestrian comfort.
5. Proposed design standards for newly created drive-through uses that place a greater emphasis on the pedestrian experience.
6. Assessment of the potential to have pedestrian-first drive-through restaurant site designs in walkable developments while still offering automobile accessibility.

## KEY FINDINGS

**Building orientation and location of drive-through lanes dictate pedestrian safety.** In addition to a variety of specific potential implementation strategies, buildings that are oriented towards the street from where pedestrians can see the entrance tend to perform better in terms of pedestrian design and safety. Typically, buildings that face the street are also more equipped to support walkways, crosswalks, and signage that lead pedestrians to the building frontage.

**Changing consumer habits can affect long-term prospects of pedestrian design.** Under COVID-19, an increasing number of drive-through restaurant franchises are considering site designs that shrink on-site dining space and expand drive-through lanes. This entails pedestrian design falling out of favor if there is even less space for pedestrians to maneuver.

**Adjacent car-centric uses and a lack of sidewalks complicate an already insufficient pedestrian infrastructure at most Fast Food Drive-Throughs (FFDTs).** Not only is traffic and congestion a concern for pedestrians, but many of these drive-throughs are on large lots with neighboring businesses. These businesses also primarily serve cars such as drive-through banks and pharmacies, mechanics, gas stations, and strip malls.

**The Arapahoe Road Corridor, while seemingly the least pedestrian friendly, boasts on average the most pedestrian-friendly establishments.** This is as much a testament to the attention given to the Arapahoe Road Corridor in the Land Development Code (LDC), as it is to the presence of walkable shopping developments that have propped up the economy of Centennial in recent years.

**Attributes that were present at fewer than 50 percent of drive-throughs take precedent for design standards recommendations.** Through the surveying of 22 fast-food drive-through establishments, Bronte and Matt created a pedestrian comfort and safety matrix to evaluate 19 different pedestrian-centric attributes.

## RECOMMENDATIONS

**Implement design retrofits that clearly, at minimum, proportionately cater to pedestrians on and adjacent to existing fast-food drive-through lots.** Walkways that connect from primary and secondary streets help pedestrians enter a site unscathed and are especially necessary in high traffic and high conflict situations. Painted crosswalks delineate where pedestrians can cross on a lot and where drivers must use caution in case a pedestrian is nearby. Crosswalks are supplemented with directional and cautionary signage that direct drivers away from pedestrians while also warning them of potential conflicts. Outdoor amenities such as seating and trash cans are minimum provisions for encouraging walkability, and outdoor dining should be implemented at fast-food drive-throughs where adjacent uses serve pedestrians as well, if not better than drivers.

**Enact pedestrian design standards to be implemented at new fast-food establishments.** The main building should be located near the street frontage with no more than 22 feet of

automobile circulation between the building and primary street. Outdoor amenities must be included on the site and separated from automobile circulation with railing or landscaping. Signs and marking shall be used to define circulation for vehicles. Walkways and crossings shall be used to create clearly defined, safe, and convenient pedestrian routes that connect site destinations.

**Provide a menu of standards, in addition to the primary standards, that can positively affect pedestrian infrastructure.**

This menu of standards mandates that at least two out of five of the standards is implemented on a new fast-food drive-through development. This gives developers the opportunity to customize their site while remaining cognizant of pedestrians throughout the site planning and construction process.

**Final Thoughts**

Fast-food drive-through establishments have gained prominence throughout the COVID-19 pandemic for their convenience during a complicated and trying time. The City of Centennial is exploring whether to accommodate the trend of new dining concepts only seeking locations that allow for drive-through windows, with this trend only becoming more desirable due to the COVID-19 pandemic. This would require the City to revise its zoning standards to allow FFDTs in locations not currently permitted by zoning, but may also act as a catalyst for the creation of Neighborhood Activity Centers (NACs) as a strategy to bring pedestrian and vehicular traffic to the City's older and underutilized shopping centers. This could also generate sales tax revenue and encourage further economic development. For Centennial to thrive as a result of new pedestrian design standards, pedestrian scale must be at the forefront of every commercial and residential development that happens in the future. Transportation infrastructure near NACs will accentuate walkability and allow for experience-oriented public spaces that the City of Centennial envisions. Existing fast-food drive-throughs must be further assessed to see if they can fit within the design standards for NACs, all while maintaining the essential aspects of pedestrian design while adding more that will elevate the possibility of pedestrian activity.