
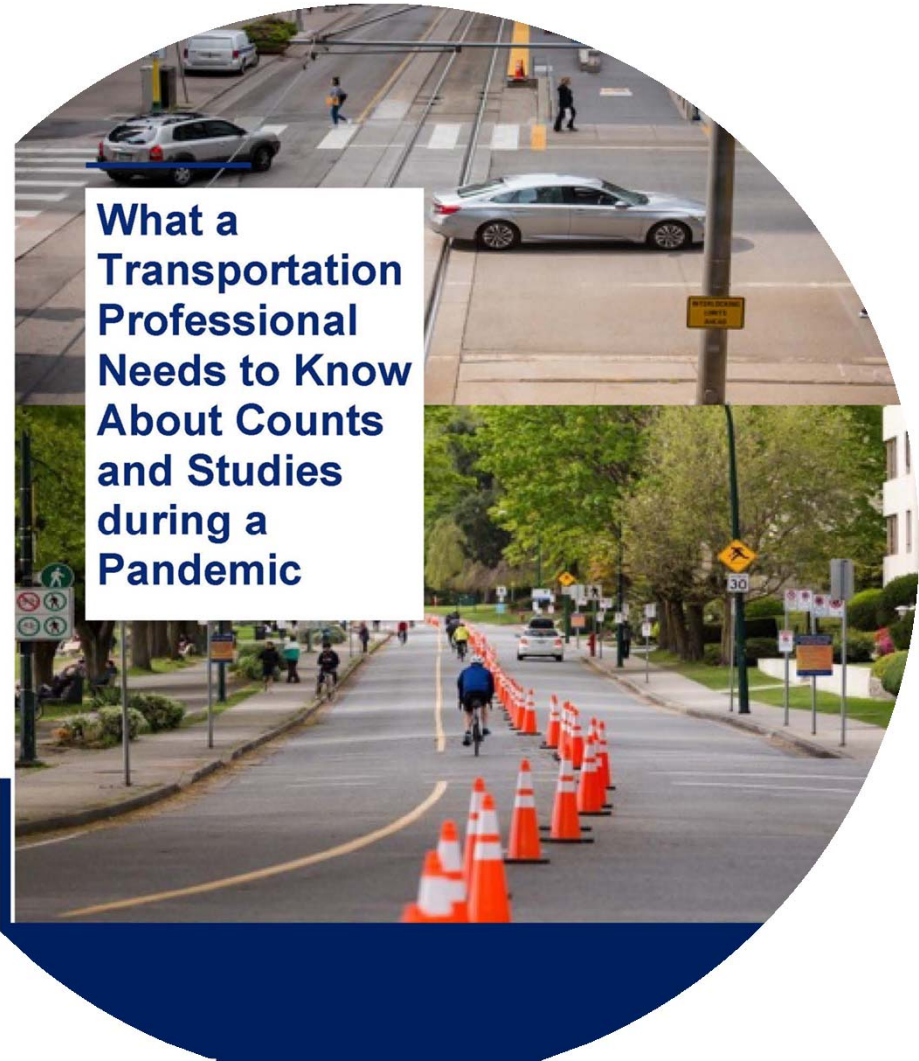


# ITE Hawaii Section Meeting October 2020

## Randy McCourt ITE President



**What a  
Transportation  
Professional  
Needs to Know  
About Counts  
and Studies  
during a  
Pandemic**



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Chair:  
Randy McCourt, ITE President

Task Force:  
Alison Felix, Boston Metro Planning Council  
Jonathan Kiser, Neel-Schaffer  
Karyn Robles, Village of Schaumburg, IL  
Mike Spack, Spack Solutions  
Ted Trepanier, Inrix  
Joe Bartus, Macomb County/HNTB  
Kevin Hopper, ITE  
Matthew Skelly, Fuss & O'Neill  
Ruben Gallegos, National Data & Surveying  
Wayne Kittelson, Kittelson and Associates

# Scope

- Ethics
- Big Data and Why
- Policies
- When Will Normal Return?
- Forecasting
- Trip Generation



## Cannon of Ethics for Members

### Section 6

- Adequate Knowledge
- Honest Conviction



## ***Guidance – Traffic Count and Speed Data, Collection and Analysis During Pandemic – June 2020***

- When to use historic peak hour count data.
  - How to apply an adjustment factor.
  - How to obtain current traffic counts from the State and City.
  - How to apply a background growth rate for traffic studies.
- 



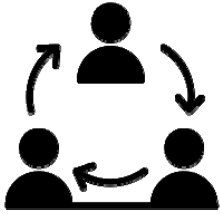
## ***Briefing on Temporary Policy for Traffic Counts Collection and Transportation Impact Study Submission During COVID-19 Pandemic – May 2020***

- Established a policy to suspend traffic count data collection in the County until further notice. At the same time, the Department does not want to inhibit development applications from proceeding.
- Recommend a combination of a *Growth Factor Approach* and a *Traditional Counts After Specified Time Approach*.
- Will investigate opportunities to utilize innovative approaches such as “Big Data” to estimate traffic counts.



# Private Sector

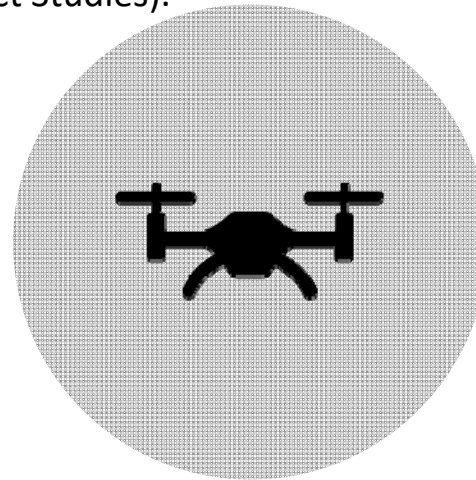
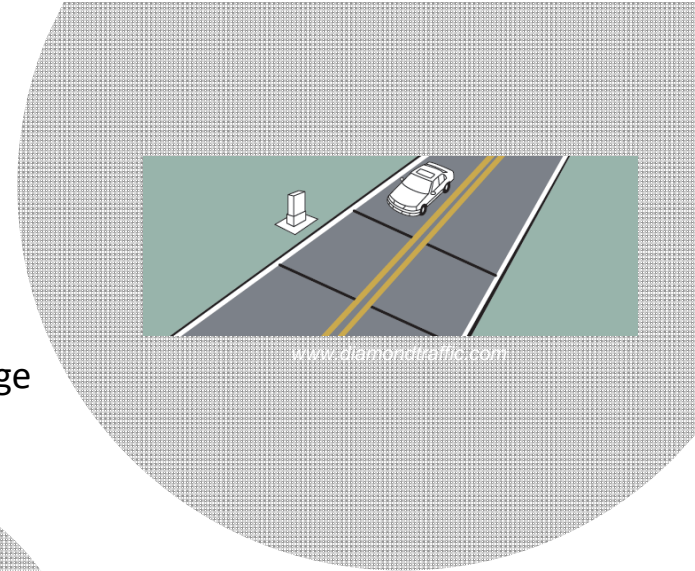
## Options to obtain historic counts



- Collaborate with consultants, traffic data collection companies, and public agencies.



- Review transportation studies (e.g., Long-Range Transportation Plans, Corridor Plans, and Transportation Impact Studies).



- Identify data collection methods (e.g., road tubes, manual counters, video cameras, and drones).



skyscrapercity.com

- Active Traffic Management/Traffic Operation Center Data Sets

- Couple big data/probe data (e.g., Streetlight, INRIX, ClearGuide) with traditional traffic volume sources or apply independently.

# The Plateau

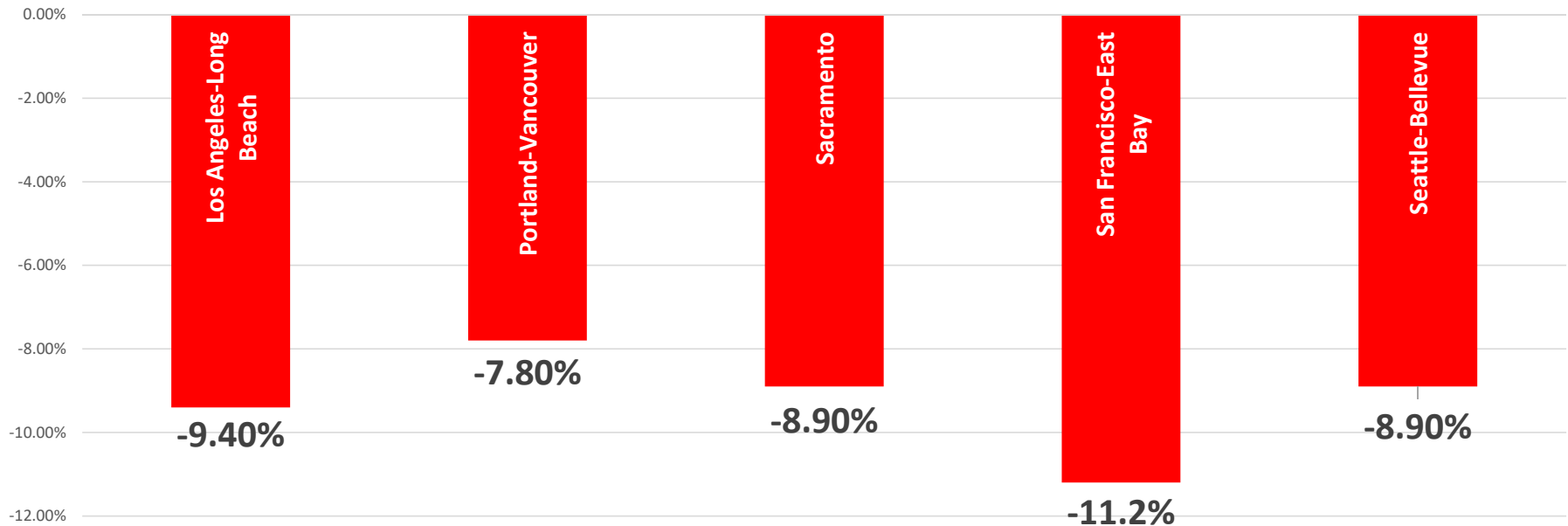


Seasonally adjusted trips to a Jan/Feb 2020 reference  
Portland, Oregon



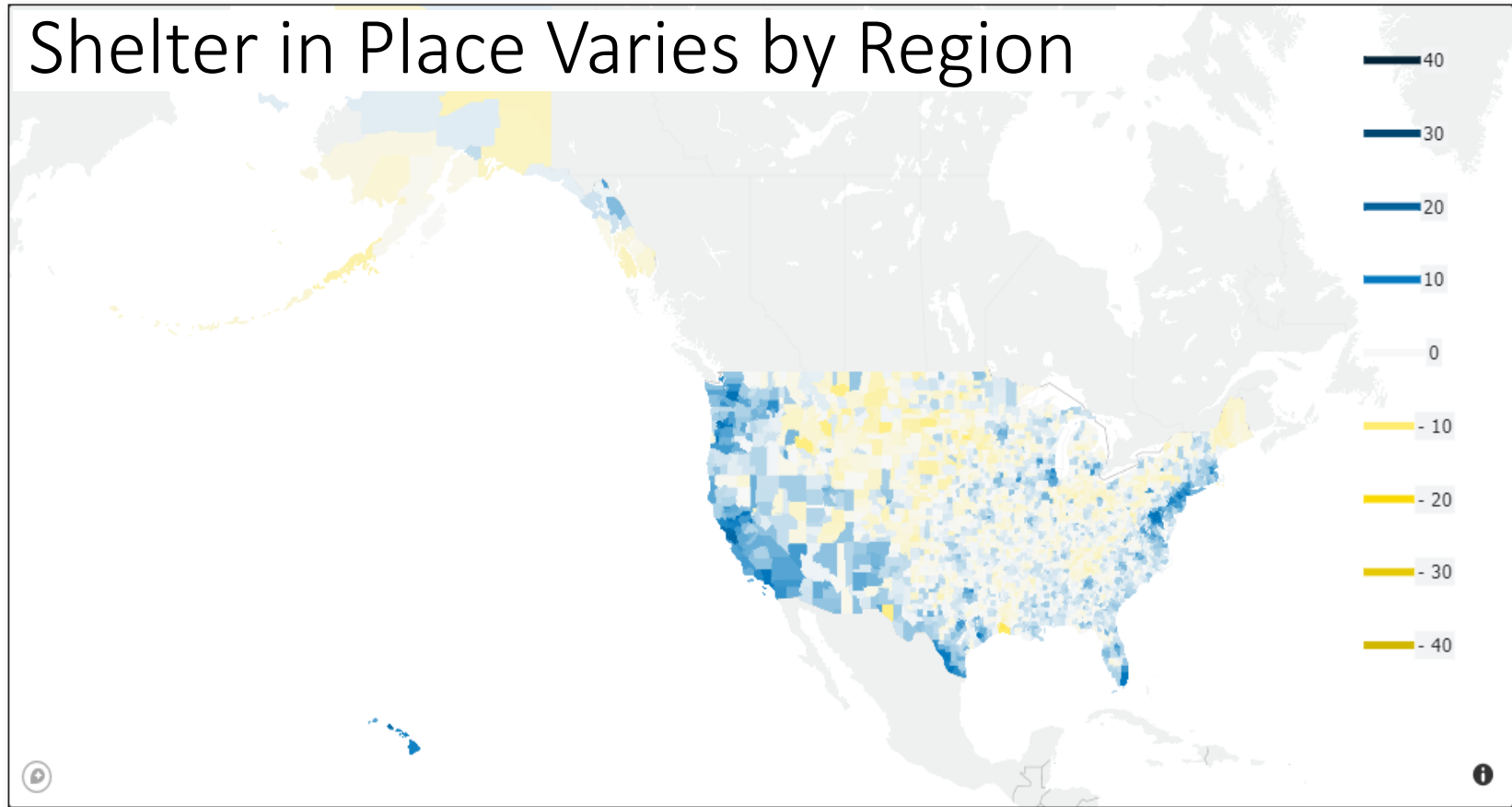
# Employment is down

US Bureau of Labor Statistics  
Non-Farm Employment, July 2020



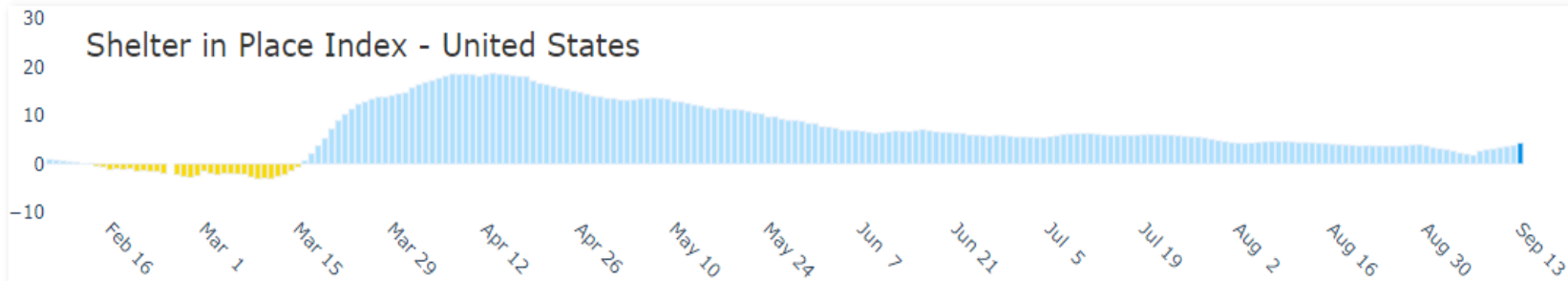


# Shelter in Place Varies by Region



**BLUE**  
More  
shelter  
in place

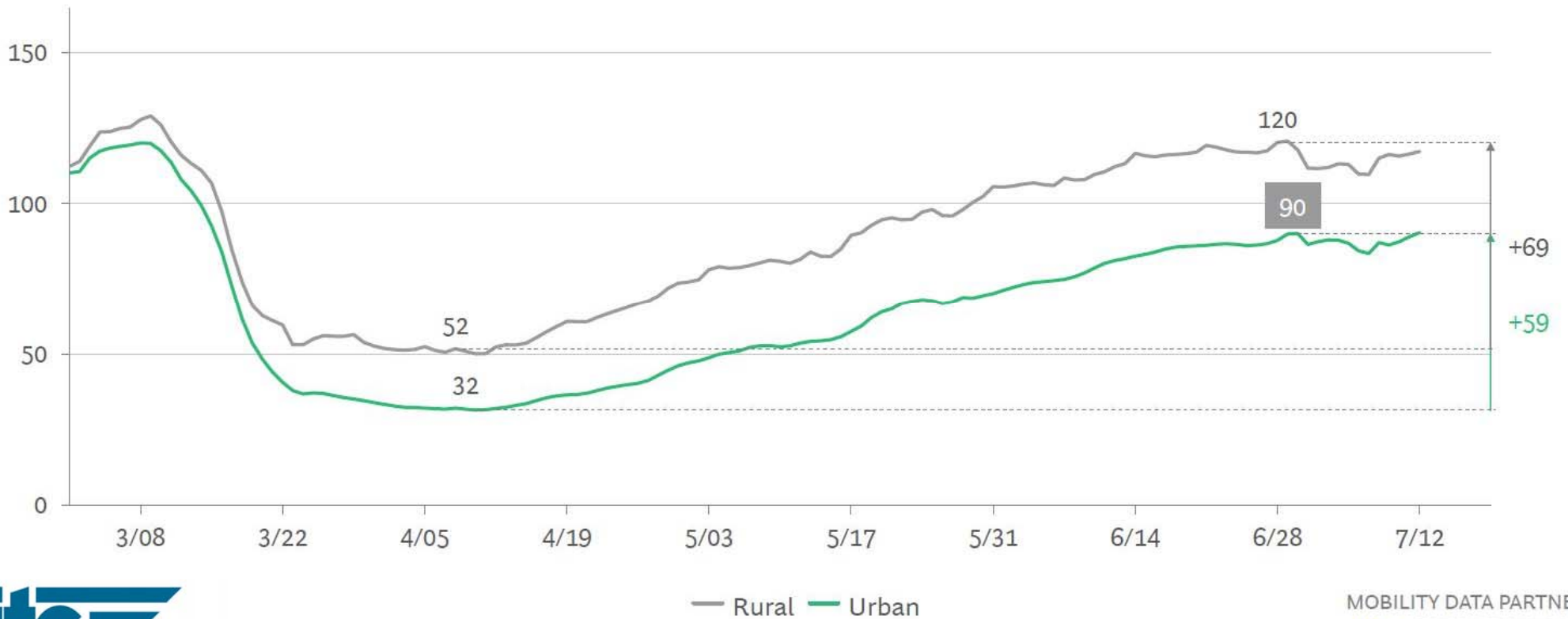
**YELLOW**  
Less  
shelter  
in place



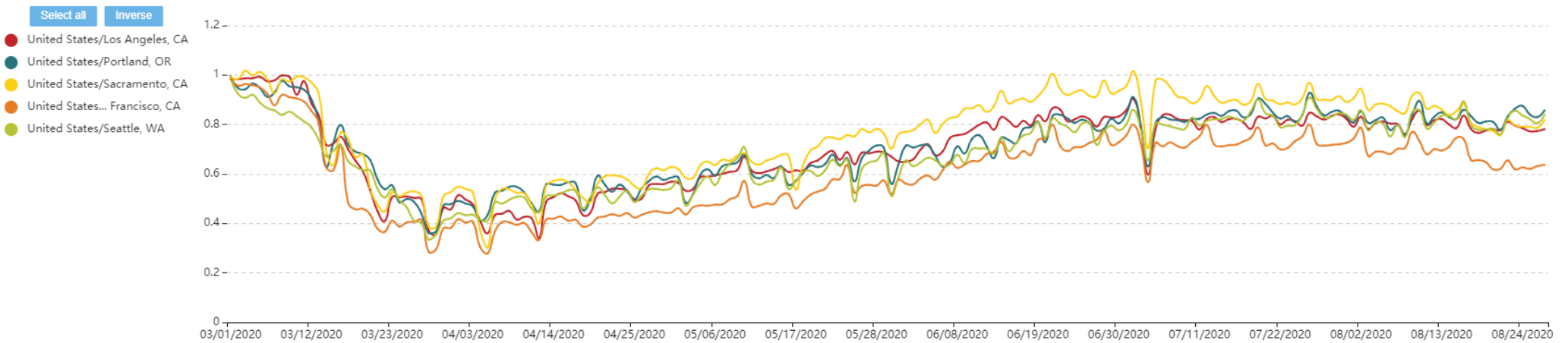
Early  
February  
Baseline

# Urban v. Rural

VMT Indexed to January 2020 (%)

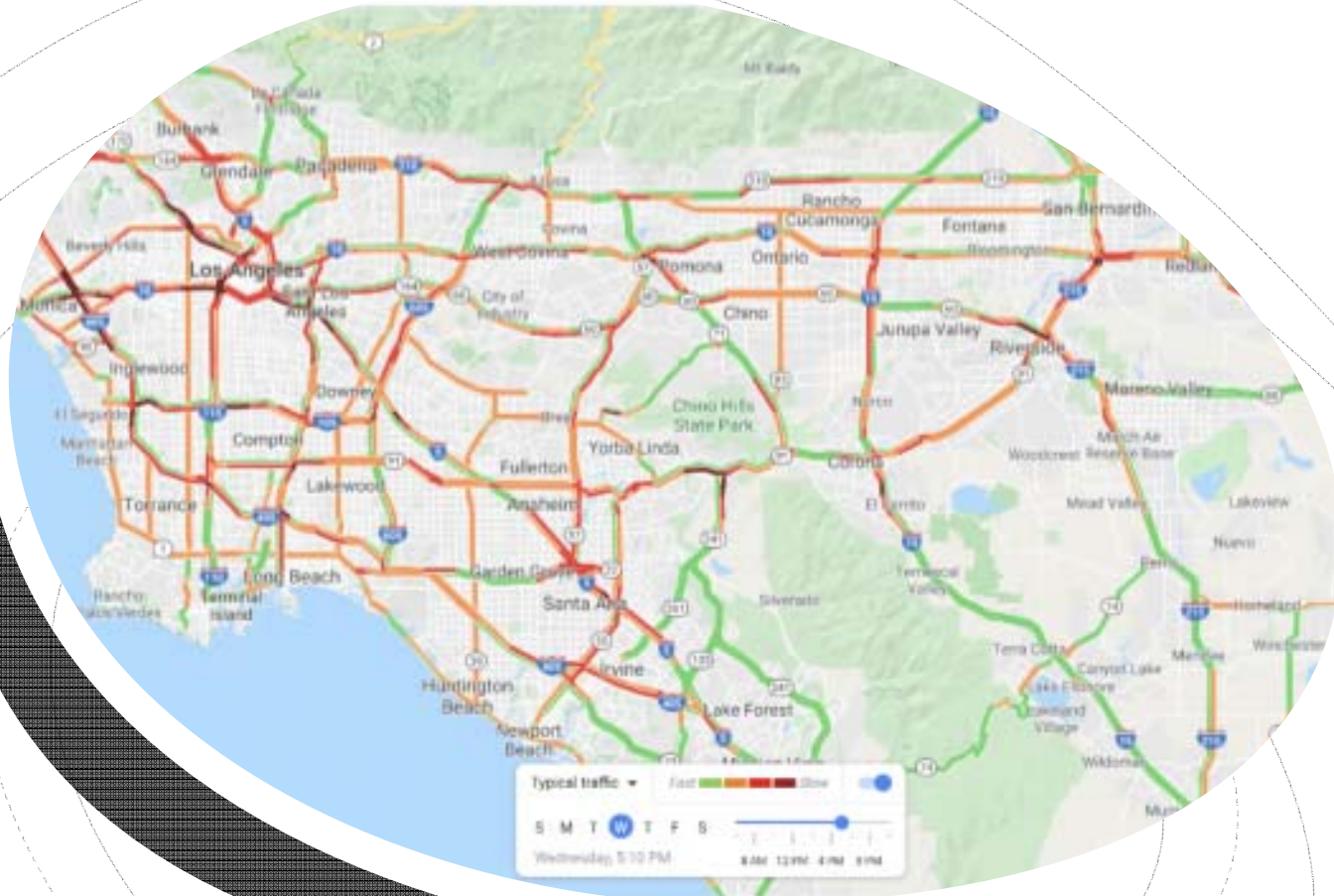


# The Recovery Varies by Region



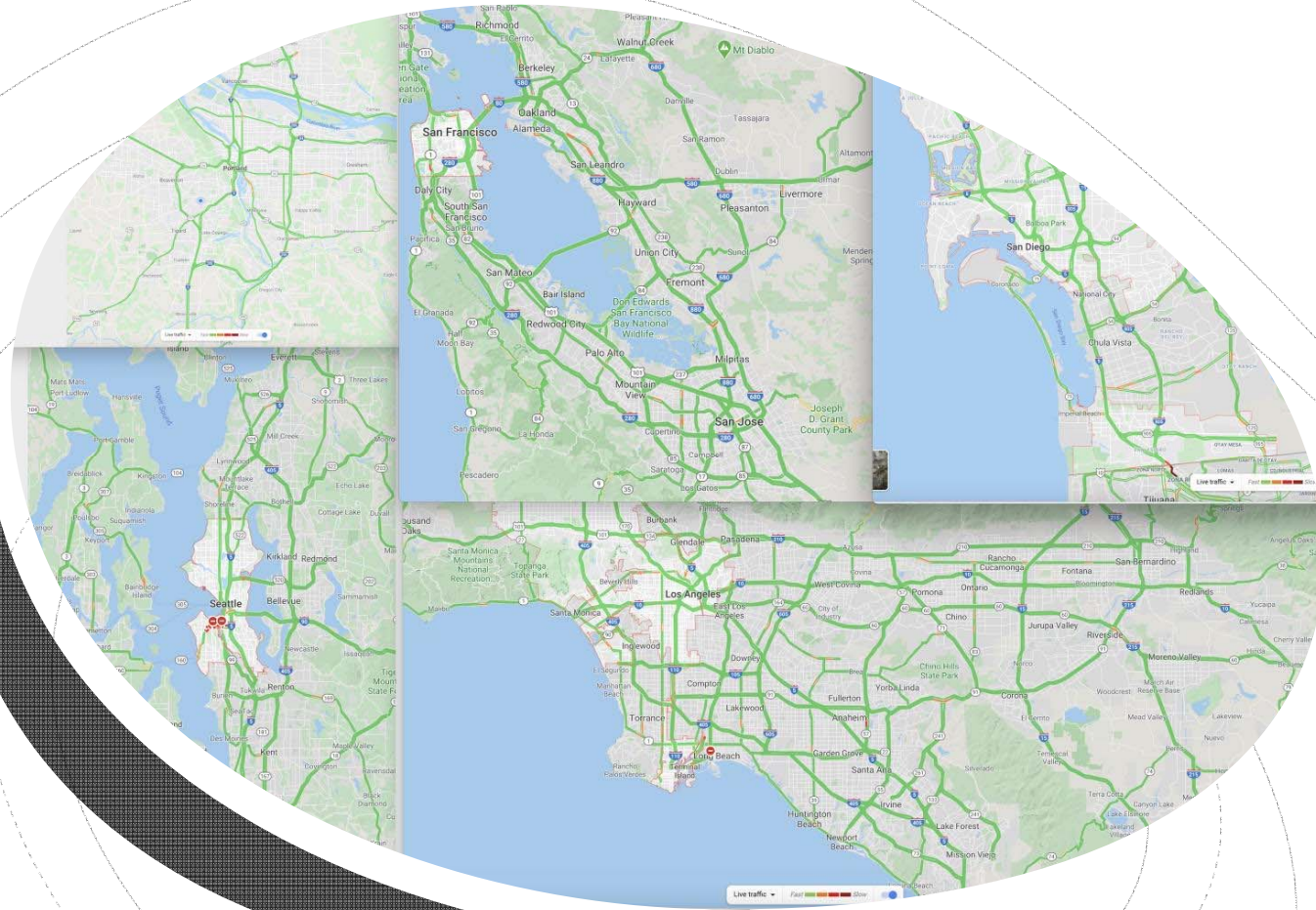
VMT comparison by west coast metro region  
Comparison to a seasonally adjusted Jan/Feb 2020 reference





Pre-COVID  
19

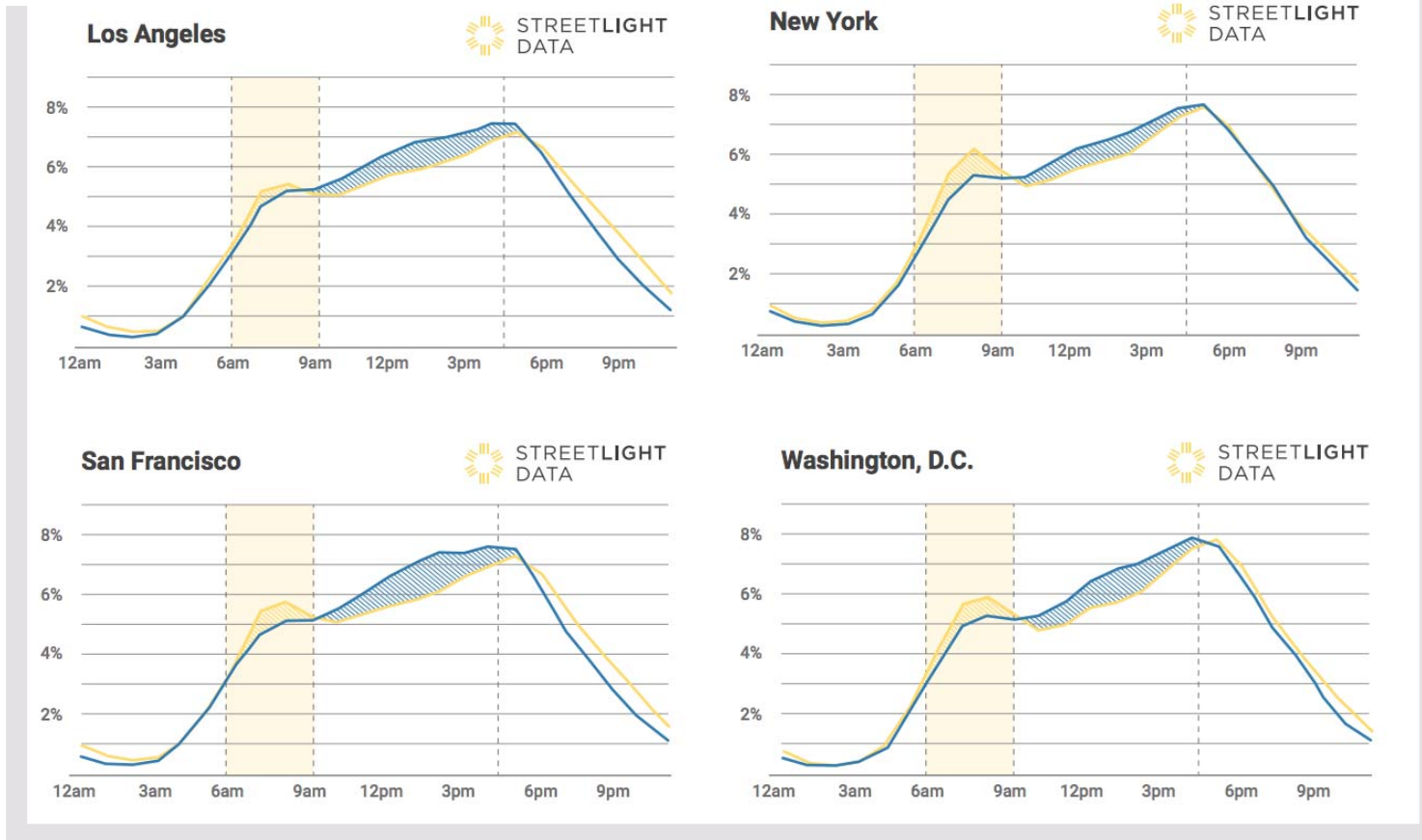




The “Day After”  
Mid- March

# Peak patterns have changed in U.S. metro areas

## DISTRIBUTION OF DAILY VMT BY TIME OF DAY

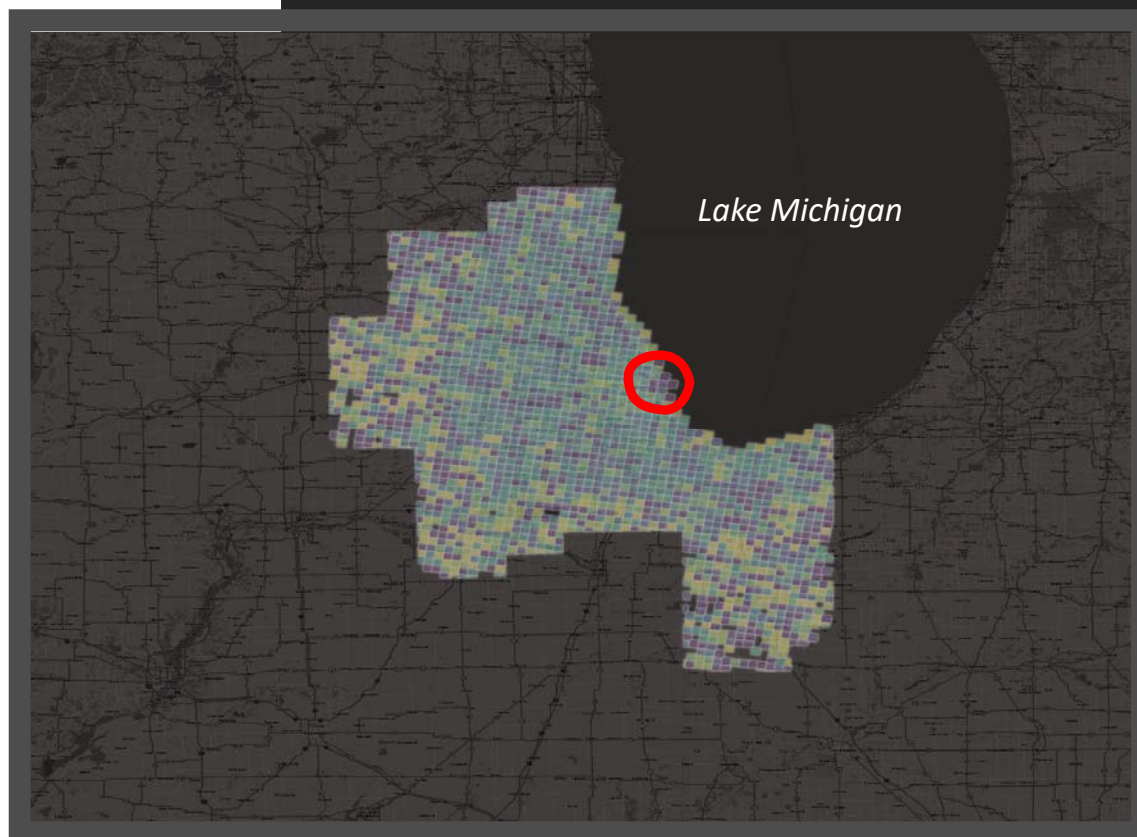




## Changes in *where* trips are occurring

- Light yellow zones indicate heavier VMT vs last year
- Dark purple zones indicate lighter VMT vs last year

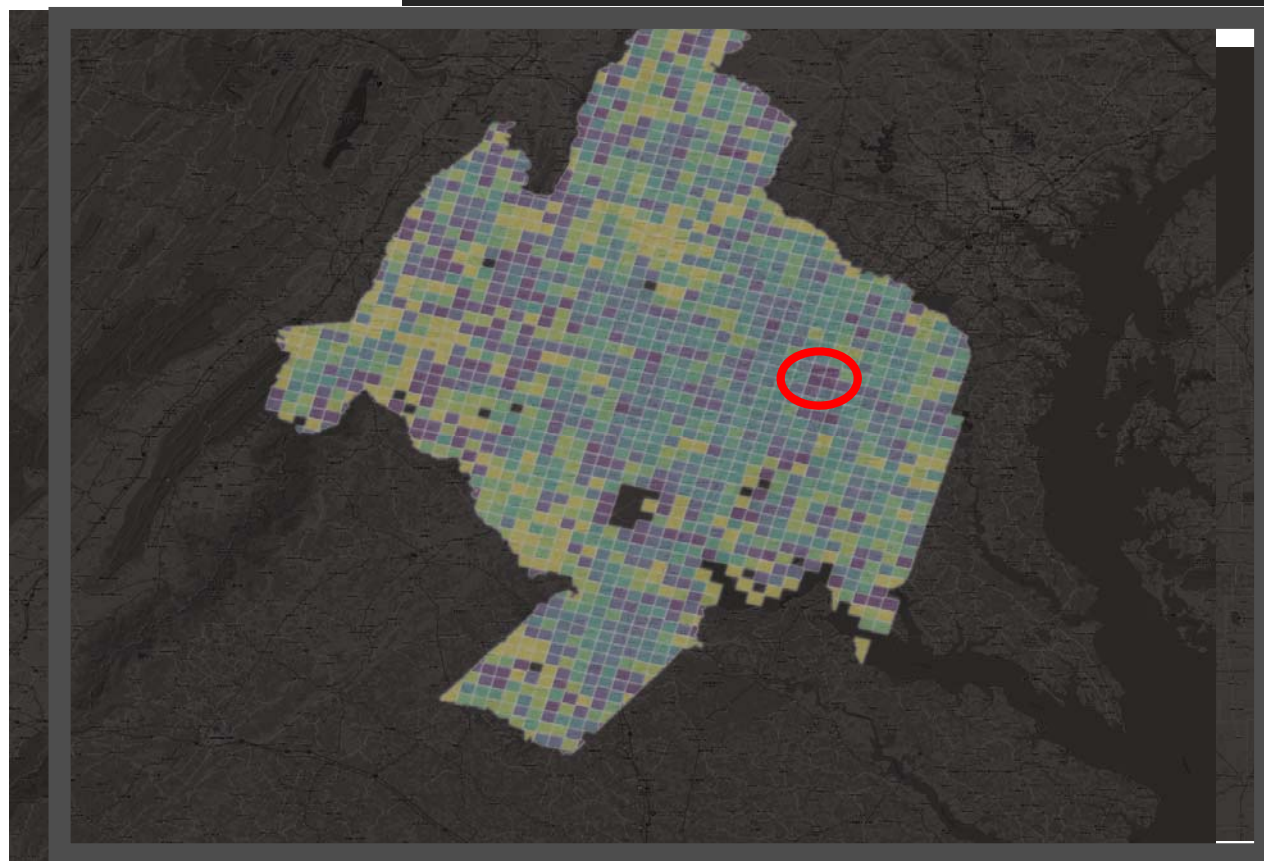
### CHANGE IN TRIP STARTS FROM JUN'19 TO JUN'20 CHICAGO MSA



## Similar dynamic in Washington D.C.

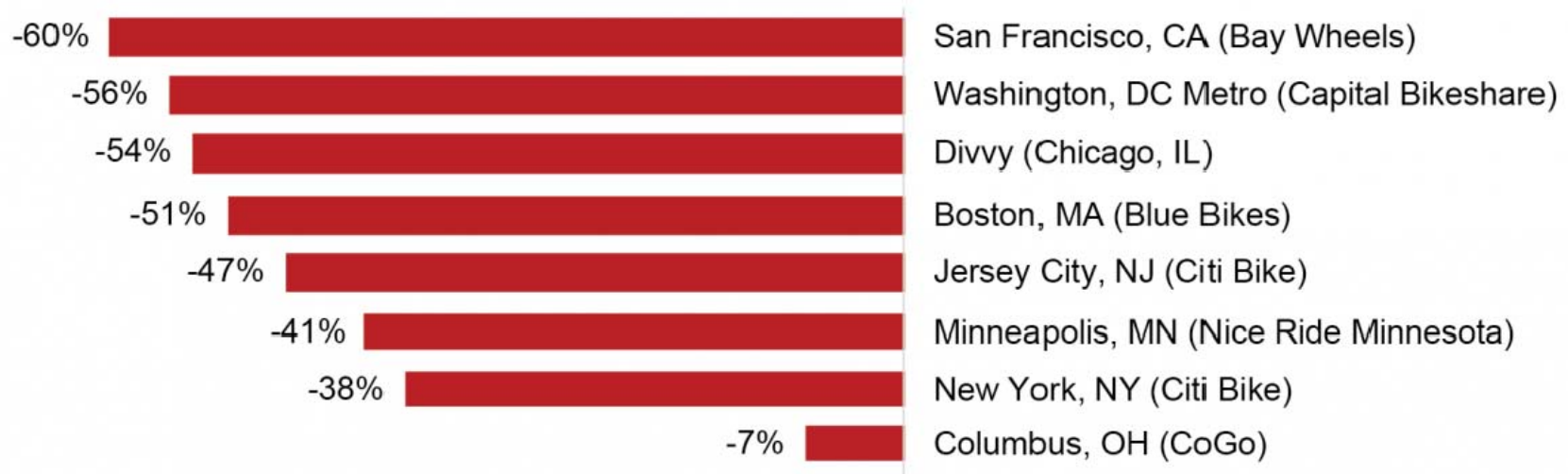
- Light yellow zones indicate heavier VMT vs last year
- Dark purple zones indicate lighter VMT vs last year

CHANGE IN TRIP STARTS FROM JUN'19 TO JUN'20  
WASHINGTON D.C.



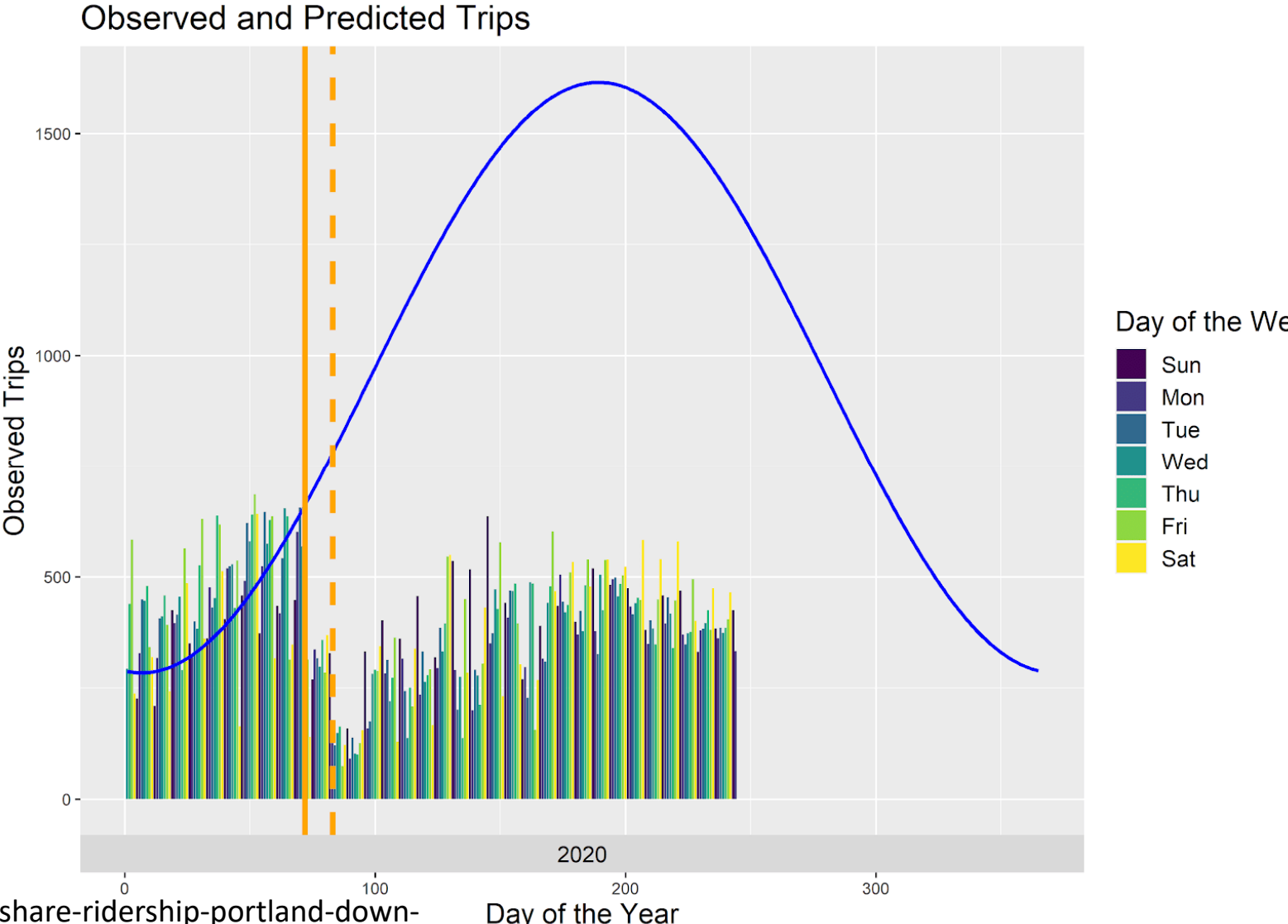
# Bicycle Share Impacts

Figure 1: Percent Change in Docked Bikeshare Trips, March through May  
Change from same days of week in 2019



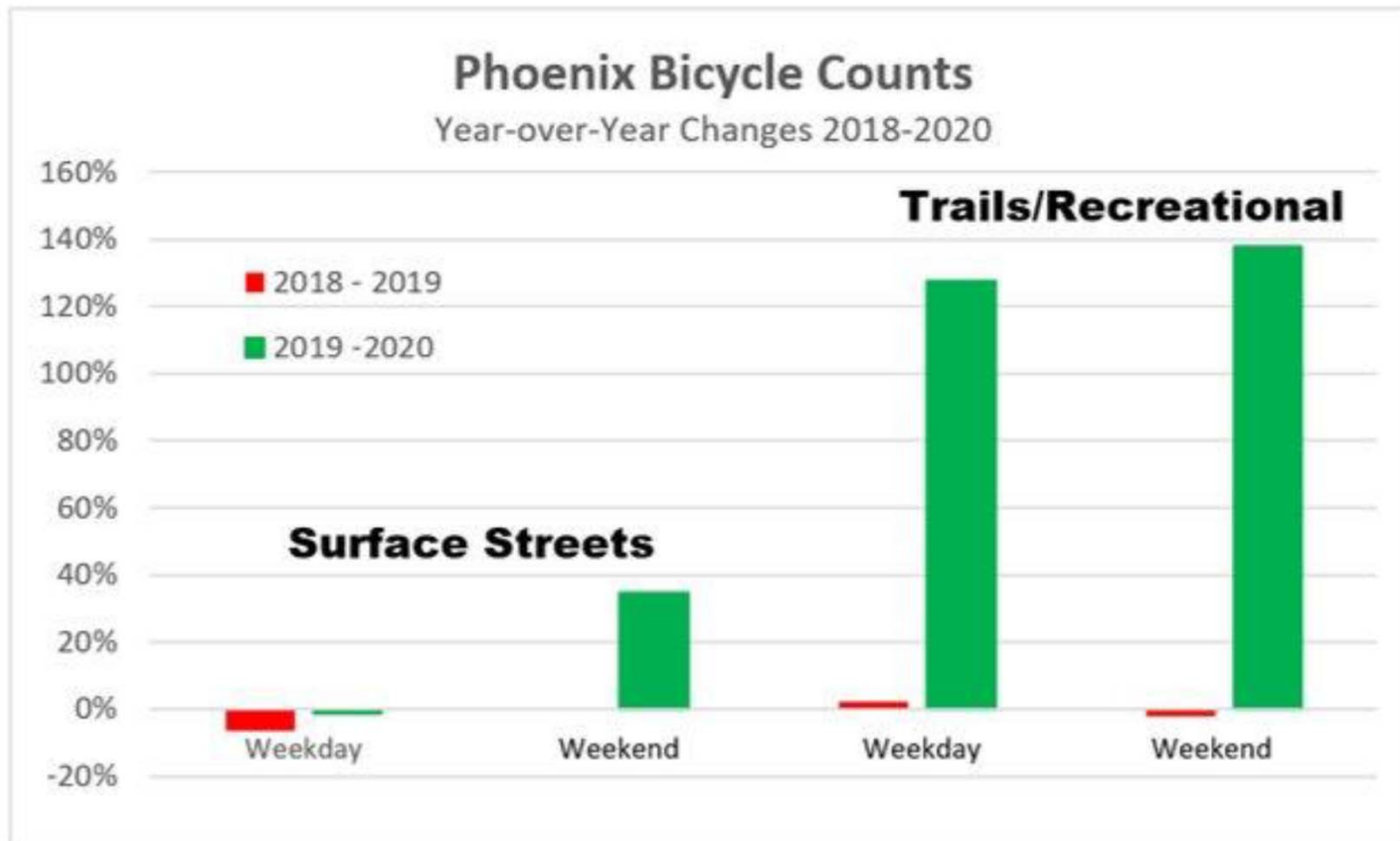
**NOTE:** Data for Nice Ride Minnesota includes only May as system began operations in mid-April in 2019 and 2020.

# Biketown w/ e-Bike

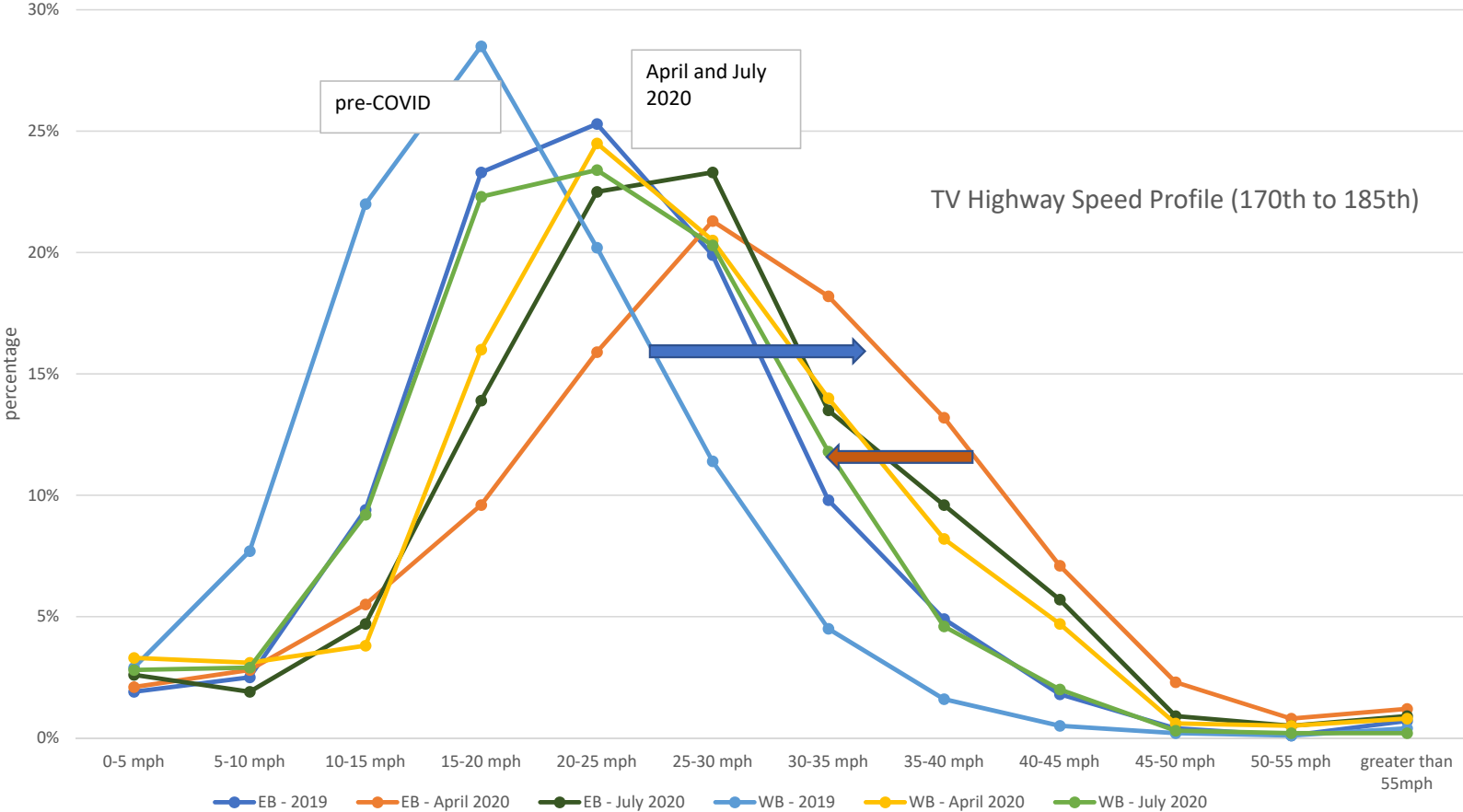


<https://trec.pdx.edu/news/bike-share-ridership-portland-down-727-during-pandemic>

# Other Bicycle Activity is up – Way Up!

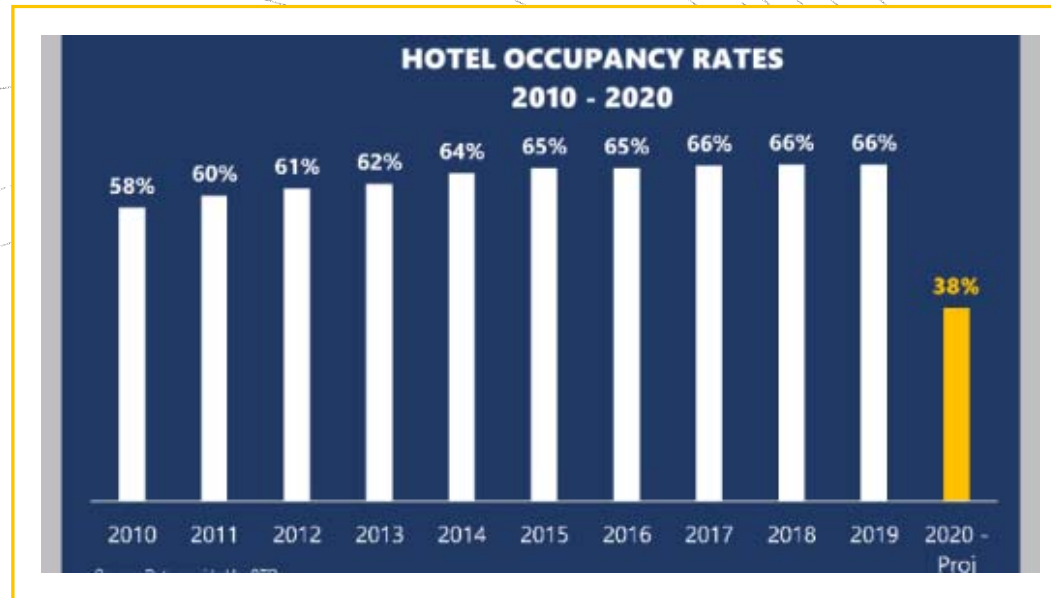


# Data reveals speed trends





Trip  
Generation

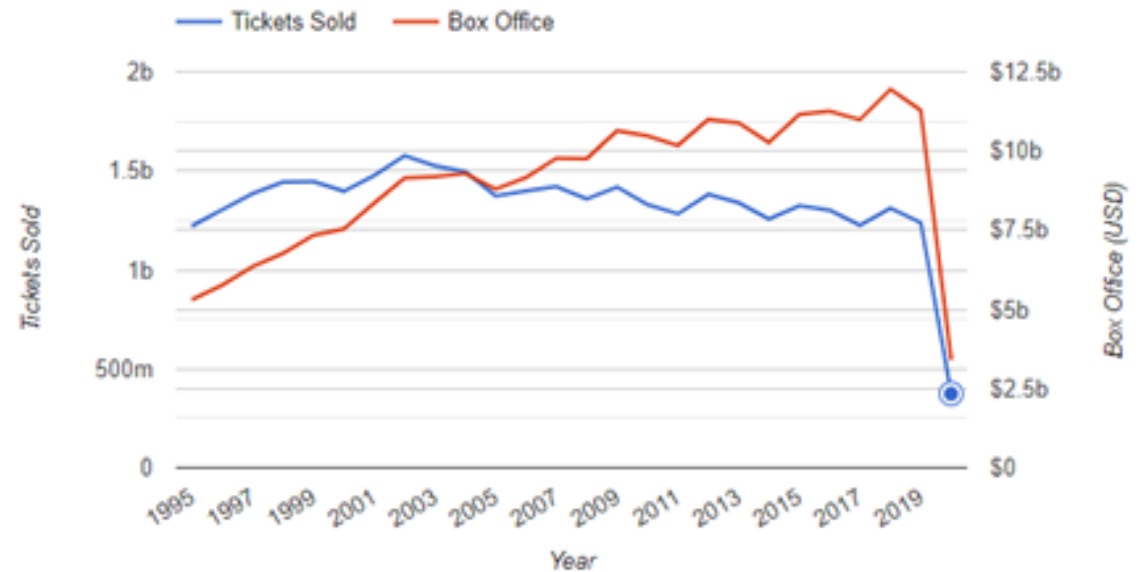


Data Forecasting  
Sensitive Land Uses

Data  
Forecasting  
Sensitive  
Land Uses

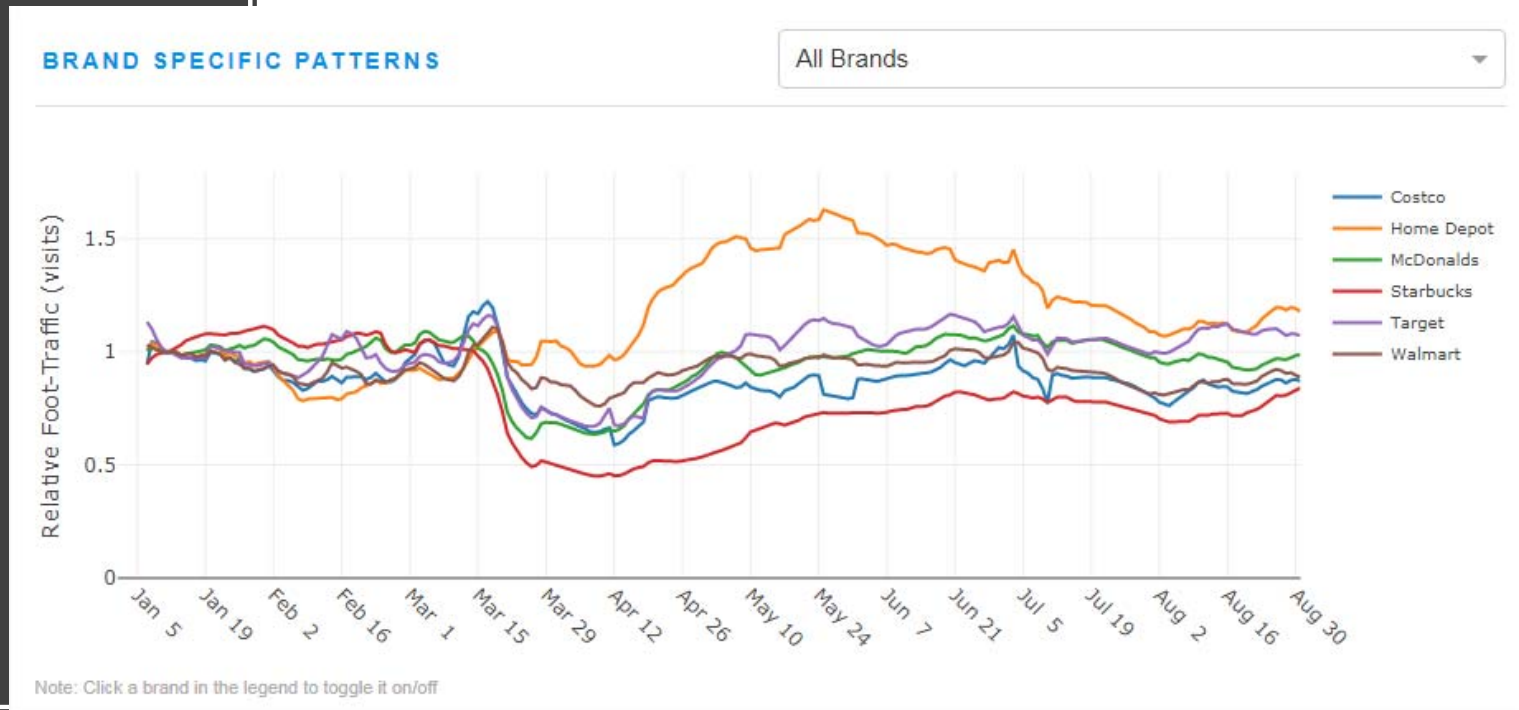
# Theaters

Annual Ticket Sales



# Data Forecasting Sensitive Land Uses

## Retail

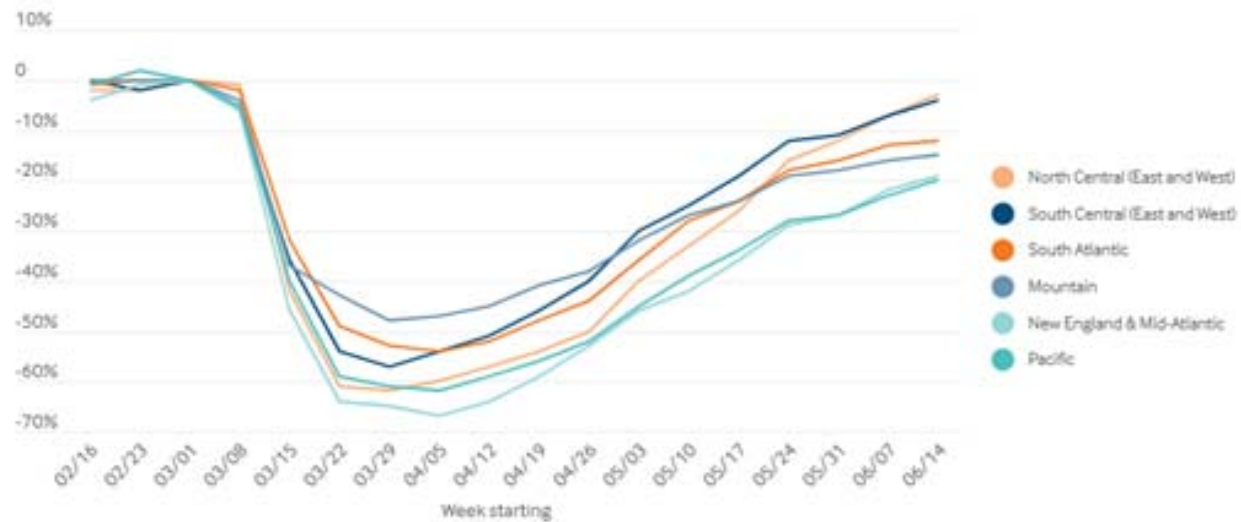


Source: Safegraph, U.S. Consumer Activity During COVID-19 Pandemic.

# Medical

Data  
Forecasting  
Sensitive  
Land Uses

Percent change in visits from baseline



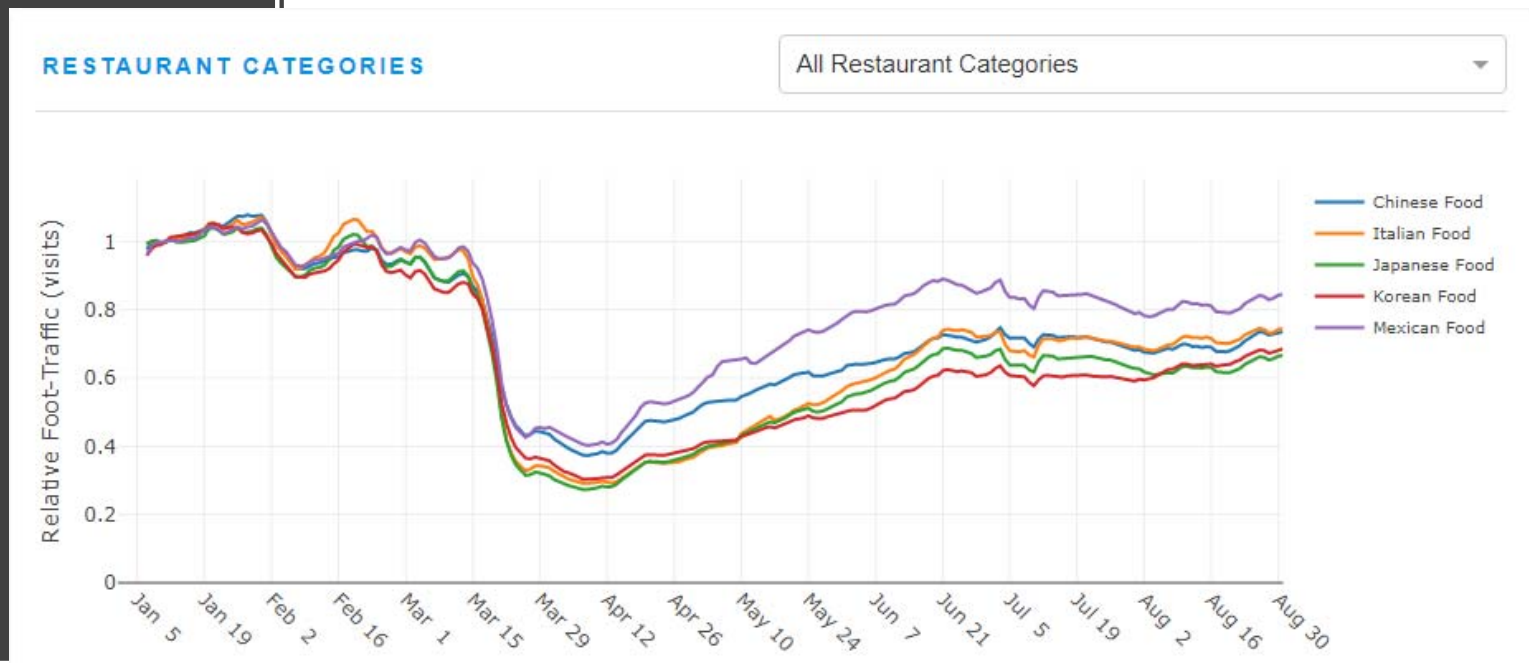
[Download data](#)

Data are presented as a percentage change in the number of visits in a given week from the baseline week (March 1–7). Distribution of states across U.S. census divisions is available at the [census website](#).

Source: Ateev Mehrotra et al., *The Impact of the COVID-19 Pandemic on Outpatient Visits: Practices Are Adapting to the New Normal* (Commonwealth Fund, June 2020). <https://doi.org/10.26099/2v5t-9y63>

# Data Forecasting Sensitive Land Uses

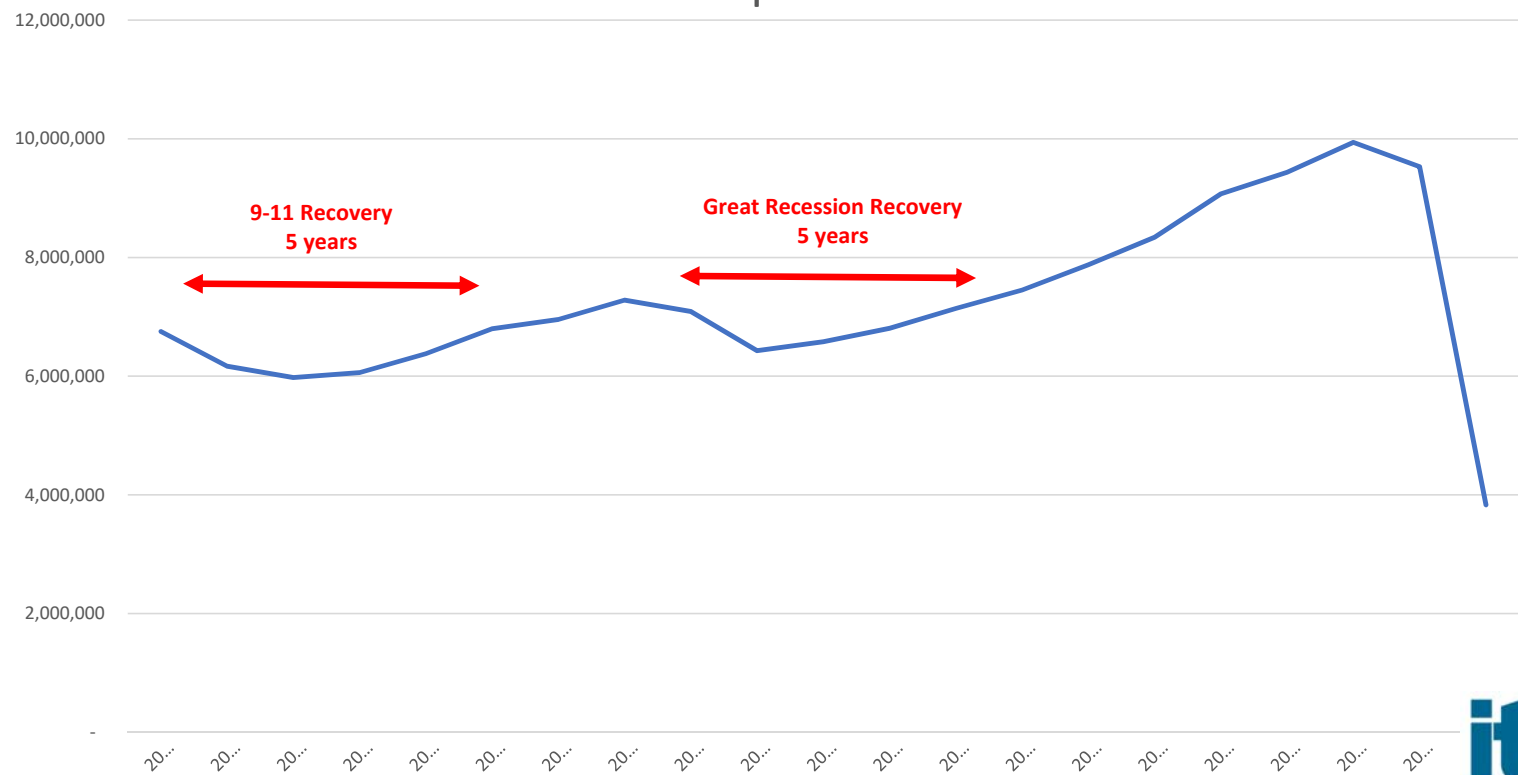
## Restaurants



Source: Safegraph, U.S. Consumer Activity During COVID-19 Pandemic.

# When do we recover?

Portland International Airport  
Annual Enplanements





Questions?

Randy McCourt, ITE President

[503.randy.mccourt@gmail.com](mailto:503.randy.mccourt@gmail.com)

