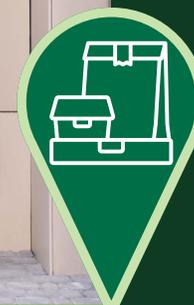*From App to Table:*

Rapid Food Deliveries in Massachusetts

Executive Summary

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MAPC

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From App to Table: Rapid Food Deliveries in Massachusetts

About MAPC and this Report

The Metropolitan Area Planning Council (MAPC) is the regional planning agency for the 101 cities and towns of Greater Boston. Our mission is to promote smart growth and regional collaboration.

This report concentrates on the transportation, land use, and economic effects of rapid food deliveries from third-party mobile apps such as DoorDash, Grubhub, and Uber Eats, as well as fast delivery of convenience store items from mobile apps including GoPuff and Getir. This report does not include an analysis of larger, same-day deliveries from grocery stores, but instead concentrates on smaller orders of prepared foods and convenience store items typically delivered within 15 to 45 minutes. We put forward potential policies that could help the Commonwealth, municipalities, and the mobile delivery platforms more sustainably manage the growth and impacts of these rapid food deliveries.

This report is a follow-up work to MAPC's 2021 report Hidden and in Plain Sight: Impacts of E-Commerce in Massachusetts, which investigated the effects of online commerce on municipalities in the Commonwealth. It also follows MAPC's Fare Choices research on the impacts of app-based ride-hailing in Massachusetts. Finally, this report is aligned with the recommendations adopted in the regional plan **MetroCommon 2050**, including improving access and regional mobility, reducing vehicle miles traveled, enabling wealth creation and intergenerational wealth transfer, and expanding and promoting the resiliency of small businesses, particularly those owned by people of color. Of note, MetroCommon identifies three actions that closely align with this study:

▷ Action 4.1: Municipalities should develop flexible curb use policies to accommodate an influx of new mobility options and increased demand for curb space.

▷ Action 4.2: Require transportation network companies (TNCs) and e-commerce to share trip-related data with government planning entities and establish standards for doing so.

▷ Action 4.3: Establish a cross-agency task force to consider issues around transportation data ownership and privacy.

MAPC serves as a resource for continued information sharing and findings from e-commerce surveys and pilot programs and will continue to conduct research on how municipalities in Massachusetts are mitigating and managing the impacts of e-commerce. Please email ecommerce@mapc.org with relevant information or to be informed of future initiatives.

From App to Table: Rapid Food Deliveries in Massachusetts

Executive Summary

The use of apps to order meals from restaurants, items from convenience stores, and food from grocery stores has seen explosive growth in the last few years. This recent growth in rapid food deliveries can largely be attributed to third-party delivery apps (also known as third-party delivery platforms) such as DoorDash, Grubhub, and Uber Eats, as well as grocery and convenience store apps such as Getir and GoPuff. Spurred by the adoption of smart phones and the pandemic, the number of rapid food delivery app users nationally has almost doubled in the last five years, from 66 million in 2015 to 111 million in 2020. A 2021 survey of U.S. adult consumers found that 6.5% order deliveries from food apps every day, while 42% order at least once a month.

MAPC could find no studies or reports that definitively identify the number of app-based deliveries in the U.S. or Massachusetts. However, based upon Securities and Exchange Commission (SEC) filings and market data, MAPC estimates that in Massachusetts the number of third-party rapid food deliveries now exceed the number of ride-hailing trips from Transportation Network Companies (TNCs, i.e., Uber, Lyft). This estimate does not account for restaurant-provided online deliveries, nor the rapid deliveries of grocery and convenience store items from businesses such as Getir and GoPuff. Thus, the true annual number of app-based rapid food deliveries in Massachusetts is likely much higher.

Online order and delivery platforms are shifting the way many restaurants, convenience stores, and grocery stores market their products and services to grow their businesses. The growing demand for rapid food deliveries creates a new dynamic for municipalities managing parking and street curbs, as well as zoning for downtowns, neighborhood and village centers, and main streets. Like the ride-hailing industry, these rapid food delivery

platforms are struggling to be profitable, and thus will continue to evolve and expand their marketplace as consumers become more accustomed to quick, convenient deliveries of food, snacks, and other items. It is highly likely that rapid food delivery platforms will become a permanent fixture in the delivery landscape.

The exponential growth of the rapid food delivery sector has significant transportation, environmental, economic, labor, and land use implications. Based upon the research completed for this paper, our key learnings are as follows.

▷ Key Learnings

The scale of rapid food deliveries in Massachusetts is unknown, but likely exceeds that of ride-hailing (Uber, Lyft) trips.

Data suggest that rapid food deliveries in Massachusetts may now exceed the number of ride-hailing (Uber, Lyft) trips. MAPC estimates that in 2021, Massachusetts may have had between 80 and 105 million rapid food deliveries by third-party platforms – a figure that has more than doubled in the last three years. By comparison, Massachusetts had 91 million ride-hailing trips in 2019, but less than 40 million ride-hailing trips in 2021. It is important to note that the decline in ride-hailing trips is directly related to the pandemic, with fewer people traveling in 2020 and 2021. By contrast, the pandemic accelerated the pace of rapid food deliveries, with more households ordering delivery and doing so more frequently. This trend is highly likely to continue, but perhaps at a slower pace. Consistent and reliable data reporting is needed to monitor the rapid food delivery sector and its impact on public infrastructure.

Estimated Third-Party Food Delivery Trips in Massachusetts
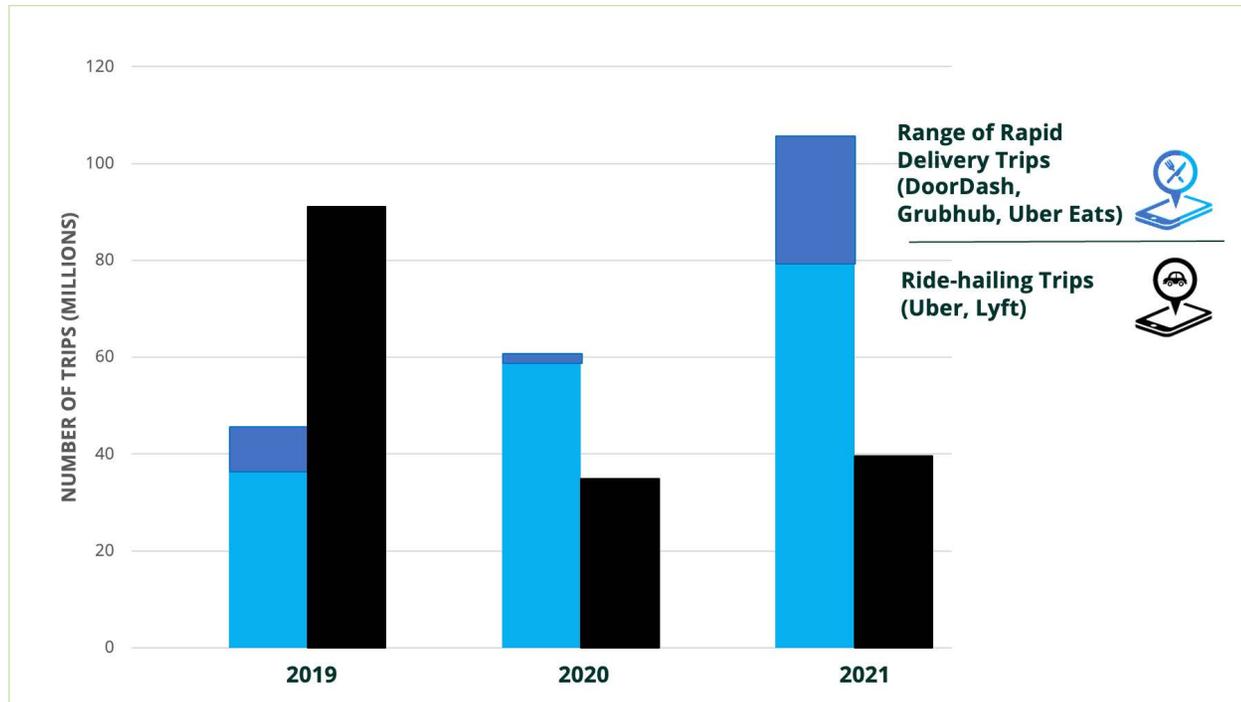
Sources: Uber, DoorDash, Grubhub SEC Filings; Business of Apps; YipitData, compiled by MAPC
See Appendix A for data sources and methods

The transportation impacts of rapid food deliveries may be greater than ride-hailing impacts.

Like ride-hailing, the types of transportation impacts from rapid food deliveries include increased street congestion, idling and associated emissions at the curb, as well as greater competition for parking, resulting in unsafe and illegal practices such as double-parking in bus, bike, and travel lanes. However, data suggest that the impact per trip may be even greater for rapid food deliveries than ride-hailing.

- A [study of food deliveries in London](#) determined that the average time occupying the curb or parking area for picking up food at a restaurant was 10 minutes, while delivering a meal to a customer lasted an average of two minutes. In contrast, the typical time for ride-hail curb interactions is one to five minutes for pick-ups and 30 seconds for drop-offs.

- A [survey of delivery drivers](#) working for apps such as DoorDash, Grubhub, or Uber Eats found that only 7.5% of drivers are always able to find parking at the curb upon arrival and 25% spend between four and seven minutes searching for parking. One-fourth of survey respondents admitted to parking in spaces not meant for them when unable to find parking.

- When not delivering, many food delivery drivers spend time waiting for their next assignment — time known as deadheading. A study of food deliveries in London found that workers spend nearly 50% of their time waiting for their next delivery assignment. A [study of ride-hailing trips in the Boston](#) area determined that one-third of miles driven by drivers were considered deadheading while waiting for a ride request. While these two studies are not apples-to-apples comparisons, the data illustrate the inefficiencies of these services and their associated impacts on streets.

- Most rapid food deliveries are within one to five miles – suggesting more environmentally sustainable delivery methods such as e-bikes or electric mopeds might be feasible.

The proliferation of ghost kitchens and micro-fulfillment centers is directly related to the rapid food delivery industry.

Ghost kitchens are commercial facilities that house one or more restaurant operators who prepare food exclusively to fulfill online orders. While some ghost kitchens are stand-alone facilities, others operate out of existing restaurants delivering food under virtual brands that exist only online.

Based on MAPC's research, most Massachusetts ghost kitchens currently operate as virtual brands from existing restaurants. Over time, ghost kitchens and virtual brands may appropriate business from traditional brick-and-mortar restaurants, a pattern comparable to ride-hailing companies disrupting the taxi industry. Often located in densely populated areas, micro-fulfillment centers (MFCs, sometimes referred to as dark stores) primarily fulfill online grocery and convenience item orders. Because ghost kitchens and MFCs do not bring in the foot traffic of traditional stores and restaurants, they have the potential to diminish the vibrancy and economic vitality of neighborhoods and main streets.

Deliveries by third-party platforms are increasingly critical to the viability of restaurants, yet restaurants are encumbered by high commission or service fees.

While third-party rapid food delivery platforms can play a role in expanding a restaurant's customer reach, they also charge high commission or service fees and generate competition between in-person restaurants and delivery-only ghost kitchens. Commission or service fees typically range between 15-30%, which is a significant added expense for restaurants that already operate on slim profit margins. It is particularly challenging for small, independent, or neighborhood restaurants that lack the power to negotiate fees and commissions.

Most delivery workers are independent contractors and many earn less than $16 per hour after expenses.

It is difficult to estimate the number of workers who provide rapid food deliveries. Most rapid food delivery apps consider their delivery workers to be independent contractors, who are more likely to be non-white, younger, immigrants, and lower-income. As independent contractors, they face confusing rules and options on liability insurance, whether delivering by car or other means. Frequently referred to as gig workers, these employees consider the money they earn from these jobs as essential or important for meeting basic needs, yet many earn less than $16 per hour after expenses such as transportation and insurance.

▷ Recommendations

The following recommendations are proposed to manage this evolving and growing sector of the Massachusetts economy in a sustainable manner. Advancing these recommendations will require collaboration among the Administration, the Legislature, municipalities, the delivery platforms, and restaurants. The Commonwealth should consider identifying an existing agency, creating a new agency, or forming an inter-agency partnership to oversee implementing the recommendations.

Our recommendations, which are divided into legslative actions, state actions, regional and local actions, and emerging best practices should all be undertaken now. Many of the recommendations include obtaining and collecting data to better understand the scale and geographic reach of rapid food deliveries in Massachusetts. Consistent and reliable data collection is essential, as it will inform and refine policies, regulations, and guidelines to mitigate the impacts of this expanding and evolving component of the economy.

Legislative Actions:

- *Require rapid food delivery platforms to report data to the Commonwealth, similar to the requirements that are in place for ride-hailing services.* Legislation should be developed for data sharing requirements that, at a minimum, include data on precise trip origins, destinations, time spent at the curb, and time of day. The Massachusetts Department of Public Utilities and MassDOT should maintain, manage, and publish the data.

- *Require the state meals tax to be collected and remitted by rapid food delivery platforms.* Short of obtaining data directly from rapid food delivery platforms, meals tax data is another means to understand the scale and growth of app-based food deliveries in the Commonwealth. Currently, thousands of individual restaurants and stores in Massachusetts are required to

report on meals tax collection for rapid food delivery platforms. The majority of states require the collection and remittance of state-administered meals taxes by rapid food delivery businesses. Having the rapid food delivery businesses collect and remit the state meals tax would be more efficient and remove this reporting burden from multiple entities. The Massachusetts Department of Revenue should oversee the implementation of this adjustment to meals tax collection and remittance.

- *Require an assessment for trips made by delivery vehicles proportional to their impacts on the transportation network*. Currently, the existing statute governing the fees on ride-hailing trips by TNCs in Massachusetts does not include trips for deliveries made by rapid food delivery platforms. Legislation should be developed to require a delivery assessment for trips made by rapid food deliverers, similar to the existing assessment on ride-hailing trips by TNCs. This assessment should be designed to encourage more sustainable travel options that yield fewer greenhouse gas emissions and have less detrimental impacts on curb access and safety (e.g., a lower assessment or no assessment if deliveries are made by electric cars, electric mopeds, electric bicycles, or traditional bicycles). This assessment could also be applied to reduce congestion (e.g., a lower assessment for deliveries made during off-peak times or for deliveries of multiple orders made in one trip). This fee structure should hold customers and restaurants harmless.

- *Require revenue from the delivery assessment to mitigate local impacts on streets and support locally owned businesses*. Like the current assessment on ride-hailing trips, similar legislation should be enacted that requires revenue from an assessment on rapid food deliveries be used to address local impacts on businesses and streets. Revenue from a delivery assessment would be administered by MassDOT and municipalities to mitigate impacts to the curb, traffic congestion, and vehicle emissions (e.g., installing dedicated cycle lanes and charging infrastructure, designating areas where bicycles and mopeds

can be left safely at restaurants and properties with high delivery activity, supporting local e-bike share programs, generating revenue for public transit, and/or planting street trees). Additionally, revenue should be designated for a program that would support locally owned restaurants and convenience stores, which could be managed by one of the Commonwealth's economic development agencies. This would help such businesses to cope with the impacts of rapid food delivery platforms and transition to an economy in which such deliveries are more common.

- *Ensure that delivery workers receive fair compensation and operate in a safe working environment.* Legislation should be developed that requires fair compensation to gig workers on rapid food delivery platforms, similar to the efforts that have been made to ensure that ride-hailing drivers receive fair compensation.

- *Require delivery platforms to insure delivery workers, similar to the Massachusetts requirements for ride-hailing platforms.* The Legislature should require rapid food delivery platforms to provide clear information to workers on insurance coverage when engaged in the platform, as well as information on optional coverage that might be available for purchase. Required coverage should apply to delivery workers whether they use their own personal vehicle, walk, or use a personal mobility device such as a bicycle or e-scooter. These insurance requirements should apply to rapid food delivery platforms such as DoorDash, Uber Eats, and Grubhub, and other delivery platforms such as Amazon and Instacart.

- *Require rapid food delivery platforms to provide safety training for delivery workers.* Legislation should be developed that requires rapid food delivery platforms to provide safety training as part of onboarding new delivery workers and on an annual basis for existing delivery workers. Safety training can reduce dangerous driving and biking behaviors and increase adherence to roadway regulations.

State Regulations:

- *Ensure that delivery workers receive fair compensation and operate in a safe working environment.* State agencies should regularly survey app-based delivery workers in Massachusetts to monitor wages, tips, and benefits received, particularly for workers who rely on delivery work as a major source of income for their households. The surveys should also monitor worker safety, such as harassment, insurance requirements, and crashes. This data will help the Commonwealth determine whether delivery workers are earning the applicable minimum wage after expenses such as transportation, liability and health insurance, and self-employment taxes. The survey data can be used to ensure delivery workers are fairly compensated and are operating in a safe working environment. The Massachusetts Attorney General's Public Protection and Advocacy Bureau Fair Labor Division and its Consumer Protection Division should be responsible for conducting surveys and enforcing possible legislation on compensation and safety for app-based delivery workers.

- *Require rapid food delivery platforms to implement programs that make it easier for delivery workers to access e-bikes and adopt electric vehicles.* The Department of Public Utilities or MassDOT should work with rapid food delivery platforms to implement programs similar to DoorDash's partnership with e-bike company Zoomo, which provides access to e-bikes at reduced rates and offers cash bonuses for bicyclists who deliver via bike or e-bike in select cities. These state agencies should also work with rapid food delivery platforms to develop programs that advance the adoption of electric vehicles, such as DoorDash's low-cost electric vehicle subscription leasing program in California, which also includes cash bonuses for drivers. It is important to note that the clean energy and offshore wind legislation passed in 2022 requires the Massachusetts Department of Public Utilities to create a plan to electrify ride-hailing vehicles.

Municipal and RPA Actions:

- *Regional Planning Agencies (RPAs) should analyze data collected by the state and work with municipalities to develop curb management policies.* Data analysis would enable local officials to understand the scale of traffic and curb usage in local areas, given that most delivery trips are less than five miles.

- *Conduct local and regional surveys of restaurants, ghost kitchens, MFCs, grocery stores, and convenience stores to understand the impacts of rapid food delivery platforms.* Continuous surveys conducted by the Commonwealth (through the Massachusetts Office of Consumer Affairs and Business Regulation or similar agency) would be critical as part of monitoring the impacts of policy recommendations and changes in the rapid delivery marketplace. MassDOT, RPAs, and/or municipalities could also conduct regional or local studies to understand delivery patterns.

- *Implement curb management strategies, particularly in areas with multiple restaurants or high delivery activity.* Curb management strategies municipalities can implement include designating spaces for rapid-delivery vehicles (including e-cargo bikes), evaluating loading requirements, creating dynamic curbside pricing, and continuous study and re-evaluation of curb uses and policies. Where needed, municipalities should adjust zoning, curbside management policies, and loading zone requirements to minimize negative impacts.

- *Establish zoning, design, operational, and development standards for ghost kitchens and MFCs.* Standards for municipalities to consider include zoning requirements that regulate parking for delivery vehicles, loading zones, and hours of operation to minimize impacts to neighbors (especially residential).

- *Strengthen placemaking around local restaurants and retailers to create more positive in-person experiences*. This can be accomplished by creating more outdoor dining and pedestrian areas (for example, via MassDOT's Shared Streets and Spaces program) and requiring parking and deliveries to be behind the building rather than on the street front. RPAs can assist municipalities in planning and implementing such place-making and place-enhancing programs and policies.

Emerging Best Practices:

- *Monitor emerging practices in other states that apply automated enforcement to prevent the occurrence of roadway violations, including parking violations at the curb.* The application of cameras and other types of automated enforcement can serve to reduce speeding, running red lights, and other dangerous driver behaviors for all roadway users, not just those of delivery workers. At a minimum, automated enforcement programs must be transparent and open to the public, motivated by safety, and equitable to lower-income drivers such as rapid food delivery workers.

- *Monitor other state and municipal actions on regulating agreements between restaurants and third-party delivery businesses,* such as New York City's delivery fee and purchase price caps and California's cost breakdown disclosure requirements. It is highly recommended that an annual report be issued to summarize key legislative actions nationwide. An economic development agency such as the Office of Consumer Affairs and Business Regulation should be responsible for authoring and releasing the annual report. If the report finds that regulations in other states and municipalities are successful in protecting small businesses, the Legislature should implement similar requirements in Massachusetts or encourage municipalities to adopt their own local requirements for agreements between restaurants and third-party delivery platforms.

- *Encourage restaurants to review contract terms deliberately when they enter agreements to run on a third-party delivery platform.* The Massachusetts Restaurant Association and local Chambers of Commerce can work closely with restaurants to ensure they are equipped to navigate these agreements, especially with regard to commission fees, marketing practices, anonymized data on orders, and other guidelines identified by the National Restaurant Association's Public Policy Principles for Third-Party Delivery.

- *Monitor labor-related legislative changes outside Massachusetts, including new Federal rulemaking on classifying independent contractors.* The Massachusetts Attorney General's Public Protection and Advocacy Bureau Fair Labor Division can assist in reviewing emerging polices and new legislation that might assist and support app-based delivery workers. Examples include new requirements in New York City and the National Safety Principles signed by delivery platforms in Australia, as well as the Biden Administration's proposed rules on classifying employees and independent contractors.