



Optimal Site Locations for Warehousing

Case by : Seven Swanky Statisticians

USC Marshall
School of Business

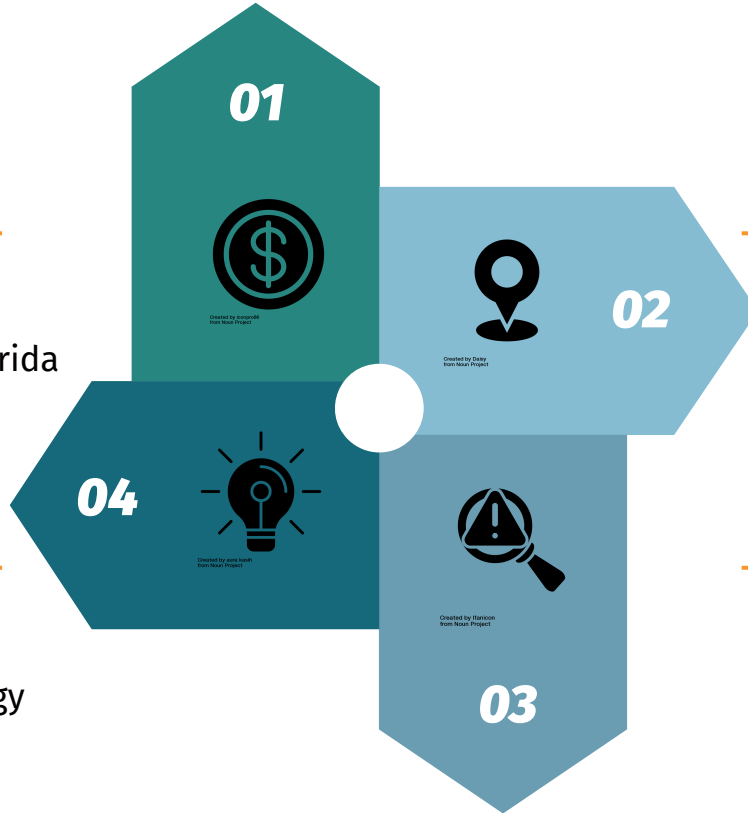
Executive Summary

Region Selection based on Demand

Hospitals, Clinics, Pharmacies
Population Shifts in Texas & Florida
Population Demographic

Risk & Mitigation

Due Diligence & Compliance
Temperature - Solar/Wind Energy
Capital Structure & Costs



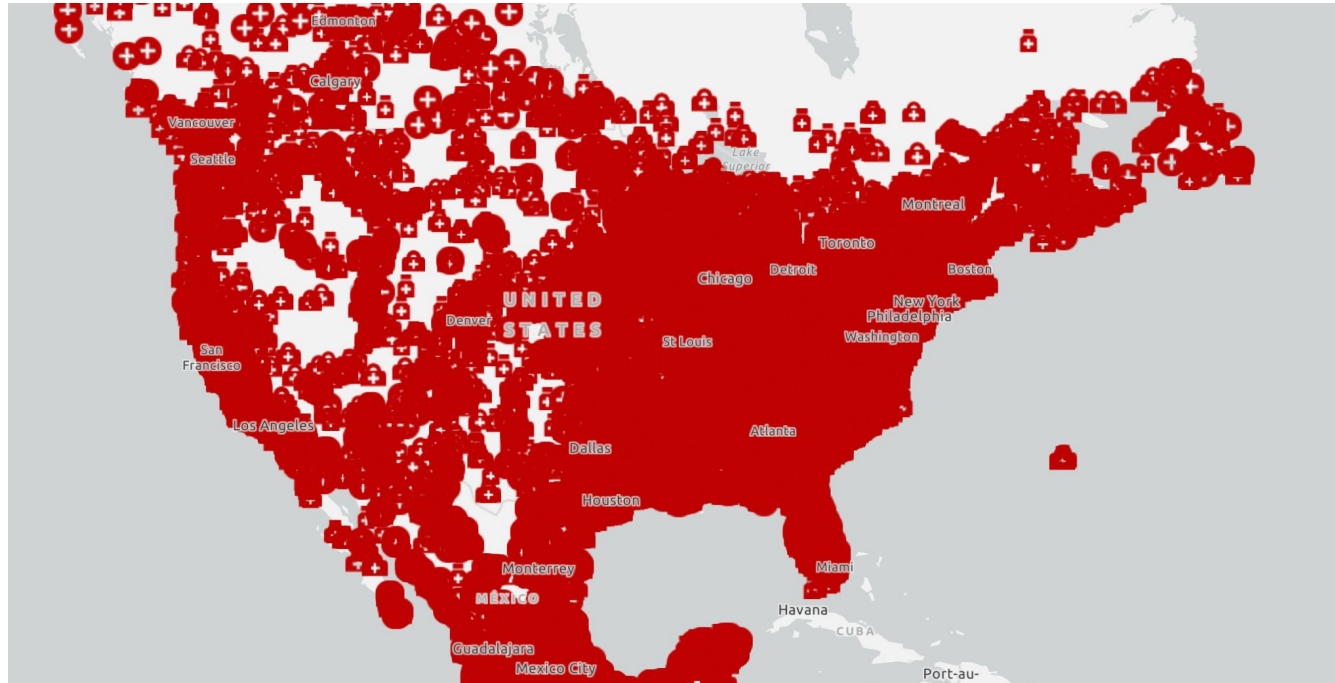
Evaluation Criterias for City Prioritisation

Logistics, Economic Zones,
Weather, Sustainability,
Costs & Competitors

Our Strategy

Cold Warehouses in 5 Cities
Timeline 3 years

Demand - Revenue Generation



90% demand from:

-  hospital
-  pharmacy
-  clinic

Top 5 Regions:

1. West
2. South
3. South-East
4. North-East
5. Central

Evaluation Criteria

Airports, Roads, Railroads,
Highways, Principal Ports

Logistics / Supply Chain

Fixed: Land, Machinery, Construction
Variable: Overhead, Labor, Utilities
(Electricity and Water), Inventory holding

Special Economic Zones

Qualified Opportunity Zones

Fixed / Variable Costs

Labor

Colleges and Universities, Population (18-50)

Internet, Power supply, Water supply

Utilities

Risk Index

National Risk Index (Low to Moderate)

Alternative Fuel stations

Sustainability

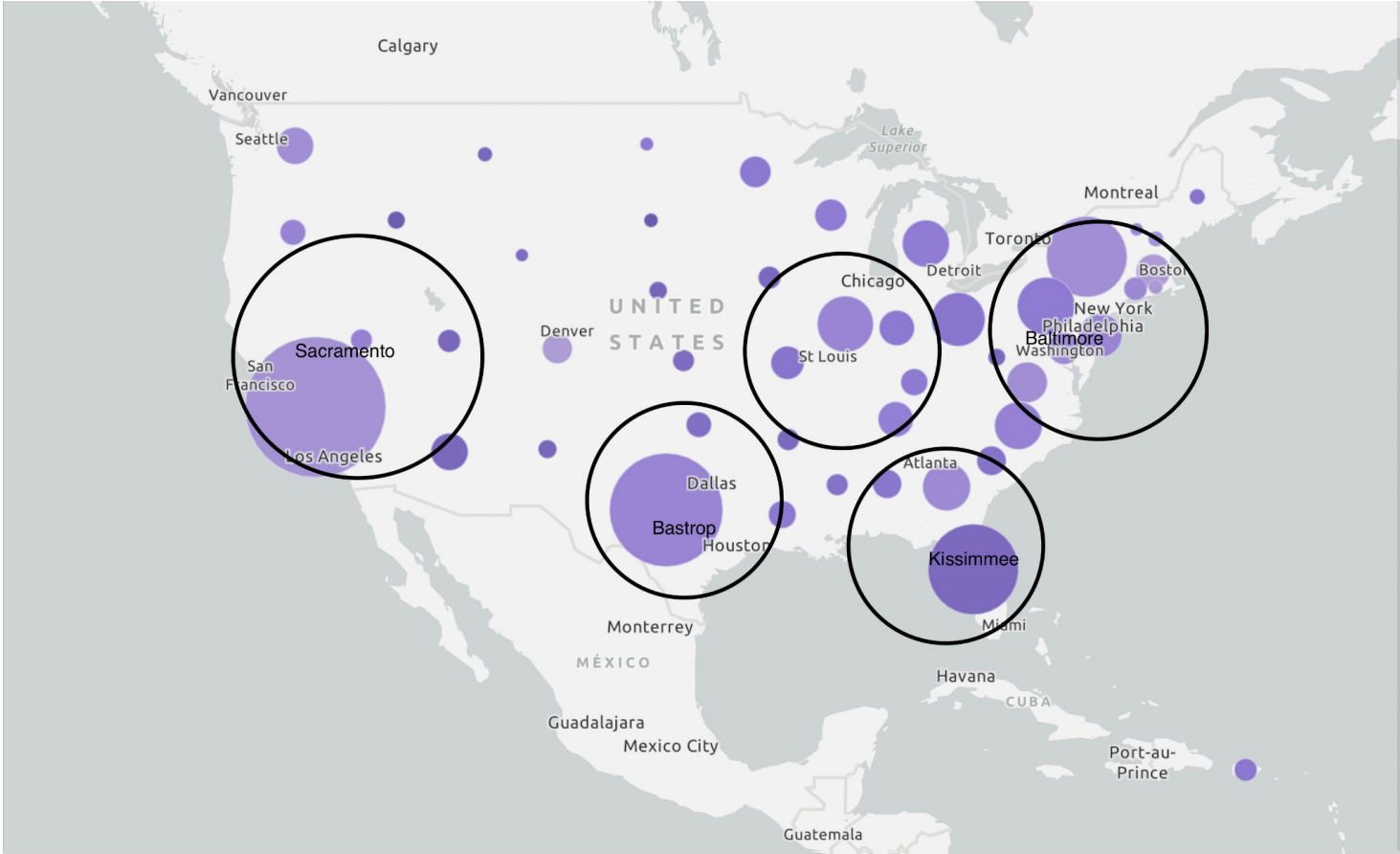
Weather

Temperature, Humidity (High/Low)

Competitor's Location

Competitors

Final 5 Recommendations



Analysis

3. Sacramento

Demand: Yes
Opportunity Zone: Yes
Risk Index: High
Fixed Cost: Moderate
Variable Cost: High
Competitors: No
Power Supply: Yes
Labor: Yes
Diversity Index: High
Logistic Network: Great
Close competitor: Los Angeles

5. St Louis

Demand: Yes
Opportunity Zone: Yes
Risk Index: High
Fixed Cost: Moderate - High
Variable Cost: Moderate
Competitors: No
Power Supply: Yes
Labor: Yes
Diversity Index: Moderate
Logistic Network: Great

4. Baltimore

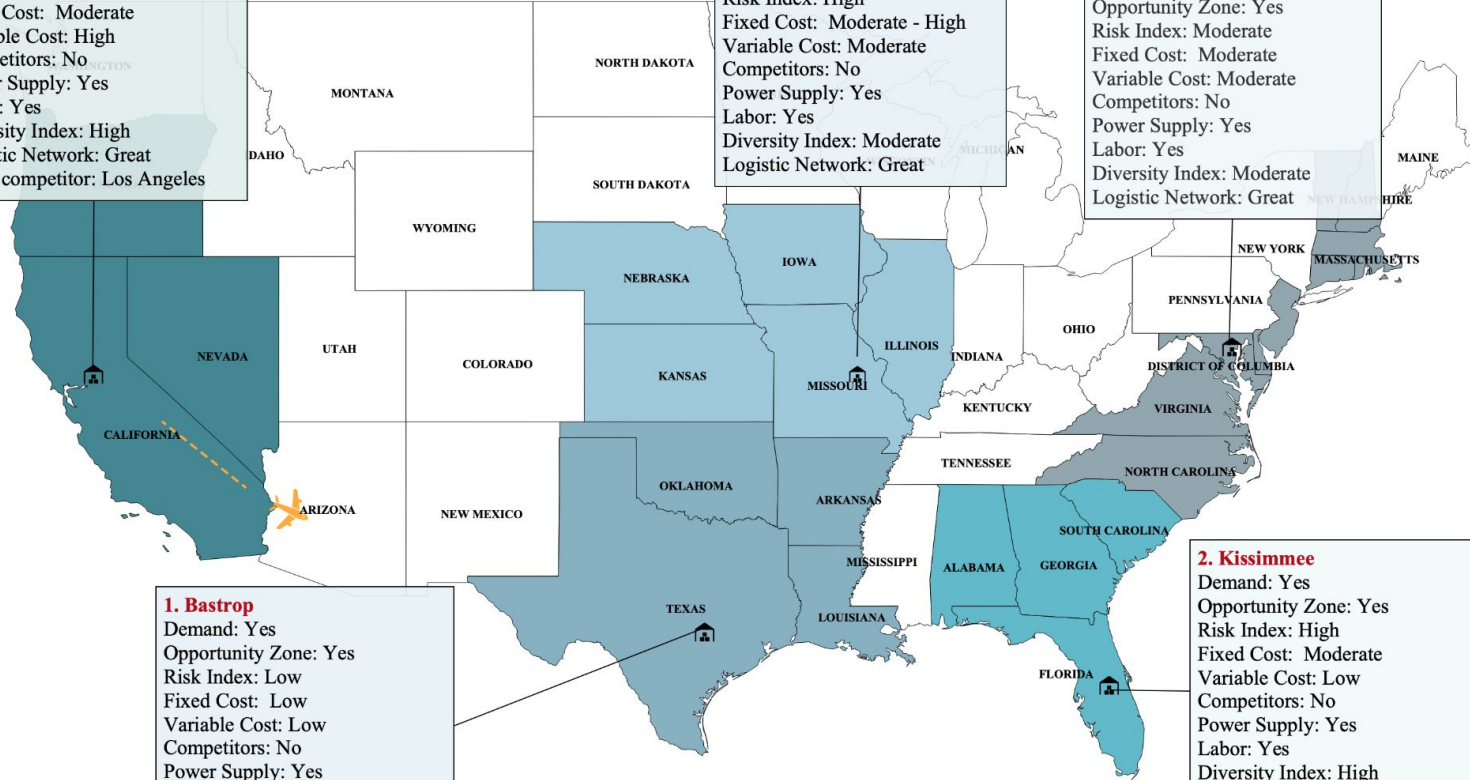
Demand: Yes
Opportunity Zone: Yes
Risk Index: Moderate
Fixed Cost: Moderate
Variable Cost: Moderate
Competitors: No
Power Supply: Yes
Labor: Yes
Diversity Index: Moderate
Logistic Network: Great

1. Bastrop

Demand: Yes
Opportunity Zone: Yes
Risk Index: Low
Fixed Cost: Low
Variable Cost: Low
Competitors: No
Power Supply: Yes
Labor: Yes
Diversity Index: High
Logistic Network: Great

2. Kissimmee

Demand: Yes
Opportunity Zone: Yes
Risk Index: High
Fixed Cost: Moderate
Variable Cost: Low
Competitors: No
Power Supply: Yes
Labor: Yes
Diversity Index: High
Logistic Network: Great
Close competitor: Miami



Strategic Implementation

01

Bastrop

Jan 1, 2024

450K sq. ft.

TX

02

Kissimmee

Jan 1, 2025

350K sq. ft.

FL

03

Sacramento

July 1, 2025

450K sq. ft.

CA

04

Baltimore

Jan 1, 2026

400K sq. ft.

MD

05

St. Louis

July 1, 2026

300K sq. ft.

MO

Risks and Limitations

01



Temperature and Humidity

Maintaining climate control

Zoning and Permits

Chosen location in city is zoned for industrial use



02

03



National Risk Index

Serving high risk regions

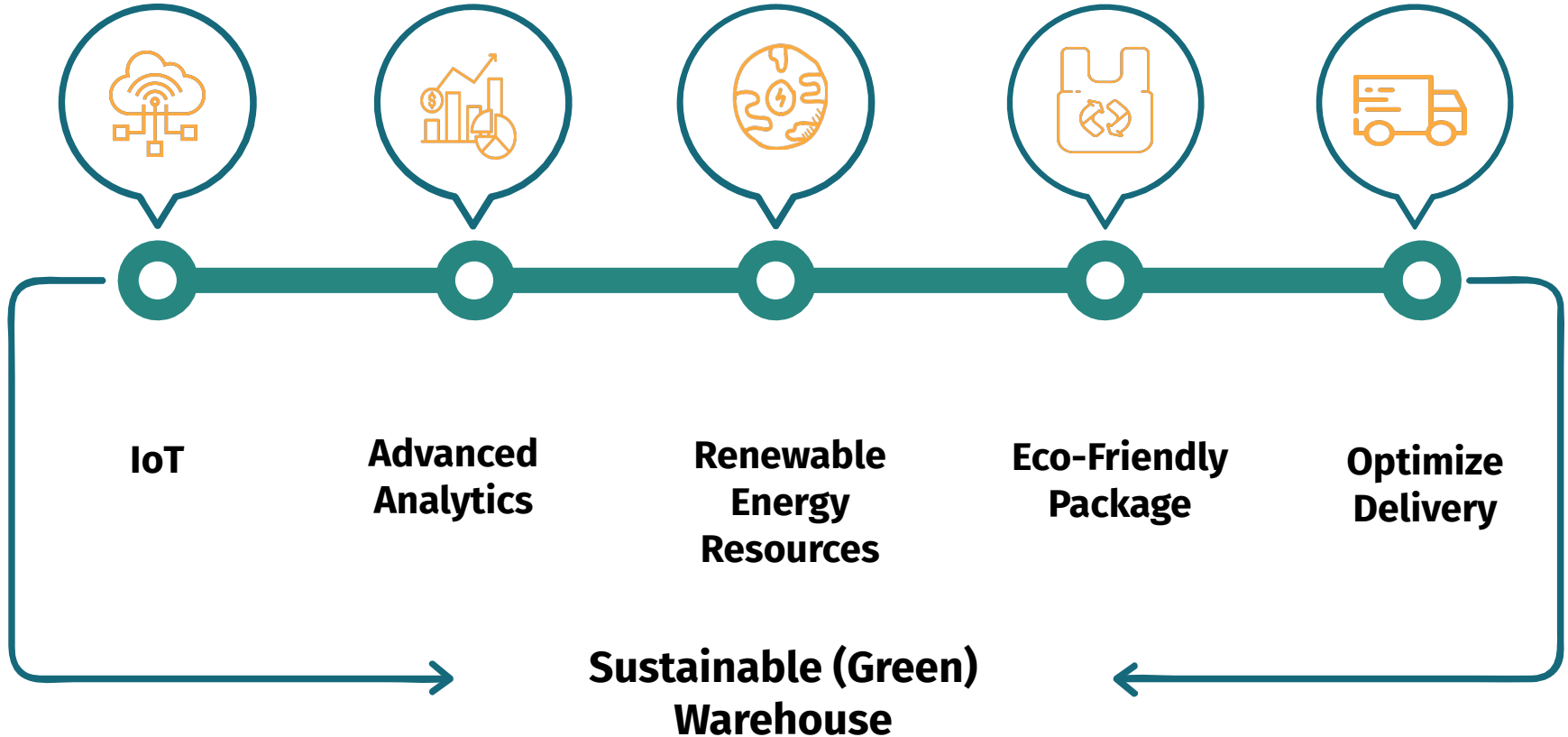
Budgetary Constraints

Capital Structure and availability of funds



04

Future and Innovation



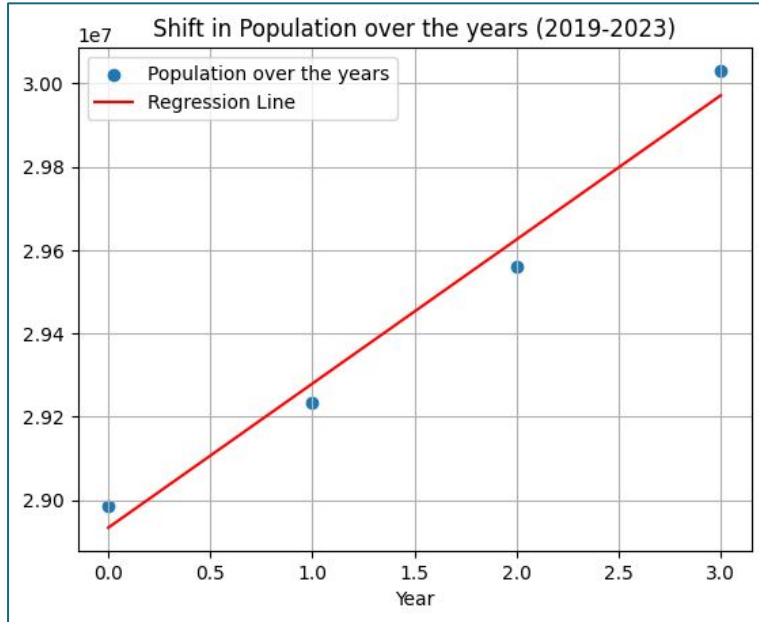


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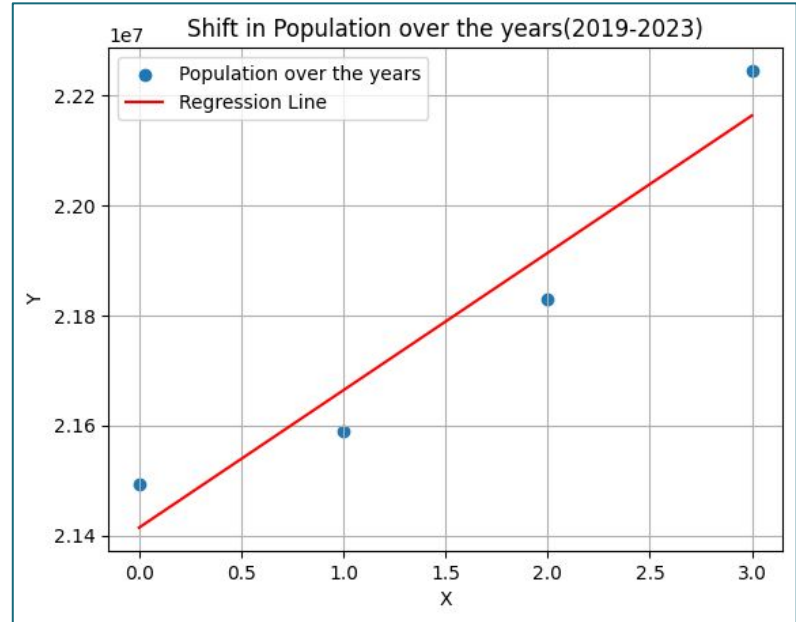
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APPENDIX

POPULATION SHIFT IN TEXAS AND FLORIDA



TEXAS



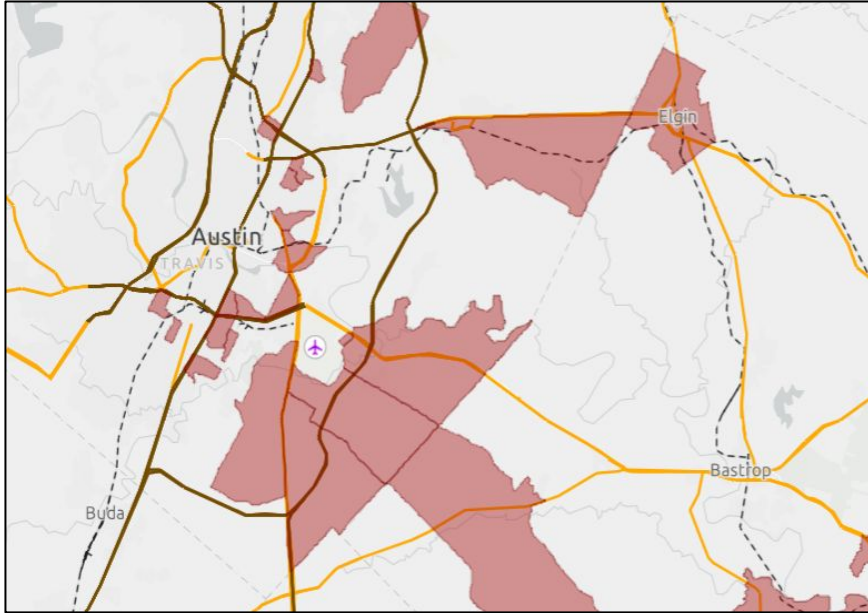
FLORIDA

TIME SERIES REGRESSION EQUATION

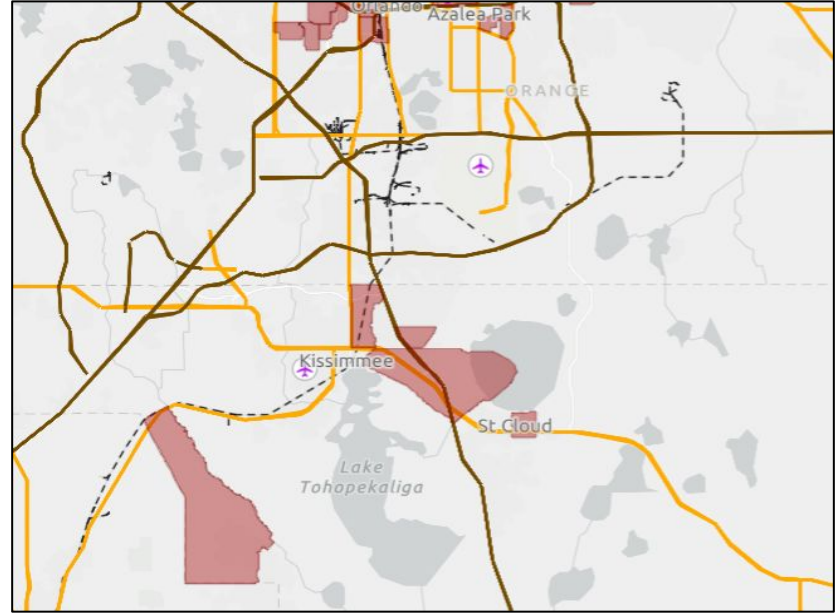
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$$Y = 249676.8 * X + 21414122.3$$

SOCIAL ECONOMIC ZONE AND LOGISTICS

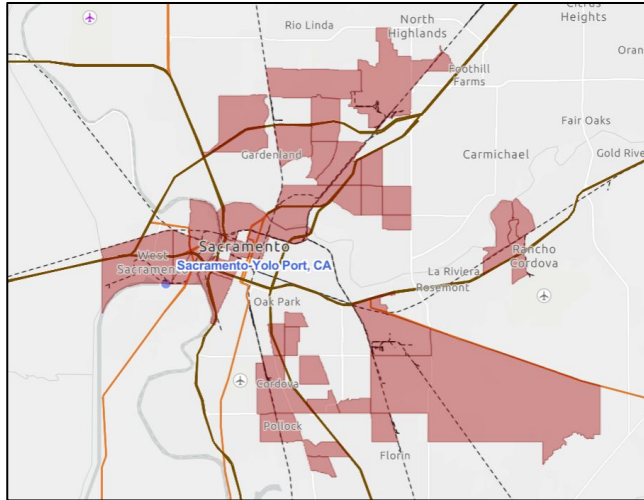


BASTROP

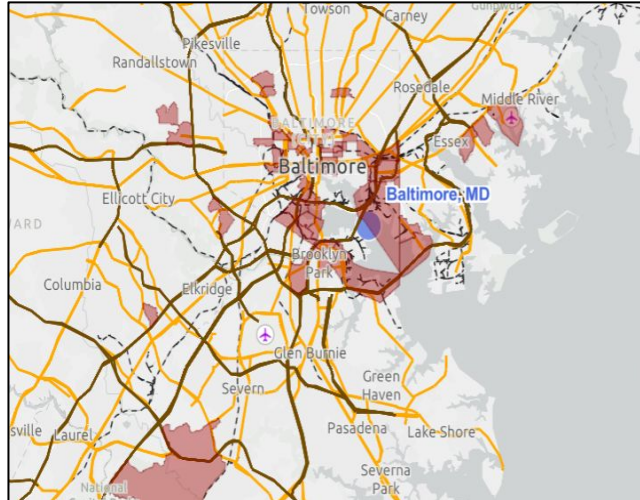


KISSIMMEE

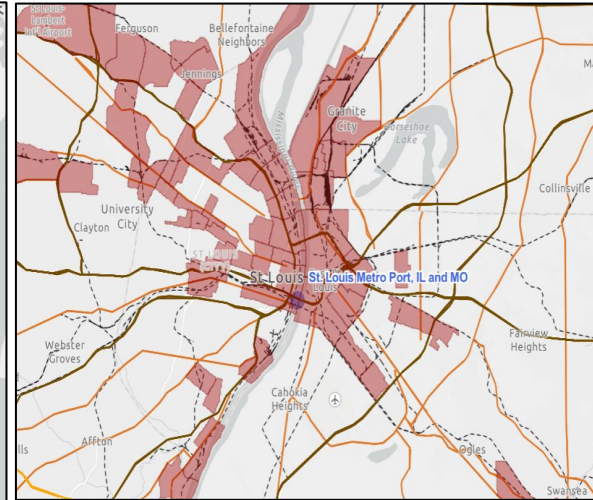
SOCIAL ECONOMIC ZONE AND LOGISTICS



SACRAMENTO



BALTIMORE

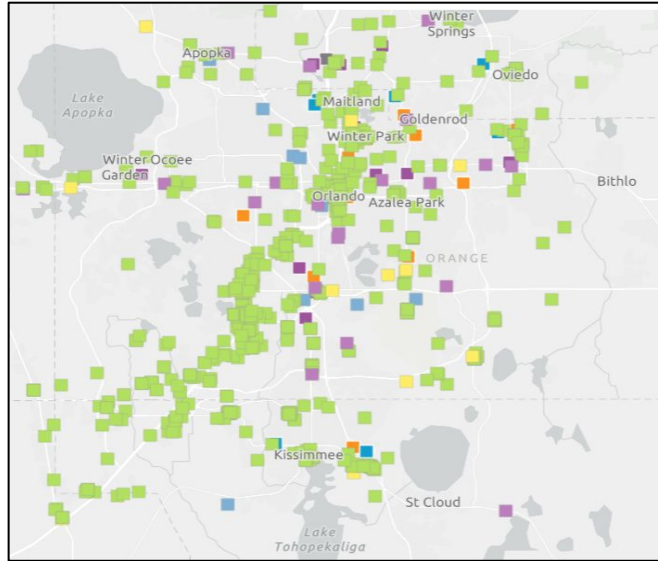
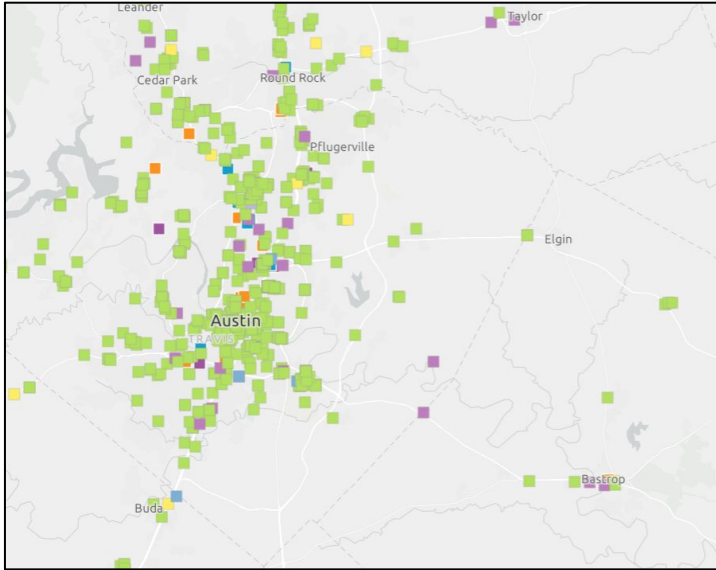


ST. LOUIS

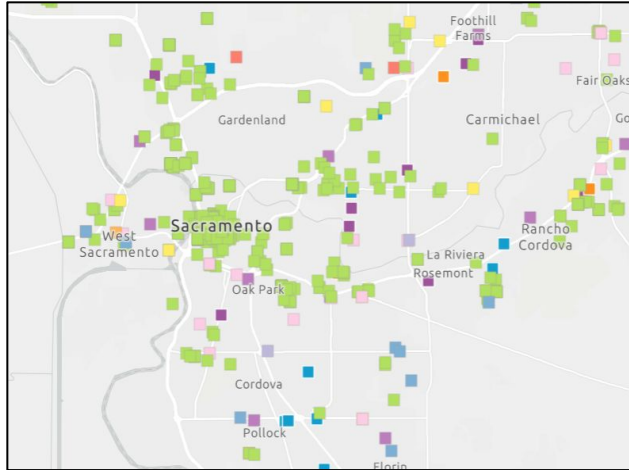
SUSTAINABILITY

Alternative Fuel Stations

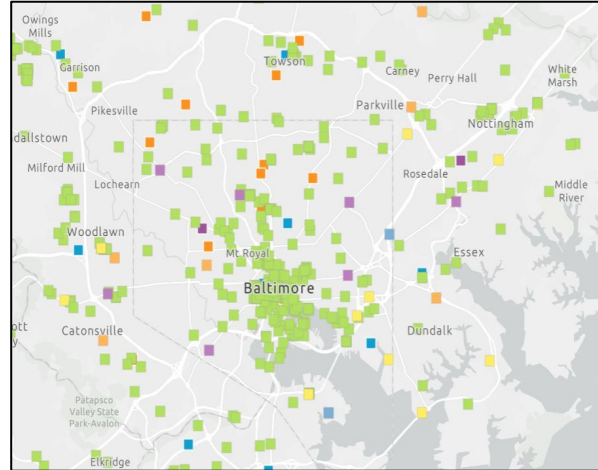
- Electric
- Ethanol (E85)
- Propane (LPG)
- Compressed Natural Gas (CNG)
- Biodiesel (B20 and above)
- Renewable Diesel (R20 and above)
- Hydrogen
- Liquefied Natural Gas (LNG)



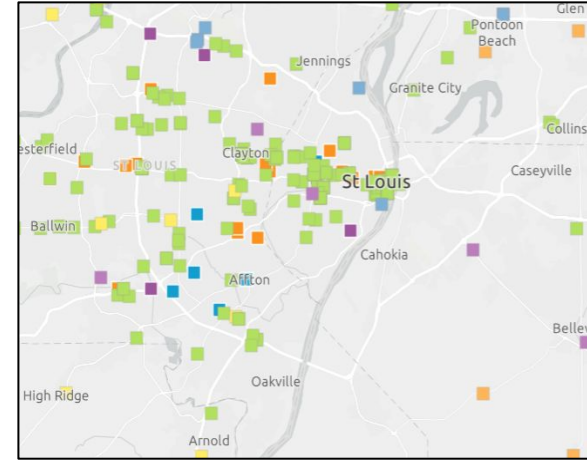
SUSTAINABILITY



SACRAMENTO



BALTIMORE



ST. LOUIS

DETAILED ANALYSIS

Cities ▼	Demand ▼	Opportunity Zone ▼	Risk Index ▼	Fixed Cost ▼	Variable Costs ▼
Bastrop	High	Yes	Low	Low	Low
Kissimmee	High	Yes	Moderate	Moderate	Low
Sacramento	High	Yes	High	Moderate	High
Washington D.C.	High	Yes	Moderate	Low	High
St. Louis	High	Yes	Moderate	Low	Moderate

DETAILED ANALYSIS

Cities ▼	Competitors Nearby ▼	Power Supply ▼	Labour ▼	Diversity Index ▼	Logistics Network ▼
Bastrop	No	Yes	Yes	High	Great
Kissimmee	No	Yes	Yes	High	Great
Sacramento	No	Yes	Yes	High	Great
Washington D.C.	No	Yes	Yes	High	Great
St. Louis	No	Yes	Yes	Moderate	Great