


The background of the slide is a light gray gradient. It is decorated with numerous realistic water droplets of various sizes. Some droplets are at the top left, some are in the middle right, and others are at the bottom. They have highlights and shadows, giving them a three-dimensional appearance.

PREDICTING THE MOST PROFITABLE FOOD TRUCK LOCATIONS

FINAL CAPSTONE PROJECT, 3/20/21



LOCATION, LOCATION, LOCATION

- FAILURE RATE OF FOOD TRUCKS CAN BE AS HIGH AS 60%
 - IDENTIFYING KEY LOCATIONS CAN BE A COMPETITIVE ADVANTAGE
 - INCREASED PROFITABILITY
 - BRAND RECOGNITION
 - OPERATORS FIND VALUE IN A PREDICTIVE MODEL THAT CAN BE USED ANYWHERE IN THE US
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DATA ACQUISITION AND CLEANING

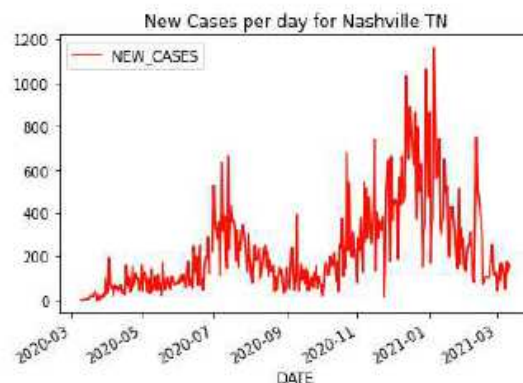
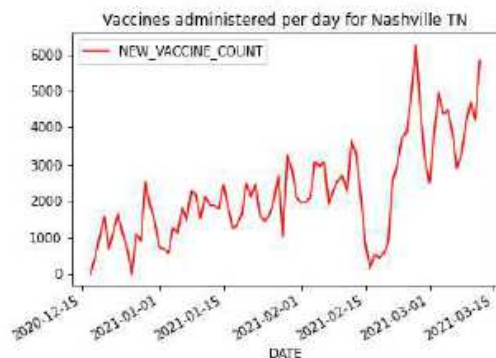
- AVERAGE TEMPERATURE AND RAINFALL DATA BY CITY
 - NASHVILLE: [HTTPS://EN.WIKIPEDIA.ORG/WIKI/NASHVILLE, TENNESSEE](https://en.wikipedia.org/wiki/Nashville,_Tennessee)
 - KNOXVILLE: [HTTPS://EN.WIKIPEDIA.ORG/WIKI/KNOXVILLE, TENNESSEE](https://en.wikipedia.org/wiki/Knoxville,_Tennessee)
- COVID DATA (NEW CASES AND VACCINE ROLLOUT)
 - TENNESSEE DEPARTMENT OF HEALTH: [HTTPS://WWW.TN.GOV/HEALTH/CEDEP/NCOV/COVID-19-VACCINE-INFORMATION.HTML](https://www.tn.gov/health/cedep/ncov/covid-19-vaccine-information.html)
- VENUE DATA PULLED FROM FOURSQUARE PLACE API
 - /V2/VENUES/EXPLORE: [HTTPS://DEVELOPER.FOURSQUARE.COM/DOCS/PLACES-API/ENDPOINTS/](https://developer.foursquare.com/docs/places-api/endpoints/)
- FOCUSED ON KEY FEATURES (NEW CASES/COUNTS) ONLY WITH IN THE COVID DATASETS
- ANALYZED 354 VENUES IN KNOXVILLE AND 440 VENUES IN NASHVILLE

IS IT HOT ENOUGH?

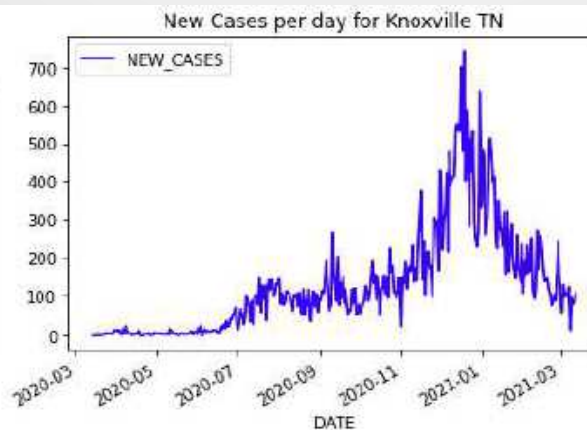
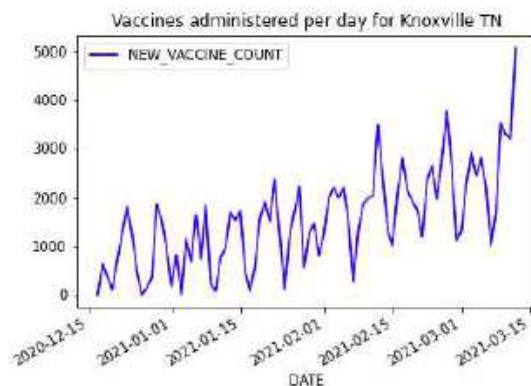
- WEATHER HAS A HUGE IMPACT ON WHETHER INDIVIDUALS WANT FROZEN TREATS
- NASHVILLE AND KNOXVILLE BOTH HAVE SUMMER TEMPERATURES IN THE HIGH 80'S
- NASHVILLE HAS LESS RAINFALL THOUGH MAKING IT A BETTER CHOICE

Climate data for Nashville (Nashville Int'l), 1981–2010 normals, ^[b] extremes 1871–									
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Record high °F (°C)	78 (26)	84 (29)	89 (32)	91 (33)	96 (36)	109 (43)	107 (42)	106 (41)	
Mean maximum °F (°C)	68.0 (20.0)	73.0 (22.8)	80.2 (26.8)	85.1 (29.5)	88.7 (31.5)	94.2 (34.6)	97.1 (36.2)	96.5 (35.8)	
Average high °F (°C)	46.9 (8.3)	51.8 (11.0)	61.0 (16.1)	70.5 (21.4)	78.2 (25.7)	86.0 (30.0)	89.3 (31.8)	89.0 (31.7)	
Average low °F (°C)	28.4 (-2.0)	31.6 (-0.2)	39.0 (3.9)	47.5 (8.6)	56.8 (13.8)	65.4 (18.6)	69.5 (20.8)	68.4 (20.2)	
Mean minimum °F (°C)	8.8 (-12.9)	13.5 (-10.3)	22.5 (-5.3)	31.2 (-0.4)	42.7 (5.9)	54.3 (12.4)	61.6 (16.4)	59.4 (15.2)	

COVID BY THE NUMBERS



- NASHVILLE AND KNOXVILLE HAVE BOTH DONE A GOOD JOB TO CONTAIN THE SPREAD. LOOKS LIKE VACCINATION HAS BEEN A KEY ELEMENT OF THAT PLAN.
- RISK SEEMS TO BE LOW, ESPECIALLY IN KNOXVILLE



OUTDOOR ACTIVITIES - NASHVILLE

Nash_Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
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• WOODBINE

Woodbine	Convenience Store	Park	Yoga Studio	Fabric Shop	Flower Shop	Fish Market	Fish & Chips Shop	Financial or Legal Service	Fast Food Restaurant	Farmers Market
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• BELLE MEADE

Belle Meade	Gym	Sports Bar	Moving Target	Pool	Golf Course	Southern / Soul Food Restaurant	Fabric Shop	Fish & Chips Shop	Financial or Legal Service	Fast Food Restaurant
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• OLD HICKORY

Old Hickory	Discount Store	Park	Baseball Field	Yoga Studio	Fast Food Restaurant	Food	Flower Shop	Fish Market	Fish & Chips Shop	Financial or Legal Service
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OUTDOOR ACTIVITIES - KNOXVILLE

Nash_Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
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- ISLAND HOME PARK

Island Home Park	Playground	Park	Yoga Studio	Dessert Shop	Dive Bar	Dog Run	Donut Shop	Dry Cleaner	Electronics Store	Exhibit
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- WEST HILLS

West Hills	Park	Athletics & Sports	Yoga Studio	Fried Chicken Joint	Dive Bar	Dog Run	Donut Shop	Dry Cleaner	Electronics Store	Exhibit
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- OAKWOOD-LINCOLN PARK

Oakwood-Lincoln Park	Park	Other Repair Shop	Furniture / Home Store	Basketball Court	Lounge	Flower Shop	Fast Food Restaurant	Farmers Market	Yoga Studio	French Restaurant
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CONCLUSION AND FUTURE DIRECTION

- BASED ON THE ANALYSIS BOTH CITIES HAVE THE KEY CRITERIA FOR A PROFITABLE FOOD TRUCK BUSINESS
 - ADDITIONAL DATA SOURCES WOULD BE HELPFUL TO ENSURE RESULTS ARE SOUND
 - DEMOGRAPHIC DATA
 - CRIME DATA
 - THIS MODEL HAS VALUE FOR ALL FOOD TRUCK OPERATORS, REGARDLESS OF LOCATION IN THE US
 - AS FOR ME, I CAN FOCUS ON NASHVILLE IN JUNE AND JULY, AND KNOXVILLE IN AUGUST BEFORE SCHOOL BEGINS
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