FOURSQUARE  apptopia

THE DINING FORECAST

Tracking how restaurants are leveraging data to adapt to changing consumer behavior.

In this report, you'll learn...

- How to combine two powerful data sets, and how to present the findings visually
- The latest post-COVID trends in the dining sector

Introduction

Largely driven by the COVID-19 pandemic, people in the U.S. are altering their dining habits. In this report, we've combined Apptopia's mobile app performance estimates and Foursquare location data to create a clear, comprehensive picture of this shifting landscape.

Began with the hypothesis that foot traffic to restaurants would be down, and mobile app usage would be up. Dining brands' mobile apps are for primarily designed for pickup and not delivery, and so where we saw high upticks in mobile usage, we would expect to see a decent amount of foot traffic still.

However, what we found by looking through both data sets was that even with mobile usage soaring, it does not appear to be enough to fully combat the impact of the pandemic. Brands investing in **mobile experiences**, but not necessarily enough to make up for the impact of COVID on brick and mortar. Businesses are surviving but not thriving.

Introduction

In this report, you'll learn how these data signals can help you market more intelligently within this rapidly shifting sector — discover new opportunities, identify potential challenges, and plan for the future.

We'll outline:

- The latest trends we're seeing in the dining sector
- How to combine these two powerful data sets
- How to present the findings visually

Introduction

In this report, you'll learn how these data signals can help you market more intelligently within this rapidly shifting sector — discover new opportunities, identify potential challenges, and plan for the future.

We'll outline:

How to combine these two powerful data sets, and how to present the findings visually

The latest trends we're seeing in the dining sector

Overview Of Data Sets

FOURSQUARE

Foursquare is the leading independent location technology platform. Location is at the center of everything we do: we understand location, how people move through the real world, and how those patterns change over time. We use that knowledge and our proprietary technologies to help brands, developers, marketers and analysts understand consumers and engage with them. Privacy comes first -- all foot traffic data is pseudonymized, aggregated and normalized against the U.S. Census data to remove any age, gender and geographical bias.

APPTOPIA

Apptopia provides competitive intelligence for the mobile app economy. Apptopia was founded on the belief that the mobile app community requires transparency to level the playing field and make way for innovation and industry advancements. Mobile publishers and developers, service providers, and investors use Apptopia on a daily basis to understand and monitor competitors, inform business strategies, and identify emerging consumer interests and trends.

Methodology

COMBINING TWO DATA SETS

This analysis examines consumers' behavior around dining based on foot traffic data from millions of Americans that make up Foursquare's always-on panel, combined with Apptopia's data on the usage of mobile apps. Chains and apps for this analysis are listed in the appendix.

TRACK YEAR OVER YEAR TRENDS

Using data from **January 2019 through July 2020** on a national level, you can **identify the year over year changes** in daily active users of restaurants' mobile apps, as well as year over year changes in visitation to quick service restaurants and casual dining restaurants, in order to isolate the effects of COVID-19 and to account for seasonality .

SMOOTH CURVES

For foot traffic data, we leveraged **rolling 7-day averages** also account for fluctuations by day of week. For mobile app usage data, we looked at **weekly sums.**

INDEX TO ENABLE COMPARISON

Index the data, rather than looking at the overall volume of visits or monthly active users, to **uncover relative upticks and declines**, adjusting for changes in panel size.

Index to first week. In order to index, take the nominal volume of a given week and divide that volume by volume of the first week of the timeframe. Multiply that product by 100.

GROUP CHAINS

Group chains into meaningful categories -- fast food, casual dining, sandwich shops, pizza places and coffee shows -- to surface macro trends, and to highlight specific chains which are over or underperforming relative to their category.

- Category indices are based on aggregate chain visits (summing across all chains in a given category).
- We then **index** those summed visits to week 1 of the timeframe (dividing each week's volume by week 1 volume and multiplying by 100).
- This established a **category trend/benchmark**, which we could then compare each chain to.

Methodology

It's important to note that while foot traffic and mobile app usage can both serve as strong indicators for brand health, a correlation analysis between these metrics revealed that chains that perform well in terms of foot traffic do not necessarily perform well in terms of app usage, and vice versa.

	LOW APP USAGE	HIGH APP USAGE
HIGH FOOT TRAFFIC	**NEGATIVE CORRELATION** Perhaps have not invested heavily in mobile experiences, but has a strong in-store experience.	**POSITIVE CORRELATION** A strong mobile app that is used for take out, rewards, or browsing menu items before dining in.
LOW FOOT TRAFFIC	**POSITIVE CORRELATION** A strong mobile app that is used for take out, rewards, or browsing menu items before dining in.	**NEGATIVE CORRELATION** Perhaps have not invested heavily in mobile experiences, but has a strong in-store experience.

Key Findings

Our analysis showed that mobile app usage in the dining sector is generally up in 2020. In fact, 21 of the 37 mobile apps reviewed by Apptopia were found to have hit their highest number of daily active users in their lifetimes between the months of April and July.

However, foot traffic to restaurants is generally down year over year, with consumers spending more time at home due to the pandemic. This indicates that dining brands are investing in better mobile experiences, but it's not necessarily enough to make up for the impact of COVID on brick and mortar visitation.

Thus, **while most restaurant chains are surviving, they're not necessarily thriving in today's landscape of unprecedented uncertainty.**

Key Findings

- **Sandwich shops** like Subway are growing faster than other restaurant chains.
- **Coffee shops** like Peet's Coffee are growing slower than other restaurant chains.
- **Quick service restaurants'** performance may be contingent upon drive through and take out options.
- **Sit-down casual dining restaurants'** app usage is up but visits are down, indicating they may be relying more on delivery.
- Most **pizza** chains are using mobile apps to drive delivery.

Overview Of Data Sets

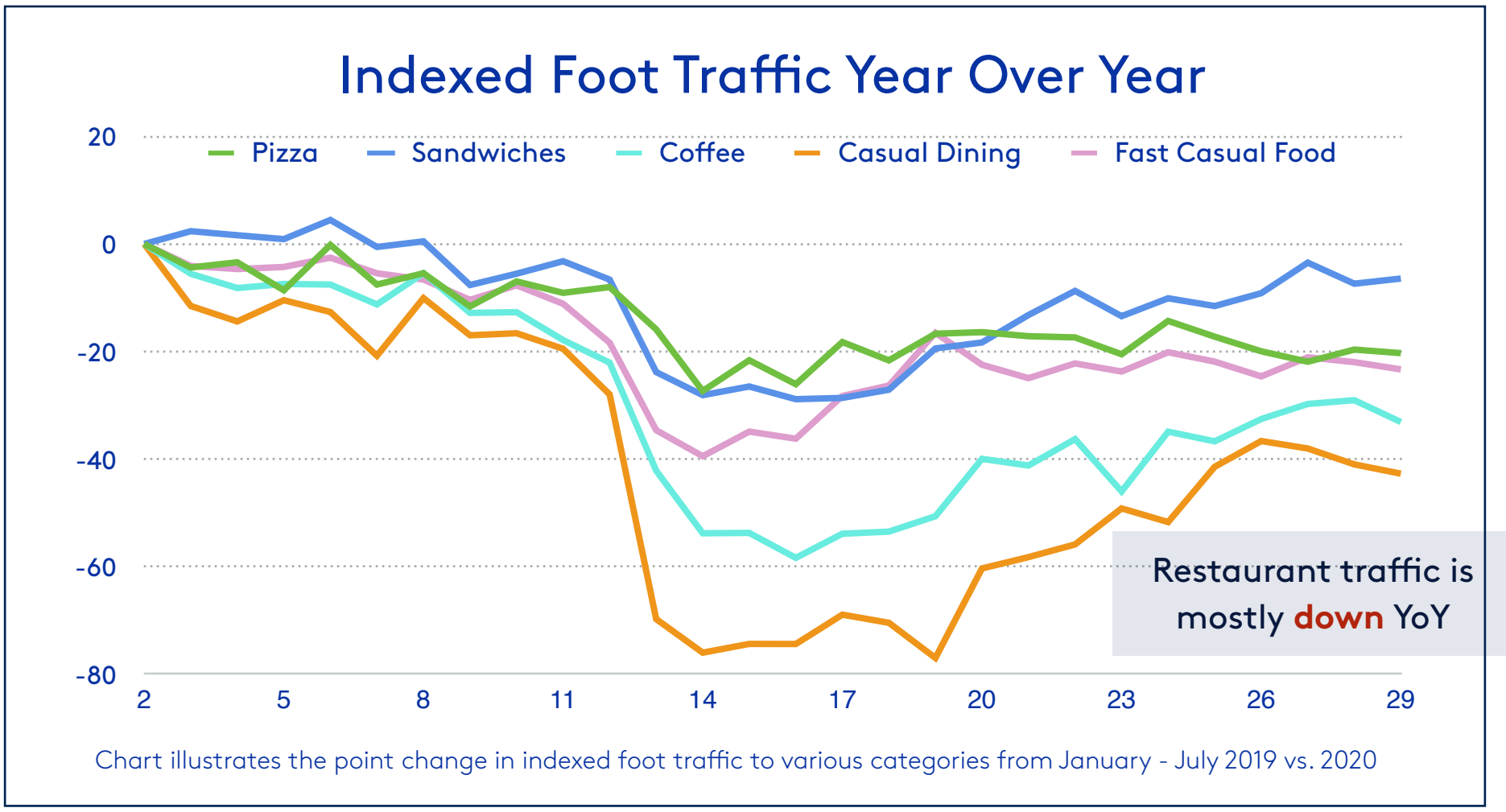


Chart illustrates the point change in indexed foot traffic to various categories from January - July 2019 vs. 2020

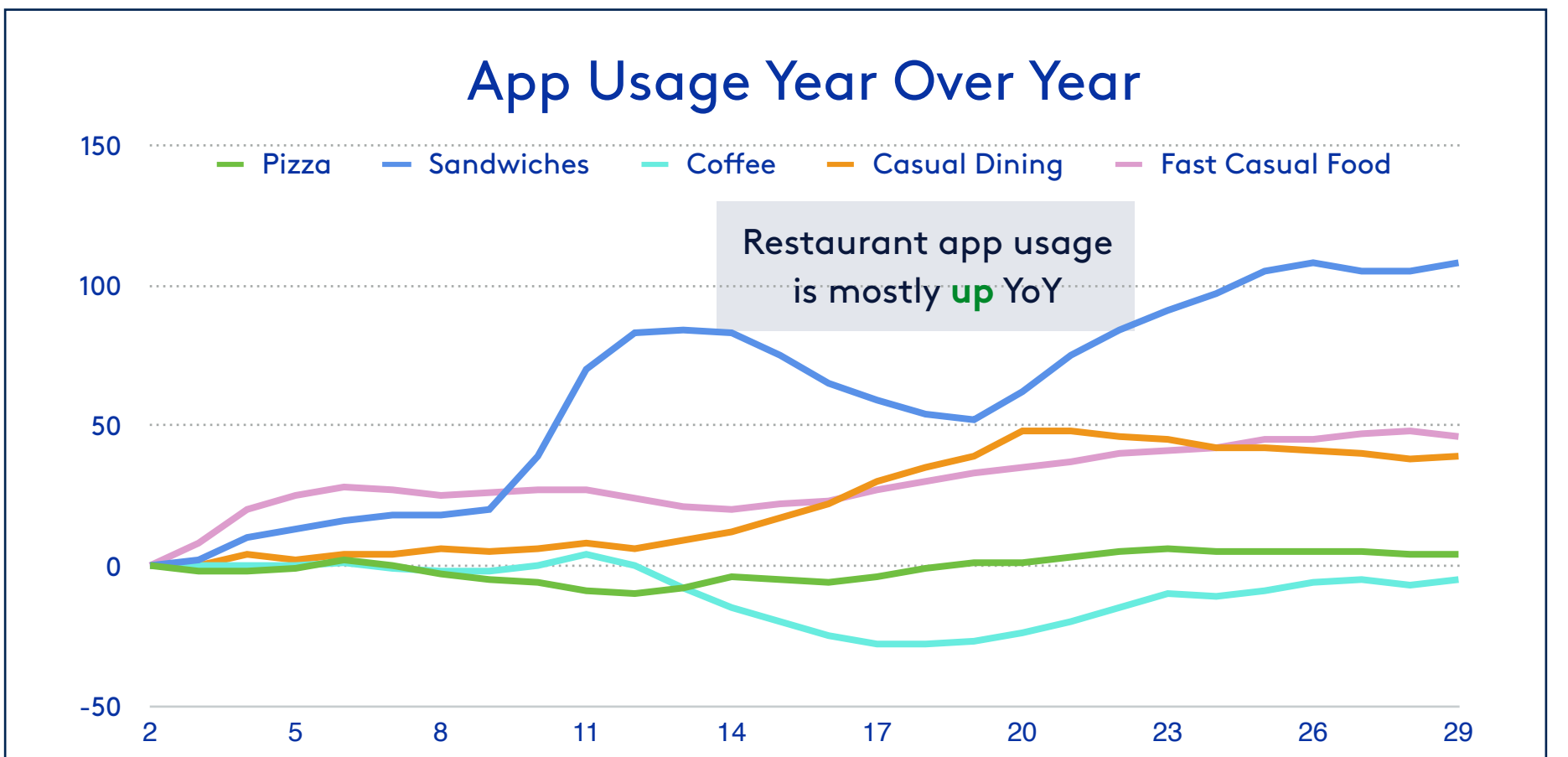


Chart illustrates the point change in indexed app usage c to various categories from January - July 2019 vs. 2020

Visualizing Data By Sub-Sector & Identifying Trends

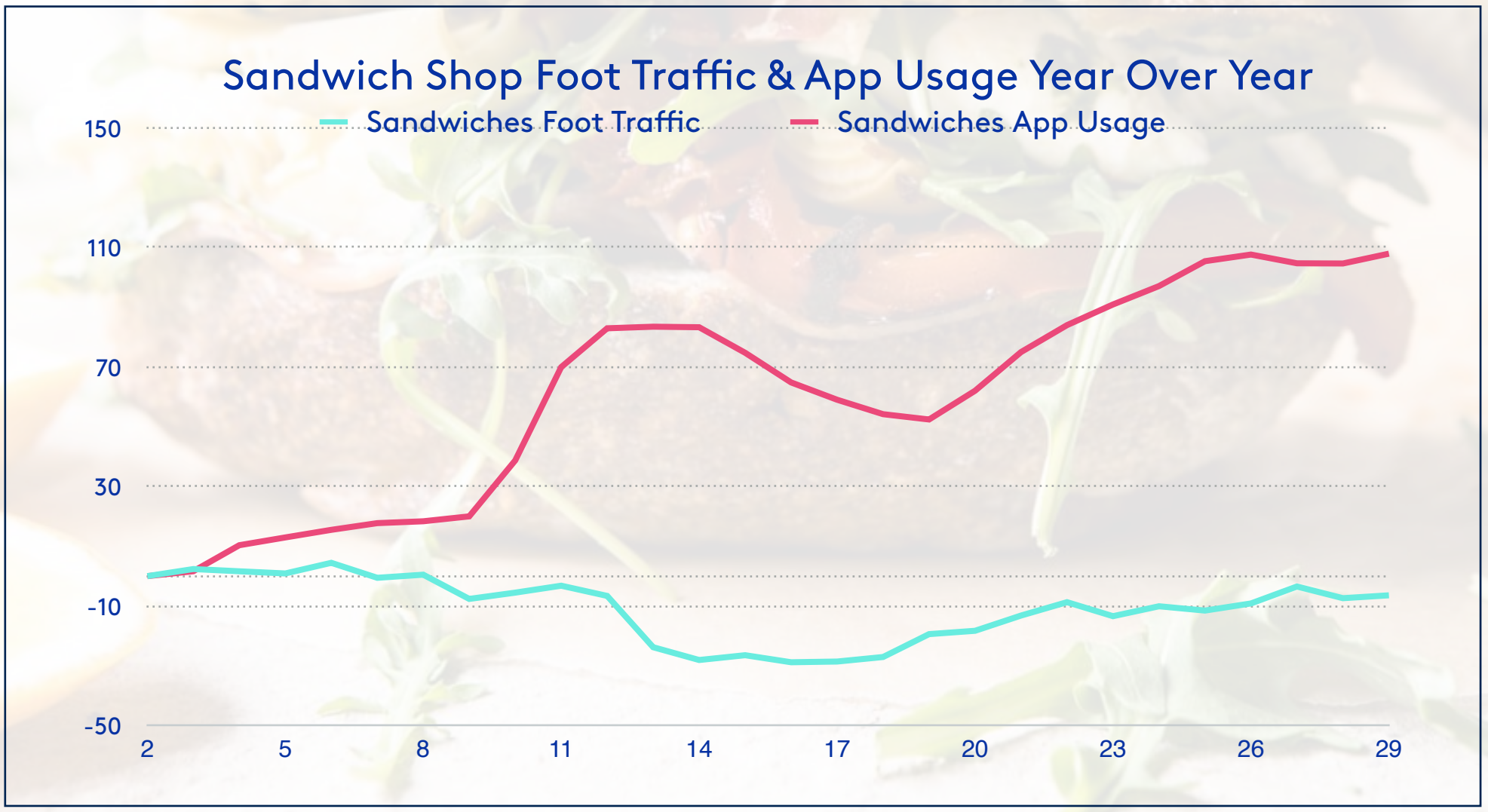
FOURSQUARE apptopia

Trend 1: Sandwich Wins

Sandwich shops are performing well in 2020, with much smaller declines in foot traffic than other dining categories, and significant upticks in mobile app usage in 2020.

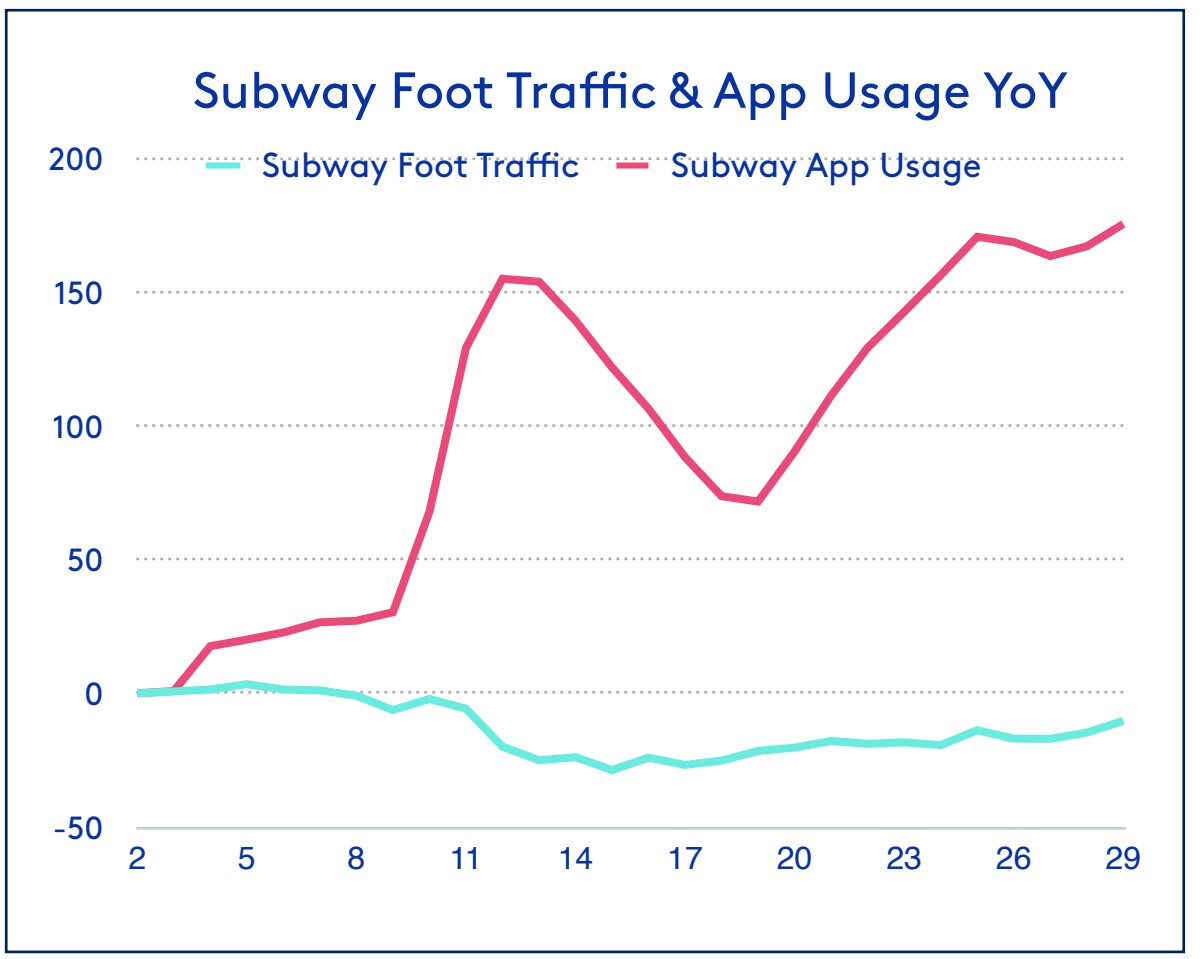
KEY INSIGHTS

- Sandwich shops' app usage was also up **+78%** YoY from Q2 2019 to Q2 2020.
- Foot traffic to sandwich shops was only down **-3-10%** YoY at the end of July, while visitation to other categories were down -**20-40%** YoY.
- App usage amongst sandwich shops was up **+107%** YoY from July 2019 to July 2020. This is more than any other restaurant category analyzed.



Trend 1: Sandwich Wins

How are specific sandwich chains fairing?

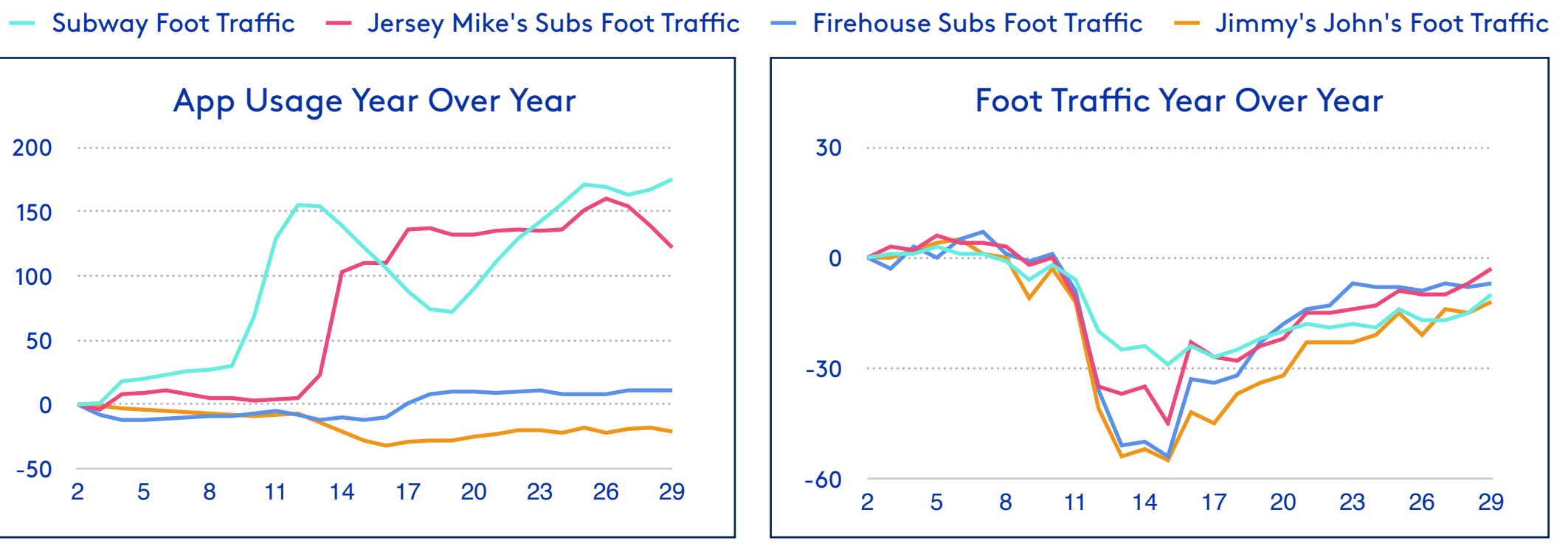


Subway is leading the pack in sandwich shops when it comes to mobile app usage in terms of absolute numbers, but is second as it pertains to YoY growth in July (**+123%**).

Jersey Mike's is first in terms of mobile app usage growth, at **+242%** YoY. Still, Subway's growth is above that of sandwich shops overall (**+107%**).

However, Subway's foot traffic was down **-10-17%** YoY at the end of July, more than the sandwich category overall, which was only down **-6-7%** YoY**.**

Thus, increases in Subway's app usage are not necessarily making up for foot traffic declines since COVID -- either indicating conversion challenges, or simply that the absolute number is not enough to make up for what was lost.



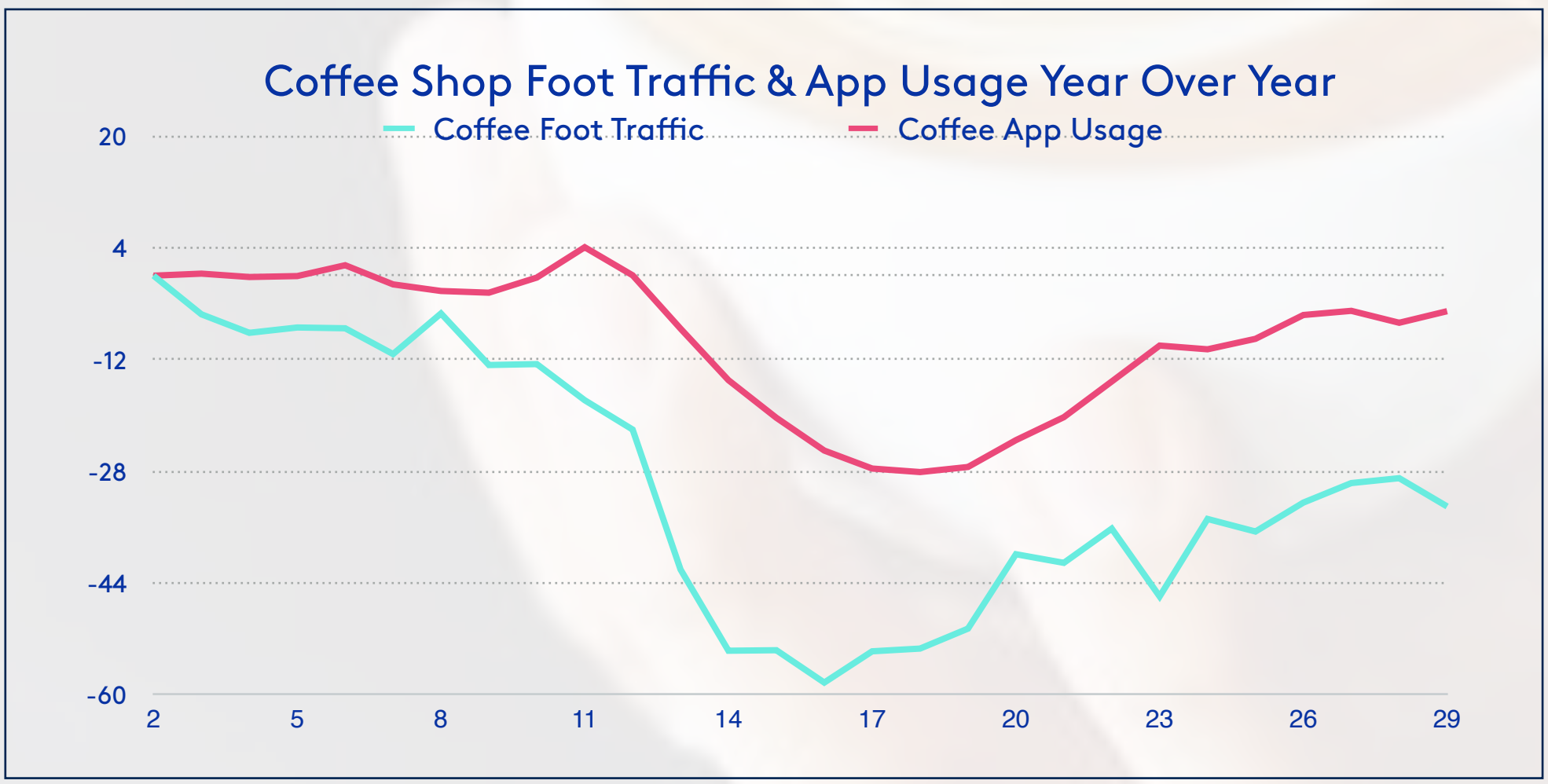
In terms of foot traffic, **Jersey Mike's Subs** is only down 3-10% YoY, **Firehouse Subs** is down -7-9% YoY, **Jimmy John's** is down 12-15% YoY.

Trend 2: Caffeinating At Home

Coffee shops are not performing as well this year, with larger relative declines in foot traffic since COVID-19 than other dining categories and slight declines in mobile app usage.

KEY INSIGHTS

- Coffee shop app usage was up **+8%** YoY at the end of July (vs fast food mobile app usage up **+31.5%** YoY).
- Coffee shops' app usage was down **-7%** YoY from Q2 2019 to Q2 2020.
- Coffee shops were up only **+8%** YoY from July 2019 to July 2020 in app usage.
- Foot traffic to coffee shops was down **-29-33%** YoY at the end of July (whereas fast food visits overall were down **-21-23%** YoY at the end of July).



Trend 2: Caffeinating At Home

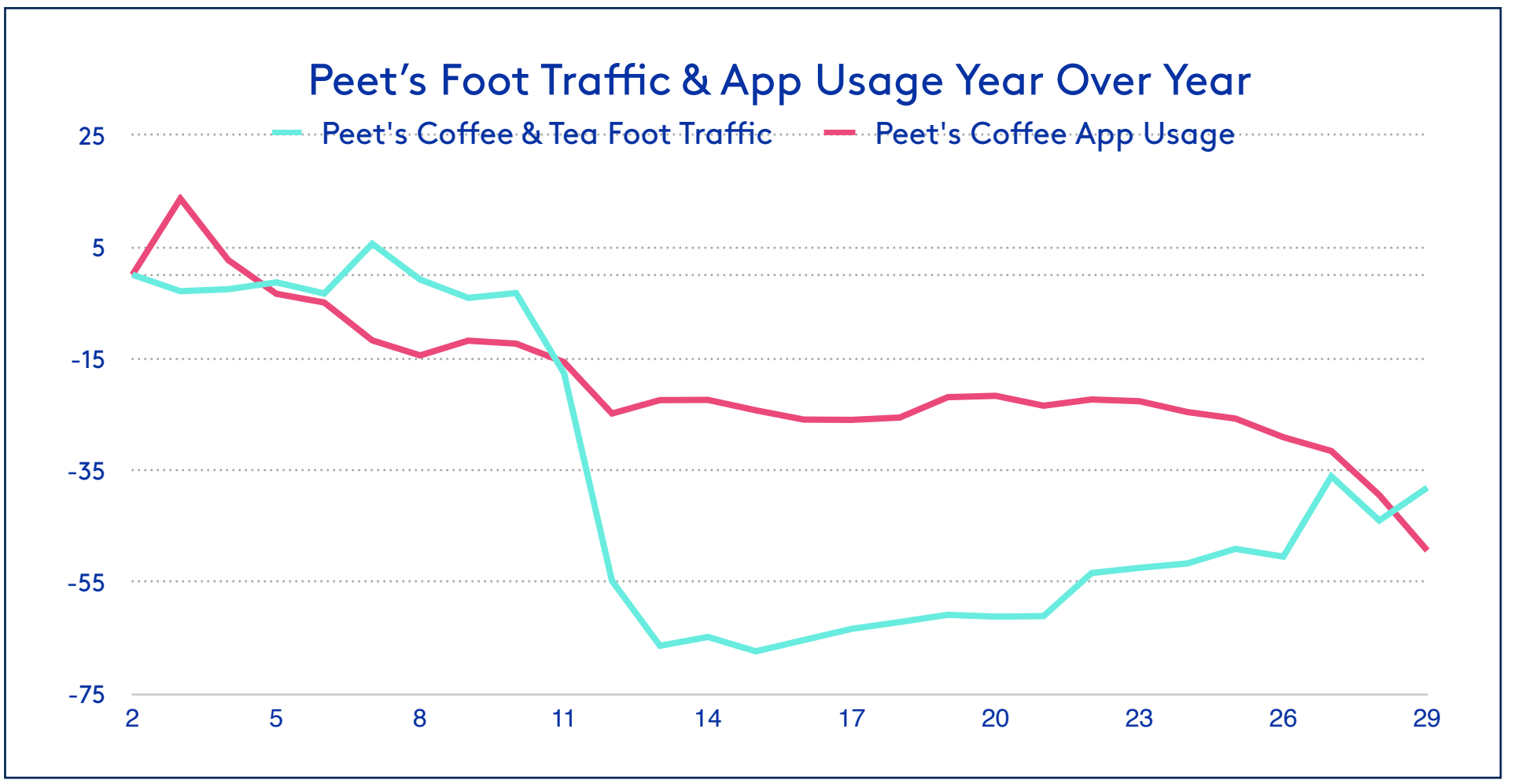
Which coffee chains in particular are underperforming in terms of foot traffic and mobile app usage?

Peet's Coffee & Tea is underperforming versus the coffee category overall both in foot traffic and usage:

- Peet's Coffee app usage was down **-32-49%** YoY at the end of July (and **-17%** YoY for July as a whole), while app usage for the category was down only **-5-7%** YoY.

- Visits to Peet's Coffee were also down -**36-50%** YoY at the end of July, while visits to the category were down **-29-33%** YoY.

While the chain actually went public during the pandemic, these metrics indicate they may be relying more on subscription coffee offerings (for which users don't necessarily need to use an app or visit locations), or products sold in grocery and big box stores (where visitation is at pre-pandemic levels)



Trend 3: Driving Through QSRS

Quick service restaurants' performance may be contingent upon drive through, take out, and delivery.

KEY INSIGHTS

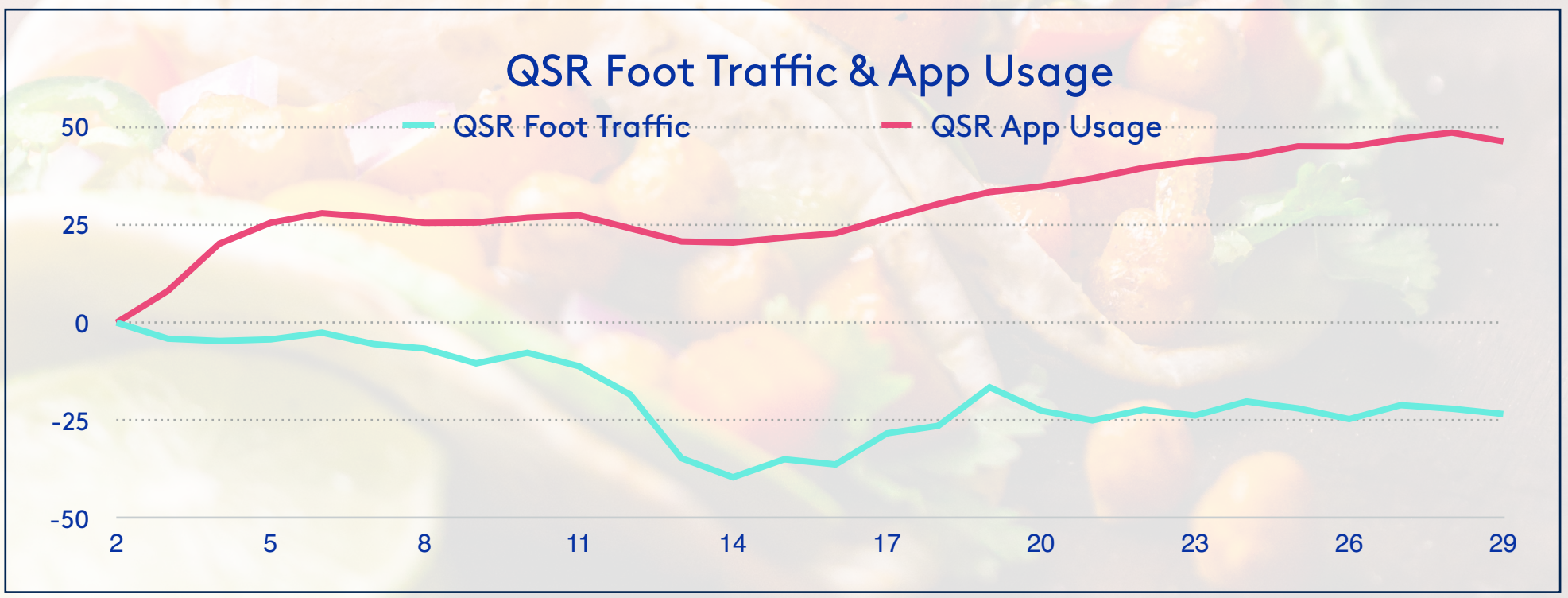
- While hit less hard in terms of foot traffic than casual dining restaurants, quick service restaurant visitation is still below pre-pandemic levels, down **-21-23%** YoY at the end of July.

- However, mobile app usage for QSRs is on the rise, up **+46-48%** YoY at the end of July.

- QSR app usage was up **+32%** YoY from July 2019 to July 2020.
- QSR app usage was up **+19%** YoY from Q2 2019 to Q2 2020.

- This likely indicates QSRs are relying more on drive through, take out, and delivery.

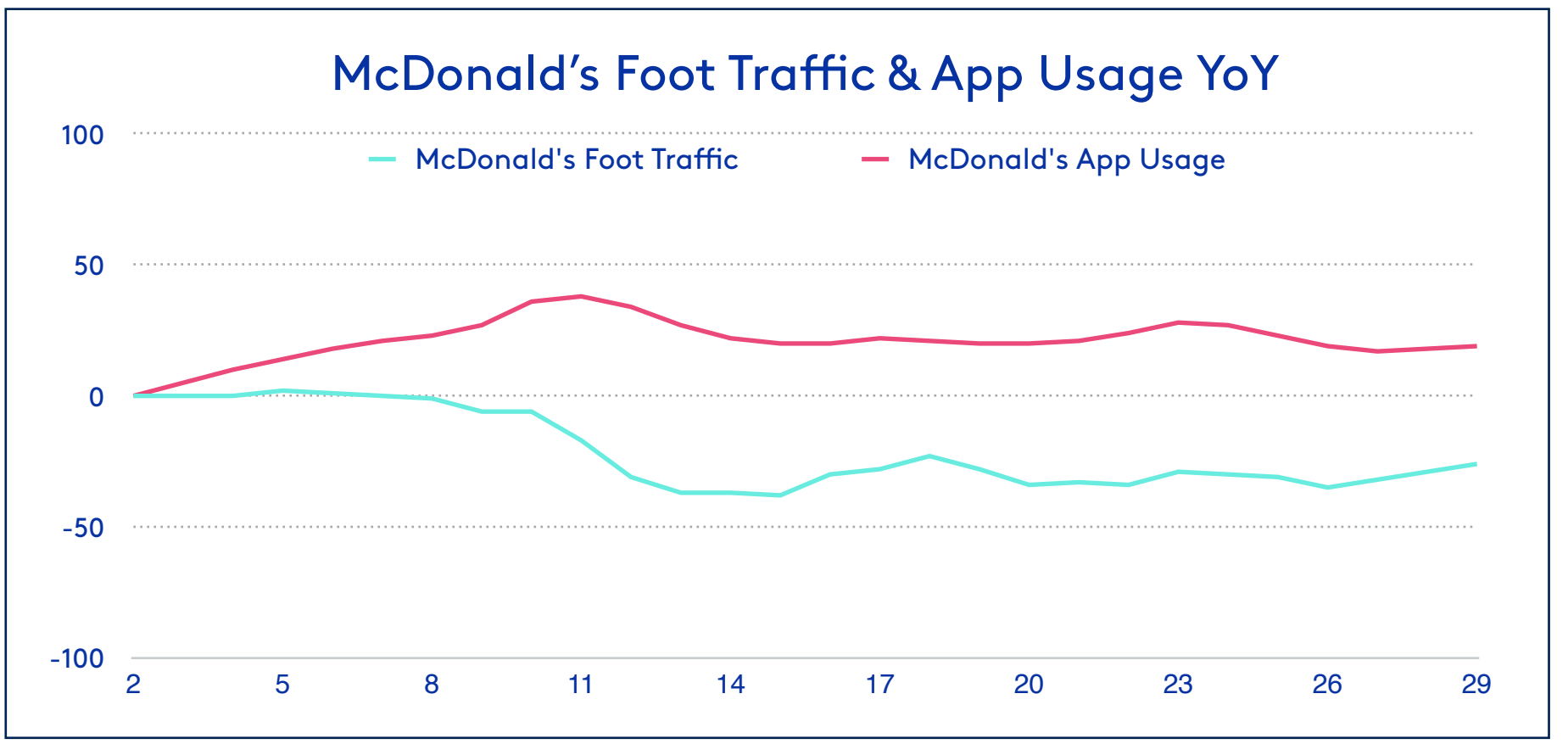
- We see a positive correlation between app usage and QSR foot traffic in 2020 (**.42**), indicating consumers may be using the app for take out and drive through. However, before the pandemic there was a significant negative correlation between QSR app usage and foot traffic 2019 (**-.84**), perhaps indicating that QSR apps may have seen lower conversion rates pre-COVID.

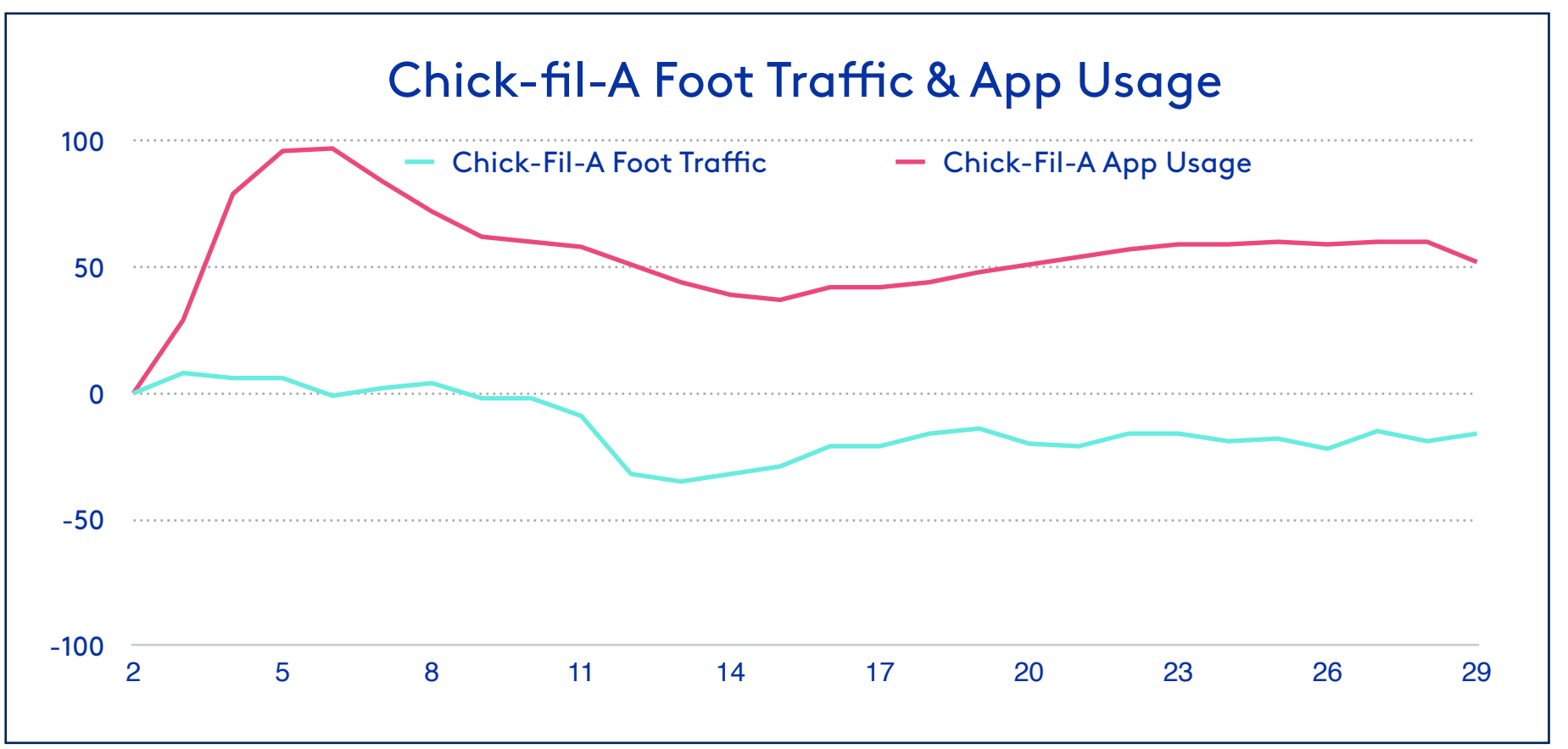


Trend 3: Driving Through QSRS

Which QSR chains in particular are performing well?

McDonald's has long been the top performing mobile app in this space, but **Chick-fil-A** has recently taken over, starting in Q1 2020. While not due to the pandemic (rather a free chicken nugget promotion), Chick-fil-A has maintained its lead thus far.





Trend 3: Driving Through QSRS

Which QSR chains in particular are performing well?

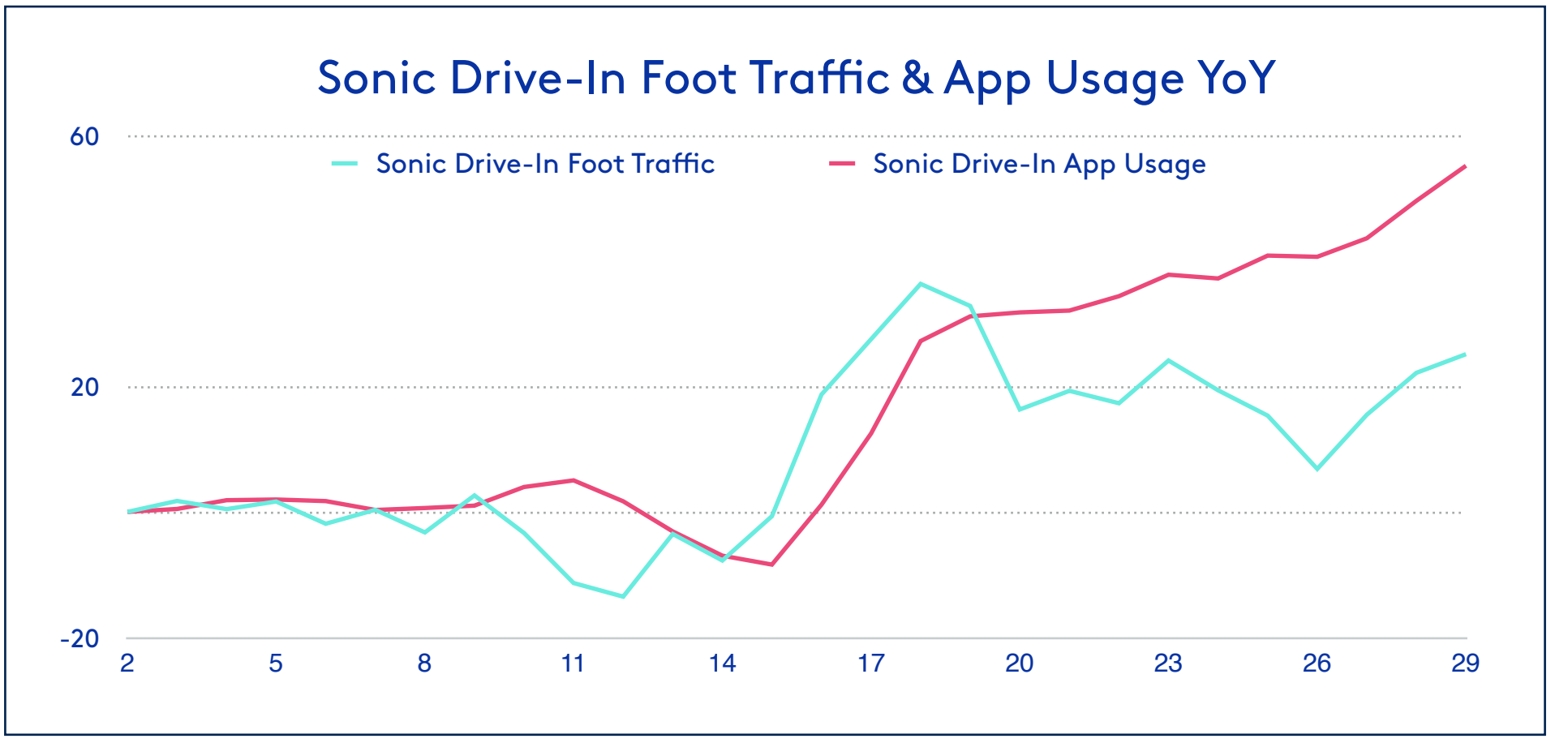
Sonic Drive-In has significantly outperformed the category in YoY growth.

Sonic Drive In is out performing the category overall on both metrics:

- Sonic Drive In traffic was up **+22-25%** YoY at the end of the July, while visits to QSRs overall were down **-21-23%** YoY.
- Sonic Drive In mobile app usage was up **+50-55%** YoY at the end of July, while mobile app usage for the category was up **+46-48%** YoY.

With "drive in" in the name itself, consumers may be turning to the chain for their new preferred method of dining.

While Sonic does offer delivery via different services, the mobile app has an emphasis on order ahead, and we saw a strong positive correlation between foot traffic and mobile app usage --**.87** --evidence that takeout is a popular use case for the app.



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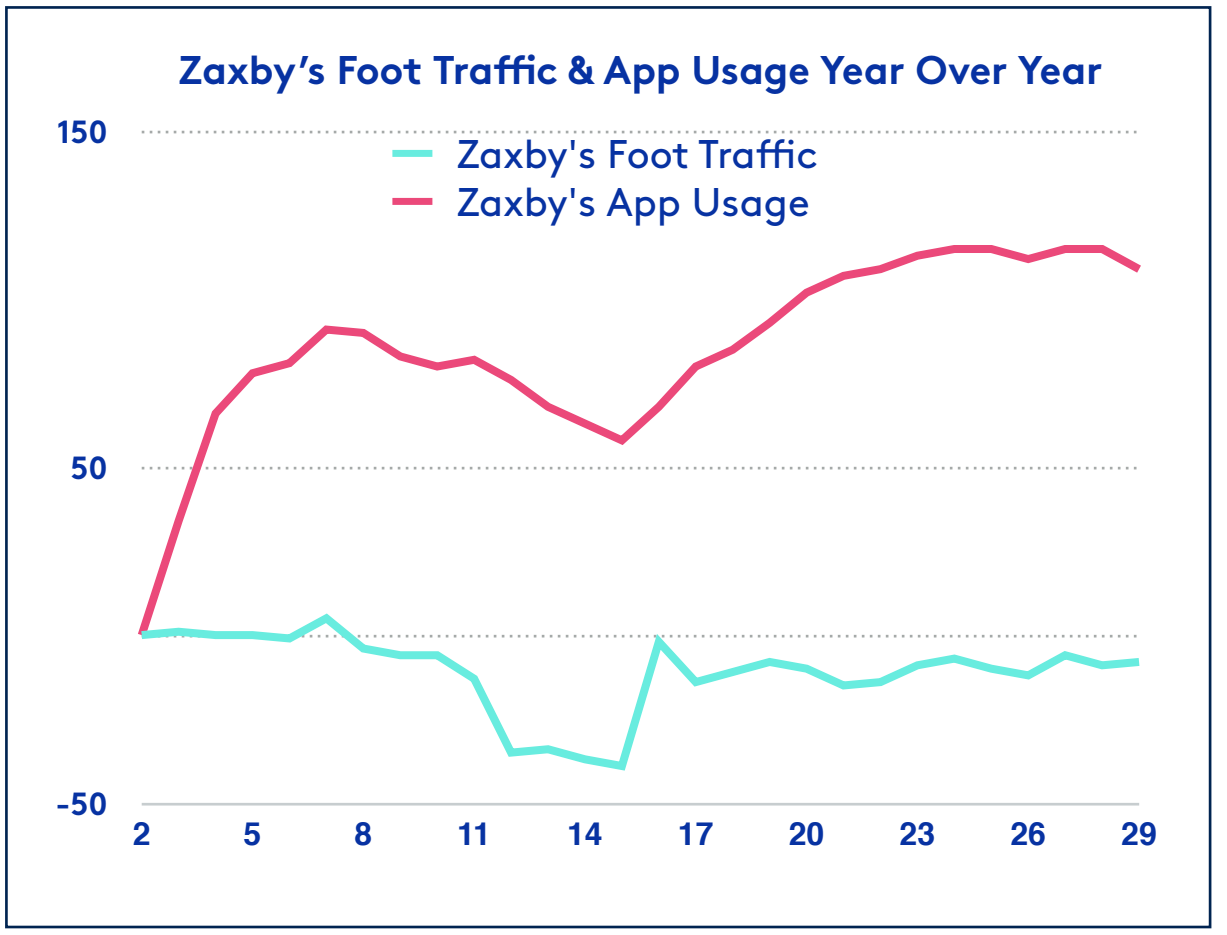


Zaxby's has also outperformed the category in terms of YoY growth.

Zaxby's is out performing the category overall on both metrics:

- Traffic down **-8-9%** YoY at end of July, while visits to QSRs overall were down **-21-23%** YoY.

- Sonic Drive In mobile app usage was up **+50-55%** Mobile app usage up **+109-115%** YoY at end of July, while app usage for QSRs overall were up **+46-48%** YoY.

Zaxby's may benefit from a heavy concentration of locations in the **South**, where consumers were quicker to start visiting restaurants again after the pandemic began.

While Zaxby's does offer delivery via different services, the mobile app has an emphasis on takeout orders, and we saw a positive correlation between foot traffic and mobile app usage -- evidence that **takeout** is a popular use case for the app.

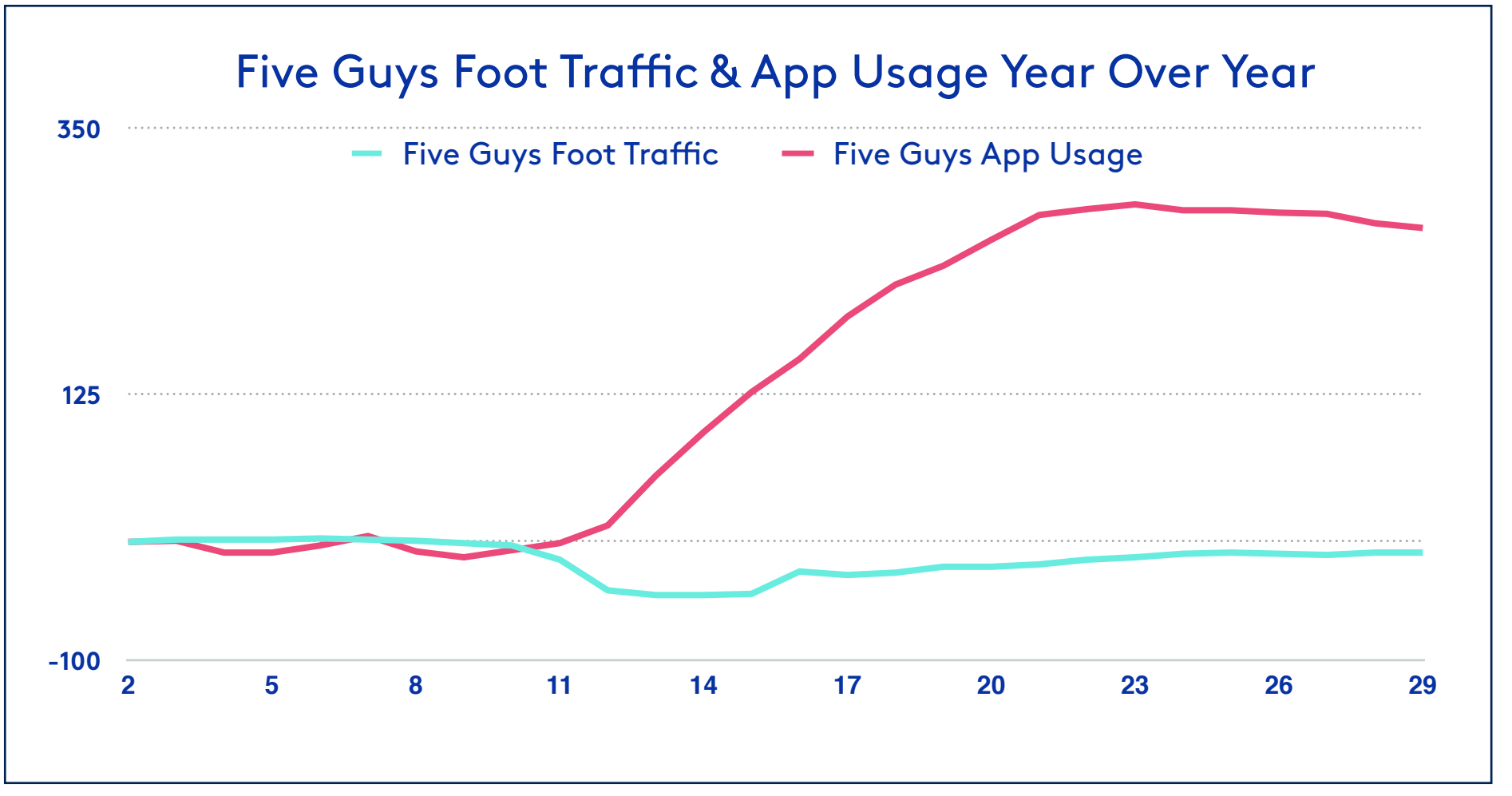
Trend 3: Driving Through QSRS

Which QSR chains in particular are performing well?

Five Guys has outperformed the QSR category as well.

Five Guys is out performing the category overall on both metrics:

- Traffic down **-9-11%** YoY at end of July, while visits to QSRs overall were down **-21-23%** YoY.
- Mobile app usage up **+266-278%** YoY at end of July, while app usage for QSRs overall were up only **+46-48%** YoY.



Trend 4: Casual Dining Drive To Survive

Casual dining restaurants are potentially having conversion issues -- while app usage is up dramatically YoY, foot traffic is down, indicating the restaurants have gained new users but they may be browsing menus and not actually ordering. These restaurants are often available via third party food delivery apps such as Grubhub and DoorDash, which could be where menu browsers are converting instead of within the chains' own apps.

KEY INSIGHTS

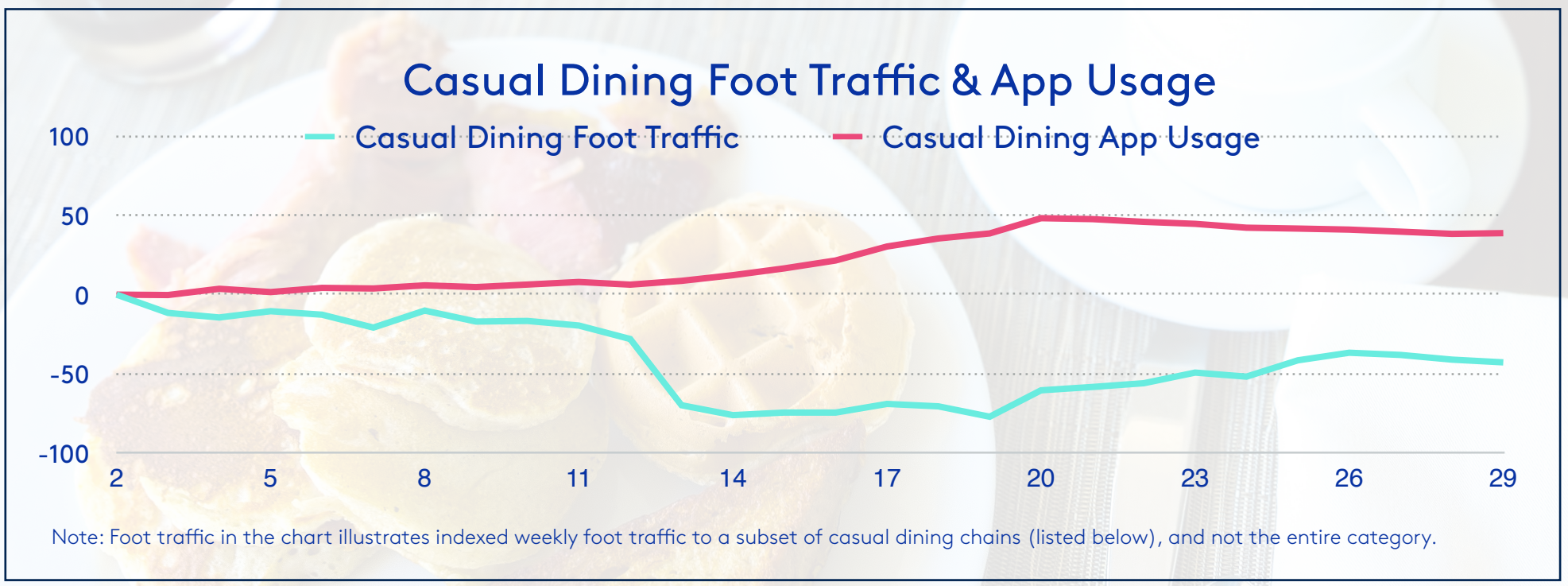
- Casual dining restaurants have suffered in terms of foot traffic, with visits down **-40-42%** YoY at the end of July.

- With restrictions on dine-in, it's unsurprising that this category of the dining industry has been most impacted by COVID-10.

- However, sit down restaurant chains on the whole are faring better in terms of mobile app usage.

- Casual dining restaurants' app usage was up **+65%** YoY Q2 2019 to Q2 2020.
- Casual dining restaurants; app usage was up **+71%** YoY July 2019 to July 2020.

- Even though mobile app usage is way up(something they need to turn to), not enough in absolute numbers to make up for the lost foot traffic, even if some people are actually converting -- indicating these chains are surviving, but not necessarily thriving.



Note: Foot traffic in the chart illustrates indexed weekly foot traffic to a subset of casual dining chains (listed below), and not the entire category.

Trend 4: Casual Dining Strive To Survive

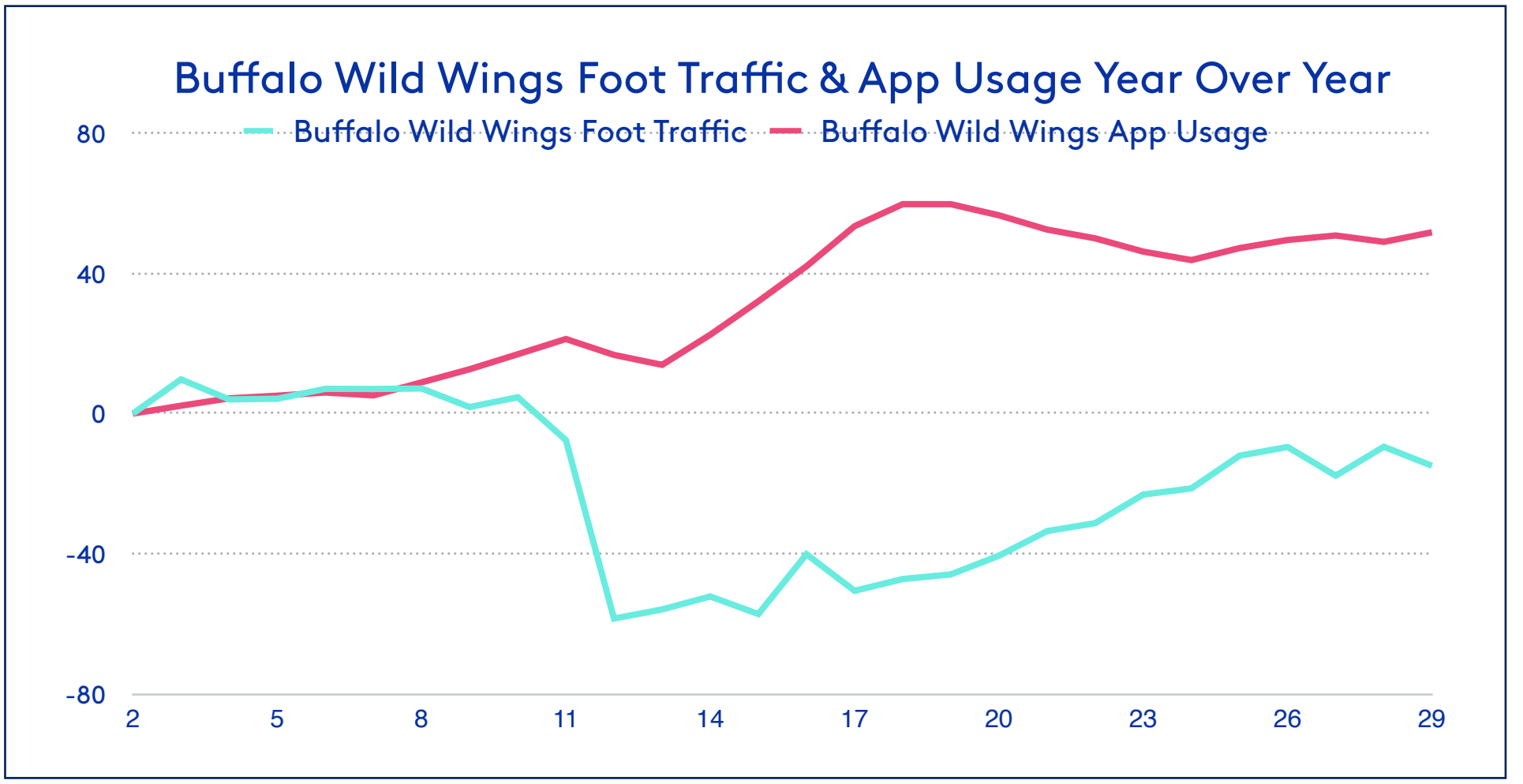
Which casual dining chains are fairing better than most?

Buffalo Wild Wings outperformed the casual dining category on both metrics:

- Foot traffic was down only **-9-18%** YoY in July (vs traffic for the category down **-37-43%** YoY).
- App usage was up **+49-52%** YoY (vs app usage for category up **+38-41%** YoY).

The chain's promotions highlighting free delivery and restrictions on dine-in likely explains this discrepancy between foot traffic performance and mobile app performance. In fact, we found a strong negative correlation (**-.72**) between foot traffic and mobile app usage in 2020.

It's worth noting that the correlation between app usage and foot traffic was positive in 2019, indicating consumers were using apps more for takeout or browsing menus rather than for delivery pre-pandemic.



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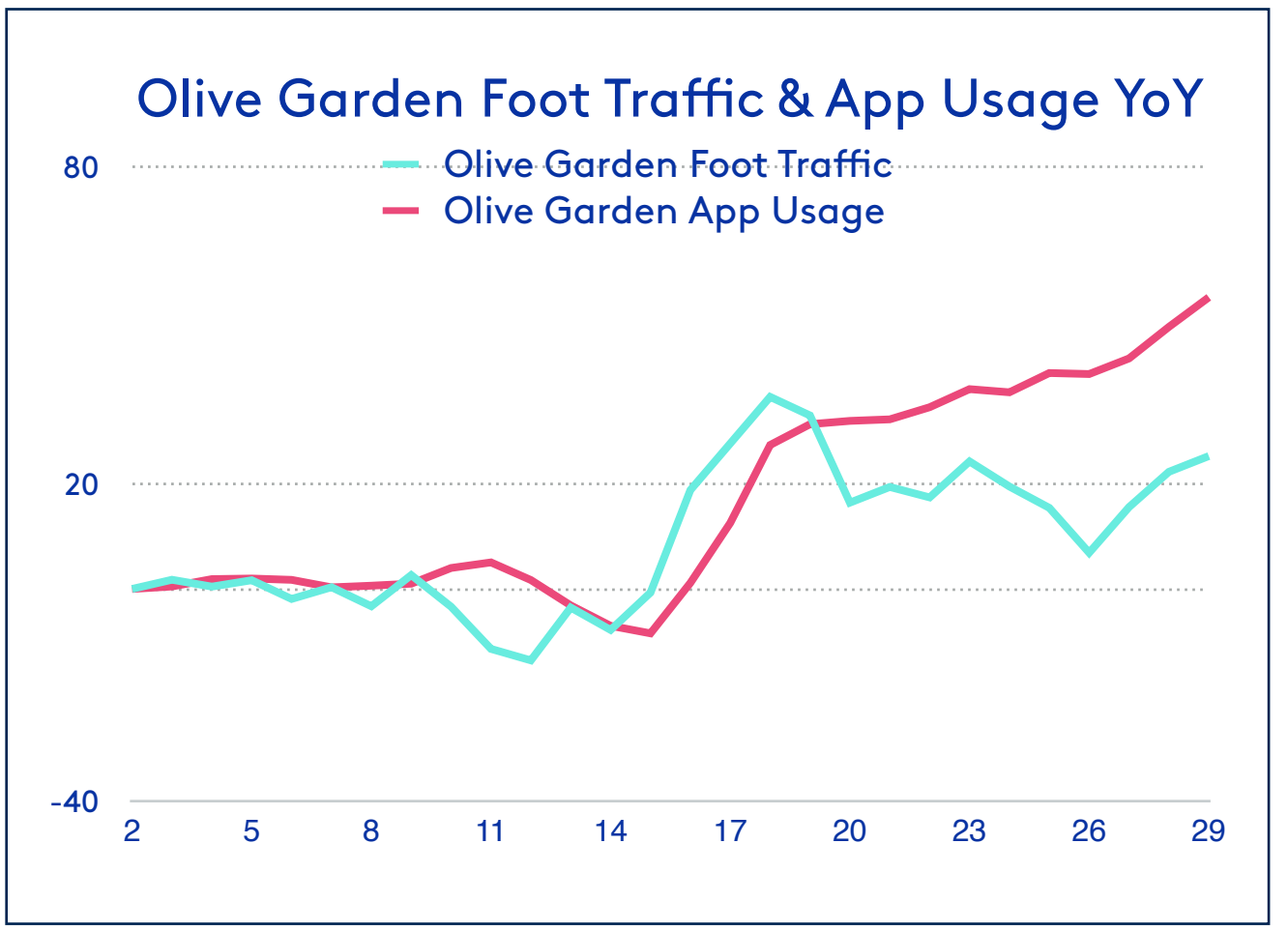


Olive Garden has outperformed the casual dining category. While foot traffic was down **-40-44%** YoY in late July, the chain's app usage was up **+91-106%** in late July.

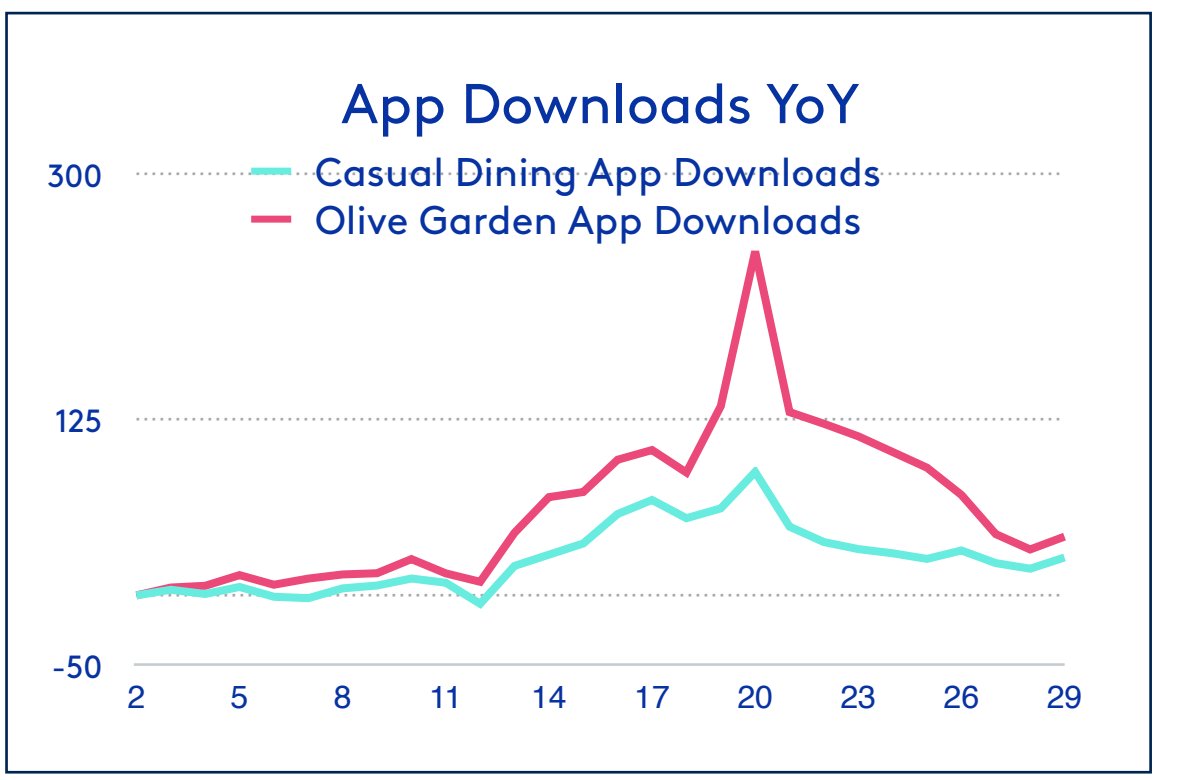
This difference may indicate that consumers are leveraging the app for delivery, rather than order ahead for takeout. This is verified by the negative correlation (**-.57**) between foot traffic and mobile app usage for Olive Garden in 2020.

Olive Garden has outperformed the casual dining category on both metrics.

- Foot traffic was down **-40-44%** YoY in late July (similar to traffic for the category, down **-37-43%** YoY).
- App usage was up **+91-106%** in late July (vs app usage for category up **+38-41**% YoY).

While Olive Garden was not in the top 3 casual dining restaurants as judged by absolute foot traffic in Q2 2020, it was the leader during this time in mobile app DAUs. It was also above the grouping's benchmarks dating back to Q1 2019; Having already invested in mobile app capabilities and marketing, it was able to scale up new active users faster than its competitors were when the pandemic set in.

Olive Garden was the fastest growing casual dining mobile app in Q2 2020, YoY.



Trend 5: Pizza Delivery Reigns

KEY INSIGHTS

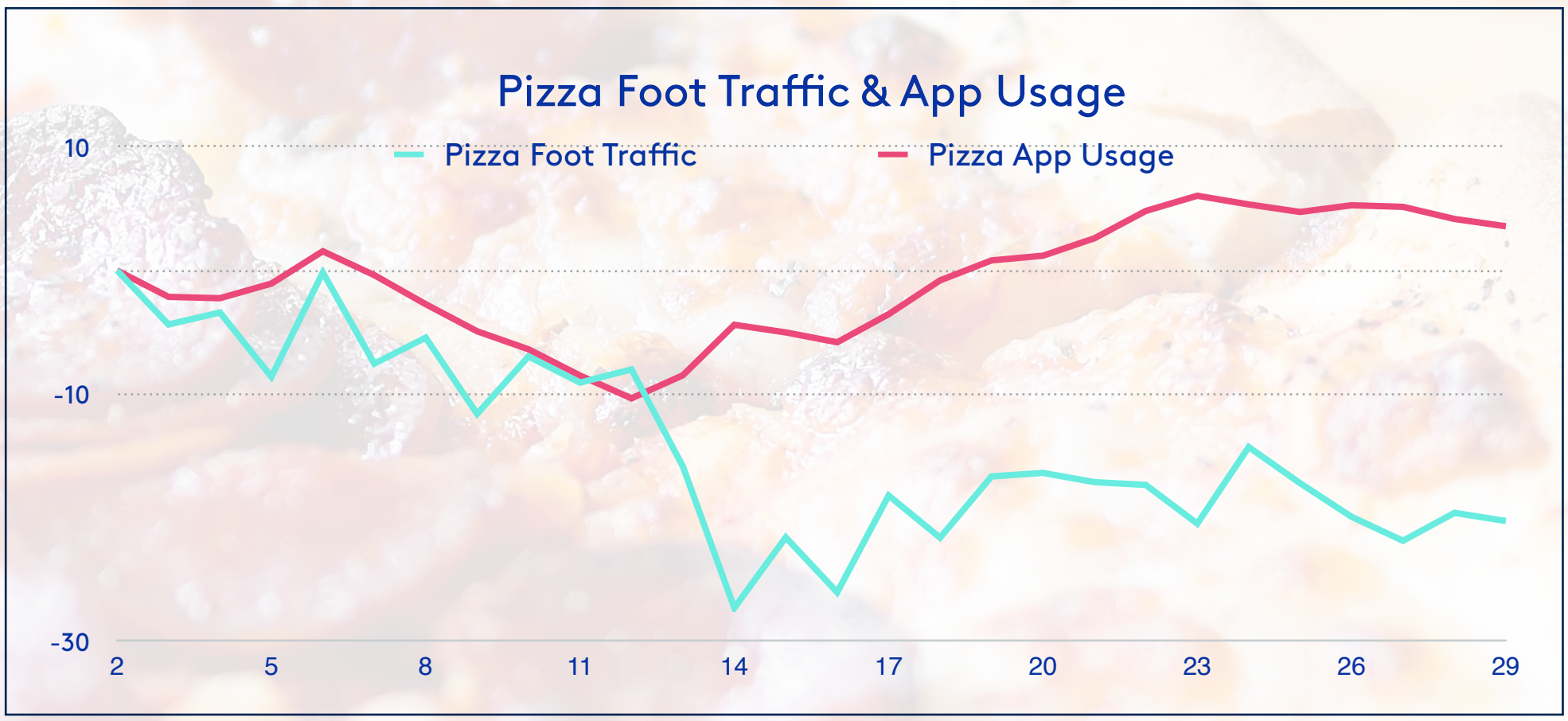
Pizza chains' foot traffic has been impacted similar to the QSR category overall, down **-19-21%** YoY at the end of July, while the QSR category overall was down **-21-23%** YoY at the end of July.

- Pizza app usage was up **+25%** YoY from July 2019 to July 2020.
- Pizza app usage was up **+23%** YoY from Q2 2019 to Q2 2020.

We see a negative correlation between pizza chains' app usage and foot traffic in 2020 (**-.24**), indicating consumers are leveraging pizza apps for delivery, more so than take out.

Unlike most restaurant apps, pizza apps offer their own delivery, which could lead to lower foot traffic while having higher app usage.

- However, before the pandemic there was a positive correlation between pizza app usage and foot traffic 2019 (**0.66**), perhaps indicating that consumers may have been using pizza apps more for takeout pre-COVID-19.



Trend 5: Pizza Delivery Reigns

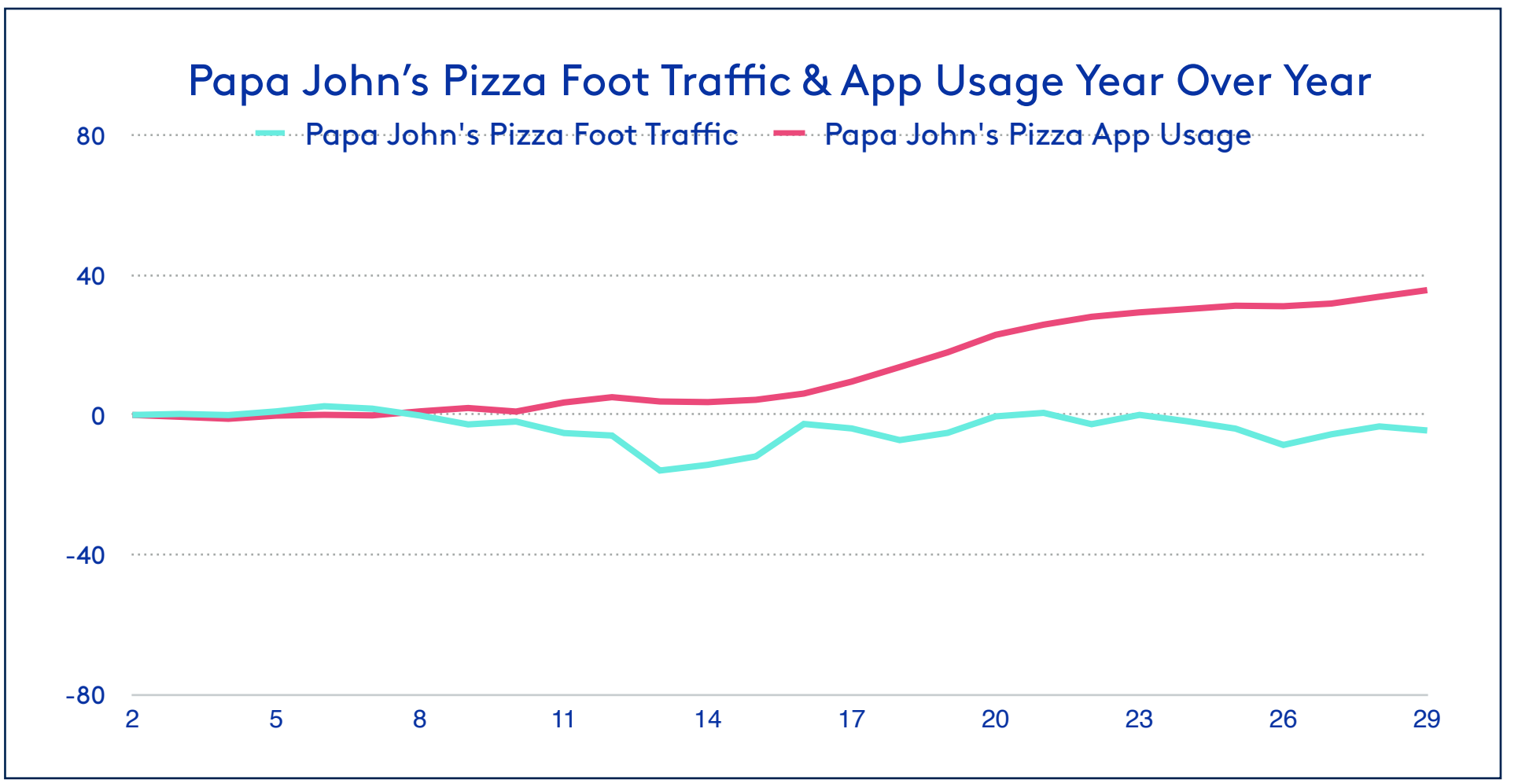
Which pizza chains in particular are performing well?

Papa John's Pizza is outperforming the pizza category in both app usage and foot traffic:

- Mobile app usage for Papa John's was up **+34-36%** YoY at the end of July, while app usage for the pizza category was only up **+4-6%** YoY.

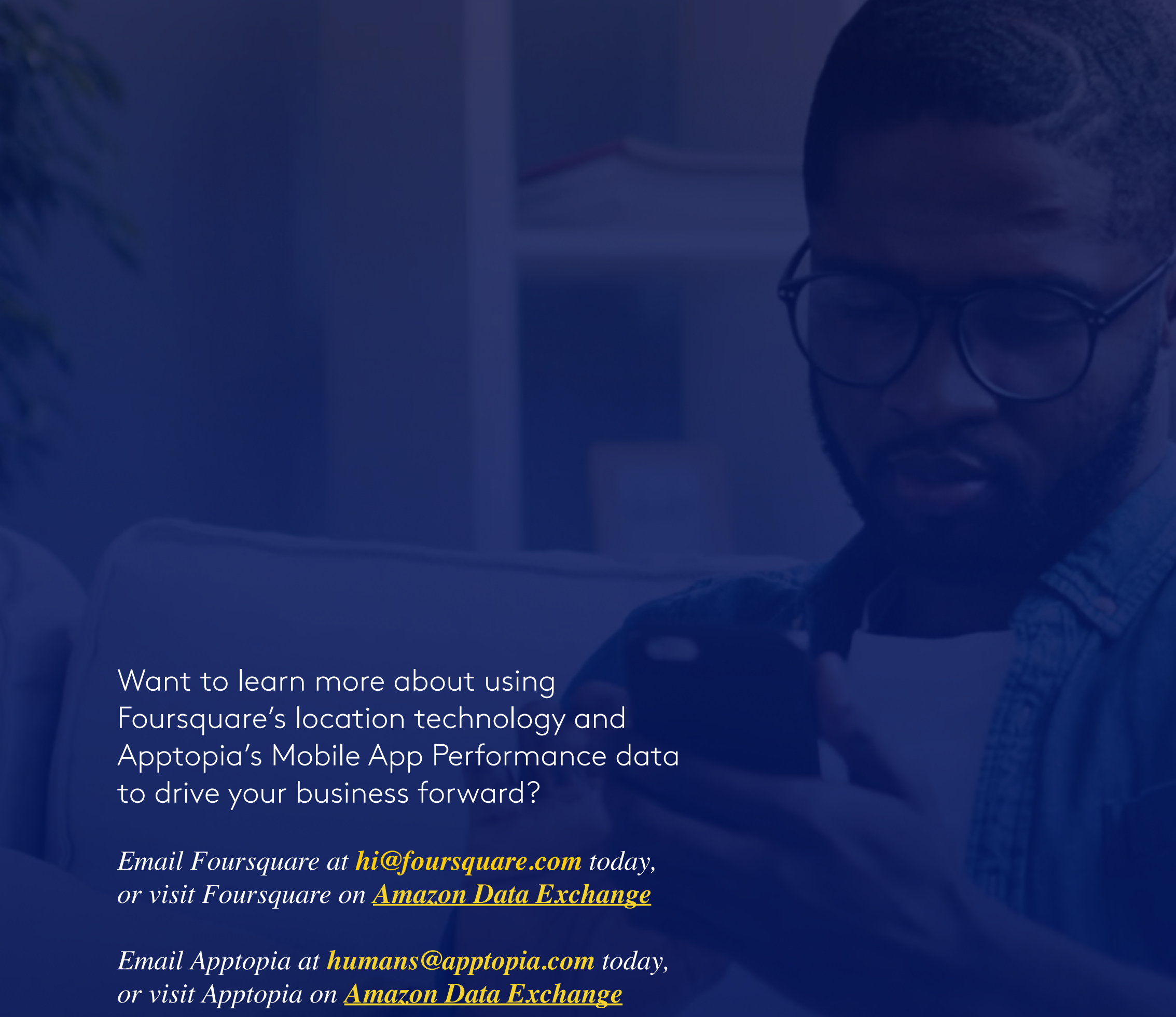
- Foot traffic to Papa John's was down only **-4-6%** YoY at the end of July, while visits to the pizza category were down **-19-21%** YoY.

We actually see a positive correlation between app usage and foot traffic to Papa John's in 2020 (**.47**), indicating that consumers may be using the app more for takeout compared to other pizza chains



Key Takeaways

- By combining Foursquare location data with Apptopia's mobile app data, marketers and investors alike can gain a clear, comprehensive picture of **restaurant chains' performance.**
- Foot traffic data and mobile app data are both strong indicators of **brand health**, and can serve as powerful tools for tracking trends in consumer behavior.
- **Takeout**, **drive through** and **delivery** will continue to play a major role in restaurant chains' performance throughout the rest of 2020 and beyond.
- **Appealing in-store experiences** and **engaging mobile apps** are both key ingredients for restaurants to succeed in today's rapidly changing landscape.



Want to learn more about using Foursquare's location technology and Apptopia's Mobile App Performance data to drive your business forward?

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